

IMPLEMENTING ACCORD
BETWEEN
THE UNITED STATES DEPARTMENT OF ENERGY
AND
THE CHINESE ACADEMY OF SCIENCES
FOR
A PROGRAM OF COLLABORATION
ON THE SUPERCONDUCTING SUPER COLLIDER

The Department of Energy (DOE) of the United States of America and the Chinese Academy of Sciences (CAS) of the Peoples Republic of China, hereinafter referred to as the "Parties";

Recognizing the importance of cooperation in conducting research in high energy physics and the significant contribution that the Superconducting Super Collider (SSC) shall make to the advancement of mankind's understanding of the origins and basic constituents of matter;

Noting that the Institute of High Energy Physics (IHEP), the Beijing Electron-Positron Collider (BEPC) National Laboratory of the CAS, and various other institutes and universities in the PRC have made significant contributions to research in high energy physics;

Recognizing the history of cooperation between the DOE and the CAS under the Agreement Between the Government of the United States of America and the Government of the Peoples Republic of China on Cooperation in Science and Technology of January 31, 1979, as amended and extended on May 22, 1991, hereinafter referred to as "the Agreement", and the Implementing Accord for High Energy Physics;

Intending to implement the Agreement, pursuant to Article V thereof, through an arrangement for close and long term cooperation on the SSC project;

Recognizing that the SSC is intended to be an international laboratory with other countries becoming partners in building, operating, and utilizing the facility; and

Considering that establishment of a multilateral international council may be desirable to oversee SSC Laboratory activities and to provide policy guidance on the construction and operation of the SSC and on the broad directions of the Laboratory's scientific program;

Have agreed as follows:

Article I
Objective

The objective of this Implementing Accord is to establish an arrangement for cooperation between DOE and CAS that shall advance the construction of the SSC and ensure the full exploitation of its scientific capabilities, subject to the Agreement.

Article II
The Superconducting Super Collider

The Superconducting Super Collider (SSC) is an accelerator complex and laboratory located in Ellis County, Texas, which DOE is constructing and shall operate through its management and

operating contractor, Universities Research Association, Inc. The SSC shall provide access to interactions at a luminosity of $10^{33} \text{cm}^{-2} \text{sec}^{-1}$ of two colliding proton beams, each at an energy of 20 TeV, at up to four interaction regions in the Collider ring to support physics research into the fundamental nature of matter and energy. The accelerator complex shall consist of five cascaded accelerators including a 600 MeV linear accelerator; an 11 GeV Low Energy Booster (LEB) synchrotron; a 200 GeV Medium Energy Booster (MEB) synchrotron; a 2 TeV High Energy Booster (HEB) synchrotron; and the Collider itself, which is two synchrotrons located in a common tunnel. Detectors are to be located in underground experimental halls at four primary interaction points. The SSC Laboratory shall include the accelerator complex and offices, laboratories, work space, and technical support facilities for an estimated staff of 2,200 and 500 visiting scientists from throughout the world.

Article III Program of Cooperation

1. The Parties shall cooperate in activities related to the design, development, construction, operation, and utilization of the SSC accelerator complex and related detectors as provided in this Implementing Accord. Such activities may include:
 - a. exchanges of information, scientists and engineers;
 - b. joint investigations and design of engineering systems;
 - c. joint workshops and technical reviews;
 - d. joint projects to support the design, construction, operation, and enhancement of the SSC accelerator complex;
 - e. joint projects to support the design, development, construction, operation, and enhancement of the SSC detector collaborations;
 - f. joint cooperative projects in experimental, theoretical, computational and other scientific aspects of the SSC program.

Article IV Contributions and Interlaboratory Agreements

1. In recognition of the capabilities of the IHEP and other Chinese institutes to provide design, development, and fabrication of certain components for the SSC, DOE's SSC Laboratory intends to enter into an interlaboratory collaborative agreement with IHEP with respect to the particular contribution of such components to the SSC. The SSC Laboratory may enter into similar agreements with other Chinese institutes with coordination of IHEP, when appropriate.
2. In addition to the above mentioned interlaboratory collaborative agreements, the SSC Laboratory shall notify the CAS of any procurement for supply of equipment for the accelerator. Such procurements shall be conducted on a competitive basis consistent with U.S. laws and regulations.

