

**AGREEMENT BETWEEN THE
DEPARTMENT OF ENERGY OF THE UNITED STATES
AND THE
COMMISSARIAT A L'ENERGIE ATOMIQUE OF FRANCE
CONCERNING RESEARCH AND DEVELOPMENT
IN THE FIELD OF NUCLEAR MATERIAL CONTROL
AND ACCOUNTING MEASURES**

The Department of Energy of the United States (DOE) and the Commissariat à l'Energie Atomique (CEA) of France (hereinafter referred to as "the Parties")

Expressing their support for efforts to enhance nonproliferation of nuclear weapons through effective systems of nuclear material control and accounting with the aim of preventing the theft, diversion, or unauthorized use of nuclear materials;

Recognizing that the Parties have cooperated in nuclear material control and accounting measures under the Memorandum of Understanding Concerning Research and Development in the Field of National Nuclear Materials Accounting and Control Measures, signed on May 31, 1985, and which terminated on February 28, 1991; and

Undertaking to renew cooperation, considering that the Parties share a desire to cooperate on research, development, testing and evaluation;

Have agreed as follows:

**ARTICLE 1
Objective**

The major objective of this Agreement is to improve the Parties' nuclear materials control and accounting measures and procedures.

**ARTICLE 2
Limitations**

Cooperation of a technical nature shall be limited to the field of competence of each Party. It will not be exclusive and will not, in particular, interfere with other governmental agreements between the two countries.

**ARTICLE 3
Areas of Cooperation**

Areas of cooperation under this Agreement may include, but are not limited to:

- o non-destructive assay measurement technologies for special nuclear material, including spent

fuel and waste, French and U.S., including:

- calorimetric assay
- passive neutron and gamma ray detection
- active neutron instruments
- K-edge densitometry

- o near real time accounting technologies, French and U.S.
- o other topics as suggested by either of the Parties and reviewed and approved by the Principal Coordinators.

ARTICLE 4 **Forms of Cooperation**

Cooperation in accordance with this Agreement may include:

- 4.1 Exchange of information and data on scientific and technical activities/reports, development practices and results, and computational techniques, including exchange of business confidential information in accordance with the terms and conditions of Annex I - Intellectual Property Rights.
- 4.2 Exchange of staff for agreed periods of time in order to participate in experiments, analysis, design, and other research and development activities conducted in research centers, laboratories, universities, and other facilities and enterprises of each of the Parties, or its associated organizations or contractors in accordance with Article 8 - Exchange of Staff.
- 4.3 Exchange or use of equipment, computer programs, and/or facilities in accordance with Article 9 - Equipment.
- 4.4 Organization of technical seminars and meetings.
- 4.5 Conducting research and development related to areas of cooperation outlined in Article 3 and in accordance with the terms and conditions set forth in Article 6 in appropriate Annexes (hereinafter referred to as Action Sheets).
- 4.6 Other forms of cooperation mutually agreed to in writing.

ARTICLE 5 **Management**

- 5.1 Each Party shall name a Principal Coordinator to supervise activities under this Agreement. The Principal Coordinators shall hold annual Permanent Coordinating Group (PCG) meetings,

alternately in the United States and in France, to evaluate the status of cooperation under this Agreement. This evaluation will include a review of the achievements, problems, effectiveness, as well as an assessment of the balance of exchanges under this Agreement and consideration of measures to help maintain a balanced exchange where a balanced exchange supports and does not detract from cooperation to improve nuclear material accounting and control measures. The Principal Coordinators will also consider and approve future program opportunities with a view to maximizing the mutual benefits of cooperation.

- 5.2 Subject to the prior approval of the Parties, the Principal Coordinators may appoint Technical Coordinators to manage specific cooperative activities (Action Sheets) initiated under this Agreement and to establish and maintain working contacts at the staff level.

ARTICLE 6

Action Sheets

When the Parties agree to undertake research and development activities in those areas set forth in Article 3, the Parties shall conclude an Action Sheet, which shall be annexed to this Agreement and subject to its terms. Each Action Sheet shall include detailed provisions for carrying out the activity, and shall cover such matters as technical scope; total costs, cost-sharing between the Parties as set forth in Article 10; project schedule; management of the cooperation as set forth in Article 5, exchange of equipment as set forth in Article 9; and any special provisions necessary for treatment of business confidential information, intellectual property, and information disclosure specific to the particular project as set forth in Annex I. Activities under Action Sheets may involve laboratories of the Parties or their contractors.

ARTICLE 7

Intellectual Property Rights

Rights related to any form of intellectual property arising under this Agreement will be allocated in conformity with the rules and procedures set out in the Intellectual Property Rights Annex attached hereto.

ARTICLE 8

Exchange of Staff

- 8.1 Whenever an assignment or exchange of personnel is contemplated under para 4.2 of Article 4, each Party shall ensure that qualified personnel are selected for exchange to the other Party.
- 8.2 Each Party shall be responsible for the salaries, insurance, travel and living expenses of its personnel while on assignment to the other Party.
- 8.3 The receiving Party shall arrange for accommodations for the assigned staff and families of the other Party or its contractors on a mutually agreeable reciprocal basis.

- 8.4 The Receiving Party shall provide all necessary assistance to the assigned staff and their families regarding administrative formalities such as travel arrangements and work permits.
- 8.5 Assigned staff shall conform to the general and special rules of work and safety regulations in force at the establishment of the Receiving Party, unless otherwise agreed in a separate Action Sheet. Such special rules of work may include restrictions on access to sensitive or classified facilities or areas.

ARTICLE 9

Equipment

- 9.1 By mutual agreement, a Party may provide equipment to be utilized in a joint activity. In such cases, the sending Party shall supply, as soon as possible, a detailed list of the equipment to be provided, together with the relevant specifications and appropriate technical and informational documentation related to use, maintenance, and repair of the equipment.
- 9.2 Title to the equipment and necessary spare parts supplied by the sending Party for use in joint activities shall remain with the sending Party and the property shall be returned to the sending Party upon completion of the joint activity, unless otherwise agreed.
- 9.3 The above-mentioned equipment shall be brought into operation at the host establishment only by mutual agreement between the Parties.
- 9.4 The host establishment shall provide the necessary premises for the equipment, shall provide for utilities such as electric power, water, and gas, and normally shall provide materials to be tested, in accordance with technical requirements which shall be as mutually agreed upon.
- 9.5 The responsibility and expenses for the transport of equipment and materials from the United States by plane or ship to an authorized port of entry in France convenient to the ultimate destination and return, and also responsibility for its safekeeping and insurance en route shall rest with DOE.
- 9.6 The responsibility and expenses for the transport of equipment and materials from France by plane or ship to an authorized port of entry in the United States convenient to the ultimate destination and return, and also responsibility for its safekeeping and insurance en route shall rest with CEA.
- 9.7 The equipment provided by the sending Party for carrying out joint activities shall be considered to be scientific, not having a commercial character and each Party shall make its best effort to obtain duty free entry.

ARTICLE 10
General Provisions

- 10.1 Unless otherwise specifically agreed in writing, all costs resulting from cooperation under this Agreement shall be borne by the Party that incurs them.
- 10.2 Each Party shall conduct the activities provided for in this Agreement subject to its applicable laws and regulations, and subject to the availability of appropriated funds, personnel, and resources.
- 10.3 All questions of interpretation and implementation relating to the Agreement arising during its term shall be resolved by agreement of the Parties.

ARTICLE 11
Duration, Amendment and Termination

- 11.1 This Agreement shall enter into force upon the latter date of signature, remain in force for five years, and be automatically renewed for further five-year periods unless either Party notifies the other in writing three months prior to the expiration of the first five-year period or each succeeding five-year period of its intent to terminate the Agreement. The Agreement may be amended by mutual written agreement of the Parties.
- 11.2 This Agreement may be terminated at any time at the discretion of either Party, upon six (6) months advance notification in writing by the Party seeking to terminate the Agreement. Such termination shall be without prejudice to the rights which may have accrued under this Agreement to either Party up to the date of such termination.
- 11.3 Joint efforts and experiments not completed at the expiration or termination of this Agreement may, on agreement of the Parties, be continued until their completion under the terms of this Agreement.

Done in duplicate, in the English and French and languages, both texts being equally authentic.

FOR THE DEPARTMENT OF ENERGY
OF THE UNITED STATES:


FOR THE COMMISSARIAT A L'ENERGIE
ATOMIQUE OF FRANCE:

Le Directeur Central de la Sécurité

DATE

[Signature]
29 December 1997

DATE

[Signature]
S. BOULARD
20 août 1997


ANNEX I - INTELLECTUAL PROPERTY

PREAMBLE

PURSUANT TO ARTICLE 7 OF THIS AGREEMENT:

The Parties shall ensure adequate and effective protection of intellectual property created or furnished under this agreement and relevant Action Sheets. The Parties agree to notify one another in a timely fashion of any inventions or copyrighted works arising under this agreement and to seek protection for such intellectual property in a timely fashion. Rights to such intellectual property shall be allocated as provided in this annex.

I-SCOPE

- I-A. This annex is applicable to all cooperative activities undertaken by the Parties or by the relevant entities (hereafter "cooperative entities") pursuant to this agreement, except as otherwise specifically agreed by the Parties or their cooperative entities.
- I-B. For purposes of this agreement, "intellectual property" shall have the meaning found in Article 2 of the convention establishing the World Intellectual Property Organization, done at Stockholm, July 14, 1967.
- I-C. This annex addresses the allocation of rights, interests, and royalties between the Parties. Each Party shall ensure that the other Party or cooperative entities can obtain the rights to intellectual property allocated in accordance with the annex. The allocation between a Party and participants on behalf of this Party in the Action Sheets, which shall be determined by the Party's laws and practices, shall not be altered or prejudiced by application of this annex.
- I-D. Disputes concerning intellectual property arising under this agreement should be resolved through discussions between the concerned participating institutions or, if necessary, the Parties or their designees. Upon mutual agreement of the Parties, a dispute shall be submitted to an arbitral tribunal for binding arbitration in accordance with the applicable rules of international law. Unless the Parties or their designees agree otherwise in writing, the arbitration rules of UNCITRAL shall govern.
- I-E. Termination or expiration of this agreement shall not affect the rights or obligations under this annex.

II-ALLOCATION OF RIGHTS

- II-A. Each Party, subject to the restrictions of Article III of this annex, shall be entitled to a nonexclusive, irrevocable, royalty-free license in all countries to translate, reproduce, and

publicly distribute scientific and technical journal articles, and publicly available reports directly arising under this agreement. All publicly distributed copies of a copyrighted work prepared under this provision shall indicate the names of the authors of the work unless an author explicitly declines to be named. Each Party or its cooperative entities shall have the right to review a translation prior to public distribution.

II-B. Rights to all forms of intellectual property, other than those rights described in section II(A) above, shall be allocated as follows:

1. Visiting researchers, for example, scientists visiting primarily in furtherance of their education, shall receive intellectual property rights under the policies of the host institution, unless a specific agreement is or has been signed between the host and forwarding institutions. In addition, each visiting researcher named as an inventor shall be entitled to treatment as a national of the host country with regard to awards, bonuses, benefits, or any other rewards, in accordance with the policies of the host institution.
2.
 - a. For intellectual property created during joint research, the Parties or their cooperative entities shall jointly develop a technology management plan either prior to the start of their cooperation, for example in research areas likely to lead rapidly to industrial applications, or within a reasonable time from the time a Party becomes aware of the creation of intellectual property. The technology management plan shall consider the relative contributions of the Parties and their cooperative entities, the benefits of exclusive or non-exclusive licensing by territory or for field of use, requirements imposed by the Parties' domestic laws, and other factors deemed appropriate. If needed, the technology management plan shall be jointly modified or completed in a timely fashion, subject to the approval of both Parties or their cooperative entities.
 - b. If the Parties or their cooperative entities cannot reach agreement on a joint technology management plan within a reasonable time not to exceed six months from the time a Party becomes aware of the creation of the intellectual property in question, each Party may designate one co-exclusive licensee to have world-wide rights to said intellectual property. Each Party shall notify the other two months prior to making a designation under this paragraph. When both Parties (or their licensees) exploit the intellectual property in a country, they shall share equally the reasonable cost of intellectual property protection in that country.
 - c. A specific program of research will be regarded as joint research for purposes of allocating rights to intellectual property only when it is designated as such in the relevant Action Sheet, otherwise the allocation of rights to intellectual

property will be in accordance with paragraph II-B/1.

- d. In the event that either Party believes that a particular joint research project under this agreement will lead, or has led, to the creation or furnishing of intellectual property of a type not protected by the applicable laws of one of the Parties, the Parties shall immediately hold discussions to determine the allocation of the rights to the said intellectual property; the joint activities in question will be suspended during the discussions, unless otherwise agreed by the Parties thereto. If no agreement can be reached within a three month period from the date of the request for discussions, the Parties shall cease the cooperation in the project in question. Notwithstanding paragraphs II-B/2(a) and (b), rights to any intellectual property which has been created will be resolved in accordance with the provisions of Article I-D.

III-BUSINESS-CONFIDENTIAL INFORMATION

In the event that information identified in a timely fashion as business-confidential is furnished or created under the agreement, each Party and its cooperative entities shall protect such information in accordance with applicable laws, regulations, and administrative practice. Information may be identified as business-confidential information if a person having the information may derive an economic benefit from it or may obtain a competitive advantage over those who do not have it, the information is not generally known or publicly available from other sources, and the owner has not previously made the information available without imposing in a timely manner an obligation to keep it confidential. Without prior written consent, neither of the Parties shall disclose any business-confidential information provided by the other Party except to appropriate employees and government personnel. If expressly agreed between the Parties, business-confidential information may be disclosed to prime and subcontractors. Such disclosures shall be for use only within the scope of their contracts with the Parties relating to cooperation under the agreement. The Parties shall impose, or shall have imposed, an obligation on those receiving such information to keep it confidential. If one of the Parties becomes aware that, under its laws or regulations, it will be, or may reasonably be expected to become, unable to meet the non-disclosure provisions, it shall immediately inform the other Party. The Parties shall thereafter consult to define an appropriate course of action.