# 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

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## The Contracting Parties

Considering that the Contracting Parties, being either governments or international organizations 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:

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

#### THE OPERATING AGENT

- (a) Designation. The Programme shall be conducted jointly by the European Atomic Energy Community (EURATOM) and by the Kernforschungsanlage Jülich GmbH (KFA) in the EURATOM-KFA Jülich Association for Fusion. The Operating Agent will be EURATOM and KFA acting through KFA.
- (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 organizations 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 routine 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) Licence 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 research, development and demonstration purposes (non-commercial uses) in the field of fusion power 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) Licence 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) Licence of Inventions. Each Contracting Party agrees to license all preexisting inventions covered by patents owned or controlled by it which are necessary for utilizing 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 research, development and demonstration purposes (non-commercial uses) in the field of fusion power 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.
- (1) 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) and Sweden are carried out jointly in the framework of EURATOM, and that EURATOM acts on behalf of itself and its associated national organizations in fusion power research and development, the governments and countries referred to in paragraphs (f) and (i) above shall, with respect to EURATOM, be understood to be the governments and countries of the Member States of EURATOM and Sweden.

#### 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 organization) 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

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 organization, 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 organization, 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 organization 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 (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 6th day of October, 1977.

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

ALASTAIR GILLESPIE

For the European Atomic Energy Community (EURATOM):

BRUNNER

For the Government of Japan:

Sunao Sonoda 13th April, 1978.

For the Office Fédéral de la Science et de la Recherche du Département Fédéral de l'Intérieur for and on behalf of the Government of Switzerland:

A. Grübel
Subject to ratification

For the Turkish Scientific and Technical Research Council (designated by the Government of Turkey):

Memduh Aytür

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

JAMES R. SCHLESINGER

#### 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 utilization 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.

In the event that, in the judgement of the Operating Agent, a proposed experiment is felt to endanger 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.

# It is understood that 40 per cent of the total operating time of TEXTOR will be available for the agreed experiments of all the

Allocation of Time for Experiments

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.

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.

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.

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:

- (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. The costs of materials for additional equipment or modifications of TEXTOR as well as any increase in routine operating costs (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:

— vessel ...... 1978

Commissioning of the system including neutral injection . . . . 1980-1981

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.

The Legal Advisor of the International Energy Agency hereby certifies that the present copy conforms to the original text deposited with the Executive Director of the International Energy Agency (as amended to the date hereof, by agreement of the Contracting Parties).

Paris,

THE LEGAL ADVISOR:

RICHARD F. SCOTT