Article V Coordination and Management

1. The Parties shall establish a Joint Committee for Cooperation on the SSC for the implementation of this Implementing Accord.
2. Each Party shall designate five members and alternates to serve on the Joint Committee for Cooperation on the SSC. The Parties may increase the membership of the Joint Committee by mutual agreement. The CAS and the DOE shall co-chair the meetings of the Joint Committee for Cooperation on the SSC.
3. The Joint Committee for Cooperation on the SSC shall prepare and agree upon the program of work for each calendar year consistent with the overall schedule of the SSC.
4. The Joint Committee for Cooperation on the SSC may develop specific joint activities and programs to further the development of cooperation between the Parties on the SSC consistent with this Implementing Accord.
5. The Joint Committee for Cooperation on the SSC may assist in arranging collaboration between or among relevant organizations in the respective countries in accordance with national laws and regulations of the Parties.
6. The Joint Committee for Cooperation on the SSC shall meet at least once a year unless agreed otherwise, usually at the SSC Laboratory. Times and places for meetings shall be agreed in advance and confirmed in writing by the Parties

Article VI Personnel Assignments

Unless otherwise agreed by the Parties in writing, the following provisions shall apply to personnel assignments under this Implementing Accord.

1. Whenever a personnel assignment is contemplated under this Implementing Accord, each Party shall select qualified scientific and technical staff for assignment to the other Party.
2. Each such personnel assignment may be the subject of a separate exchange arrangement between participating institutions, consistent with this Implementing Accord.
3. Each Party shall be responsible for the salaries of its staff and for travel to and from the receiving country as part of an approved exchange. Local travel, living expenses (including room and board), and insurance also shall be paid by the sending Party unless otherwise agreed in writing in advance of the exchange.
4. DOE and CAS shall ensure that appropriate working arrangements are provided for scientists and engineers, visiting or assigned under this Implementing Accord in order for them to carry out activities under this Implementing Accord. Specific appropriate working arrangements, such as, but not limited to, office space, telephone service, a translator, transportation to and from the work site, and other appropriate working arrangements shall be agreed to in writing in advance of each personnel assignment, in order for them to carry out activities under this Implementing Accord. The Parties may assign by mutual

agreement, Chinese scientists and engineers to work at the SSC Laboratory and/or the DOE Project Office, and U.S. scientists and engineers to work at IHEP.

5. The host establishment shall locate appropriate living accommodations for personnel of the sending Party, and their families, on a mutually agreeable basis.
6. Each Party shall make its best efforts to provide or facilitate all necessary assistance to the assigned personnel, and their families, with respect to administrative formalities, such as travel arrangements and documents.
7. The attached staff of each Party shall conform to the general and special rules of work and safety regulations in force at the host establishment.

Article VII Provision or Exchange of Components and Equipment

Unless otherwise agreed in writing, in the event components or equipment are to be exchanged or provided by one Party to the other Party under the provisions of Article III, the following provisions shall apply covering the shipment and use of the components or equipment.

1. The Parties shall agree on a detailed list of the components and equipment to be provided or exchanged together with the necessary specifications and technical documentation for operation and maintenance of the components or equipment.
2. Upon acceptance by the SSC Laboratory, on behalf of DOE, and unless otherwise agreed in writing, all components and equipment provided by the CAS to advance the construction and operation of the SSC shall become the property of the DOE; shall become an integral part of the SSC accelerator and detectors; and shall remain with the SSC Laboratory in perpetuity.
3. The host establishment shall provide the necessary premises and shelter for the components and equipment of the sending Party. Utilities, such as electric power, water, and gas shall be supplied as agreed by the participating institution in advance of the exchange.
4. The sending Party shall pay for expenses, safekeeping, and insurance during the transport of the components or equipment from the original location in the country of the sending Party to the agreed upon place of entry in the country of the receiving Party. If the sending Party elects to have the components or equipment to which it holds title returned, it must be so specified in writing in advance of the exchange and the sending Party shall pay for the expenses, safekeeping, and insurance during the transport of the components or equipment from the original point of entry in the country of the receiving Party to the country of the sending Party.
5. The receiving Party shall pay for expenses, safekeeping, and insurance during the transport of the components or equipment from the agreed upon place of entry in the country of the receiving Party to the final destination in the country of the receiving Party. If the sending Party elects to have components or equipment to which it holds title returned, the receiving Party shall pay for expenses, safekeeping, and insurance during the transport of the components or equipment from the final destination in the country of the receiving Party to the original point of entry in the country of the receiving Party.

Article VIII General Provisions

1. Activities under this Implementing Accord, including its Annexes, are subject to applicable national laws and regulations of the Parties, including those related to technology transfers.
2. Activities under this Implementing Accord, including the provision of financial resources, shall be subject to the availability of appropriated funds.
3. All questions relating to the interpretation or application of this Implementing Accord that arise during the period it is in force shall be referred to the Joint Committee for Cooperation on the SSC for resolution. Any issues that remain unresolved at the Joint Committee for Cooperation on the SSC shall be referred to the Parties for resolution.
4. Damages incurred in the course of or arising out of the implementation of this Implementing Accord and its Annexes shall be compensated to the extent permitted by and in accordance with applicable domestic laws and regulations.

