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COM (77)439

Vol. 1977/0140

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Conformément au règlement (CEE, Euratom) n° 354/83 du Conseil du 1er février 1983 concernant l'ouverture au public des archives historiques de la Communauté économique européenne et de la Communauté européenne de l'énergie atomique (JO L 43 du 15.2.1983, p. 1), tel que modifié par le règlement (CE, Euratom) n° 1700/2003 du 22 septembre 2003 (JO L 243 du 27.9.2003, p. 1), ce dossier est ouvert au public. Le cas échéant, les documents classifiés présents dans ce dossier ont été déclassifiés conformément à l'article 5 dudit règlement.

In accordance with Council Regulation (EEC, Euratom) No 354/83 of 1 February 1983 concerning the opening to the public of the historical archives of the European Economic Community and the European Atomic Energy Community (OJ L 43, 15.2.1983, p. 1), as amended by Regulation (EC, Euratom) No 1700/2003 of 22 September 2003 (OJ L 243, 27.9.2003, p. 1), this file is open to the public. Where necessary, classified documents in this file have been declassified in conformity with Article 5 of the aforementioned regulation.

In Übereinstimmung mit der Verordnung (EWG, Euratom) Nr. 354/83 des Rates vom 1. Februar 1983 über die Freigabe der historischen Archive der Europäischen Wirtschaftsgemeinschaft und der Europäischen Atomgemeinschaft (ABl. L 43 vom 15.2.1983, S. 1), geändert durch die Verordnung (EG, Euratom) Nr. 1700/2003 vom 22. September 2003 (ABl. L 243 vom 27.9.2003, S. 1), ist diese Datei der Öffentlichkeit zugänglich. Soweit erforderlich, wurden die Verschlussachen in dieser Datei in Übereinstimmung mit Artikel 5 der genannten Verordnung freigegeben.

KOMMISSION DER EUROPÄISCHEN GEMEINSCHAFTEN

KOM(77) 439 endg.

Brüssel, den 20. September 1977

ENTWURF EINES RATSBSCHLUSSES

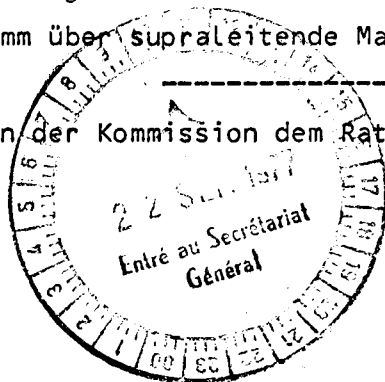
zur Erteilung von Anweisungen an die Kommission über eine Beteiligung der EAG an zwei F & A-Abkommen im Bereich der thermoklearen Fusion, die unter der Federführung der Internationalen Energie-Agentur (OECD) erstellt worden sind

ENTWURF EINES RATSBSCHLUSSES

zur Genehmigung

- 1) des Durchführungsabkommens über ein Forschungs- und Entwicklungsprogramm über die Wechselwirkungen zwischen Plasma und Wand in "Textor" -
- 2) Des Durchführungsabkommens für ein Forschungs- und Entwicklungsprogramm über supraleitende Magneten für die Fusion

(von der Kommission dem Rat vorgelegt)



KOM(77) 439 endg.

MITTEILUNG DER KOMMISSION AN DEN RAT

1. Am 24. Juni und 6. Juli 1976 wurde zwischen der Europäischen Atomgemeinschaft (Euratom) und der Europäischen Wirtschaftsgemeinschaft einerseits und der Internationalen Energie-Agentur (IEA) andererseits ein Abkommen in Form eines Briefwechsels über Zusammenarbeit bei der Forschung und Entwicklung im Bereich der Energie geschlossen.

In diesem Briefwechsel hatten die Europäischen Gemeinschaften ihre Absicht bekundet, ihre Beteiligung an solchen im Rahmen der IEA erstellten "Durchführungsabkommen" von Fall zu Fall auszuhandeln, die zur Erreichung der F & E - Ziele der Gemeinschaft beitragen würde. Die IEA ihrerseits nahm diese Absicht zur Kenntnis und bestätigte, dass der Europäischen Gemeinschaft eine solche Beteiligung offensteht.

In Anwendung dieser Vereinbarung wurden geschlossen :

- ein Durchführungsabkommen über den technischen Informationsaustausch im Bereich der Forschung und Entwicklung über Reaktorsicherheit ;
- ein Durchführungsabkommen für ein in Zusammenarbeit unternommenes Forschungs- und Entwicklungsprogramm, das zum Bau einer Hochfluss-Neutronenquelle führen soll ;
- ein Durchführungsabkommen über ein Programm zur Entwicklung und Erprobung von Sonnenenergie - Heiz- und Kühlsystemen (1). Ausserdem werden nummehr die letzten Schritte für eine gemeinschaftliche Beteiligung an einem Durchführungsabkommen an ein F & E-Programm über die Erzeugung von Wasserstoff aus Wasser unternommen.

(1) Unterzeichnung steht unmittelbar bevor.

2. Im Rahmen ihres Programms über thermonukleare Fusion - bei dem die Kommission die Rolle einer "Pilotstelle" spielt - schlägt die IEA ihren Mitgliedern und Euratom den Abschluss von zwei neuen Durchführungsabkommen in diesem Bereich vor. Es handelt sich um :

- a) ein Durchführungsabkommen über ein F & E-Programm über die Wechselwirkungen zwischen Plasma und Wand in "Textor" ;
- b) ein Durchführungsabkommen über ein F & E-Programm über supraleitende Magneten für die Fusion.

Die Texte beider Abkommen und ihrer Anhänge mit der Aufgabenstellung liegen anbei. (siehe Anhang A und Anhang B).

3. Die Kommission ist der Auffassung, dass die Beteiligung der Europäischen Atomgemeinschaft an diesen beiden Durchführungsabkommen zur Erreichung der gemeinschaftlichen Ziele für die Forschung und Entwicklung in diesem Bereich beitragen kann. Das Interesse der Gemeinschaft an diesen beiden Durchführungsabkommen kann wie folgt zusammengefasst werden :

- a) Forschung und Entwicklung über die Plasma-Wand-Wechselwirkung in "Textor".

In Fusionsanlagen ist der Grad der Wechselwirkung zwischen dem Plasma und der umgebenden Wand für die heutigen Fusionsexperimente von ausschlaggebender Bedeutung, da die Kontamination des Plasmas in annehmbaren Grenzen gehalten werden muss und da sowohl die Erhöhung der Plasmatemperatur als auch die Dauer der Arbeitsgänge eine Erosion der Wand verursachen. Es müssen daher Mittel entwickelt werden, um die Auswirkungen der gegenseitigen Beeinflussung von Plasma und Wand weitgehend zu reduzieren.

Eine Möglichkeit zur Erreichung dieses Ziels ist der Bau und der Betrieb einer ausreichend grossen Tokamak-Anlage, die besonders für diesen Zweck ausgelegt ist. Diese Anlage muss die Möglichkeit eines unproblematischen Austausches des gesamten inneren Vakuumbehälters bieten, und sie muss mit spezialisierter und hochentwickelter Diagnostik ausgestattet sein.

Eine solche Vorrichtung ist "Textor". Die Anlage wird im Rahmen des Euratom-Fusionsprogramms von der Assoziation Euratom-KFA gebaut und betrieben. Diese Anlage könnte noch beträchtlich an Wert gewinnen, wenn als Ergebnis internationaler Zusammenarbeit weitere Partner dazu beitragen würden, indem sie verschiedene Innenwandanordnungen liefern, - die je nach ihrer Erfahrung optimiert sind - und indem sie während der Bau- und Betriebsphase Sachverständige abstellen.

b) Forschung und Entwicklung auf dem Gebiet supraleitender Magneten für die Fusion.

Es ist sehr wahrscheinlich, dass die künftigen Fusionsreaktoren auf der Grundlage von toroidalen Magneteinschliessungen mit supraleitenden Spiralen ausgestattet sein werden. Diese Technologie ist grundsätzlich schon entwickelt, jedoch ist sie noch nicht so ausgereift, als dass der sofortige Bau grosser Spiralen und ihr zuverlässiger Betrieb unter den erforderlichen Grenzbedingungen möglich wäre.

Daher muss diese Technologie soweit entwickelt werden, dass sie für die nächste Generation der Fusionsexperimente nach JET, TFTR oder JET-60 zur Verfügung steht. Zu diesem Zweck muss nicht nur eine supraleitende Spirale ausreichender Dimensionen gebaut werden, sondern die ordnungsgemässe Erprobung erfordert eine toroidale Anlage/^{von} mindestens 4 bis 6 Spiralen und eine Einrichtung, mit der die starken wechselwirkenden Kräfte zwischen ihnen ausgeglichen werden können. Dieses Durchführungsabkommen bietet eine solche Möglichkeit.

Jeder Teilnehmer liefert mindestens eine Spirale, so dass man über eine vollständige toroidale Anlage von 6 Spiralen verfügt. So kommen z.B. der Gemeinschaft für die Kosten einer einzigen Spirale die Vorzüge dieser mit mehreren Spiralen ausgestatteten Einrichtung zugute. Ausser den von ihr gelieferten Spiralen leistet die USERDA als Betreiber einen weiteren Beitrag dadurch, dass sie die "Large Coil Test Facility", die für die ordnungsgemässe Erprobung erforderlich ist, ohne Kosten für die übrigen Teilnehmer zur Verfügung stellt.

4. Die finanziellen Auswirkungen der Beteiligung an jedem dieser Durchführungsabkommen sind in den aufgabenspezifischen Anhängen aufgeführt.

Es wird keine gemeinsame Finanzierung vorgeschlagen ; der Beitrag jedes Teilnehmers besteht in der Übernahme einer Aufgabe, deren Kosten von den Teilnehmern selbst getragen wird. Für Euratom z.B. besteht der Beitrag in jedem Falle in Arbeiten, die im Rahmen der bestehenden Assoziierungsverträge durchgeführt werden, so dass keine zusätzlichen finanziellen Verbindlichkeiten vorgesehen sind. Im Falle des Durchführungsabkommens über die Wechselwirkungen Plasma-Wand besteht der Euratom-Beitrag in Arbeiten, die im Rahmen des Assoziierungsvertrags zwischen Euratom und der Kernforschungsanlage Jülich GmbH (KFA) durchgeführt werden. Im Falle des Durchführungsabkommens über die supraleitenden Magneten besteht der Beitrag in den Arbeiten, die gemäss dem Assoziierungsvertrag Euratom/Max Planck Institut für Plasmaphysik (IPP) durchgeführt wird.

5. Betreffend die Bestimmungen über die Information und das geistige Eigentum war die Haltung der Kommission bei den Verhandlungen des Abkommens über die Erzeugung von Wasserstoff bekanntlich wie folgt: ist in einem Abkommen, an dem sich die Gemeinschaft beteiligen will, ein Austausch von industriellen und kommerziellen Lizenzen vorgesehen, so muss dafür Sorge getragen werden, dass die Mitglied - Staaten, Personen und Unternehmen der Gemeinschaft aus solchen Lizenzen einen Nutzen ziehen können.

Im Falle der Wasserstofferzeugung stellt sich dieses Problem nicht, da der Austausch von Lizenzen auf Forschungs - und Entwicklungszwecke und auf die Durchführung der im Abkommen vorgesehenen Aufgaben beschränkt ist. Im Falle der Fusion und betreffend den Austausch von industriellen und kommerziellen Lizenzen wurde die Haltung der Kommission akzeptiert, wobei der Tatsache Rechnung getragen wurde, dass das Programm der Gemeinschaft und diejenigen der Mitgliedstaaten gemeinsam durchgeführt werden und dass die Kommission nicht nur im Namen der Gemeinschaft, sondern auch im Namen ihrer Assoziierungspartner handeln wird.

6. Die Kommission war an der Ausarbeitung dieser beiden Entwürfe für die Durchführungsabkommen im Rahmen des Koordinierungsausschusses "Fusion" (FPCC) der IEA in enger Zusammenarbeit mit den Assoziierten des Euratom-Programms für thermonukleare Fusion und insbesondere mit den beiden direkt betroffenen Assoziierungspartnern, nämlich KFA und IPP, beteiligt.

Alle diese Assoziierungspartner haben zugestimmt, dass Euratom diese beiden Durchführungsabkommen abschliessen kann.

Wie im Falle des Durchführungsabkommens über die Hochfluss-Neutronenquelle, das nicht von den Mitgliedstaaten, sondern von der Kommission für Euratom unterzeichnet wurde, sollten die Mitgliedstaaten diese Abkommen nicht unterzeichnen. Da die gesamten Forschungsarbeiten in den neun Mitgliedstaaten im Bereich der thermonuklearen Fusion auf Gemeinschaftsbasis durchgeführt werden, müssen nämlich Abkommen über eine solche internationale Zusammenarbeit von der Gemeinschaft geschlossen werden.

7. Wenn der Rat die Auffassung der Kommission teilt, dass eine Beteiligung an diesen beiden Durchführungsabkommen im Interesse der EAG ist und dass die vorgeschlagenen Texte annehmbar sind, schlägt die Kommission vor, dass diese Beteiligung auf

der Grundlage von Artikel 101 Absatz 2 Euratom-Vertrag ausgehandelt und vereinbart wird.

Angesichts der Dringlichkeit der Angelegenheit (der Unterzeichnungsakt soll während der Ministersitzung des Verwaltungsrates der IEA am 5. Oktober 1977 in Paris stattfinden), schlägt die Kommission vor, dass der Rat gleichzeitig Anweisungen für die Aushandlung der Beteiligung von Euratom an diesem Abkommen erteilt und einen Beschluß zur Billigung dieses Abkommens faßt.

8. Die Kommission schlägt daher dem Rat vor :

- a) einen Beschluss zu fassen, mit dem der Kommission Anweisungen erteilt werden, wie im Entwurf von Anhang C dargelegt,
- b) gleichzeitig einen Beschluss zu fassen (Anhang D), mit dem der Abschluss des auf der Grundlage der in a) genannten Anweisungen ausgehandelten Durchführungsabkommens genehmigt wird.

10th August, 1977

INTERNATIONAL ENERGY AGENCY

IMPLEMENTING AGREEMENT FOR A PROGRAMME OF RESEARCH AND DEVELOPMENT ON PLASMA WALL INTERACTION IN TEXTOR

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INTERNATIONAL ENERGY AGENCY

IMPLEMENTING AGREEMENT
FOR A PROGRAMME OF RESEARCH
AND DEVELOPMENT ON PLASMA WALL
INTERACTION IN TEXTOR

The Contracting Parties

CONSIDERING that the Contracting Parties, being either governments or international organisations or parties designated by their respective governments pursuant to Article III of the Guiding Principles for Co-operation in the Field of Energy Research and Development adopted by the Governing Board of the International Energy Agency (the "Agency") on 28th July, 1975, wish to take part in the establishment and operation of a Programme of Research and Development on Plasma Wall Interaction in TEXTOR (the "Programme") as provided in this Agreement;

CONSIDERING that the Contracting Parties which are governments and the governments of the other Contracting Parties (referred to collectively as the "Governments") participate in the Agency and have agreed in Article 41 of the Agreement on an International Energy Program (the "I.E.P. Agreement") to undertake national programmes in the areas set out in Article 42 of the I.E.P. Agreement, including research and development on controlled thermonuclear fusion in which field the Programme will be carried out;

CONSIDERING that in the Governing Board of the Agency on 28th July, 1975, the Governments approved the Programme as a special activity under Article 65 of the I.E.P. Agreement;

CONSIDERING that the Agency has recognized the establishment of the Programme as an important component of international co-operation in the field of fusion power research and development;

HAVE AGREED as follows:

Article 1

OBJECTIVES

- (a) *Scope of Activity.* The Programme to be carried out by the Contracting Parties within the framework of this Agreement shall consist of co-operative research, development, demonstrations and exchanges of information regarding plasma wall interaction in TEXTOR as provided in the Annex hereto.
- (b) *Method of Implementation.* Each Contracting Party shall implement the Programme by undertaking one or more tasks as provided in the Annex hereto.
- (c) *Task Co-ordination and Co-operation.* The Contracting Parties shall co-operate in co-ordinating the work under the Programme and in advancing the research and development activities of all Contracting Parties in the field of plasma wall interaction.

Article 2

THE EXECUTIVE COMMITTEE

- (a) *Supervisory Control.* Control of the Programme shall be vested in the Executive Committee constituted under this Article.
- (b) *Membership.* The Executive Committee shall consist of one member designated by each Contracting Party; each Contracting Party shall also designate an alternate member to serve on the Executive Committee in the event that its designated member is unable to do so.
- (c) *Responsibilities.* The Executive Committee shall:
- (1) Adopt for each year, acting by unanimity, the Programme of Work, together with an indicative programme of work for the following two years; the Executive Committee may, as required, make adjustments within the framework of the Programme of Work;
 - (2) Make such rules and regulations as may be required for the sound management of the Programme;
 - (3) Carry out the other functions conferred upon it by this Agreement and the Annex hereto; and
 - (4) Consider any matters submitted to it by the Operating Agent or by any Contracting Party.
- (d) *Procedure.* The Executive Committee shall carry out its responsibilities in accordance with the following procedures:

- (1) The Executive Committee shall each year elect a Chairman and one or more Vice-Chairmen;
- (2) The Executive Committee may establish such subsidiary bodies and rules of procedure as are required for its proper functioning. A representative of the Agency and a representative of the Operating Agent (in its capacity as such) may attend meetings of the Executive Committee and its subsidiary bodies in an advisory capacity;
- (3) The Executive Committee shall meet in regular session twice each year; a special meeting shall be convened upon the request of any Contracting Party which can demonstrate the need therefor;
- (4) Meetings of the Executive Committee shall be held at such time and in such office or offices as may be designated by the Committee;
- (5) At least twenty-eight days before each meeting of the Executive Committee, notice of the time, place and purpose of the meeting shall be given to each Contracting Party and to other persons or entities entitled to attend the meeting; notice need not be given to any person or entity otherwise entitled thereto if notice is waived before or after the meeting;
- (6) The quorum for the transaction of business in meetings of the Executive Committee shall be one-half of the members plus one (less any resulting fraction).

(e) *Voting.*

- (1) Where this Agreement requires the Executive Committee to act by unanimity, this shall require the agreement of each member or alternate member present and voting at the meeting at which the decision is taken. The Executive Committee shall adopt decisions and recommendations, for which no express voting provision is made in this Agreement, by majority vote of the members or alternate members present and voting;
- (2) With the agreement of each member or alternate member entitled to act thereon, a decision or recommendation may be made by telex or cable without the necessity for calling a meeting. The Chairman of the Executive Committee shall have the responsibility of ensuring that all members or alternate members entitled to act thereon are informed of each decision or recommendation made pursuant to this paragraph.

(f) *Reports.* The Executive Committee shall, at least annually, provide the Agency with periodic reports on the progress of the Programme.

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Article 3

THE OPERATING AGENT

(a) *Designation.* The Programme shall be conducted by the EURATOM-KFA Jülich Association for Fusion, acting through the Kernforschungsanlage Jülich GmbH, as the Operating Agent.

(b) *Scope of Authority to Act on Behalf of Contracting Parties.* Subject to the provisions of Article 6 hereof, the Operating Agent shall perform all legal acts required to carry out its functions as defined in the Annex hereto on behalf of the Contracting Parties.

(c) *Replacement.* A Contracting Party may, with the consent of the Executive Committee, acting by unanimity, designate another entity as Operating Agent in place of the Contracting Party or other Operating Agent designated by it. The adoption of any consequential amendments to this Agreement and the Annex hereto as well as the arrangements for transfer of the Operating Agent's responsibilities shall require a decision of the Executive Committee, acting by unanimity.

(d) *Resignation.* The Operating Agent shall have the right to resign at any time, by giving six months written notice to that effect to the Executive Committee, provided that:

- (1) A Contracting Party, or entity designated by a Contracting Party, is at such time willing to assume the duties and obligations of the Operating Agent and so notifies the Executive Committee and the other Contracting Parties to that effect, in writing, not less than three months in advance of the effective date of the Operating Agent's resignation; and
- (2) Such Contracting Party or entity is approved by the Executive Committee, acting by unanimity.

Article 4

ADMINISTRATION AND STAFF

(a) *Administration of Tasks.* The Operating Agent shall be responsible to the Executive Committee for implementing its responsibilities in accordance with this Agreement, the Annex hereto and the decisions of the Executive Committee.

(b) *Information and Reports.* The Operating Agent shall furnish to the Executive Committee such information concerning the Programme as the Committee may request and shall each year submit, not later than two months after the end of the financial year, a report on the status of work under the Programme.

(c) *Staff.* It shall be the responsibility of the Operating Agent to retain such staff as may be required to carry out its responsibilities. The Operating Agent may also, as required, utilize the services of personnel employed by other Contracting Parties (or organisations or other entities designated by Contracting Parties) and made available to the Operating Agent by secondment or otherwise, subject to arrangements to be agreed between the Contracting Party and the employer of such personnel.

Article 5

FINANCE

(a) *Obligations of the Operating Agent.* The Operating Agent shall bear the costs of the construction and normal operation of TEXTOR as described in the Annex hereto.

(b) *Individual Obligations.* Each of the Contracting Parties will bear the costs it incurs in carrying out this Agreement and the Annex hereto except as otherwise agreed between two or more Contracting Parties.

Article 6

INFORMATION AND INTELLECTUAL PROPERTY

(a) *Executive Committee's Powers.* The publication, distribution, handling, protection and ownership of information and intellectual property arising from activities conducted under this Agreement shall be determined by the Executive Committee, acting by unanimity, in conformity with this Agreement.

(b) *Right to Publish.* Subject only to patents and copyright restrictions of this Agreement, the Contracting Parties shall have the right to publish all information provided to or arising from the Programme except proprietary information, but they shall not publish it with a view to profit except as the Executive Committee, acting by unanimity, may agree or provide by rule. All that information shall be available without charge to the Contracting Parties.

(c) *Proprietary Information.* The Contracting Parties shall take all necessary measures in accordance with this Article, the laws of their respective countries and international law to protect proprietary information. For the purposes of this Agreement, proprietary information shall mean information of a confidential nature such as trade secrets and know-how (for example, computer programmes, design procedures and techniques, chemical composition of materials, or manufacturing methods, processes, or treatments) which is appropriately marked, provided such information:

- (1) Is not generally known or publicly available from other sources;

- (2) Has not previously been made available by the owner to others without obligation concerning its confidentiality; and
- (3) Is not already in the possession of the recipient Contracting Party without obligation concerning its confidentiality.

It shall be the responsibility of each Contracting Party supplying proprietary information to identify the information as such and to ensure that it is appropriately marked.

(d) *Production of Relevant Information by Governments.* The Operating Agent should encourage the governments of all Agency Participating Countries to make available or to identify to the Operating Agent all published or otherwise freely available information known to them that is relevant to the Programme. The Contracting Parties should notify the Operating Agent of all pre-existing information, and information developed independently of the Programme known to them which is relevant to the Programme and which can be made available to the Programme without contractual or legal limitations.

(e) *Reports on Programme Work.* Reports containing arising information and pre-existing information necessary for and used in the Programme, including proprietary information, shall be provided to each Contracting Party by the Contracting Party performing the work. It shall be the responsibility of each Contracting Party to identify information which qualifies as proprietary information under this Article and ensure that it is appropriately marked. The Operating Agent shall provide summary reports of work performed under the Annex hereto and the results thereof (arising information), other than proprietary information, to the Executive Committee.

(f) *License of Proprietary Information.* Each Contracting Party agrees to license all pre-existing proprietary information necessary for and used in its work under the Programme and which it owns or controls and all arising proprietary information to the Contracting Parties, their governments, and the nationals of their respective countries designated by them:

- (1) Royalty-free for use in the Programme only; and
- (2) On favourable terms and conditions for all other uses taking into account the equities of the Contracting Parties based upon the sharing of obligations, contributions, rights and benefits of all Contracting Parties.

Each Contracting Party agrees to license all such arising proprietary information to all Agency Participating Countries on reasonable terms and conditions for use in their own country in order to meet their energy needs.

(g) *License of Patents Needed for Programme.* Patents solely owned or controlled by a Contracting Party which are needed for use in the Programme shall be licensed to another Contracting Party for use in the Programme only at no cost to such Contracting Party. If such patents are partially owned or controlled by a Contracting Party, then efforts shall be made by the Contracting Party to reduce or eliminate as possible the benefit that might accrue to it.

(h) *Arising Inventions.* Inventions made or conceived in the course of or under the Programme (arising inventions) shall be owned in all countries by the inventing Contracting Party. Information regarding inventions on which patent protection is to be obtained by the Contracting Party shall not be published or publicly disclosed by the other Contracting Parties until a patent application has been filed, provided, however, that this restriction on publication or disclosure shall not extend beyond six months from the date of receipt of such information. It shall be the responsibility of the inventing Contracting Party to appropriately mark reports which disclose inventions that have not been appropriately protected by the filing of a patent application.

(i) *License of Inventions.* Each Contracting Party agrees to license all pre-existing inventions covered by patents owned or controlled by it which are necessary for practising the results of its work under the Programme and which have been utilized in that work, and all arising inventions to the Contracting Parties, their governments and the nationals of their respective countries designated by them:

- (1) Royalty-free for use in the Programme only; and
- (2) On favourable terms and conditions for all other uses, taking into account the equities of the Contracting Parties based upon the sharing of obligations, contributions, rights and benefits of all Contracting Parties.

Each Contracting Party agrees to license all such arising inventions to all Agency Participating Countries on reasonable terms and conditions for use in their own country in order to meet their energy needs.

(j) *Copyright.* The Operating Agent or each Contracting Party for its own work under the Programme may take appropriate measures necessary to protect copyrightable material generated under the Programme. Copyrights obtained shall be the property of that Contracting Party or the Operating Agent, provided, however, that Contracting Parties may reproduce and distribute such material, but shall not publish it with a view to profit.

(k) *Inventors and Authors.* Each Contracting Party will, without prejudice to any rights of inventors or authors under its national laws, take all necessary steps to provide the co-operation from its authors and inventors required to carry out the provisions of this Article. Each Contracting Party will assume the responsibility to pay awards or compensation required to be paid to its employees according to the laws of its country.

(l) *Determination of "National".* The Executive Committee may establish guidelines to determine what constitutes a "national" of a Contracting Party, provided, however, in recognition of the fact that all the fusion power research and development programmes of the individual Member States of the European Atomic Energy Community (EURATOM) are carried out jointly in the framework of EURATOM, and that EURATOM acts on behalf of itself and its associated national organisations in fusion power research and development, the governments and countries referred to in sub-paragraphs (f) and (i) above shall, with respect to EURATOM, be understood to be the governments and countries of the Member States of EURATOM.

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Article 7

LEGAL RESPONSIBILITY

Each Contracting Party agrees to compensate the Operating Agent or persons acting on its behalf for damages, liabilities or costs when such damages, liabilities or costs are due to the gross negligence or wilful misconduct of the personnel of the Contracting Party assigned under an agreement entered into in accordance with the Annex hereto, provided, however, that this provision shall not apply to damages, liabilities or costs insofar as and to the extent that they arise out of the gross negligence or wilful misconduct of the Operating Agent, or persons acting on its behalf.

Article 8

LEGISLATIVE PROVISIONS

(a) *Accomplishment of Formalities.* Each Contracting Party shall request the appropriate authorities of its country (or its Member States in the case of an international organisation) to use their best endeavours, within the framework of applicable legislation, to facilitate the accomplishment of formalities involved in the movement of persons, the importation of materials and equipment and the transfer of currency which shall be required to conduct its work under the Programme.

(b) *Applicable Laws.* In carrying out this Agreement and the Annex hereto, the Contracting Parties shall be subject to the appropriation of funds by the appropriate governmental authority, where necessary, and to the constitution, laws and regulations applicable to the respective Contracting Parties, including, but not limited to, laws establishing prohibitions upon the payment of commissions, percentages, brokerage or contingent fees to persons retained to solicit governmental contracts and upon any share of such contracts accruing to government officials.

(c) *Decisions of Agency Governing Board.* The Contracting Parties shall take account, as appropriate, of the Guiding Principles for Co-operation in the Field of Energy Research and Development, and any modification thereof, as well as other decisions of the Governing Board of the Agency in that field. The termination of the Guiding Principles shall not affect this Agreement, which shall remain in force in accordance with the terms hereof.

(d) *Settlement of Disputes.* Any dispute among the Contracting Parties concerning the interpretation or the application of this Agreement which is not settled by negotiation or other agreed mode of settlement, shall be referred to a tribunal of three arbitrators to be chosen by the Contracting Parties concerned who shall also choose the Chairman of the tribunal. Should the Contracting Parties concerned fail to agree upon the composition of the tribunal or the selection of its Chairman, the President of the International Court of Justice shall, at the request of any of the Contracting Parties concerned, exercise those responsibilities. The tribunal shall decide any such dispute by reference to the terms of

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this Agreement and any applicable laws and regulations, and its decision on a question of fact shall be final and binding on the Contracting Parties. An Operating Agent which is not a Contracting Party shall be regarded as a Contracting Party for the purpose of this paragraph.

Article 9

ADMISSION AND WITHDRAWAL OF CONTRACTING PARTIES

(a) *Admission of New Contracting Parties: Agency Countries.* Upon the invitation of the Executive Committee, acting by unanimity, admission to the Agreement shall be open to the government of any Agency Participating Country (or a national agency, public organisation, private corporation, company or other entity designated by such government), which signs or accedes to this Agreement and accepts the rights and obligations of a Contracting Party. Such admission of a Contracting Party shall become effective upon the signature of this Agreement by the new Contracting Party or its accession thereto and the adoption of any consequential amendments thereto.

(b) *Admission of New Contracting Parties: Other OECD Countries.* The government of any Member of the Organisation for Economic Co-operation and Development which does not participate in the Agency may, on the proposal of the Executive Committee, acting by unanimity, be invited by the Governing Board of the Agency to become a Contracting Party to this Agreement (or to designate a national agency, public organisation, private corporation, company, or other entity to do so), under the conditions stated in paragraph (a) above.

(c) *Contributions.* The Executive Committee may require, as a condition to admission to participation, that the new Contracting Party accept obligations which are designed to compensate the Contracting Parties as appropriate for their prior contributions to the Programme.

(d) *Replacement of Contracting Parties.* With the agreement of the Executive Committee, acting by unanimity, and upon the request of a government, a Contracting Party designated by that government may be replaced by another party. In the event of such replacement, the replacement party shall assume the rights and obligations of a Contracting Party as provided in paragraph (a) above and in accordance with the procedure provided therein.

(e) *Withdrawal.* Any Contracting Party may withdraw from this Agreement either with the agreement of the Executive Committee, acting by unanimity, or by giving twelve months written Notice of Withdrawal to the Executive Director of the Agency, such Notice to be given not less than two years after the date hereof. The withdrawal of a Contracting Party under this paragraph shall not affect the rights and obligations of the other Contracting Parties.

(f) *Change of Status of Contracting Party.* A Contracting Party other than a government or an international organisation shall forthwith notify the Executive Committee

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of any significant change in its status or ownership, or of its becoming bankrupt or entering into liquidation. The Executive Committee shall determine whether any such change in status of a Contracting Party significantly affects the interests of the other Contracting Parties; if the Executive Committee so determines, then, unless the Executive Committee, acting upon the unanimous decision of the other Contracting Parties, otherwise agrees:

- (1) That Contracting Party shall be deemed to have withdrawn from the Agreement under paragraph (e) above on a date to be fixed by the Executive Committee; and
- (2) The Executive Committee shall invite the government which designated that Contracting Party to designate, within a period of three months of the withdrawal of that Contracting Party, a different entity to become a Contracting Party; if approved by the Executive Committee, acting by unanimity, such entity shall become a Contracting Party with effect from the date on which it signs or accedes to this Agreement.

(g) *Failure to Fulfil Contractual Obligations.* Any Contracting Party which fails to fulfil its obligations under this Agreement within sixty days after its receipt of notice specifying the nature of such failure and invoking this paragraph, may be deemed by the Executive Committee, acting by unanimity, to have withdrawn from this Agreement.

Article 10

FINAL PROVISIONS

(a) *Term of Agreement.* This Agreement shall remain in force for an initial period of nine years from the date hereof. The term of this Agreement may be extended for such additional period as may be determined by the Executive Committee, acting by unanimity.

(b) *Legal Relationship of Contracting Parties.* Nothing in this Agreement shall be regarded as constituting a partnership between any of the Contracting Parties.

(c) *Amendment.* This Agreement and the Annex hereto may be amended at any time by the Executive Committee, acting by unanimity. Such amendments shall come into force in a manner determined by the Executive Committee, acting by unanimity.

(d) *Deposit.* The original of this Agreement shall be deposited with the Executive Director of the Agency and a certified copy thereof shall be furnished to each Contracting Party. A copy of this Agreement shall be furnished to each Agency Participating Country, and to each Member country of the Organisation for Economic Co-operation and Development.

Done in Paris, this 5th day of October, 1977.

For the NATIONAL RESEARCH
COUNCIL OF CANADA
(designated by the Government
of Canada):

For the EUROPEAN ATOMIC ENERGY COMMUNITY (EURATOM):

[JAPAN]

For the TURKISH SCIENTIFIC AND
TECHNICAL RESEARCH COUNCIL
(designated by the Government
of Turkey):

[For the UNITED STATES ENERGY RESEARCH
AND DEVELOPMENT ADMINISTRATION
for and on behalf of the Government
of the United States of America:

or

For the UNITED STATES DEPARTMENT OF ENERGY
for and on behalf of the Government
of the United States of America]:

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ANNEX

PLASMA WALL INTERACTION IN TEXTOR

1. Objectives

The overall objectives of the Programme are to evaluate the relative importance of the processes leading to the build-up of impurities in tokamaks and to the damage of the first wall under different operating conditions; to search for appropriate first wall materials, structures and temperatures that are optimized with respect to particle release and wall material behaviour; and to develop and test methods to control the plasma boundary.

2. Means

The Contracting Parties will undertake a Programme involving the sharing of tasks (as described in paragraph 3 below) in the final design, construction and operation of a plasma test bed device (the Torus Experiment for Technology Oriented Research known as TEXTOR) (as described in the Report on the Planning of TEXTOR dated 15 November 1975 and the TEXTOR Kurzbeschreibung dated March 1976, hereinafter called the "TEXTOR Reports"). In this regard, they will undertake the accompanying material studies, the development of related diagnostics, and will co-operate in the operation of TEXTOR in the presence of different first wall assemblies under a variety of plasma boundary conditions.

3. Programme Phases

(a) Phase I: Final Design and Construction

- (1) *Definition.* The preliminary design having been completed prior to the signing of this Agreement, Phase I will encompass the final design and construction of TEXTOR. During this phase, which is expected to last three to four years, the Contracting Parties other than EURATOM will assign specialists (scientists, engineers and/or other technical personnel) to the TEXTOR site to contribute to the final design, construction and preparation for operation of TEXTOR, including the development of plasma wall diagnostics and appropriate wall materials.
- (2) Each Contracting Party other than EURATOM will contribute between four and seven man-years of assigned specialists working at the TEXTOR site. Not more than three specialists from a single Contracting Party, with the noted exception, will be accepted at any one time without the prior approval of the Operating Agent.
- (3) Specialists will be assigned in accordance with the procedures set forth in paragraph 6 below.

(b) *Phase II: Operation*

(1) *Definitions.* The TEXTOR Operation Phase will include a sequence of experiments for which an agreed time period will be provided by the Operating Agent. Each of the Contracting Parties will contribute proposals for experiments in the Operation Phase falling into one or more of the following categories:

- (i) *Category I.* Experiments requiring neither modifications to TEXTOR nor additional equipment, but involving the assignment of the necessary experts during the experiment.
- (ii) *Category II.* Experiments requiring no modifications to TEXTOR, but requiring additional equipment, and the assignment of experts during the experiment.
- (iii) *Category III.* Experiments requiring modifications of TEXTOR and the assignment of specialists, and possibly, additional equipment. It is expected that such modifications will not require major changes in the basic design and construction of TEXTOR.

(2) *Procedures for Submission of and Decision on Proposals for Experiments*

- (i) Proposals for experiments to be carried out with TEXTOR will be submitted by each of the Contracting Parties other than EURATOM to the Operating Agent. These shall include a detailed description of aims, Category (as defined in subparagraph (1) above), programme, design, means, personnel (including experts to be assigned), time period required and time schedule, other conditions and, if available, results of reliability tests already conducted.
- (ii) Experiments in Categories I and II, requiring the utilisation of TEXTOR for a period of not more than four months, may be agreed upon directly between the Operating Agent and the proposing Contracting Party.
- (iii) All other experiments will require the approval of the Executive Committee, acting by unanimity.
- (iv) In the case of proposals for experiments falling under (iii) above, the Operating Agent, if it concurs with the proposal, will submit it with its comments to the Executive Committee which will take the necessary steps to have the proposal reviewed as to its scientific and technical merits, cost and time requirements, by at least two experts selected from a list of experts previously agreed by the Executive Committee. On the basis of the experts' report, the Executive Committee will

decide whether or not to approve the experiment. In approving, the Executive Committee shall confirm the experimental programme, time period required and time schedule, priority with respect to other experiments, personnel to be assigned and any special conditions.

- (v) In the event that, in the judgement of the Operating Agent, a proposed experiment is felt to endanger the essential components of the TEXTOR ensemble and/or the safety of operating personnel, the Operating Agent may, after consultation with the Executive Committee, decline to carry out the proposed experiment.

(3) *Allocation of Time for Experiments*

It is understood that 40 per cent of the total operating time of TEXTOR will be available for the agreed experiments of all the Contracting Parties. The other 60 per cent will be at the exclusive disposal of the Operating Agent, which may grant from that time additional operating time for agreed experiments of the Contracting Parties other than EURATOM. The Operating Agent will make every effort to transmit the results of experiments performed within its operating time to the Executive Committee and to the Programme Officers of each of the Contracting Parties other than EURATOM within six months of the conclusion of each experiment.

(4) *Acceptance Testing of Components*

The Operating Agent reserves the right to conduct acceptance tests of the delivered components (for instance, vacuum, mechanical, electrical, magnetic) to ensure that their insertion will not endanger or perturb the operation of TEXTOR.

(5) *Removal of Materials and Equipment*

After the conclusion of an experiment, each Contracting Party will, upon the request of the Operating Agent, forthwith effect at its own cost the removal of materials and/or equipment introduced by that Contracting Party at the TEXTOR site.

(6) *Reporting of Experimental Results*

Each Contracting Party will report the results of its experiments to the other Contracting Parties within six months of the conclusion of each experiment.

4. *Specific Responsibilities of the Operating Agent*

The Operating Agent will:

- (a) Be responsible for the funding, design, construction and operation of the TEXTOR device (as specified in the TEXTOR Reports); for which purpose operation shall mean the overall administrative and technical management of TEXTOR;

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- (b) Use its best efforts to provide the necessary office space and, subject to mutual agreement, laboratory space at the site to Contracting Parties other than EURATOM;
 - (c) Make the necessary arrangements to facilitate access for each of the Contracting Parties other than EURATOM to the site;
 - (d) Use its best efforts to provide, during the Operation Phase, necessary and reasonable computer time to Contracting Parties other than EURATOM;
 - (e) During the Operation Phase, and after agreement on experiments (under paragraph 3 (b) (2) above), carry out the necessary modifications of TEXTOR, assisted where necessary by the interested Contracting Party and ensure that adequate priority is given to the experiments during the agreed time period;
 - (f) During the Operation Phase, be responsible for providing the necessary technical personnel for the routine operation of TEXTOR during the agreed experiments, for covering TEXTOR operating costs and for acquiring the basic plasma and wall data required for the interpretation of results insofar as permitted by standard measuring methods installed at that time. "TEXTOR operating costs" are the costs anticipated in connection with the routine operation of TEXTOR, and the services of the Operating Agent pursuant to sub-paragraphs (b) to (f) above. Costs other than TEXTOR operating costs, as well as the costs of materials for additional equipment or modifications of TEXTOR (extra costs), will be borne by the Contracting Party whose experiment requires these extra costs.

5. *Technical Description*

A description of the TEXTOR facility and its relevant parameters is to be found in the TEXTOR Reports. From this information Contracting Parties other than EURATOM may obtain dimensions and other data needed for the incorporation of new components or diagnostic instruments. Technical information in greater detail than that found in the TEXTOR Reports will be made available by the Operating Agent upon the request of a Contracting Party.

6. *Assignment of Personnel*

- (a) The Contracting Parties other than EURATOM may assign experts in the fields set forth in paragraph 1 above to work at the TEXTOR site in accordance with agreements between the Operating Agent and the assigning Party. Such agreements will specify the work plan to be followed by such experts.
- (b) The procedures to be followed in assigning experts shall be as follows:
 - (1) Each Contracting Party desiring to assign an expert shall submit its nomination to the Operating Agent, as a rule, at least four months prior to the expected assignment date. Each such nomination shall specify the qualifications of the expert, his task during the assignment and the length of the assignment.

- (2) The Operating Agent shall, as soon as possible, notify the nominating Party of the acceptability of the assignment.
- (c) The duration of each assignment during the final design and construction phase shall normally be one year, except as may otherwise be agreed between the Operating Agent and the nominating Party.
- (d) Publications resulting from theoretical or experimental investigations carried out in connection with the Programme shall normally be issued in the form of joint reports of the Contracting Parties or individuals who contributed to the investigations.
- (e) All personal expenses associated with an assignment shall be borne by the assigning Party. Such expenses shall include, but not be limited to, costs of salary, travel, insurance and living expenses of the assigned personnel. Assigned personnel shall in no way be deemed to be employees of the Operating Agent by virtue of their assignment. Assigned personnel shall adhere to all safety and other operating procedures of the Operating Agent.

7. Programme Officers

Each Contracting Party will designate a Programme Officer who will be the principal point of contact among the Contracting Parties.

8. Time Period

- (a) The period of the Programme is expected to extend to the end of 1985 or until the completion of the Operation Phase set out in paragraph 3 above, whichever is earlier.

- (b) Programme Milestones:

Freezing of main machine parameters Completed in 1976

Final design and call for tenders of main components:

— TF-coils, transformer 1977

— vessel 1978

— first liner 1978-1979

Commissioning of the system including neutral injection 1980

The development of special diagnostics, the accompanying material studies e.g. leading to new liners and the preparation of new methods of plasma-wall-control will be pursued throughout the Programme.

INTERNATIONAL ENERGY AGENCY

IMPLEMENTING AGREEMENT FOR A PROGRAMME OF RESEARCH AND DEVELOPMENT ON SUPERCONDUCTING MAGNETS FOR FUSION POWER

The Contracting Parties

CONSIDERING that the Contracting Parties, being either governments or international organisations or parties designated by their respective governments pursuant to Article III of the Guiding Principles for Co-operation in the Field of Energy Research and Development adopted by the Governing Board of the International Energy Agency (the "Agency") on 28th July, 1975, wish to take part in the establishment and operation of a Programme of Research and Development on Superconducting Magnets for Fusion Power (the "Programme") as provided in this Agreement;

CONSIDERING that the Contracting Parties which are governments and the governments of the other Contracting Parties (referred to collectively as the "Governments") participate in the Agency and have agreed in Article 41 of the Agreement on an International Energy Program (the "I.E.P. Agreement") to undertake national programmes in the areas set out in Article 42 of the I.E.P. Agreement, including research and development on controlled thermonuclear fusion in which field the Programme will be carried out;

CONSIDERING that in the Governing Board of the Agency on 28th July, 1975, the Governments approved the Programme as a special activity under Article 65 of the I.E.P. Agreement;

CONSIDERING that the Agency has recognised the establishment of the Programme as an important component of international co-operation in the field of fusion power research and development;

HAVE AGREED as follows:

Article 1

OBJECTIVES

(a) *Scope of Activity.* The Programme to be carried out by the Contracting Parties within the framework of this Agreement shall consist of co-operative research, development, demonstrations and exchanges of information regarding superconducting magnets for fusion power.

(b) *Method of Implementation.* The Contracting Parties shall implement the Programme by undertaking one or more tasks (the "Task" or "Tasks") each of which will be open to participation by two or more Contracting Parties as provided in Article 2 hereof. The Contracting Parties which participate in a particular Task are, for the purposes of that Task, referred to in this Agreement as "Participants".

(c) *Task Co-ordination and Co-operation.* The Contracting Parties shall co-operate in co-ordinating the work of the various Tasks and shall endeavour, on the basis of an appropriate sharing of burdens and benefits, to encourage co-operation among Participants engaged in the various Tasks with the objective of advancing the research and development activities of all Contracting Parties in the field of superconducting magnets for fusion power.

Article 2

IDENTIFICATION AND INITIATION OF TASKS

(a) *Identification.* The Tasks undertaken by Participants are identified in the Annexes to this Agreement. At the time of signing this Agreement, each Contracting Party shall confirm its intention to participate in one or more Tasks by giving the Executive Director of the Agency a Notice of Participation in the relevant Annex or Annexes and the Operating Agent for each Task shall give the Executive Director of the Agency a Notice of Acceptance of the Task Annex. Thereafter, each Task shall be carried out in accordance with the procedures set forth in Articles 2 to 11 hereof, unless otherwise specifically provided in the applicable Annex.

(b) *Initiation of Additional Tasks.* Additional Tasks may be initiated by any Contracting Party according to the following procedure:

- (1) A Contracting Party wishing to initiate a new Task shall present to one or more Contracting Parties for approval a draft Annex, similar in form to the Annexes attached hereto, containing a description of the scope of work and conditions of the Task proposed to be performed;
- (2) Whenever two or more Contracting Parties agree to undertake a new Task, they shall submit the draft Annex for approval by the Executive Committee pursuant to Article 3 (e) (2) hereof; the approved draft Annex shall become part of this Agreement; Notice of Participation in the Task by Contracting Parties and acceptance by the Operating Agent shall be communicated to the Executive Director in the manner provided in paragraph (a) above;
- (3) In carrying out the various Tasks, Participants shall co-ordinate their activities in order to avoid duplication of activities.

(c) *Application of Task Annexes.* Each Annex shall be binding only upon the Participants therein and upon the Operating Agent for that Task, and shall not affect the rights or obligations of other Contracting Parties.

Article 3

THE EXECUTIVE COMMITTEE

(a) *Supervisory Control.* Control of the Programme shall be vested in the Executive Committee constituted under this Article.

(b) *Membership.* The Executive Committee shall consist of one member designated by each Contracting Party; each Contracting Party shall also designate an alternate member to serve on the Executive Committee in the event that its designated member is unable to do so.

(c) *Responsibilities.* The Executive Committee shall:

- (1) Adopt for each year, acting by unanimity, the Programme of Work, and Budget if foreseen, for each Task, together with an indicative programme of work and budget for the following two years; the Executive Committee may, as required, make adjustments within the framework of the Programme of Work and Budget;
- (2) Make such rules and regulations as may be required for the sound management of the Tasks, including financial rules as provided in Article 6 hereof;
- (3) Carry out the other functions conferred upon it by this Agreement and the Annexes hereto; and
- (4) Consider any matters submitted to it by any of the Operating Agents or by any Contracting Party.

(d) *Procedure.* The Executive Committee shall carry out its responsibilities in accordance with the following procedures:

- (1) The Executive Committee shall each year elect a Chairman and one or more Vice-Chairmen;
- (2) The Executive Committee may establish such subsidiary bodies and rules of procedure as are required for its proper functioning. A representative of the Agency and a representative of each Operating Agent (in its capacity as such) may attend meetings of the Executive Committee and its subsidiary bodies in an advisory capacity;
- (3) The Executive Committee shall meet in regular session twice each year; a special meeting shall be convened upon the request of any Contracting Party which can demonstrate the need therefor;
- (4) Meetings of the Executive Committee shall be held at such time and in such office or offices as may be designated by the Committee;

- (5) At least twenty-eight days before each meeting of the Executive Committee, notice of the time, place and purpose of the meeting shall be given to each Contracting Party and to other persons or entities entitled to attend the meeting; notice need not be given to any person or entity otherwise entitled thereto if notice is waived before or after the meeting;
- (6) The quorum for the transaction of business in meetings of the Executive Committee shall be one-half of the members plus one (less any resulting fraction) provided that any action relating to a particular Task shall require a quorum as aforesaid of members or alternate members designated by the Participants in that Task.

(e) *Voting.*

- (1) When the Executive Committee adopts a decision or recommendation for or concerning a particular Task, the Executive Committee shall act:
 - (i) When unanimity is required under this Agreement: by agreement of those members or alternate members which were designated by the Participants in that Task and which are present and voting;
 - (ii) When no express voting provision is made in this Agreement: by majority vote of those members or alternate members which were designated by the Participants in that Task and which are present and voting;
- (2) In all other cases in which this Agreement expressly requires the Executive Committee to act by unanimity, this shall require the agreement of each member or alternate member present and voting, and in respect of all other decisions and recommendations for which no express voting provision is made in this Agreement, the Executive Committee shall act by a majority vote of the members or alternate members present and voting. If a government has designated more than one Contracting Party to this Agreement, those Contracting Parties may cast only one vote under this paragraph;
- (3) The decisions and recommendations referred to in paragraphs (1) and (2) above may, with the agreement of each member or alternate member entitled to act thereon, be made by mail, telex or cable without the necessity for calling a meeting. Such action shall be taken by unanimity or majority of such members as in a meeting. The Chairman of the Executive Committee shall ensure that all members are informed of each decision or recommendation made pursuant to this paragraph.

(f) *Reports.* The Executive Committee shall, at least annually, provide the Agency with periodic reports on the progress of the Programme.

Article 4

THE OPERATING AGENTS

(a) *Designation.* Participants shall designate in the relevant Annex an Operating Agent for each Task. References in this Agreement to the Operating Agent shall apply to each Operating Agent in respect of the Task for which it is responsible.

(b) *Scope of Authority to Act on Behalf of Participants.* Subject to the provisions of the applicable Annex:

- (1) All legal acts required to carry out each Task shall be performed on behalf of the Participants by the Operating Agent for the Task;
- (2) The Operating Agent shall hold, for the benefit of the Participants, the legal title to all property rights which may accrue to or be acquired for the Task.

The Operating Agent shall operate the Task under its supervision and responsibility, subject to this Agreement, in accordance with the law of the country of the Operating Agent.

(c) *Reimbursements of Costs.* The Executive Committee may provide that expenses and costs incurred by an Operating Agent in acting as such pursuant to this Agreement shall be reimbursed to the Operating Agent from funds made available by the Participants pursuant to Article 6 hereof.

(d) *Replacement.* Should the Executive Committee wish to replace an Operating Agent with another government or entity, the Executive Committee may, acting by unanimity and with the consent of such government or entity, replace the initial Operating Agent. References in this Agreement to the "Operating Agent" shall include any government or entity appointed to replace the original Operating Agent under this paragraph.

(e) *Resignation.* An Operating Agent shall have the right to resign at any time, by giving six months written notice to that effect to the Executive Committee, provided that:

- (1) A Participant, or entity designated by a Participant, is at such time willing to assume the duties and obligations of the Operating Agent and so notifies the Executive Committee and the other Participants to that effect, in writing, not less than three months in advance of the effective date of such resignation; and
- (2) Such Participant or entity is approved by the Executive Committee, acting by unanimity.

(f) *Accounting.* An Operating Agent which is replaced or which resigns as Operating Agent shall provide the Executive Committee with an accounting of any monies and other assets which it may have collected or acquired for the Task in the course of carrying out its responsibilities as Operating Agent.

(g) *Transfer of Rights.* In the event that another Operating Agent is appointed under paragraph (d) or (e) above, the Operating Agent shall transfer to such replacement Operating Agent any property rights which it may hold on behalf of the Task.

Article 5

ADMINISTRATION AND STAFF

(a) *Administration of Tasks.* Each Operating Agent shall be responsible to the Executive Committee for implementing its designated Task in accordance with this Agreement, the applicable Task Annex, and the decisions of the Executive Committee.

(b) *Information and Reports.* Each Operating Agent shall furnish to the Executive Committee such information concerning the Task as the Committee may request and shall each year submit, not later than two months after the end of the financial year, a report on the status of the Task.

(c) *Staff.* It shall be the responsibility of the Operating Agent to retain such staff as may be required to carry out its designated Task in accordance with rules determined by the Executive Committee. The Operating Agent may also, as required, utilise the services of personnel employed by other Participants (or organisations or other entities designated by Contracting Parties) and made available to the Operating Agent by secondment or otherwise. Such personnel shall be remunerated by their respective employers and shall, except as provided in this Article, be subject to their employers' conditions of service. The Contracting Parties shall be entitled to claim the appropriate cost of such remuneration or to receive an appropriate credit for such cost as part of the Budget of the Task, in accordance with Article 6 (f) (6) hereof.

Article 6

FINANCE

(a) *Individual Obligations.* Each Contracting Party shall bear the costs it incurs in carrying out this Agreement, including the costs of formulating or transmitting reports and of reimbursing its employees for travel and other per diem expenses incurred in connection with work carried out on the respective Tasks, unless provision is made for such costs to be reimbursed from common funds as provided in paragraph (g) below.

(b) *Common Financial Obligations.* Participants wishing to share the costs of a particular Task shall agree in the appropriate Task Annex to do so. The apportionment of contributions to such costs (whether in the form of cash, services rendered, intellectual property or the supply of materials) and the use of such contributions shall be governed by the regulations and decisions made pursuant to this Article by the Executive Committee.

(c) *Rules of Procurement, Expenditure.* The Executive Committee, acting by unanimity, may make such regulations as are required for the sound financial management of each Task including, where necessary:

- (1) Establishment of budgetary and procurement procedures to be used by the Operating Agent in making payments from any common funds which may be maintained by Participants for the account of the Task or in making contracts on behalf of the Participants;
- (2) Establishment of minimum levels of expenditure for which Executive Committee approval shall be required, including expenditure involving payment of monies to the Operating Agent for other than routine salary and administrative expenses previously approved by the Executive Committee in the budget process.

In the expenditure of common funds, the Operating Agent shall take into account the necessity of ensuring a fair distribution of such expenditure in the Participants' countries, where this is fully compatible with the most efficient technical and financial management of the Task.

(d) *Crediting of Income to Budget.* Any income which accrues from a Task shall be credited to the Budget of that Task.

(e) *Accounting.* The system of accounts employed by the Operating Agent shall be in accordance with accounting principles generally accepted in the country of the Operating Agent and consistently applied.

(f) *Programme of Work and Budget, Keeping of Accounts.* Should Participants agree to maintain common funds for the payment of obligations under a Programme of Work and Budget of the Task, accounts shall be maintained as follows unless otherwise decided by the Executive Committee, acting by unanimity:

- (1) The financial year of the Task shall correspond to the financial year of the Operating Agent;
- (2) The Operating Agent shall each year prepare and submit to the Executive Committee for approval a draft Programme of Work and Budget, together with an indicative programme of work and budget for the following two years, not later than three months before the beginning of each financial year;
- (3) The Operating Agent shall maintain complete, separate financial records which shall clearly account for all funds and property coming into the custody or possession of the Operating Agent in connection with the Task;
- (4) Not later than three months after the close of each financial year the Operating Agent shall submit to auditors selected by the Executive Committee for audit the annual accounts maintained for the Task; upon completion of the annual audit, the Operating Agent shall present the

accounts together with the auditors' report to the Executive Committee for approval;

- (5) All books of account and records maintained by the Operating Agent shall be preserved for at least three years from the date of termination of the Task;
- (6) Where provided in the relevant Annex, a Participant supplying services, materials or intellectual property to the Task shall be entitled to a credit, determined by the Executive Committee, acting by unanimity, against its contribution (or to compensation, if the value of such services, materials or intellectual property exceeds the amount of the Participant's contribution); such credits for services of staff shall be calculated on an agreed scale approved by the Executive Committee and include all payroll-related costs.

(g) *Contribution to Common Funds.* Should Participants agree to establish common funds under the annual Programme of Work and Budget for a Task, any financial contributions due from Participants in a Task shall be paid to the Operating Agent in the currency of the country of the Operating Agent at such times and upon such other conditions as the Executive Committee, acting by unanimity, shall determine, provided however that:

- (1) Contributions received by the Operating Agent shall be used solely in accordance with the Programme of Work and Budget for the Task;
- (2) The Operating Agent shall be under no obligation to carry out any work on the Task until contributions amounting to at least fifty per cent (in cash terms) of the total due at any one time have been received.

(h) *Ancillary Services.* Ancillary services may, as agreed between the Executive Committee and the Operating Agent, be provided by that Operating Agent for the operation of a Task and the costs of such services, including overheads connected therewith, may be met from budgeted funds of that Task.

(i) *Taxes.* The Operating Agent shall pay all taxes and similar impositions (other than taxes on income) imposed by national or local governments and incurred by it in connection with a Task, as expenditure incurred in the operation of that Task under the Budget; the Operating Agent shall, however, endeavour to obtain all possible exemptions from such taxes.

(j) *Audit.* Each Participant shall have the right, at its sole cost, to audit the accounts of any work in a Task for which common funds are maintained on the following terms:

- (1) The Operating Agent shall provide the other Participants with an opportunity to participate in such audits on a cost-shared basis;
- (2) Accounts and records relating to activities of the Operating Agent other than those conducted for the Task shall be excluded from such audit.

but if the Participant concerned requires verification of charges to the Budget representing services rendered to the Task by the Operating Agent, it may at its own cost request and obtain an audit certificate in this respect from the auditors of the Operating Agent;

- (3) Not more than one such audit shall be required in any financial year;
- (4) Any such audit shall be carried out by not more than three representatives of the Participants.

Article 7

INFORMATION AND INTELLECTUAL PROPERTY

It is expected that for each Task agreed to pursuant to this Agreement, the applicable Annex will contain information and intellectual property provisions. The General Guidelines Concerning Information and Intellectual Property, approved by the Governing Board of the Agency on 21st November, 1975, shall be taken into account in developing such provisions.

Article 8

LEGAL RESPONSIBILITY AND INSURANCE

(a) *Liability of Operating Agent.* The Operating Agent shall use all reasonable skill and care in carrying out its duties under this Agreement in accordance with all applicable laws and regulations. Except as otherwise provided in this Article, the cost of all damage to property, and all expenses associated with claims, actions and other costs arising from work undertaken with common funds for a Task shall be charged to the Budget of that Task; such costs and expenses arising from other work undertaken for a Task shall be charged to the Budget of that Task if the Task Annex so provides or the Executive Committee, acting by unanimity, so decides.

(b) *Insurance.* The Operating Agent shall propose to the Executive Committee all necessary liability, fire and other insurance, and shall carry such insurance as the Executive Committee may direct. The cost of obtaining and maintaining insurance shall be charged to the Budget of the Task.

(c) *Indemnification of Contracting Parties.* The Operating Agent shall be liable, in its capacity as such, to indemnify Participants against the cost of any damage to property and all legal liabilities, actions, claims, costs and expenses connected therewith to the extent that they:

- (1) Result from the failure of the Operating Agent to maintain such insurance as it may be required to maintain under paragraph (h) above; or
- (2) Result from the gross negligence or wilful misconduct of any officers or employees of the Operating Agent in carrying out their duties under this Agreement.

Article 9

LEGISLATIVE PROVISIONS

- (a) *Accomplishment of Formalities.* Each Participant shall request the appropriate authorities of its country (or its Member States in the case of an international organisation) to use their best endeavours, within the framework of applicable legislation, to facilitate the accomplishment of formalities involved in the movement of persons, the importation of materials and equipment and the transfer of currency which shall be required to conduct the Task in which it is engaged.
- (b) *Applicable Laws.* In carrying out this Agreement and its Annexes, the Contracting Parties shall be subject to the appropriation of funds by the appropriate governmental authority, where necessary, and to the constitution, laws and regulations applicable to the respective Contracting Parties, including, but not limited to, laws establishing prohibitions upon the payment of commissions, percentages, brokerage or contingent fees to persons retained to solicit governmental contracts and upon any share of such contracts accruing to governmental officials.
- (c) *Decisions of Agency Governing Board.* Participants in the various Tasks shall take account, as appropriate, of the Guiding Principles for Co-operation in the Field of Energy Research and Development, and any modification thereof, as well as other decisions of the Governing Board of the Agency in that field. The termination of the Guiding Principles shall not affect this Agreement, which shall remain in force in accordance with the terms hereof.
- (d) *Settlement of Disputes.* Any dispute among the Contracting Parties concerning the interpretation or the application of this Agreement which is not settled by negotiation or other agreed mode of settlement, shall be referred to a tribunal of three arbitrators to be chosen by the Contracting Parties concerned who shall also choose the Chairman of the tribunal. Should the Contracting Parties concerned fail to agree upon the composition of the tribunal or the selection of its Chairman, the President of the International Court of Justice shall, at the request of any of the Contracting Parties concerned, exercise those responsibilities. The tribunal shall decide any such dispute by reference to the terms of this Agreement and any applicable laws and regulations, and its decision on a question of fact shall be final and binding on the Contracting Parties. Operating Agents which are not Contracting Parties shall be regarded as Contracting Parties for the purpose of this paragraph.

Article 10

ADMISSION AND WITHDRAWAL OF CONTRACTING PARTIES

- (a) *Admission of New Contracting Parties: Agency Countries.* Upon the invitation of the Executive Committee, acting by unanimity, admission to this Agreement shall be open to the government of any Agency Participating Country (or a national agency, public organisation, private corporation, company or other entity designated by such government), which signs or accedes to this Agreement, accepts the rights and obligations of a Contracting Party, and is accepted for participation in at least one Task by the Participants in that Task, acting by unanimity. Such admission of a Contracting Party shall become effective upon the signature of this Agreement by the new Contracting Party or its accession thereto and its giving Notice of Participation in one or more Annexes and the adoption of any consequential amendments thereto.
- (b) *Admission of New Contracting Parties: Other OECD Countries.* The government of any Member of the Organisation for Economic Co-operation and Development which does not participate in the Agency may, on the proposal of the Executive Committee, acting by unanimity, be invited by the Governing Board of the Agency to become a Contracting Party to this Agreement (or to designate a national agency, public organisation, private corporation, company or other entity to do so), under the conditions stated in paragraph (a) above.
- (c) *Admission of New Participants in Tasks.* Any Contracting Party may, with the agreement of the Participants in a Task, acting by unanimity, become a Participant in that Task. Such participation shall become effective upon the Contracting Party's giving the Executive Director of the Agency a Notice of Participation in the appropriate Task Annex and the adoption of consequential amendments thereto.
- (d) *Contributions.* The Executive Committee may require, as a condition to admission to participation, that the new Contracting Party or new Participant shall contribute (in the form of cash, services or materials) an appropriate proportion of the prior budget expenditure of any Task in which it participates.
- (e) *Replacement of Contracting Parties.* With the agreement of the Executive Committee, acting by unanimity, and upon the request of a government, a Contracting Party designated by that government may be replaced by another party. In the event of such replacement, the replacement party shall assume the rights and obligations of a Contracting Party as provided in paragraph (a) above and in accordance with the procedure provided therein.
- (f) *Withdrawal.* Any Contracting Party may withdraw from this Agreement or from any Task either with the agreement of the Executive Committee, acting by unanimity, or by giving twelve-months written Notice of Withdrawal to the Executive Director of the Agency, such Notice to be given not less than two years after the date hereof. The withdrawal of a Contracting Party under this paragraph shall not affect the rights and obligations

of the other Contracting Parties; except that, where the other Contracting Parties have contributed to common funds for a Task, their proportionate shares in the Task Budget shall be adjusted to take account of such withdrawal.

(g) *Changes of Status of Contracting Party.* A Contracting Party other than a government or an international organisation shall forthwith notify the Executive Committee of any significant change in its status or ownership, or of its becoming bankrupt or entering into liquidation. The Executive Committee shall determine whether any such change in status of a Contracting Party significantly affects the interests of the other Contracting Parties; if the Executive Committee so determines, then, unless the Executive Committee, acting upon the unanimous decision of the other Contracting Parties, otherwise agrees:

- (1) That Contracting Party shall be deemed to have withdrawn from the Agreement under paragraph (g) above on a date to be fixed by the Executive Committee; and
- (2) The Executive Committee shall invite the government which designated that Contracting Party to designate, within a period of three months of the withdrawal of that Contracting Party, a different entity to become a Contracting Party; if approved by the Executive Committee, acting by unanimity, such entity shall become a Contracting Party with effect from the date on which it signs or accedes to this Agreement and gives the Executive Director of the Agency a Notice of Participation in one or more Annexes.

(h) *Failure to Fulfil Contractual Obligations.* Any Contracting Party which fails to fulfil its obligations under this Agreement within sixty days after its receipt of notice specifying the nature of such failure and invoking this paragraph, may be deemed by the Executive Committee, acting by unanimity, to have withdrawn from this Agreement.

Article 11

FINAL PROVISIONS

(a) *Term of Agreement.* This Agreement shall remain in force for an initial period of six years from the date hereof, and shall continue in force thereafter unless and until the Executive Committee, acting by unanimity, decides on its termination.

(b) *Legal Relationship of Contracting Parties and Participants.* Nothing in this Agreement shall be regarded as constituting a partnership between any of the Contracting Parties or Participants.

(c) *Termination.* Upon termination of this Agreement, or any Annex to this Agreement, the Executive Committee, acting by unanimity, shall arrange for the liquidation of the assets of the Task or Tasks. In the event of such liquidation, the Executive Committee shall, so far as practicable, distribute the assets of the Task, or the proceeds

therefrom, in proportion to the contributions which the Participants have made from the beginning of the operation of the Task, and for that purpose shall take into account the contributions and any outstanding obligations of former Contracting Parties. Disputes with a former Contracting Party about the proportion allocated to it under this paragraph shall be settled under Article 9 (d) hereof, for which purpose a former Contracting Party shall be regarded as a Contracting Party.

(d) *Amendment.* This Agreement may be amended at any time by the Executive Committee, acting by unanimity, and any Annex to this Agreement may be amended at any time by the Executive Committee, acting by unanimity of the Participants in the Task to which the Annex refers. Such amendments shall come into force in a manner determined by the Executive Committee, acting under the voting rule applicable to the decision to adopt the amendment.

(e) *Deposit.* The original of this Agreement shall be deposited with the Executive Director of the Agency and a certified copy thereof shall be furnished to each Contracting Party. A copy of this Agreement shall be furnished to each Agency Participating Country, and to each Member country of the Organisation for Economic Co-operation and Development.

Done in Paris, this 5th day of October, 1977.

For the EUROPEAN ATOMIC ENERGY COMMUNITY (EURATOM):

[JAPAN]

[SWITZERLAND]

[For the UNITED STATES ENERGY RESEARCH
AND DEVELOPMENT ADMINISTRATION
for and on behalf of the Government
of the United States of America:

or

For the UNITED STATES DEPARTMENT OF ENERGY
for and on behalf of the Government
of the United States of America]:

Annex I

LARGE COIL TASK

1. Objectives

The Large Coil Task shall be undertaken in order to obtain experimental data, to demonstrate reliable operation of large superconducting coils, and to prove the design principles and fabrication techniques proposed for the magnets in a tokamak Experimental Power Reactor.

2. Means

The Participants shall implement the Large Coil Task, on a task-sharing basis as provided in the Agreement and this Annex.

(a) Planning and Construction of the Large Coil Test Facility (LCTF)

- (1) In consultation with the other Participants, the Operating Agent shall fund, design, construct and operate the LCTF as described in document IEA/CRD(77)57, which may be amended by the Executive Committee, acting by unanimity. As the design of the LCTF progresses, the Operating Agent shall keep the other Participants informed on any major additional elements of facility design and its capabilities.
- (2) The Participants shall make suggestions relating to the planning and design of the LCTF.

(b) Design and Fabrication of Test Coils

Each of the Participants shall design, fabricate, and deliver to the LCTF in Oak Ridge, Tennessee, U.S.A., one or more of its superconducting coils conforming to the parameters contained in document IEA/CRD(77)57 which may be amended by the Executive Committee, acting by unanimity.

(c) Assembly and Testing of Coils in a Compact Torus Array in the LCTF

- (1) The Operating Agent shall accept a maximum of three non-U.S. origin coils in the first test assembly. The Operating Agent shall also provide computer time to the Participants as required for the conduct of the Test Programme referred to in paragraph 2 (e) below.
- (2) Each Participant shall participate in the Test Programme in accordance with its terms. Each Participant shall also provide all special equipment necessary for the incorporation of its coils into the LCTF and for the conduct of tests not provided for in the Test Programme.

(d) Task-Related Information Exchanges and Visits

- (1) Each Participant shall report on the progress on subsize coil design and fabrication to all other Participants as the information becomes available. Each Participant shall report anticipated helium coil cooling requirements to the Operating Agent.
- (2) Each Participant shall supply the following information to the Operating Agent at least thirty days in advance of delivery of its coils to the LCTF site:
 - (i) Date of delivery of the coils to the test site;
 - (ii) Method of delivery and agent utilised;
 - (iii) Total weight of coils and crates;
 - (iv) Overall crate dimensions;
 - (v) Any special precautions that should be taken during handling of the coils;
 - (vi) Manner in which the coils can be lifted (i.e. suspended through a single point or by a cradle under the crate);
 - (vii) Names of people that will be either accompanying the coils or will help uncrate and check out the condition of the coils; and
 - (viii) Names of people that will help to test the coils.

The Participants shall contact the Operating Agent a few months before shipping their coils in order to determine if there are any changes to or added requirements besides those enumerated above.

- (3) Each Participant should, at the time of the delivery of its coils to the LCTF site, distribute the following information to the other Participants subject to the provisions of paragraph 5 below, and to the extent that the information is not proprietary.
 - (i) Description of the coils, including drawings and materials used;
 - (ii) Detailed design data of the coils and superconductors;
 - (iii) Back-up analysis and test data that was utilised to evolve the design of the coils;
 - (iv) Description of fabrication methods of the coils and superconductors; and
 - (v) Anticipated performance of the coils.

- (4) Each Participant shall use its best efforts to arrange visits for the other Participants to coil fabrication installations in its country.

(e) *Detailed Test Procedures*

Detailed procedures for the conduct of tests ("The Test Programme") shall, not later than 31st December, 1979, be adopted by the Executive Committee, acting by unanimity, in agreement with the Operating Agent.

3. *Administration and Staff (Supplementing Article 5 of the Agreement)*

- (a) *Administration of Task.* The Operating Agent shall have sole responsibility for the administration and provision of staff for this Task; remuneration of the staff of the Task shall be the sole responsibility of the Operating Agent. The Operating Agent shall adhere to the LCTF and Test Coil Procurement Programme to be adopted by the Executive Committee, acting by unanimity.
- (b) *Access to Test Facility.* Each Participant may schedule visits by its personnel to the LCTF during the period of the Agreement. The Operating Agent shall accept a maximum of three officials from each of the other Participants at the LCTF site at any one time without prior notification; the acceptance of additional officials shall be subject to the prior approval of the Operating Agent. In addition to making the necessary arrangements to facilitate access of Participants to the LCTF site, the Operating Agent shall also provide office space at the LCTF site to the other Participants.

4. *Funding and Rules of Procurement*

- (a) *Costs of Participation.* The Operating Agent shall bear the cost of funding, designing, constructing, and operating the LCTF. Each of the other Participants shall bear the costs it incurs in carrying out this Agreement, including the costs of formulating and transmitting reports, of designing, fabricating, delivering, and repatriating test coils, of reimbursing its employees for travel and other per diem expenses, and of payment for the salaries, insurance, and allowances to be paid to its personnel incurred in connection with work carried out on the Task. The repatriation of test coils shall be the sole responsibility of the Participant supplying the test coils, which shall make all arrangements and bear all responsibility for removal of the coils from the LCTF. The other Participants shall also provide all special equipment necessary for the incorporation of coils into the LCTF and for the conduct of tests not included in the agreed Test Programme.
- (b) *Rules of Procurement.* The Operating Agent may enter into agreements for the appointment of consultants, the construction of plant, and the procurement of materials in pursuit of the Task in accordance with its procurement regulations.

5. *Information and Intellectual Property*

- (a) *Executive Committee's Powers.* The publication, distribution, handling, protection and ownership of information and intellectual property, and rules and procedures related thereto, shall be determined by the Executive Committee in conformity with the Agreement.
- (b) *Right to Publish.* Subject only to the restrictions applying to patents and copyrights, the Participants shall have the right to publish all information provided to or arising from this Project except proprietary information. For the purposes of this paragraph, proprietary information shall mean information of a confidential nature such as trade secrets and know-how (for example, computer programmes, design procedures and techniques, chemical composition of materials, or manufacturing methods, processes, or treatments) which are appropriately marked, provided such information:
 - (1) Is not generally known or publicly available from other sources;
 - (2) Has not previously been made available by the owner to others without obligations concerning its confidentiality; and
 - (3) Is not already in the possession of the Operating Agent or Participants without obligation concerning its confidentiality.
- (c) *Marking of Proprietary Information.* It shall be the responsibility of each Participant to identify information it furnishes which qualifies as proprietary information under this paragraph and insure that it is appropriately marked. The Participants shall take all necessary measures in accordance with this paragraph, the laws of their respective countries and international law to protect proprietary information.
- (d) *Production of Relevant Information by Participants.* The test facility and associated buildings and facilities to be used in this Task are being supplied by the Operating Agent, and the Operating Agent and the other Participants will be supplying superconducting coils to be tested in the test facility. Each Participant should endeavour to make available, or identify in the context of the Task, pre-existing information and information developed independently of the Task, known to it, which is relevant to the Task and which can be made available to the Task without contractual or legal limitation. Each Participant supplying a superconducting coil to be tested under this Task shall supply to the Operating Agent full and complete information regarding the design, physical properties, operating characteristics, materials and construction of the superconducting coils supplied including proprietary information (hereinafter referred to as "design information"), but need not supply information regarding the methods or processes by which the coils, their subcomponents or their materials were manufactured (hereinafter referred to as "manufacturing information").
- (e) *Reports on Information Relevant to the Task.* Reports containing information arising in the course of or under the Agreement ("arising infor-

mation") and pre-existing information necessary for and used in the Task, including coil design information, both proprietary and freely available, shall be provided to the Operating Agent by each Participant and shall cover the work performed by the Participant on the superconducting coils supplied. A report summarising the work performed by each Participant and the Operating Agent, excluding proprietary information, shall be prepared by the Operating Agent and forwarded to the Executive Committee.

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- (f) *Licensing of Inventions and Information.* Each Participant agrees to license all pre-existing inventions and all pre-existing design information, including proprietary information owned or controlled by the Contracting Party which are necessary for utilising or testing, or which were incorporated in the superconducting coils supplied by that Participant to the Operating Agent as non-exclusive, royalty-free basis for use in the Task only. Each Participant also agrees to license all arising design information including proprietary information, and all information identified in paragraph 2 (d) of this Annex, on a non-exclusive, royalty basis to the Operating Agent for use in the task only.
- (g) *Licensing Design and Manufacturing Information for Research, Development or Demonstration Programmes.* Each Participant agrees to license all pre-existing design information, including proprietary information, owned or controlled by the Participant, which is necessary for utilising or manufacturing, or which was incorporated in the superconducting coils supplied by that Participant, and all arising design information, including proprietary information, regarding the superconducting coils supplied by the Participant, to the other Participants on a non-exclusive, royalty-free basis for use in the research, development and demonstration programmes only of the other Participants. Each Participant similarly agrees to license on the same basis and for the same purpose all pre-existing manufacturing information, including proprietary information, necessary for utilising or manufacturing, or which was incorporated in the superconducting coils supplied by that Participant and arising manufacturing information, including proprietary information, but only if that Participant cannot supply additional superconducting coils, subcomponents or materials therefor at reasonable prices and within a reasonable time which are necessary for use in the research, development or demonstration programmes of the other Participants. Each Participant also agrees to license any pre-existing and arising invention owned or controlled by that Participant which is necessary for the utilisation or manufacture, or which was incorporated in the superconducting coils supplied by that Participant, to the other Participants on a non-exclusive, royalty-free basis for use in the research, development and demonstration programmes of the other Participants.
- (h) *Licensing for Commercial Use.* Each Participant agrees to license all pre-existing inventions and all pre-existing design and manufacturing information, including proprietary information, owned or controlled by the Participant which are necessary for utilising or manufacturing, or which were incorporated in the superconducting coils supplied by that Participant, to the other Participants, their governments and the nationals of their

respective countries designated by them for commercial purposes on favourable terms and conditions taking into account the equities of the Participants based upon the sharing of obligations, contributions, rights and benefits of all Participants.

- (i) *Licensing of Inventions and Information Arising from the Task.* Inventions made or conceived in the course of or under the Agreement ("arising inventions") and arising design and manufacturing information, including proprietary information, shall be owned in all countries by the inventing Participant. Each Participant shall license such arising inventions and information to the other Participants, their governments and the nationals of their respective countries designated by them for commercial purposes in all other countries on favourable terms and conditions taking into account the equities of the Participants based upon the sharing of obligations, contributions, rights and benefits of all Participants under the Agreement.
- (j) *Licensing to Agency Participating Countries.* Each Participant agrees to license all arising information and inventions to all Agency Participating Countries on reasonable terms and conditions for use in their own country in order to meet their own energy needs.
- (k) *Production of Information or Inventions Subject to Limitations.* In situations where a Participant only partially owns or controls pre-existing information or inventions which are required to be licensed in the preceding sections of this paragraph, the Participant should endeavour to report that fact to the Participants and will use its best efforts to insure that the licensing as stipulated above is carried out and that the Participant will obtain no more benefit from such licensing than is provided for in this paragraph.
- (l) *Copyrights.* Each Participant may take appropriate measures necessary to protect copyrightable material generated by it under the Agreement. Copyrights obtained shall be the property of the Participant, provided however, that the other Participants may reproduce and distribute such material, but shall not publish it with a view to profit.
- (m) *Co-operation from Authors and Inventors.* Each Participant will, without prejudice to any rights of inventors or authors under its national laws, take all necessary steps to provide the co-operation from its authors and inventors required to carry out the provisions of this paragraph. Each Participant will assume the responsibility to pay awards or compensation required to be paid to its employees according to the laws of its country.
- (n) *"National" of a Participant.* The Participants may establish guidelines to determine what constitutes a "national" of a Participant provided, however, in recognition of the fact that all the fusion power research and development programmes of the individual Member states of the European Atomic Energy Community (EURATOM) are carried out jointly in the framework of EURATOM, and that EURATOM acts on behalf of itself and its associated national organisations in fusion power research and

development, the governments and countries referred to in sub-paragraphs (h) and (i) above shall, with respect to EURATOM, be understood to the governments and countries of the Member states of EURATOM. Disputes that cannot be settled by the Participants shall be settled under Article 9 (d) of the Agreement.

6. *Specific Responsibilities of the Operating Agent*

The Operating Agent shall develop and deliver to the other Participants periodic reports, at intervals mutually agreed upon, on the ongoing evaluations of systems performance resulting from execution of the Task described in this Annex. Further, the Operating Agent shall be responsible for taking all steps required to implement the Task in accordance with this Annex and with the decisions of the Executive Committee. Such responsibility shall include, but not be limited to:

- (1) Operating all test equipment and such instrumentation which may be installed in accordance with the Task;
- (2) Recording the results of the operation of the experiments.

7. *Operating Agent*

The Operating Agent for the Task shall be the United States Energy Research and Development Administration [or the United States Department of Energy], which intends to act through the Fusion Energy Division of the Oak Ridge National Laboratory.

8. *Responsibility, Insurance and Indemnity*

- (a) *Liability of Operating Agent and Participants.* Article 8 (a) of the Agreement shall not apply to the Task. The Operating Agent shall use all reasonable skill and care in carrying out its duties under this Agreement in accordance with all applicable laws and regulations. Except as otherwise provided in this paragraph, the cost of all damage to a Participant's property and all its legal liabilities, claims, actions, and all its costs and expenses connected with participation in the Task shall be borne by the Participant.
- (b) *Insurance.* Article 8 (b) of the Agreement shall not apply to the Task. Each Participant shall obtain and carry the necessary liability, fire, accident, and other insurance relating to its property and its personnel to participate in the Project. The cost of obtaining and maintaining insurance shall be borne by each Participant.
- (c) *Indemnification of Participants.* Article 8 (c) (1) of the Agreement shall not apply to the Task.

9. *Suspension of Obligations*

The obligations of each of the Participants shall be suspended for any period during which such Participant is prevented or substantially hindered from complying therewith in whole or part by any cause beyond its control including, but not limited to acts of God, unavoidable accidents, laws, rules, regulations or orders, or any national, state, governmental or local authority, acts of war or conditions arising out of or attributable to war, strikes, lockouts or other disputes with workpeople, shortages of materials, equipment or labour or shortages of or delays in transportation; the Participant so prevented or hindered shall give notice to the other Participants promptly after the start and finish of such prevention or hindrance.

10. *Time Period*

This Annex shall remain in force until 30th September, 1982, or until the completion of the Test Programme. This Annex may continue in force thereafter during the life of the Agreement by decision of the Executive Committee, acting by unanimity.

11. *Participants in this Task*

The Contracting Parties which are Participants in this Task are the following:

The European Atomic Energy Community (EURATOM)

[Japan]

[Switzerland]

[The United States Energy Research and Development Administration
or

The United States Department of Energy]

ENTWURF EINES RATSBE SCHLUSSES ZUR ERTEILUNG VON ANWEISUNGEN
AN DIE KOMMISSION ÜBER EINE BETEILUNG DER EAG AN ZWEI F & A-
ABKOMMEN IM BEREICH DER THERMONUKLEAREN FUSION, DIE UNTER DER
FEDERFÜHRUNG DER INTERNATIONALEN ENERGIE-AGENTUR (OECD)
ERSTELLT WORDEN SIND.

Der Rat der Europäischen Gemeinschaften-

gestützt auf den Vertrag zur Gründung der Europäischen
Atomgemeinschaft (EAG), insbesondere auf Artikel 1 Absatz 2,
gestützt auf den von der Kommission erstellten Entwurf,
in Erwägung nachstehender Gründe :

Die am 15. November 1974 mit Beschluss des Rates der OECD
gegründete Internationale Energie-Agentur (IEA), die innerhalb
jener Organisation ein autonomes Organ darstellt, hat am 25.
Juli 1975 mit Beschluss ihres Vorstandes "Leitprinzipien" für
Forschung und Entwicklung im Energiebereich gebilligt.

Zum gleichen Zeitpunkt genehmigte der Vorstand der IEA
insbesondere :

Ein Programm für Zusammenarbeit im Bereich der kontrollierten
thermonuklearen Fusion.

Gemäss Artikel 4 c der genannten Leitprinzipien können sich
die Europäischen Gemeinschaften an allen in Zusammenarbeit durch-
geführten F&E-Programmen oder Vorhaben beteiligen, die unter Fe-
derführung der IEA untergenommen werden.

Am 24 Juni 1976 bzw. 6. Juli 1976 fand ein Briefwechsel
zwischen der EWG und der EAG einerseits und der IEA andererseits
statt, wonach

- einerseits die EWG und die EAG beabsichtigen, mit der IEA auf dem Gebiet der Forschung und Entwicklung zusammenzuarbeiten, soweit eine solche Zusammenarbeit zur Verwirklichung der gemeinschaftlichen Ziele der Forschung und Entwicklung im Energiebereich beitragen kann.

Diese Zusammenarbeit kann im Wege einer Beteiligung der Gemeinschaft an den Programmen u. Vorhaben der IEA erfolgen. Insbesondere wird die Kommission der Europäischen Gemeinschaften von Fall zu Fall gemäss den Bestimmungen der Verträge zur Gründung der Europäischen Gemeinschaften "Durchführungsabkommen" aushandeln.

- und andererseits, dass die IEA diese Absicht zur Kenntnis nimmt u. bestätigt, dass den Europäischen Gemeinschaften eine solche Beteiligung offensteht.

Unter der Federführung der IEA sind Entwürfe für Durchführungsabkommen für ein Forschungs- und Entwicklungsprogramm über die Wechselwirkungen zwischen Plasma und Wand in "Textor" und der Entwurf eines Durchführungsabkommens für ein Forschungs- und Entwicklungsprogramm über supraleitende Magneten für die Fusion erstellt worden.

Mit Ratsbeschluss vom 25. März 1976 wurde ein Forschungs- und Ausbildungsprogramm (1976-1980) für die EAG im Bereich der Fusion und der Plasmaphysik verabschiedet.

BESCHLIESST :

ARTIKEL I

Die Kommission handelt die Beteiligung der EAG am Durchführungsabkommen über ein Forschungs- und Entwicklungsprogramm über die Wechselwirkungen zwischen Plasma und Wand in "Textor" und an der im Anhang zu diesem Abkommen aufgeführten Aufgabe aus.

ARTIKEL II

Die Kommission handelt die Beteiligung der EAG am Durchführungsabkommen über ein Forschungs- und Entwicklungsprogramm über supraleitende Magneten für die Fusion und an der im Anhang zu diesem Abkommen aufgeführten Aufgabe aus.

ENTWURF EINES RATSBESCHLUSSES ZUR GENEHMIGUNG

- 1) Des Durchführungsabkommens über ein Forschungs- und Entwicklungsprogramm über die Wechselwirkungen zwischen Plasma und Wand in "Textor" -
- 2) Des Durchführungsabkommens für ein Forschungs- und Entwicklungsprogrammes über supraleitende Magneten für die Fusion.

Der Rat der Europäischen Gemeinschaften -
gestützt auf den Vertrag zur Gründung der Europäischen Atomgemeinschaft, insbesondere auf Artikel 101 Absatz 2,
gestützt auf dem Briefwechsel zwischen der Kommission der Europäischen Gemeinschaften und der Internationalen Energieagentur (IEA), mit dem die Absicht der Europäischen Gemeinschaften zur Beteiligung an bestimmten unter der Federführung der IEA ausgearbeiteten Forschungs- und Entwicklungsabkommen bekundet wird,

in Erwägung nachstehender Gründe :

die Kommission hat ihre Beteiligung gemäss den Anweisungen des Rates ausgehandelt und beabsichtigt, das Durchführungsabkommen über ein Forschungs- und Entwicklungsprogramm über die Wechselwirkungen zwischen Plasma und Wand in "Textor" und das Durchführungsabkommen für ein Forschungs- und Entwicklungsprogramm über supraleitende Magneten für die Fusion zu unterzeichnen, die unter der Federführung der internationalen Energieagentur ausgearbeitet worden sind.

Es ist angezeigt, den Abschluss dieser beiden Abkommen zu genehmigen

BESCHLIESST:

ARTIKEL 1

Der Abschluss des Durchführungsabkommens für ein Forschungs- und Entwicklungsprogramm über die Wechselwirkungen zwischen Plasma und Wand in "Textor" wird genehmigt.

ARTIKEL 2

Der Abschluss eines Durchführungsabkommens über ein Forschungs- und Entwicklungsprogramm über supraleitende Magneten für die Fusion wird genehmigt.

FINANZBOGEN

Durchführungsabkommen über ein Forschungs- und Entwicklungsprogramm über die Wechselwirkung Plasma-Wand in "Textor".

Durchführungsabkommen über ein Forschungs- und Entwicklungsprogramm über supraleitende Magneten für die Fusion.

Die Beteiligung der Gemeinschaft an diesen Abkommen ist mit keinen finanziellen Verpflichtungen verbunden, die über die bereits im Rahmen der bestehenden Assoziierungsverträge gebilligten Verpflichtungen hinausgehen. Siehe "Fusion und Plasmaphysik" Kapitel 3.20.

Mit der Unterzeichnung dieser Abkommen übernimmt Euratom die im einzelnen dargelegten Aufgaben.