

AGREEMENT

between

THE EUROPEAN ATOMIC ENERGY COMMUNITY

Represented by

THE COMMISSION OF THE EUROPEAN COMMUNITIES

and

THE UNITED STATES DEPARTMENT OF ENERGY

in the field

OF NUCLEAR MATERIAL SAFEGUARDS RESEARCH AND DEVELOPMENT

The United States Department of Energy (US-DOE) and the European Atomic Energy Community (EURATOM), represented by the Commission of the European Communities, hereinafter called the "Parties";

Having a mutual interest that nuclear material safeguards, applied worldwide, should meet the highest possible standards;

Sharing the desire to stimulate Research and Development collaboration between the parties.

HEREBY AGREE AS FOLLOWS:

Article 1 - Objective

The objective of this Agreement is the cooperation between US-DOE and EURATOM on mutually agreed Research and Development topics and the training of nuclear safeguards inspectors and specialists in order to enhance the effectiveness of nuclear fuel safeguards. Cooperation between the Parties shall be on the basis of mutual benefit, equality, and reciprocity.

Article 2 - Areas of Cooperation

The areas of cooperation in the field of nuclear material safeguards Research and Development covered by this Agreement shall mainly focus on:

1. Safeguards systems analysis for part or the complete fuel cycle;
2. Measurement and accountancy control technology for nuclear materials;
3. Containment and surveillance technology for nuclear materials and nuclear facilities;
4. Nuclear safeguards training courses for inspectors and specialists;
5. Scientific coordination of both Parties' efforts to transfer nuclear safeguards technologies to other countries, upon their request, in order to improve the effectiveness of their national safeguards systems;

Other areas of cooperation may be added by mutual agreement.

Article 3 - Forms of Cooperation

Cooperation under this Agreement may include, but is not limited to, the following forms:

1. Projects in which the Parties agree to share costs, subject in each case to a separate written note. The relative contribution to costs shall be determined in each case allowing for the efforts to be invested by each Party and for the value of background information, infrastructure or support work contributed by each Party.
2. Exchange of scientists, engineers and other specialists, researchers and trainers for agreed periods for participation in activities conducted by the Parties or their contractors. Such exchange of staff shall be in accordance with Article 9 of this Agreement.
3. Exchange of scientific and technical information and results of Research and Development.
4. Exchange of samples, materials and equipment for testing, subject in each case to a separate written note.

5. Seminars and other meetings on specific topics.
6. Short visits by specialist teams or individuals to the facilities of the other Party.
7. Studies dealing with the areas of cooperation referred to in Article 2.

Other forms of cooperation may be added by mutual agreement.

Article 4 - Management

The Parties shall each name one individual to act as Coordinator in order to supervise the execution of this Agreement.

1. The Coordinators shall meet, on an annual basis, with the meetings held alternatively in the European Community and in the United States of America. On this occasion, the Coordinators will:
 - evaluate the status of cooperation under this Agreement;
 - define the specific tasks to be undertaken in each of the areas of cooperation as described in Article 2 of this Agreement. A first list of these specific tasks is given in Annex C.
2. All cooperative projects are defined and listed on action sheets. Any new cooperative projects can be defined and added to this list after approval by the Coordinators. These action sheets shall specify the tasks to be undertaken, the time schedule and the resources involved on either side.
3. The evaluation of the status of cooperation shall include a comprehensive review of each Party's safeguards Research and Development activities of the nuclear fuel cycle.
4. Day-to-day management of the cooperation under this Agreement shall be carried out by Managers designated by the Coordinators. The Managers shall agree on specific research activities in accordance with Articles 1 and 2 of this Agreement and within policy guidelines set by the Coordinators. The Managers shall be responsible for the working contacts between the Parties.

Article 5 - Availability and Dissemination of Information

1. Subject to applicable laws and regulations and to its obligations to third parties, and to provisions of this Agreement, each Party and its designees shall undertake to make freely available to the other Party and its designees any information at its disposal which is required for the execution of the Agreement.
2. The Parties shall support the widest possible dissemination of information for which they have the right to disclose, either in their possession or available to them, and which is either developed jointly or intended to be provided or exchanged pursuant to this Agreement, subject to the need to protect documentary undisclosed information and the need to protect intellectual property arising under this Agreement.

Article 6 - Disclaimer

Information transmitted by one Party to the other Party under this Agreement shall be accurate to the best knowledge and belief of the Transmitting Party, but the Transmitting Party does not warrant the suitability of the information transmitted for any particular use or application by the Receiving Party or by any third Party. Information developed jointly by the Parties shall be accurate to the best knowledge and belief of both Parties. Neither Party warrants the accuracy of the jointly developed information or its suitability for any particular use or application by either Party or by any third Party.

Article 7 - Classified Information

Information which is classified by either Party for security reasons shall not be exchanged hereunder.

Article 8 - 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 and in the Technology Management Plan hereby attached.

Article 9 - Attachment of Staff

1. Whenever an exchange of staff is contemplated under this Agreement, each Party shall ensure that qualified staff are selected for attachment to the other Party.
2. Each Party shall be responsible for the salaries, insurance, and allowance to be paid to its staff while attached to the other Party unless otherwise agreed.
3. Each Party shall pay for the travel and living expenses of its staff while attached to the other Party unless otherwise agreed.
4. The host establishment shall use its best efforts to arrange for comparable accommodation for the other Party's staff and their families on a mutually agreeable reciprocal basis.
5. Each Party shall provide all necessary assistance to the attached staff (and their families) of the other Party as regards administrative formalities (travel arrangements, etc.).
6. The attached personnel of each Party shall conform to the general rules of work and safety regulations in force at the host establishment.

Article 10 - Transfer of Equipment

1. By mutual agreement, the Parties may transfer equipment to be utilised under the Agreement. 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 information documentation relating to use, maintenance and repair of the equipment.
2. Equipment and necessary spare parts supplied by the Sending Party for use in joint activities shall remain its property and shall be returned to the Sending Party upon completion of the joint activity, unless otherwise agreed.

If either party wishes to acquire equipment made available under a cooperative task, such transfer of equipment may be performed based upon mutual agreement. The Parties will apply to each other the most advantageous conditions and charge, if so required, only the cost price incurred.

3. The above-mentioned equipment shall be brought into operation at a receiving establishment after mutual agreement between the Coordinators, Managers, or their senior representatives at the interested establishments of the Parties.
4. The receiving 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 mutually agreed upon.

5. The responsibility and expenses for each transport of equipment and materials between the United States of America and the European Community by plane or ship to a mutually agreed destination, including responsibility for its safekeeping and insurance en route shall rest with the shipper until the receiver or his agent takes custody of the shipment.
6. The equipment provided by the Sending Party for carrying out activities pursuant to this Agreement shall be considered to be scientific and as having a non-commercial character, for the purposes of designation and import/export declarations.
7. The Receiving Party shall ensure duty-free entry into its territory of any equipment provided pursuant to this Agreement.

Article 11 - Applicable Rules

This Agreement shall be in accordance with the Parties' applicable laws.

Article 12 - Settlement of Disputes

1. All questions or disputes related to activities carried out under this Agreement shall be settled by mutual agreement of the Parties.
2. Compensation for damages arising from activities under this Agreement shall be in accordance with the Parties' applicable laws.

Article 13 - Costs

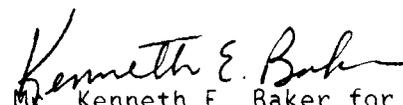
Except when otherwise specifically agreed, all costs resulting from cooperation under this Agreement shall be borne by the Party that incurs them. It is understood that the ability of the Parties to carry out their obligations shall be subject to the appropriation of funds by the appropriate authority, where necessary.

Article 14 - Entry into Force and Termination

This Agreement shall enter into force upon signature, shall remain in force for five years, and be automatically renewed for further five-years 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.

Done in duplicate at _____ this 6 day of January 1995.

For the
UNITED STATES
DEPARTMENT OF ENERGY


Mr. Kenneth E. Baker for
Dr John G. KELIHER
Director,
Office of NonProliferation and National Security

For the
EUROPEAN ATOMIC ENERGY
COMMUNITY


Mr J.P. CONTZEN
Director General
of the Joint Research Centre

Annex A

Intellectual Property Rights

Pursuant to Article 8 of this Agreement : Rights to intellectual property created or furnished under this agreement shall be allocated as provided in this Annex.

I. Ownership, Allocation and Exercise of Rights

1. This annex is applicable to all cooperative activities undertaken pursuant to this Agreement, except as otherwise specifically agreed by the Parties.
2. For purposes of this Agreement, "intellectual property" shall have the meaning found in Article 2 of the Convention establishing the World Intellectual Property Organisation, done at Stockholm, July 14, 1967.
3. This Annex addresses the allocation of rights, interests and royalties between the Parties. Each Party shall ensure that the other Party may obtain the rights to intellectual property allocated to it in accordance with this Annex. This Annex does not otherwise alter or prejudice the allocation between a Party and its nationals, which shall be determined by that Party's laws and practices.
4. Disputes concerning intellectual property shall be resolved in accordance with Article 12(1) of this Agreement.
5. Termination or expiration of this Agreement shall not affect rights or obligations under this Annex.
6. Intellectual property arising from joint research, i.e., cooperative research supported by both Parties and whose scope is agreed in advance by them, shall be treated according to the principles of the technology management plan set forth in Annex B, unless otherwise agreed by the Parties. This plan shall also cover the treatment of scientists visiting primarily for their education or training (i.e., visiting researchers).

II. Scientific Literary Works

Subject to the treatment provided for undisclosed information in section III, the following procedures shall apply:

1. Each Party shall be entitled to a non-exclusive, irrevocable, royalty-free license in all countries to translate, reproduce, and publicly distribute information contained in scientific and technical journals, articles, reports, books, or other media, directly arising from joint research pursuant to this Agreement.
2. 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. They shall also bear a clearly visible acknowledgment of the cooperative support of the Parties.

III. Undisclosed Information

A. Documentary undisclosed information

1. Each Party or its designees shall identify at the earliest possible moment the information that it wishes to remain undisclosed in relation to this Agreement, taking account, inter alia, of the following criteria :
 - secrecy of the information in the sense that the information is not, as a body or in the precise configuration or assembly of its components, generally known or readily accessible by lawful means ;
 - the actual or potential commercial value of the information by virtue of its secrecy;
 - previous protection of the information in the sense that it has been subject to steps that were reasonable under the circumstances by the person lawfully in control, to maintain its secrecy;

The Parties or their designees may in certain cases agree that, unless otherwise indicated, parts or all of the information provided, exchanged or created in the course of joint research pursuant to this Agreement may not be disclosed.

2. Each Party shall ensure that undisclosed information under the Agreement and its ensuing privileged nature is readily recognisable as such by the other Party, for example by means of an appropriate marking or restrictive legend. This also applies to any reproduction of the said information, in whole or in part.

A party receiving undisclosed information pursuant to such agreement shall respect the privileged nature thereof. These limitations shall automatically terminate when this information is disclosed by the owner without restriction.

3. Undisclosed information communicated under this Agreement may be disseminated by the receiving Party to persons employed by the receiving Party including its contractors, and other concerned departments of the Party authorised for the specific purposes of the joint research underway, provided that any undisclosed information so disseminated shall be protected to the extent provided by each Party's laws and regulations and shall be readily recognisable as such, as set out above.

B. Non-documentary undisclosed information

Non-documentary undisclosed or other confidential or privileged information provided in seminars and other meetings arranged under the Agreement, or information arising from the attachment of staff, use of facilities, or joint projects, will be treated by the Parties or their designees according to the principles specified for documentary information in the Agreement, provided, however, that the recipient of such undisclosed or other confidential or privileged information has been made aware in writing of the confidential character of the information communicated not later than the time such a communication is made.

C. Control

Each Party shall endeavour to ensure that undisclosed information received by it under this Agreement shall be controlled as provided herein. If one of the Parties becomes aware that it will be, or may be reasonably expected to become, unable to meet the non-dissemination provisions of paragraphs A and B above, it shall immediately inform the other Party. The Parties shall thereafter consult to define an appropriate course of action.

Annex B

Technology Management Plan

1. The Parties shall notify each other within a reasonable time of any intellectual property rights arising under this Agreement (or relevant implementing arrangements).
2. For intellectual property created during joint research, each Party shall be entitled to obtain the rights and interests in its own territory. Rights in all other territories shall be jointly exploited by the Parties.
3. The Parties can agree to allocate and exploit rights differently from what is provided for under paragraph 2.
4. Each Party shall seek protection for the intellectual property to which it obtains rights and interests under the Technology Management Plan in a timely fashion.
5. Each Party shall have a non-exclusive, irrevocable, royalty-free license to use any intellectual property arising under the Agreement for research and development purposes only.
6. Visiting researchers (as defined in para 1.6. of Annex A) shall receive intellectual property rights and royalty shares earned by the host institutions from licensing of such intellectual property rights under the policies of the host institutions.

Annex C

First List of Specific Tasks

Area 1 Safeguards Systems Analysis for Part or the Complete Fuel Cycle.

(Tasks to be defined).

Area 2 Measurement and Accountancy Control Technology for Nuclear Materials.

Sub Area 1 Development, Exchange and Testing of Destructive and Non Destructive Assay Methods and Instrumentation.

- 2.1 NDA 1a Study of neutron coincidence counting methods and experience with the High Level Neutron Coincidence Counter for the measurement of Plutonium.
- 2.1 NDA 1b Simulation of Neutron Coincidence Counting Methods for inspector familiarisation and training.
- 2.1 NDA 1c Multiple correlation effects in the analysis of neutron coincidence data.
- 2.1 NDA 1d High Level Neutron Counter.
- 2.1 NDA 3 Measurement of Plutonium isotopic Composition of nuclear materials by gamma ray spectroscopy.
- 2.1 NDA 4 Comparison of systems using neutron activation for assay of highly enriched uranium.
- 2.1 NDA 6 Development and performance tests of calorimetric techniques for the determination of Plutonium material for safeguards purposes.
- 2.1 NDA 9 Analysis of errors in combined neutron coincidence counting and gamma-ray spectroscopic measurement methods for plutonium bearing samples.
- 2.1 NDA 10 Study methods for better calibration of inspectors instruments.
- 2.1 NDA 11 Development of high abundance sensitivity mass spectrometry for certification of highly enriched isotopes

Sub Area 2 Preparation and Certification of Reference Materials for Destructive and Non Destructive Assay (NDA) of Fissile Materials and refinement of Reference Techniques for Isotopic and Chemical Analysis.

- 2.2 RM 2 Establishment of reference materials and working standards for NDA.
- 2.2 RM 4 Preparation/Certification of Plutonium isotopic reference materials for mass spectrometric and NDA measurements.
- 2.2 RM 5 Establishment of Target Values for Achievable Uncertainties in the Assay of Nuclear Materials by NDA.

- 2.2 RM 6 Preparation/Certification of solid spikes for U/Pu assay in input solutions
- 2.2 RM 7 Development of software for high accurate mass spectrometry
- 2.2 RM 8 Supply of highly enriched isotopes as needed for preparation of isotope reference materials
- 2.2 RM 9 Preparation/Certification of environmental Reference Materials (traces U/Pu)
- 2.2 RM 10 Organisation of external quality control for bulk and trace analysis of Actinides

Sub Area 3 Development and Testing of Volume and Weight Measurements in Liquid Tanks.

- 2.3 VOL 1 Evaluation and field test of the portable pressure-volume authenticator for safeguards purposes.
- 2.3 VOL 2 TAME Lab testing and evaluation of volumetric measurement technology, calibration methods and equipment.
- 2.3 VOL 3 Exchange of information on data acquisition software and inspector training for the use of volumetric measurement systems.

Sub Area 4 Development and Test of Measurement Techniques for determination of nuclear materials in waste streams.

- 2.4 WA 1 Waste and environmental restoration (Tasks to be further defined).
- 2.4 WA 2 Preparation of well characterised nuclear waste materials and test of measurement techniques.

Area 3 Containment and Surveillance (C/S) Technology for Nuclear Materials and Nuclear Facilities.

- 3 C/S 5 Development and test of ultrasonic reading equipment for in-field use (Interim SPAR) and linked to headquarter evaluation (IRUSS).
- 3 C/S 5a Performance testing of C/S instruments under different environmental conditions in LaSCo.
- 3 C/S 8 Development of integrated safeguards systems, based on surveillance techniques, radiation monitoring and data transmission network technology.
- 3 C/S 10 Development and exchange of information on image processing technology for video surveillance review.
- 3 C/S 11 Provision of C/S equipment for the demonstration in LaSCo of devices, authentication techniques and integrated systems.

Area 4 Nuclear Safeguards Training Courses for Inspectors and Specialists.

4 TR 1 Exchange of staff to organise physical inventory verification exercises for inspectors in PERLA.

Area 5 Scientific coordination of both Parties' efforts to transfer nuclear safeguards technologies to other countries, upon their request, in order to improve the effectiveness of their national safeguards systems.

(Tasks to be defined).