Article IX Intellectual Property

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

1. Scope

- a. In accordance with Article V, subparagraph 2 of the Science and Technology Agreement as amended May 22, 1991, which states, "2. Except as otherwise provided in the specific accords implementing this Agreement, protection of intellectual property and rights thereto shall be as set forth in Annex I, which forms an integral part of this Agreement," this Article shall be applicable to all cooperative activities undertaken pursuant to this Implementing Accord, except as otherwise specifically agreed by the Parties or their designees.
- b. For purposes of this Implementing Accord "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.
- c. This Article addresses the allocation of rights and interests between the Parties. Each Party shall ensure that the other Party can obtain the rights to intellectual property allocated in accordance with this Article by obtaining those rights from its own participants through contracts or other legal means, if necessary. This Article 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.

- d. Disputes concerning intellectual property arising under this Implementing Accord 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.
- e. Termination or expiration of this Implementing Accord shall not affect rights or obligations under this Article.

2. Allocation of rights

- a. Each Party shall be entitled to a non-exclusive, irrevocable, royalty-free license in all countries to translate, reproduce, and publicly distribute scientific and technical journal articles, reports and books directly arising from cooperation under this Implementing Accord. 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.
- b. Rights to all forms of intellectual property, other than those rights described in Paragraph 2.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. In addition, each visiting researcher named as an inventor shall be entitled to share in a portion of any royalties earned by the host institution from the licensing of such intellectual property.
 - (2) (a) For intellectual property created during joint research, for example, when the Parties, participating institutions, or participating personnel have agreed in advance on the scope of work, each Party shall be entitled to obtain all rights and interests in its own territory. Rights and interests in third countries shall be determined in a fair and equitable manner at the time the intellectual property arises. If the research is not designated as "joint research", rights to intellectual property arising from the research shall be allocated in accordance with paragraph b. (1). In addition, persons named as inventors shall be entitled to share in a portion of any royalties earned by either institution from the licensing of the intellectual property.

(b) Notwithstanding the first paragraph above, if a type of intellectual property is protected under the laws of one Party but not the other Party, unless other allocation arrangements are agreed upon by both Parties, the Party whose laws provide for protection shall be entitled to all rights and interests in the Party's own territory and in third countries. Persons named as inventors shall nonetheless be entitled to share a portion of any royalties earned by the institution of the Party whose laws provide for protection from the licensing of such intellectual property.

- (3) (a) For intellectual property arising as a result of a program of cooperative activity that involves only the transfer or exchange of information between the Parties, such as by joint meetings, seminars or the exchange of technical reports or papers, the Party whose personnel make the invention (the inventing Party) has the right to obtain all rights and interests in the invention in all countries.
- (b) In any country where the inventing Party decides not to obtain such rights and interests, the other Party has the right to do so.

3. Business confidential information

In the event that information identified in a timely fashion as business-confidential is furnished or created under this Implementing Accord, each Party and its participants shall protect such information in accordance with applicable laws, regulations, and administrative practices. No government classified information shall be exchanged. Information may be identified as "business confidential" 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.

Article X Technical Data

The technical data or articles provided or exchanged shall be for the purposes of this Implementing Accord only. Neither Party may release, or authorize the release/use of the technical data, information, and/or documentation, to third parties unless coordinated with the other Party.

Article XI Visas, Customs, Duties

1. Each Party shall use its best effort to facilitate the issuance of appropriate visas to all personnel of the other Party assigned to its facilities in accordance with this Implementing Accord.
2. Each Party shall use its best efforts to ensure that all components and equipment provided by the other Party enters into its country free of any duty and in as expeditious a manner as possible. Any applicable duty on components and equipment contributed by the CAS to the SSC shall be the responsibility of DOE.

Article XII
Duration

1. This Implementing Accord shall enter into force upon signature, and shall remain in force for the duration of the Agreement or for 10 years, whichever occurs last. Thereafter it may be extended for additional 5-year terms by written agreement of the Parties following joint review at the end of each additional 5-year period.
2. This Implementing Accord and its Annexes may be amended by written agreement of the Parties and such amendments shall enter into force upon the date stipulated therein.
3. All joint activities and experiments not completed at the expiration or termination of this Implementing Accord may be continued upon written agreement of the Parties, until their completion.
4. Either Party may terminate this Implementing Accord on 6 months' written notice.
5. The respective rights and responsibilities of the Parties regarding security, liability, use and disclosure of information shall continue notwithstanding the expiration or termination of this Implementing Accord.

DONE at Beijing, China, this 4th day of November, 1992, in duplicate, in the English and Chinese languages, both texts being equally authentic.

William Happer
FOR THE UNITED STATES
DEPARTMENT OF ENERGY:

周光召
FOR THE CHINESE ACADEMY
OF SCIENCES: