

**MEMORANDUM OF UNDERSTANDING
BETWEEN THE
DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA
AND THE
DEPARTMENT OF TRADE AND INDUSTRY OF THE UNITED KINGDOM
OF GREAT BRITAIN AND NORTHERN IRELAND
CONCERNING THE DEVELOPMENT AND IMPLEMENTATION
OF
NUCLEAR VERIFICATION TECHNOLOGIES**

Whereas, the Department of Energy of the United States of America (hereafter "DOE") and the Department of Trade and Industry of the United Kingdom of Great Britain and Northern Ireland (hereafter "DTI") (hereafter called "the Participants");

Sharing a desire to co-operate on development, testing, evaluation and implementation of nuclear verification technologies, equipment and procedures;

Have reached the following understanding:

Article 1 – Objective

The purpose of cooperation under this Memorandum of Understanding (MOU) is to establish and conduct a programme of scientific cooperation between DOE's National Nuclear Security Administration (NNSA) and the United Kingdom Department of Trade and Industry (DTI) to develop, test, evaluate and implement nuclear verification technologies, equipment and procedures. The goals of this cooperation will be to provide technologies and capabilities that improve the ability to detect and verify nuclear materials.

Article 2 – Forms of Cooperation

Cooperation between NNSA and DTI under this MOU may include, but is not limited to, the following forms:

- 2.1. Exchange of information and data on scientific and technical activities, developments, practices and results, and on program policies and plans including exchange of proprietary information in accordance with the terms and conditions in Article 7 below.
- 2.2. Exchange of scientists, engineers and other specialists in accordance with Article 4 of this MOU below.
- 2.3. Exchange of samples, materials and equipment for testing in accordance with Articles 5 and 6 below.

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- 2.4. Short visits by specialist teams or individuals to the research and development facilities of the other Participant.
- 2.5. Joint projects in the form of experiments, tests, design, analysis or other technical collaborative activities. Such joint projects would be implemented by the Co-ordinators and executed by both Participants in accordance with Article 3 below.
- 2.6. Such other specific forms of co-operation as may be added by written agreement of NNSA and DTI.

Article 3 – Management

- 3.1. To supervise the co-operation under this MOU, each Participant should designate a Lead Co-ordinator. Each Participant will also designate a Technical Co-ordinator to assist the Lead Co-ordinator in carrying out activities under this MOU. In addition, the Participants will designate an official or officials responsible for co-operation in each of the fields determined for co-operation.
- 3.2. The Lead Co-ordinators should meet each year, or as otherwise jointly decided, alternately in the United States or the United Kingdom. At the meetings, the Lead Co-ordinators should evaluate the status of co-operation under this MOU. This evaluation should include a review of the past year's activities and accomplishments and of the activities planned for the coming year, an assessment of the balances of exchanges within each of the fields or groups of related fields determined for co-operation, and consideration of measures required to correct any imbalances. In addition, the Lead Co-ordinators should consider and act on any major new proposals for co-operation. Technical Co-ordinators may, at the discretion of the Lead Co-ordinators, participate in these annual meetings.

Article 4 – Assignments and Exchange of Personnel

- 4.1. Whenever a personnel exchange is contemplated under this MOU, each Participant should ensure that qualified staff are selected for assignment to the other Participant or its contractors ("assigned staff").
- 4.2. Each such assignment should be the subject of a separate written exchange arrangement between the Participants.
- 4.3. Each Participant will be responsible for the salaries, insurance, and allowances to be paid its staff.
- 4.4. Each Participant will pay for the travel and living expenses of its staff while on assignment to the host Participant, unless otherwise decided in writing.

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- 4.5. The recipient Participant will use best efforts to arrange for comparable accommodation for the assigned staff and their families on a mutually acceptable, reciprocal basis.
- 4.6. Each Participant will use best efforts to provide all necessary assistance to the assigned staff (and their families) as regards administrative formalities, such as travel arrangements and immigration services.
- 4.7. The assigned staff of each Participant will conform to the general and special rules of work and safety regulations in force, in the State of the host Participant, or as decided in a separate personnel exchange arrangement.

Article 5 – Exchange of Equipment

- 5.1. Whenever the exchange or supply of equipment is contemplated under this MOU, unless otherwise arranged by the Participants, all equipment supplied or exchanged by the sending Participant to the recipient Participant should remain the property of the sending Participant, and may be returned to the sending Participant upon completion of the mutually agreed upon activity.
- 5.2. Whenever the exchange or supply of equipment is contemplated under this MOU, unless otherwise arranged by the Participants, the following provisions will apply covering the transportation and use of the equipment:
 - a. The sending Participant will supply as soon as possible a detailed list of the equipment to be provided together with the associated specifications and technical information documentation.
 - b. The recipient Participant will provide the necessary premises and shelter to ensure the safekeeping and security of the equipment, and will provide for electric power, water, gas, and other utilities in accordance with all technical requirements which will be as mutually agreed upon.
 - c. Responsibility for expenses, safekeeping and insurance during the transportation of the material from the original location in the country of the sending Participant to the point of entry in the country of the recipient Participant will rest with the sending Participant.
 - d. Where the sending Participant decides to have the equipment returned, it will be responsible for expenses, safekeeping, and insurance during transportation of the equipment from the original point of entry in the country of the recipient Participant to the final destination in the country of the sending Participant.
 - e. Responsibility for expenses, safekeeping and insurance during the transportation of the equipment from the point of entry in the country of the

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recipient Participant to the final destination in the country of the recipient Participant will rest with the recipient Participant. Where the sending Participant elects to have the equipment returned, the recipient Participant will be responsible for expenses, safekeeping, and insurance during transportation of the equipment from the final destination in the country of the recipient Participant to the original point of entry in the country of the recipient Participant.

- f. The equipment provided by the sending Participant is, scientific and/or commercial in character and should be used for carrying out mutually agreed-upon activities to develop, test and evaluate nuclear verification technologies.

Article 6 – Samples and Materials

- 6.1 Whenever the exchange or supply of samples or material is contemplated under this MOU, unless otherwise arranged by the Participants, all sample or material supplied or exchanged by the sending Participant to the recipient Participant will remain the property of the sending Participant, and will be returned to the sending Participant upon completion of the mutually agreed upon activity.
- 6.2 Whenever the exchange of supply of samples or material is contemplated under this MOU, unless otherwise arranged by the Participants, the following provisions should apply covering the transportation and use of the samples or material:
 - a. Where one Participant requests that a sample or material be provided by the other Participant, the Participant making the request will bear all costs and expenses associated with the transportation of the sample or material from the location of the sending Participant to the final destination.
 - b. Subject to the provisions of Article 7, each Participant will promptly disclose to the other Participant all information arising from the examination or testing of samples or materials exchanged under this MOU.

Article 7 – Intellectual Property; Business-Confidential Information

The Participants do not anticipate the generation of intellectual property from the activities under this MOU or the exchange of business-confidential information. If the Participants determine that a particular activity may lead to the creation of intellectual property or the exchange of business-confidential information, they should consult with each other and make appropriate written arrangements for the protection and allocation of such intellectual property and business-confidential information.

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Article 8 - Funding

- 8.1. Unless otherwise agreed in writing, any costs arising from any direct collaboration between the Participants will be borne by the Participant that incurs them.
- 8.2. Cooperation under this MOU will be subject to the availability of appropriated funds.

Article 9 - Project Arrangements

Where the Participants decide to undertake a form of cooperation set forth in Article 2, they will execute a Project Arrangement. Each such Project Arrangement will include, as appropriate, detailed provisions for carrying out the specified forms of cooperation and may cover such matters as technical scope, project documents, management, costs and schedule.

Article 10 - General Provisions

- 10.1. Cooperation under this MOU will be in accordance with the laws and regulations of the Participants respective countries.
- 10.2. The Participants should settle all questions related to the MOU arising out of or connected to this MOU through consultations with each other.

Article 11 - Entry into Operation and Termination

Cooperation under this MOU will begin upon signature for a period of five (5) years and is expected to be automatically renewed for further five (5) year periods unless either Participant notifies the other of their intent to terminate the MOU.

Signed in duplicate at Vienna, this 17th day of September, 2001.

Kenneth E. Baker

FOR THE DEPARTMENT OF ENERGY
OF THE UNITED STATES OF AMERICA:

Susan Ward

FOR THE DEPARTMENT OF TRADE AND
INDUSTRY OF THE UNITED KINGDOM
OF GREAT BRITAIN AND NORTHERN
IRELAND: