

IMPLEMENTING ARRANGEMENT
BETWEEN
THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF
AMERICA
AND
THE MINISTRY OF EDUCATION, CULTURE, SPORTS, SCIENCE AND
TECHNOLOGY OF JAPAN
CONCERNING
COOPERATION IN THE FIELD OF NUCLEAR ENERGY-RELATED
RESEARCH AND DEVELOPMENT

The Department of Energy of the United States of America and the Ministry of Education, Culture, Sports, Science and Technology of Japan, collectively hereinafter referred to as the “Agencies”:

Acting pursuant to the agreement between the Government of the United States of America and the Government of Japan concerning cooperation in the field of nuclear energy-related research and development, effected by the Exchange of Notes of March 9, 2012 (hereinafter referred to as the “Exchange of Notes”);

Sharing an interest in fostering cooperation and pursuing scientific research and development in the nuclear energy-related field;

Seeking to promote and maintain nuclear energy science and engineering infrastructure in the Agencies’ respective countries to sustain the capabilities necessary for the development and use of nuclear energy for peaceful purposes; and

Believing that cooperation based on equitable sharing of their respective research and development data, technology and experience in the nuclear energy-related field would be of mutual benefit,

Have decided as follows:

Section 1

Purpose

1. The objective of this Implementing Arrangement is to set forth detailed terms and conditions that will apply to the Cooperation, as defined in the Exchange of Notes, conducted between the Agencies as identified in Section 2 of this Implementing Arrangement. The Agencies will conduct the Cooperation on the basis of mutual benefit, equality and reciprocity.
2. This Implementing Arrangement is pursuant to and subject to the Exchange of Notes.
3. In the event of any conflict between the provisions of this Implementing Arrangement and the Exchange of Notes, the latter will prevail.

Section 2

Scope of Cooperation

The Cooperation under this Implementing Arrangement, which will be conducted as deemed appropriate by the Agencies, may include research and development of the following that are stated in the Exchange of Notes: nuclear safety; response to nuclear incidents; radioactive waste management; decontamination relating to radioactive substances, and decommissioning of nuclear facilities; nuclear security; nuclear nonproliferation; advanced nuclear reactors and their fuels, materials, and equipment; and the nuclear fuel cycle.

Section 3

Forms of Cooperation

The forms of Cooperation under this Implementing Arrangement may include the following:

1. Exchange of scientific and engineering information including software, and results and methods of research and development;

2. Exchange of equipment, including instruments and components, and samples, including specimens for experiments;
3. Exchange of personnel for participation in research, development, demonstration, analysis, design, experiments, and training activities;
4. Joint projects in the form of experiments, design analysis, calculation, training and other technical activities; and
5. Other forms as the Agencies may decide in writing, provided that they are deemed appropriate by the two Governments in accordance with the provisions of the Exchange of Notes.

Section 4 Participants

An Agency may, as appropriate, invite laboratories, research institutes, or other entities by contract or otherwise to undertake Cooperation under this Implementing Arrangement. Each such entity and the Agencies (collectively hereinafter referred to as the "Participants" or individually as a "Participant") may conclude Project Arrangements described in Section 5 for the Cooperation they conduct under and in accordance with this Implementing Arrangement.

Section 5 Project Arrangements

Each Project Arrangement that involves the sharing of costs or that may give rise to intellectual property will include detailed provisions for carrying out the specified forms of Cooperation, including such matters as technical scope, the protection and distribution of intellectual property, exchange of business-confidential information, management, total costs, cost sharing, and schedule. Each Project Arrangement will be subject to and refer to this Implementing Arrangement and the Exchange of Notes.

Each Project Arrangement to be concluded by Participants other than the Agencies is to be notified to the Agencies prior to its conclusion.

Section 6 Management

Each Agency will designate a Principal Coordinator to supervise the implementation of this Implementing Arrangement. Each Principal Coordinator will designate Coordinators, who will be responsible for working-level contacts between the Agencies in their respective subjects of Cooperation.

Section 7 Exchange of Information

The provisions of this Section will apply to the Cooperation under this Implementing Arrangement, unless otherwise decided in an individual Project Arrangement.

1. The Agencies may exchange, on a mutually beneficial basis, scientific and technical information, documents and results of research and development carried out under this Implementing Arrangement. Such information will be limited to that which the Agencies may disclose under the national laws and regulations of their respective countries, either in their possession or available to them, relating to the forms of Cooperation described in Section 3.
2. Seminar proceedings and reports of joint activities carried out under this Implementing Arrangement will be made available for publication as joint publications.
3. Information developed and exchanged under this Implementing Arrangement should be given wide distribution. Except as provided in Section 8 and paragraph 4 of this Section, such information may be made

available to the public by the receiving Agency through customary channels and in accordance with normal procedures of the Agency.

4. An Agency may provide to the other Agency sensitive, non-public information that requires protection against unauthorized disclosure under the laws and regulations of the providing Agency's country. In such cases:
 - a. The providing Agency will mark such information with the Agency's name, the fact that it is provided under this Implementing Arrangement, and the limitations on disclosure.
 - b. Access to such information will be limited to individuals of the receiving Agency, its Government, and Participants as referred to in Section 4, on a need-to-know basis for the purpose of this Implementing Arrangement and subject to any limitations on disclosure specified in writing by the providing Agency.
 - c. The receiving Agency will take appropriate measures, which may include classification, to prevent unauthorized disclosure in accordance with the relevant national laws and regulations of the receiving Agency.
 - d. Without the prior written consent of the providing Agency, the receiving Agency will not disclose the provided information, other than as provided in paragraph 4.b above.
 - e. Any question relating to the disclosure of information provided under the provisions of this paragraph will be resolved in accordance with paragraph 5 of the Exchange of Notes.

Section 8

Intellectual Property Rights; Business-Confidential Information

Details and procedures for the protection and distribution of intellectual property rights and other rights of a proprietary nature created or

introduced in the course of the Cooperation under this Implementing Arrangement and those for the protection of business-confidential information exchanged under this Implementing Arrangement are set forth in the Intellectual Property Annex, which is an integral part of this Implementing Arrangement. The Intellectual Property Annex is applicable to any activity conducted as the Cooperation under this Implementing Arrangement unless otherwise decided by the Participants implementing the activity concerned.

Section 9

Exchange of Personnel

The provisions of this Section will apply to the Cooperation under this Implementing Arrangement, unless otherwise decided in an individual Project Arrangement.

1. Whenever an exchange of personnel is contemplated, each Agency will ensure the selection of personnel with the skills and competence necessary to conduct the activities planned under this Implementing Arrangement. Each such exchange of personnel will be determined in advance by an exchange of letters between the Agencies, referring to this Implementing Arrangement and its pertinent intellectual property provisions.
2. Each Agency will be responsible for the salaries, insurance, and allowances to be paid to its staff or contractors.
3. Each Agency will pay for the travel and living expenses of its staff or contractors staying at an establishment of the other Agency.
4. Each Agency will help locate adequate accommodations for the visiting staff of the other Agency (and their families) on a mutually agreeable and reciprocal basis.

5. Each Agency will provide all necessary assistance to the visiting staff of the other Agency as regards administrative formalities, such as assistance in making travel arrangements.
6. The visiting staff of an Agency will conform to the general rules of work and safety regulations in force at the host establishment.

Section 10

Exchange of Equipment

The provisions of this Section will apply to the Cooperation under this Implementing Arrangement, unless otherwise decided in an individual Project Arrangement.

1. By mutual arrangement, an Agency may provide equipment to be utilized in a joint activity. In such a case, the sending Agency will supply, as soon as possible, a list of the equipment to be provided, together with the relevant specifications and appropriate technical documentation related to the use, maintenance, and repair of the equipment.
2. Title to the equipment and necessary spare parts supplied for use in a joint activity will remain in the sending Agency, and the property will be returned to the sending Agency upon completion of the activity concerned.
3. Equipment provided under this Implementing Arrangement will be brought into operation at the host establishment only by arrangement of the Agencies.
4. The host establishment will provide the necessary premises for the equipment, will provide for utilities such as electric power, water, and gas, and normally will provide materials to be tested, in accordance with technical requirements to be determined.
5. Responsibilities for expenses, safekeeping and insurance during the transport of equipment from the original location in the country of the

sending Agency to the place of entry in the country of the receiving Agency will rest with the sending Agency. If the sending Agency elects to have the equipment returned, it will be responsible for expenses, safekeeping, and insurance during the transport of the equipment from the original place of entry in the country of the receiving Agency to the final destination in the country of the sending Agency.

6. Responsibilities for expenses, safekeeping and insurance during the transport of equipment from the place of entry in the country of the receiving Agency to the final destination in that country will rest with the receiving Agency. If the sending Agency elects to have the equipment returned, the receiving Agency will be responsible for expenses, safekeeping, and insurance during the transport of the equipment from the final destination in the country of the receiving Agency to the original point of entry in that country.

Section 11

Transportation and Use of Samples

The provisions of this Section will apply to the Cooperation under this Implementing Arrangement, unless otherwise decided in an individual Project Arrangement.

1. All samples provided by the sending Agency to the receiving Agency will remain the property of the sending Agency, and will be returned to the sending Agency upon completion of the activity concerned.
2. Where an Agency requests that a sample be provided by the other Agency, the Agency making the request will bear all costs and expenses associated with the transportation of the sample from the location where the sending Agency holds the sample to the final destination.
3. Each Agency will promptly disclose to the other Agency all information arising from the examination of a sample provided under this Implementing Arrangement. Business-confidential information (as defined in the Intellectual Property Annex to this Implementing

Arrangement), which was developed prior to or outside the scope of this Implementing Arrangement, will remain business-confidential even if it is contained in the result of an examination or testing of a sample under this Implementing Arrangement. Such information will be identified as business-confidential by the Agency asserting its business-confidential nature as soon as possible after all information arising from the examination or testing is disclosed to such Agency and the other Agency will be immediately advised of that identification. All information identified as business-confidential will be controlled as provided in the Intellectual Property Annex to this Implementing Arrangement.

4. The Agency providing a sample to the other Agency may also provide a partial or complete list of the types of information arising from the examination of such a sample and should identify any such information which is business-confidential (as defined in the Intellectual Property Annex to this Implementing Arrangement). All such business-confidential information will be controlled as set out in the said Annex to this Implementing Arrangement.

Section 12

Transfer of Information and Equipment

The provisions of this Section will apply to the Cooperation under this Implementing Arrangement, unless otherwise decided in an individual Project Arrangement.

1. All information or equipment transmitted by one Agency to the other Agency will be appropriate and accurate to the best knowledge and belief of the transmitting Agency, but the transmitting Agency does not warrant the suitability of the information or equipment transmitted for any particular use or application by the receiving Agency or any third party. Information or equipment developed jointly by both Agencies will be appropriate and accurate to the best knowledge and belief of both Agencies. Neither Agency warrants the accuracy of the jointly-developed information or the appropriateness of jointly-developed equipment nor its

suitability for any particular use or application by either Agency or by any third party.

2. The transfer of unclassified export-controlled information and equipment under this Implementing Arrangement will be treated in accordance with the relevant laws and regulations of each Agency's country to prevent the unauthorized transfer or retransfer of such information and equipment provided or produced under this Implementing Arrangement. If deemed necessary, the Agencies may conclude appropriate written arrangements to prevent the unauthorized transfer or retransfer of such information or equipment.

Section 13 General Considerations

1. Unless otherwise decided, all costs resulting from Cooperation carried out under this Implementing Arrangement will be the responsibility of the Agency that incurs them.
2. Each Agency will use its best efforts to obtain all required permits and licenses necessary for the implementation of this Implementing Arrangement.
3. The provisions of this Implementing Arrangement will be implemented subject to the availability of appropriated funds and subject to the applicable laws and regulations of each Agency's country.

Section 14 Commencement, Duration, Modification, and Discontinuation

1. This Implementing Arrangement will enter into effect upon signature by both Agencies and will remain in effect so long as the Exchange of Notes remains in force, except as provided for in paragraph 3 of this Section.

2. This Implementing Arrangement may be modified by mutual consent in writing of both Agencies at any time.
3. The Agencies may discontinue this Implementing Arrangement at any time by mutual consent in writing, or either Agency may discontinue its participation in this Implementing Arrangement with at least 3 months advance notification in writing to the other Agency.
4. All ongoing joint efforts and experiments not completed at the time of discontinuation of this Implementing Arrangement may be continued until their completion under the terms of this Implementing Arrangement in so far as such continuation of joint efforts and experiments is not prohibited by the applicable laws and regulations of either Agency's country.

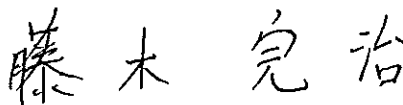
Signed in duplicate.

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



Date: JANUARY 7, 2013
Place: Washington, DC

FOR THE MINISTRY OF EDUCATION,
CULTURE, SPORTS, SCIENCE AND
TECHNOLOGY OF JAPAN:



Date: December 20, 2012
Place: Tokyo

INTELLECTUAL PROPERTY ANNEX

PROTECTION AND DISTRIBUTION OF INTELLECTUAL PROPERTY RIGHTS AND OTHER RIGHTS OF A PROPRIETARY NATURE

1. Business-Confidential Information

A. For the purpose of this Annex, "business-confidential information" means any know-how, technical data, or technical, commercial, or financial information that meets all of the following conditions:

- (i) It is of a type customarily held in confidence for commercial reasons;
- (ii) It is not generally known or publicly available from other sources;
- (iii) It has not been previously made available by the owner to others without an obligation concerning its confidentiality; and
- (iv) It is not already in the possession of the recipient without an obligation concerning its confidentiality.

B. Any business-confidential information will be furnished or, when created in the course of the Cooperation, transferred only by mutual written consent of the Participants in the cooperative activity concerned and will be given full protection in accordance with the laws and regulations of their respective countries.

C. Any business-confidential information will be appropriately identified before it is furnished in the course of the Cooperation or, unless otherwise provided in a Project Arrangement, immediately upon being created. Responsibility for identifying such information will fall on the Participant which furnishes it or asserts that it is to be protected. Unidentified information will be assumed not to be information to be protected, except that the Participant providing the information may notify the receiving Participant in writing, within a reasonable period of time after furnishing or transferring such information, that such information is business-confidential information under the laws and regulations of its country. Such information will thereafter be protected in accordance with subparagraph B above.

2. Ownership of Intellectual Property Rights

Between an Agency and nationals of its country, the ownership of intellectual property rights will be determined in accordance with the laws, regulations and practices of its country.

3. Inventions

A. For the purpose of this Annex, the "Invention" means any invention made in the course of the Cooperation which is or may be patentable or otherwise protectable under the laws of Japan, the United States of America or any third country.

B. As to an Invention, the Participants in the cooperative activity concerned will take appropriate steps, in accordance with the laws and regulations of their respective countries, with a view to realizing the following:

- (i) If an Invention is made as a result of a cooperative activity under this Implementing Arrangement that involves only the transfer or exchange of information, such as by joint meetings, seminars, or the exchange of technical reports or papers, unless otherwise provided in an applicable Project Arrangement:
 - (a) the Participant whose personnel make the Invention (hereinafter referred to as "the Inventing Participant") or the personnel who make the Invention (hereinafter referred to as "the Inventor") have the right to obtain all rights and interests in the Invention in all countries, and
 - (b) in any country where the Inventing Participant or the Inventor decides not to obtain such rights and interests, the other Participants have the right to do so.
- (ii)(a) If the Invention is made by an Inventor of a Participant ("the Assigning Participant") while assigned to another Participant ("the Receiving Participant") in the course of programs of a cooperative activity that involve only the visit or exchange of scientists and engineers, the Inventor of the Assigning Participant will receive the rights to the said Invention and any available benefits therefrom including awards, bonuses or royalties, in accordance with terms and conditions of a standard arrangement between the Receiving Participant and the Inventor except if otherwise provided in another

arrangement between them.

- (b) Upon request of the Assigning Participant, the Receiving Participant will promptly provide to the Assigning Participant information on the terms and conditions of a standard arrangement of the Receiving Participant.
- (iii)(a) Rights to an Invention made as a result of joint research and allocation of benefits derived therefrom will be decided between the Participants therein prior to the commencement of the joint research and will be contained in the arrangements setting forth the terms and conditions of the joint research. These rights will be allocated taking into account the relative contributions of the Participants to the creation of the Invention, the benefits of licensing by territory or for fields of use, requirements imposed by the domestic laws of the Participants' countries and other factors deemed appropriate.
- (b) If the Participants concerned cannot reach an agreement on rights to the Invention and allocation of benefits derived therefrom within nine months from the time they started negotiation, the matter may be resolved through consultations in accordance with paragraph 5 of the Exchange of Notes. If the Participants still cannot reach an agreement after such consultations, the joint research will not be initiated.
- (iv) The Inventing Participant will disclose promptly the Invention to the other Participants and furnish any documentation or information necessary to enable the other Participants to establish rights to which they may be entitled. The Inventing Participant may ask the other Participants in writing to delay publication or public disclosure of such documentation or information for the purpose of protecting its rights or the rights of the Inventor related to the Invention. Unless otherwise decided in writing, such restrictions will not exceed a period of six months from the date of communication of such documentation or information.

4. Copyrights

A. Disposition of rights to copyrighted works created in the course of the Cooperation under this Implementing Arrangement will be determined in the relevant Project Arrangement.

B. Each Participant in the cooperative activities under this Implementing Arrangement will use its best efforts to obtain for the other Participants concerned a non-exclusive, irrevocable, royalty-free license in all countries where copyright protection is available, to translate, reproduce, and publicly distribute scientific and technical journal articles, reports and books not containing any proprietary information, created in the course of such cooperative activities. All publicly distributed copies of a copyrighted work prepared under the cooperative activities under this Implementing Arrangement will indicate the name of the author of the work unless the author explicitly declines to be named. When scientific and technical journal articles, reports and books not containing any proprietary information, created in the course of such cooperative activities are translated and publicly distributed, the Participants concerned will be given the opportunity to review the translation prior to its public distribution.

5. Rights to Semiconductor Chip Layout Designs

Disposition of rights to semiconductor chip layout designs created in the course of the Cooperation under this Implementing Arrangement will be determined in the relevant Project Arrangement. The Participants concerned will take appropriate steps to secure rights to semiconductor chip layout designs created in the course of the cooperative activities under this Implementing Arrangement in accordance with the laws and regulations of their respective countries.

6. Other Forms of Intellectual Property

A. In the event that other forms of intellectual property are created in the course of the Cooperation under this Implementing Arrangement and they are not protected by the laws of a Participant's country, disposition of rights in that intellectual property will be determined, on an equitable basis, as described in subparagraph B below and in accordance with the laws and regulations of the respective countries.

B. The Participants concerned in the cooperative activities will, at the request of a Participant, promptly consult with each other on the disposition of rights in the intellectual property referred to in subparagraph A above.

The cooperative activity in question will be suspended during the consultation unless otherwise decided by the Participants concerned. If no decision on the disposition of said rights can be reached within a three-month period from the date of the request for consultation, the cooperative activity in question may be terminated by a Participant with notice to the other Participants. In this case, each Participant will also notify its respective Government of such termination. The matter may be resolved through consultations in accordance with paragraph 5 of the Exchange of Notes.

7. Cooperation

Each Participant in the cooperative activity concerned will take all necessary and appropriate steps, in accordance with the laws and regulations of its country, to provide for the cooperation of its authors and inventors which are required to carry out the provisions of this Annex. Each Participant in the cooperative activity concerned assumes the sole responsibility for any award or compensation that may be due its personnel in accordance with the laws and regulations of its country, provided, however, that this Annex creates no entitlement to any such award or compensation.