COMMISSION OF THE EUROPEAN COMMUNITIES



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Recommendation from the Commission to the Council

concerning the approval of an Agreement between the Government of Japan and the European Atomic Energy Community for co-operation in the peaceful uses of nuclear energy and of a Co-operation Agreement between the Government of Japan and the European Atomic Energy Community in the field of nuclear research and development

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EXPLANATORY MEMORANDUM

1. Introduction

In July 1995, the Japanese authorities expressed the desire to start negotiations with the Commission with a view to concluding an Agreement for co-operation in the peaceful uses of nuclear energy. Informal consultations took place between the Japanese authorities and the Commission Services from 1996 to 1998. From April 1999, two Co-operation Agreements were negotiated on the basis of directives proposed by the Commission and unanimously adopted by the Council on 25 May 1998. This Communication sets out the results of the negotiations conducted between Euratom and the Japanese authorities with a view to concluding these Agreements.

From the outset, the mutual desire to conclude an Agreement on the peaceful uses of nuclear energy was affirmed at the highest level, in particular at the EU/Japan Summit in 1998. This Agreement should make it possible to lay the foundations for stable long-term co-operation between the Community and Japan in this important and politically sensitive area, and to strengthen the excellent relations established between the Parties over many years. It should, primarily, provide a stable framework for the development of nuclear trade between the two Parties, and, in addition, facilitate co-operation in other areas of common interest, such as research into nuclear fission and safeguards.

In addition, the Agreement should reflect the commitment of the two Parties to use the nuclear material and items covered by the Agreement only for peaceful and non-explosive purposes. It should also guarantee that co-operation between the EU and Japan takes place in the strictest compliance with internationally recognised rules concerning non-proliferation, safeguards and physical protection of nuclear material. Moreover, it should take account of the Japanese authorities concern for transparency with regard to sensitive nuclear material, in particular plutonium.

For the Community, concluding an Agreement with Japan was of particular interest since it was the first to be negotiated with a country that does not supply the European nuclear industry but, on the contrary is one of its main clients. The Community has for a long time been one of Japan's main partners for nuclear fuel cycle services, in particular enrichment of natural uranium, reprocessing of irradiated fuels, and fabrication of Mox fuels. In this context, a Euratom-Japan Agreement should create a favourable legal framework for trade between the two Parties and ensure that all EU undertakings have access to the Japanese market. It was also in the interest of Japan, which has already signed bilateral agreements in this field with six States, including the USA, France, the UK and China, to conclude an Agreement with the EU, taking into account in particular the needs of its energy programme.

2. IMPORTANCE OF THE AGREEMENTS

The political and commercial importance of the Agreement for co-operation in the peaceful uses of nuclear energy (main Agreement) and the separate Agreement for co-operation in the field of nuclear research and development should not be underestimated. In this respect, the results of the negotiations can be assessed with particular regard to the following three dimensions: nuclear trade, bilateral EU-Japan relations and non-proliferation.

Commercially, the Agreement for co-operation in the peaceful uses of nuclear energy constitutes a solid basis favourable to the development of trade between the nuclear industries of the EU and Japan, the economic importance of which is considerable. The commercial value of nuclear business with Japan is estimated at tens of billions of euros for the duration of the Agreement. As a result of the length of its duration (initially 30 years, then automatically extended for five-year periods by tacit agreement), the Agreement will make it possible to provide the industry with the stable and predictable long-term framework needed to conclude and implement commercial arrangements in the nuclear field. By way of illustration, it will facilitate the commercial operations and exchanges planned by the Netherlands, Germany and Belgium with Japan.

In particular, there is every reason to fear that, in the absence of the Co-operation Agreement, and as a result of Japanese requirements, the transfer of Japanese nuclear material from France or the UK to another EU State not covered by a bilateral agreement will be rendered difficult legally or in practice, despite the existence of the common nuclear market.

Politically, the two Agreements are particularly important for bilateral EU-Japan relations. The two Parties have stressed on several occasions the political priority attaching to the conclusion of these Agreements, which is among the priority issues in the ten-year EU-Japan Action Plan adopted in December 2001.

Concluding these Agreements would also make it possible to complete the series of agreements existing between the three main users of nuclear energy, namely Europe, the USA and Japan, by supplementing the Japan-USA Agreement and the Euratom-USA Agreement.

Furthermore, concluding the Agreement for co-operation in the peaceful uses of nuclear energy is crucial as regards non-proliferation, by making it possible to solemnly reaffirm the commitment of the Government of Japan, the Community and the Governments of its Member States to the strengthening and strict application of safeguards and export control and physical protection arrangements. In this respect, failure to conclude the Agreement could be perceived by third countries as a negative political signal, particularly as regards the global effort in favour of non-proliferation, and could have an unfavourable impact on Europe's trade relations with other States, in particular the USA and Canada.

Concluding these Agreements would also provide an opportunity to recall the mutual commitment of the Community and Japan to a high level of nuclear safety which is a matter of major concern for public opinion, in particular in Japan.

3. GENERAL SCHEME OF THE AGREEMENTS

The negotiators reached an *ad referendum* agreement both on the text of the main Agreement and on the text of the separate Agreement on research and development on 15 October 2001 at the eighth negotiating meeting, bringing to an end the negotiations launched in April 1999. Following formal verification, the draft Agreements were initialled by the two Parties on 25 February 2002. The draft agreements were again initialled on 6 January 2004 to take account of amendments subsequently requested by Japan in the context of its procedures for the verification of international agreements. These amendments are, however, limited in scope.

The initialled texts comprise a main Agreement for co-operation in the peaceful uses of nuclear energy and a separate Agreement on research and development co-operation concluded in accordance with Article 4 of the main Agreement; The main Agreement is supplemented by three Annexes, Agreed Minutes designed to clarify some of its provisions, and draft Notes Verbales.

The texts of the Agreements are in accordance with the negotiating directives adopted by the Council, while reflecting the main demands expressed by the Member States. Like the agreements previously concluded by Euratom with Canada and the USA, the main Agreement is a general Co-operation Agreement the aim of which is to promote and facilitate trade, research and development and other nuclear activities between the Community and Japan concerning the peaceful and non-explosive uses of nuclear energy.

The main Agreement establishes extensive commercial and industrial co-operation covering trade in nuclear material, equipment and non-nuclear material, exchanges of experts and information, and nuclear fuel cycle services (Articles 2 and 3). The list of equipment which may be transferred under the Agreement is based on the list of nuclear items drawn up by the NSG (Nuclear Supplies Group).

The main Agreement contains a series of provisions aimed at facilitating its implementation and guaranteeing that its provisions are implemented in good faith in such a manner as to avoid hampering, delaying or unduly interfering with nuclear activities in Japan or in the Community (Article 5 of the Agreement). Accordingly, its provisions must not be used to seek commercial or industrial advantages or hinder the movement of items subject to the Agreement, between the parties or within the territorial jurisdiction of the parties, so as to ensure the free movement of nuclear items within the Community. In addition, the Agreement recognises the principles of fungibility and proportionality of nuclear material.

It also makes explicit reference to nuclear safety, specifying that Japan, the Community and its Member States must act in accordance with the International Convention on Nuclear Safety of the International Atomic Energy Agency (IAEA), to which they are parties.

In addition, it contains appropriate provisions to guarantee the peaceful use of nuclear items transferred under the Agreement and compliance with the international rules concerning non-proliferation (Articles 7 to 11). Where safeguards are concerned, it provides for the application, as appropriate, of Euratom and IAEA safeguards in accordance with the safeguards agreements concluded by the IAEA with the Government of Japan, the non-nuclear weapon Member States of the Community, and France and the UK.

With regard to retransfers to third States, the Agreement provides that the receiving party must be provided with prior assurances based on the guidelines of the NSG. In addition, the prior written consent of the supplying party is required for the retransfer of sensitive nuclear material and sensitive equipment (equipment for enrichment, reprocessing or production of heavy water), except in the case of retransfers to a third country bound by a bilateral Agreement with Japan or appearing on a list to be drawn up by the Community.

Where physical protection is concerned, the Agreement specifies that, in respect of international transport of nuclear material, the International Convention on the Physical Protection of Nuclear Material is to be applied and, in respect of nuclear material transferred, physical protection measures are to be applied by the parties to meet the protection levels set out in Annex C (based on the guidelines of the NSG).

Accordingly, the main Agreement makes it possible to strike a satisfactory balance between commercial requirements and the need to guarantee the peaceful and safe use of nuclear energy.

An important provision concerns the relationship between the Agreement and the existing bilateral agreements concluded between France and Japan on the one hand and the UK and Japan on the other. The Agreement provides that the rights and obligations provided for under those agreements which go beyond the provisions of the Euratom-Japan Agreement will continue to apply.

The main Agreement also specifies the conditions under which it may be suspended or terminated by one or other of the parties in the event of violation of one of its essential provisions. A consultation and arbitration procedure is also provided for in order to settle any difficulties or disputes concerning its interpretation of application. The Agreement is to be concluded for an initial period of 30 years and automatically extended for five-year periods thereafter by tacit Agreement unless either party notifies the other party in writing to terminate the Agreement.

The separate Agreement on research and development specifies the framework and extent of co-operation between the Community and Japan in the field of nuclear research and development. It is to be concluded for an initial period of ten years. The list of areas for co-operation include nuclear science and technology, nuclear reactors, nuclear safety and radiation protection, management of radioactive waste and spent fuel, the nuclear fuel cycle, nuclear safeguards, etc. This co-operation may take the form, for example, of exchanges of information and experts, joint seminars, and the development of joint projects and programmes. The Agreement on research and development includes an Annex on intellectual property rights.

It should be stressed that a satisfactory compromise for both parties was reached on the most delicate negotiating points, i.e. by-products, transfers of equipment and retransfers. Accordingly, the concept of "contamination" is strictly delimited by a restrictive definition of by-products limited to special fissionable material derived from nuclear material transferred pursuant to the main Co-operation Agreement or produced in equipment transferred pursuant to that Agreement. At this stage, the Agreement only refers to complete nuclear reactors. However, it is possible that if the Government of Japan and the European Commission so agree, following consultations between the Commission and the Member State concerned, this definition could be extended to include other nuclear equipment covered by the Agreement.

A solution has also been found concerning Japan's request for overall monitoring, i.e. a detailed inventory country by country and facility by facility of nuclear material subject to the Agreement, one of the most difficult negotiating points. The monitoring of Japanese material, in particular plutonium, was a major concern of the Japanese authorities. Euratom could not accept this request without undermining the credibility of the international commitments entered into in the IAEA context. The compromise obtained is limited to the provision by the Community of annual inventories in only three facilities in States which have not concluded a bilateral co-operation agreement with Japan and which are likely to process Japanese material, namely Dessel (Belgium), Gronau (Germany) and Almelo (Netherlands).

A solution has also been found concerning the updating of the Annexes, which can be achieved without revising the Agreement in line with changes in the Nuclear Suppliers

Guidelines published by the IAEA. With regard to retransfers, prior consent is limited to "separated" plutonium.

4. CONCLUSION

The Commission considers that the main Agreement for co-operation between the European Energy Community and the Government of Japan in the peaceful uses of nuclear energy and the separate Agreement on research and development co-operation, the adoption of which is proposed:

- are in all respects in conformity with the negotiating directives issued by the Council on 25 May 1998;
- confirm the clear commitment of the two parties in favour of non-proliferation and a
 high level of nuclear safety in order to guarantee the peaceful and safe use of nuclear
 energy;
- going beyond the field of nuclear energy, will make an important contribution to strengthening relations as a whole between the EU and Japan, in full compliance with the bilateral co-operation framework set out in the ten-year EU-Japan action plan in December 2001;
- provide the players concerned, in particular industry and research bodies, with a stable long-term and predictable co-operation framework and gives them the necessary assurances to facilitate exchanges and investments between the EU and Japan.

The Commission therefore recommends the Council to approve, pursuant to the second paragraph of Article 101 of the Treaty establishing the European Atomic Energy Community, the Agreement between the Government of Japan and the European Atomic Energy Community for co-operation in the peaceful uses of nuclear energy and the Co-operation Agreement between the Government of Japan and the European Atomic Energy Community in the field of nuclear research and development.

ANNEX

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 cooperation 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:

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.
- fissionable material derived from nuclear material transferred pursuant to this Agreement or by one or more processes from the use of complete nuclear reactors 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.

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.

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.

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, to which they are contracting parties.

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 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 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:

- (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 ant 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 the United Kingdom of

Great Britain and Northern Ireland and the Government of Japan 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, supersede 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 the Community or any of its Member States, or Japan 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.

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 English and Japanese 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 , thisday of

For the Government of Japan:

For the European Atomic Energy Community:

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 2 kg but more than 500 g	500 g or less ^(c)
2. Uranium - 235	Unirradiated ^(b) - uranium enriched to 20% 235U or more - uranium enriched to 10 % 235U but less than 20% 235U - uranium enriched above natural, but less than 10% 235U ^(d)	5 kg or more	Less than 5 kg but more than 1 kg 10 kg or more	1 kg or less (c) Less than 10 kg (c) 10 kg or more
3. Uranium - 233	Unirradiated ^(b)	2 kg or more	Less than 2 kg but more than 500 g	500 g 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.

AGREED MINUTES

In connection with the Agreement between the Government of Japan and the European Atomic Energy Community for Co-operation in the Peaceful Uses of Nuclear Energy, signed at _____ today (hereinafter referred to as "the Agreement"), the undersigned hereby record the following understandings:

- 1. With reference to all the Articles in the Agreement, it is confirmed that the headings of the Articles are included for convenience of reference only and shall not affect the interpretation of the Agreement.
- 2. With reference to the provisions of paragraph 2 of Article 4 of the Agreement, it is confirmed that the Parties shall conclude and bring into force the separate agreement referred to in that paragraph at the same time as the Agreement.
- 3. With reference to sub-paragraph 1(b) of Article 8 of the Agreement, it is confirmed that 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 shall, under the provisions of Article 23 of that agreement, come into force for non-nuclear weapon states party to the Non-Proliferation Treaty which become Member States of the Community after entry into force of the Agreement.
- 4. With reference to the provisions of sub-paragraphs 1(b), (c) and (d) of Article 8 of the Agreement, it is confirmed that the Additional Protocols, done on September 22, 1998, will become applicable under the Agreement upon their entry into force.
- 5. With reference to the provisions of paragraph 3 of Article 8 of the Agreement, it is confirmed that, when the Agency is not applying safeguards in the Community as required by paragraph 2 of Article 8 of the Agreement, the Government of Japan, recognising the importance of the application of Euratom safeguards in the Community pursuant to the Euratom Treaty, shall take due account of the effectiveness of the Community safeguards system.
- 6. With reference to the provisions of Article 8 of the Agreement, it is confirmed that:
 - (a) Euratom safeguards are applied to all nuclear material in civil use in the Community;
 - (b) Implementation of the Safeguards Agreement for Japan ensures the application of safeguards by the Agency with respect to all nuclear material in all nuclear activities in Japan; and
 - (c) Implementation 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 ensures the application of safeguards by the Agency with respect to all nuclear material in all nuclear activities within those Member States of the Community.
- 7. With reference to the provisions of Article 9 of and Annex B to the Agreement, it is confirmed that retransfers include also transfers of nuclear material recovered or produced as a by-product beyond the territorial jurisdiction of the receiving Party.

- 8. With reference to the provisions of paragraph 1 of Article 9 of and Annex B to the Agreement and in consideration of the commitments undertaken by the Government of Japan and by the Government of each Member State of the Community within the group of nuclear supplier countries known as the Nuclear Suppliers Group, it is confirmed that assurances obtained by the receiving Party in accordance with the document entitled "Guidelines for Nuclear Transfers" and published by the Agency as INFCIRC/254/Rev.6/Part 1 satisfy the assurances referred to in the above mentioned paragraph. It is further confirmed, in the case of a retransfer to a nuclear weapon state which does not have in force a bilateral agreement for co-operation in the peaceful uses of nuclear energy with the supplying Party, that, with the exception of assurance (ii), the same assurances as set out in Annex B are required but that the assurance (iii) may be replaced by an alternative assurance agreed between the Parties.
- 9. With reference to the provisions of paragraph 2 of Article 9, it is confirmed that the Government of Japan will notify the Community of the existence of appropriate bilateral agreements and the Community will notify the Government of Japan of the list of third countries to which items may be retransferred without the prior written consent of the supplying Party. It is further confirmed that each Party may add to or delete the third countries so notified or listed at any time but, in the case of a deletion, shall consult with the other Party before the third country becomes no longer eligible for retransfers.
- 10. With reference to the provisions of Article 10 of the Agreement, it is confirmed, for the effective implementation of the Agreement, that:
 - a) The Community shall provide to the Government of Japan annually the then current inventories of:
 - (i) nuclear material transferred pursuant to the Agreement which is in the facilities for reprocessing, enrichment and fuel fabrication (including mixed oxide fuel fabrication) designated by the Parties. The Parties will confirm the list so designated upon entry into force of the Agreement. This list may be updated by mutual consent of the Parties; and
 - (ii) equipment and non-nuclear material transferred pursuant to the Agreement.
 - b) The Government of Japan shall provide to the Community annually the then current inventories of:
 - (i) nuclear material transferred pursuant to the Agreement; and
 - (ii) equipment and non-nuclear material transferred pursuant to the Agreement.
- 11. With reference to the provisions of Article 10 of the Agreement, it is confirmed that the Government of Japan and the relevant Governments of the Member States of the Community have decided to adopt policies, as set out in the document published by the Agency as INFCIRC/549 ("Guidelines for the Management of Plutonium"), with respect to management of plutonium, including, where applicable, plutonium subject to the Agreement.
- 12. With reference to the provisions of Article 11 of and Annex C to the Agreement, it is confirmed that the measures of physical protection which shall be applied by the Government

of Japan, the Governments of the Member States of the Community and, as appropriate, the European Commission to nuclear material subject to the Agreement satisfy the guidelines contained in the document published by the Agency as INFCIRC/254/Rev.6/Part 1 ("Guidelines for Nuclear Transfers"). When applying measures of physical protection, the Government of Japan, the Governments of the Member States of the Community and, as appropriate, the European Commission will refer to relevant international recommendations, including those contained in the document published by the Agency as INFCIRC/225/Rev.4 ("The Physical Protection of Nuclear Material and Nuclear Facilities"). Each Party will decide recommendations to be referred based on its specific security circumstances.

- 13. With reference to the provisions of paragraph 3 of Article 12 of the Agreement, it is understood by the Parties that the reporting requirements in respect of nuclear material referred to in that paragraph of the Government of Japan, the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the French Republic pursuant to the respective Agreed Minutes to the bilateral agreements referred to in paragraph 1 of Article 12 will, upon entry into force of the Agreement, continue in effect
- 14. With reference to the provisions of paragraph 4 of Article 12 of the Agreement, it is confirmed that in order to facilitate the application of the Agreement to nuclear material which has been transferred before the entry into force of the Agreement between Japan and the Member States of the Community other than the United Kingdom of Great Britain and Northern Ireland and the French Republic, the Parties shall establish lists of such nuclear material
- 15. With reference to the provisions of Article 16 of the Agreement, it is confirmed that modifications to the Annexes to the Agreement will be made taking into account the evolution of the document published by the Agency as INFCIRC/254/Rev.6/Part 1 ("Guidelines for Nuclear Transfers").
- 16. With reference to the provisions of paragraph 2 of Article 17 of the Agreement, it is confirmed that if any question of interpretation or dispute arises concerning the implementation of those provisions, the Parties shall follow consultation and / or dispute resolution measures equivalent to those set out in paragraphs 2 and 3 of Article 15 of the Agreement.

For the Government	For the European Atomic
of Japan:	Energy Community:

DONE at......this....day of.....

Notes Verbales designating facilities in respect of sub-paragraph (a)(i) of paragraph 10 of the Agreed Minutes

(European Commission's note verbale)

The Delegation of the European Commission presents its compliments to the Ministry of Foreign Affairs and has the honour to refer to sub-paragraph (a)(i) of paragraph 10 of the Agreed Minutes to the Agreement between the Government of Japan and the European Atomic Energy Community for Co-operation in the Peaceful Uses of Nuclear Energy.

The Delegation has further the honour to propose, on behalf of the European Atomic Energy Community, that the following facilities be designated, pursuant to the said sub-paragraph:

Belgonucléaire, Dessel, Belgium

Urenco, Gronau, Germany

Urenco, Almelo, the Netherlands

(Japanese note verbale)

The Ministry of Foreign Affairs presents its compliments to the Delegation of the European Commission and has the honour to acknowledge receipt of the Delegation's Note No. () of today, a copy of which is attached, concerning the designation of facilities, pursuant to subparagraph (a)(i) of paragraph 10 the Agreed Minutes to the Agreement between the Government of Japan and the European Atomic Energy Community for Co-operation in the Peaceful Uses of Nuclear Energy.

The Ministry has further the honour to confirm the acceptance of the Government of Japan to the designation of facilities proposed, on behalf of the European Atomic Energy Community, by the Delegation in its Note referred to above.

The Ministry of Foreign Affairs avails itself of this opportunity to renew to the Delegation of the European Commission the assurances of its highest consideration.

ANNEX

AGREEMENT ON CO-OPERATION IN NUCLEAR RESEARCH AND DEVELOPMENT BETWEEN THE GOVERNMENT OF JAPAN AND THE EUROPEAN ATOMIC ENERGY COMMUNITY PURSUANT TO ARTICLE 4 OF THEIR AGREEMENT FOR CO-OPERATION IN THE PEACEFUL USES OF NUCLEAR ENERGY

The Government of Japan and the European Atomic Energy Community (hereinafter jointly referred to as the "Parties"), pursuant to Article 4 of the Agreement between the Government of Japan and the European Atomic Energy Community for Co-operation in the Peaceful Uses of Nuclear Energy (hereinafter referred to as "the Basic Agreement") signed today, have agreed as follows:

Article 1

- 1. The Parties shall develop co-operation in nuclear research and development for peaceful and non-explosive uses of nuclear energy between themselves or their agencies in areas of mutual interest. 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. Each individual activity in such co-operation will be initiated by mutual consent.
- 2. The Parties shall also facilitate co-operation in nuclear research and development for peaceful and non-explosive uses of nuclear energy between persons other than the Parties or their agencies, as deemed appropriate.

Article 2

The following nuclear research and development areas may be included in the co-operation specified in paragraph 1 of Article 1 of this Agreement, in so far as, for the European Atomic Energy Community (hereinafter referred to as "the Community"), they are covered by its research and development programmes:

- (a) Nuclear science and technology;
- (b) Nuclear power generation;
- (c) Nuclear safety and radiation protection;
- (d) Emergency preparedness and response in case of a nuclear accident;
- (e) Management of radioactive waste and spent fuel;
- (f) Decommissioning of nuclear installations;
- (g) Nuclear fuel cycle;
- (h) Nuclear safeguards;

- (i) Environmental considerations in respect of nuclear energy; and
- (j) Other areas of co-operation as may be mutually agreed upon by the Parties.

Article 3

Forms of the co-operation specified in paragraph 1 of Article 1 of this Agreement may include the following:

- (a) Exchange of information and data;
- (b) Joint seminars and meetings;
- (c) Visits and exchanges of scientists, technical personnel or other experts;
- (d) Exchange of samples and instruments for experimental purposes;
- (e) Development and implementation of joint projects and programmes; and
- (f) Other forms of co-operation as may be mutually agreed upon by the Parties.

Article 4

- 1. Implementing arrangements setting forth the details and procedures for the cooperation specified in paragraph 1 of Article 1 of this Agreement may be concluded between the Parties, their agencies or participating researchers and organisations.
- 2. (a) The Parties shall establish a Co-ordinating Committee to facilitate the co-ordination and implementation of co-operation under this Agreement.
 - (b) The functions of the Co-ordinating Committee shall include:
 - (i) reviewing and monitoring the progress of co-operation under the Agreement;
 - (ii) exchanging information and views on nuclear scientific and technological policies; and
 - (iii) discussing future co-operation under this Agreement.
 - (c) The Co-ordinating Committee shall meet alternately in the Community and in Japan at mutually agreed times.

Article 5

- 1. Implementation of this Agreement shall be subject to the availability of appropriate funds and to the applicable laws and regulations in Japan and in the Community.
- 2. Costs resulting from co-operation specified in paragraph 1 of Article 1 of this Agreement shall be borne as mutually agreed.

Article 6

The provisions of this Agreement shall not prejudice existing and future agreements for cooperation between the Parties or between the Government of Japan and the Government of any Member State of the Community.

Article 7

Intellectual property rights and other rights of a proprietary nature created or introduced in the course of the co-operation specified in paragraph 1 of Article 1 of this Agreement shall be treated in accordance with the provisions of the Annex to this Agreement.

Article 8

- 1. All questions related to this Agreement will be settled by mutual consultation between the Parties
- 2. All provisions of this Agreement shall, where appropriate, be interpreted in the light of the Basic Agreement.

Article 9

- 1. This Agreement shall enter into force upon entry into force of the Basic Agreement and shall remain in force for an initial period of ten years.
- 2. Thereafter, this Agreement shall be automatically renewed for five-year periods, unless either Party, by written notice, requests its termination or renegotiation not later than six months prior to the expiry date.
- 3. The termination of this Agreement will not affect the carrying out of any projects or programmes undertaken under this Agreement and not fully executed at the time of the termination of this Agreement.
- 4. Termination of this Agreement shall not affect the rights and obligations under Article 7 of and the Annex to this Agreement.

This Agreement and its Annex 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 English and Japanese 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,	this	day of

For the Government

For the European Atomic

of Japan: Energy Community:

ANNEX

INTELLECTUAL PROPERTY RIGHTS

Pursuant to Article 7 of this Agreement, the Parties shall apply the following provisions in respect of intellectual property rights:

1. **DEFINITIONS**

- The term "joint research" means research designed by the Parties or by their agencies and which may be undertaken jointly by the Parties directly, or by their agencies, or, as appropriate, by designees and / or participants;
- The term "designee" means, in respect of the Community, a person, legal entity, research institute or other body designated by the Community to undertake joint research; and
- The term "participant" means a person, legal entity, research institute or other body otherwise allowed by either Party to participate in joint research.

2. OWNERSHIP, ALLOCATION AND EXERCISE OF INTELLECTUAL PROPERTY RIGHTS

- A. For the purposes of this Agreement "Intellectual Property" shall have the meaning found in Article 2 of the Convention establishing the World Intellectual Property Organisation, done at Stockholm on 14 July 1967.
- B. (a) Intellectual property, except copyright and related rights, arising from joint research implemented by the Parties or their agencies shall be treated in accordance with the following principles, except as otherwise specifically agreed by the Parties:
 - (i)The Parties or their agencies shall notify each other within a reasonable time of any intellectual property rights created from joint research.
 - (ii)The Parties or their agencies shall jointly obtain all rights and interest in intellectual property created from joint research without territorial restriction.
 - (iii)Each Party or its agency shall ensure the adequate and effective protection of intellectual property in accordance with the international agreements, laws, regulations and practices applicable in Japan and in the Community.
 - (iv)The Parties or their agencies shall have a non-exclusive, irrevocable, royalty-free licence to use any intellectual property created under this Agreement for research and development purposes only.
 - (v) Visiting researchers shall receive intellectual property rights and royalty shares earned from licensing of such intellectual property rights under the policies of the host institutions.
 - (b) Designees and / or participants may, to the extent permitted by the laws and regulations in Japan and in the Community, be allowed by the Parties or their

agencies to undertake joint research only after they have entered into specific arrangements concerning the implementation of the research which also address intellectual property, except copyright and related rights, along the lines of the principles set out in sub-paragraph (a) above and also only after designees or participants have committed themselves to treat Proprietary Information as set out in sub-paragraph B (b) of paragraph 5 below.

C. Between a Party and its nationals, the allocation or the ownership of intellectual property rights, except copyright and related rights, will be determined in accordance with the laws, regulations and practices applicable in Japan and in the Community.

3. COPYRIGHT AND RELATED RIGHTS

- A. Notwithstanding the provisions of paragraph 2 above, copyright and related rights arising under this Agreement shall be accorded treatment consistent with the Paris Act of the Berne Convention for Protection of Literary and Artistic Works of 24 July 1971 and, as appropriate, other related agreements on copyright or related rights. The ownership of copyright and related rights will be determined in accordance with the laws and regulations applicable in Japan and in the Community.
- B. Subject to the treatment provided for Proprietary Information in paragraph 5 below, each Party will make its best efforts to obtain for the other Party a non-exclusive, irrevocable, royalty-free licence in all countries where copyright protection is available to translate, reproduce and publicly distribute information contained in scientific and technical journals, articles, reports, books, or other media, directly arising from joint research pursuant to this Agreement by or on behalf of the Parties.

4. ACKNOWLEDGEMENT OF PUBLISHED WORKS

All publicly distributed copies of a copyrighted work under the provisions of paragraph 3 above shall, to the extent permitted by the laws and regulations applicable in Japan and in the Community, bear a clearly visible acknowledgement of the co-operative support of the Parties.

5. Proprietary Information

- A. The Parties shall support the widest possible dissemination of information which they have a right to disclose and which is either in their possession or available to them, and is provided or exchanged as a result of the co-operation undertaken pursuant to this Agreement, subject to the need to protect Proprietary Information, to copyright restrictions, and to the provisions of paragraph 2 above. Upon publication of such information, it shall be made clear that the information was obtained in the course of joint research pursuant to this Agreement.
- B. Proprietary Information shall be treated as follows:
 - (a) Definition

The term "Proprietary Information" means scientific or technical data, results or methods of research and development arising from joint research pursuant to this Agreement, and any other information intended to be provided or exchanged under this Agreement, including know-how, information directly related to inventions and discoveries, technical, commercial or financial information provided that:

- it is not generally known or publicly available from other sources;
- it has not previously been made available by the owner to others without obligation concerning its confidentiality; and
- it is not already in the possession of the receiving Party, its agency, designees or participants without obligation concerning confidentiality.

(b) Procedures

- (i) A Party, its agency, designee or participant receiving Proprietary Information shall respect the privileged nature thereof.
- (ii) Proprietary Information received in confidence may be disseminated by the receiving Party, its agency, designee or participant to:
 - persons within or employed by the receiving Party, its agency, designee or participant; and
 - contractors or subcontractors of the receiving Party, its agency, designee or participant for use only within the framework of their contracts with the receiving Party, its agency, designee or participant for the specific purposes of the joint research underway.
- (iii) With the prior written consent of the Party providing Proprietary Information under the co-operation, the receiving Party may disseminate such Proprietary Information more widely than otherwise permitted in the foregoing sub-paragraph (ii). The Parties shall co-operate with each other in developing procedures for requesting and obtaining prior written consent for such wider dissemination, and each Party will grant such approval to the extent permitted by the laws and regulations applicable in Japan and in the Community.
- C. If one of the Parties becomes aware that it will be, or may be reasonably expected to become, unable to meet the restrictions and conditions of dissemination in subparagraph B above, it shall immediately inform the other Party. The Parties shall thereafter consult to define an appropriate course of action.
- D. Information arising from seminars, workshops and other meetings, the assignment of staff, use of facilities and exchange of equipment arranged under the Agreement shall be treated by the Parties according to the principles specified in sub-paragraph B above, provided that no Proprietary Information orally communicated shall be subject to the limited disclosure requirements of the co-operation unless the individual communicating such information places the recipient on notice as to the proprietary nature of the information communicated.

6. DISPUTE SETTLEMENT

Disputes or issues arising between the Parties concerning intellectual property rights shall be resolved in accordance with the provisions of Article 15 of the Basic Agreement.