sortium referred to in section 4622 of this title, to the extent that such participation is consistent with the missions of the national laboratory.

#### (b) Agreements

The Secretary of Energy may enter into such agreements with the Secretary of Defense, with any consortium referred to in section 4622 of this title, and with any college or university as may be necessary to provide for the active participation of the national laboratories of the Department of Energy in the Initiative.

#### (c) Research and development

One or more national laboratories of the Department of Energy shall participate in the Initiative by conducting research and development activities relating to research on the development of semiconductor manufacturing technologies. Such activities may include research and development relating to materials fabrication, materials characterization, design and modeling of devices, and new processing equipment.

(Pub. L. 100-180, div. C, title I, §3143, Dec. 4, 1987, 101 Stat. 1243.)

## § 4624. Personnel exchanges

The Secretary of Energy may authorize temporary exchanges of personnel between the national laboratories of the Department of Energy and any domestic firm or any consortium referred to in section 4622 of this title that is participating in the Initiative. The exchange of personnel shall be subject to such restrictions, limitations, terms, and conditions that the Secretary of Energy considers necessary in the interest of national security.

(Pub. L. 100–180, div. C, title I,  $\S3144$ , Dec. 4, 1987, 101 Stat. 1243.)

## § 4625. Other Department of Energy resources

## (a) Availability of resources

Subject to subsection (b), the Secretary of Energy may make available to the Department of Defense, to any other department or agency of the Federal Government, and to any consortium that has entered into an agreement in furtherance of the Initiative any facilities, personnel, equipment, services, and other resources of the Department of Energy for the purpose of conducting research and development projects under the Initiative consistent with section 4623(a) of this title.

## (b) Reimbursement

The Secretary may make facilities available under this section only to the extent that the cost of the use of such facilities is reimbursed by the user.

(Pub. L. 100–180, div. C, title I, §3145, Dec. 4, 1987, 101 Stat. 1243.)

## § 4626. Budgeting for semiconductor manufacturing technology research

## (a) Budget submission

To the extent the Secretary considers appropriate and necessary, the Secretary of Energy,

in preparing the research and development budget of the Department of Energy to be included in the annual budget submitted to the Congress by the President under section 1105(a) of title 31, shall provide for programs, projects, and activities that encourage the development of new technology in the field of semiconductors.

#### (b) Budget categories

The programs, projects, and activities described in subsection (a) shall be included in the budget for general science and research activities of the Department of Energy, except that any programs, projects, and activities that directly support and directly benefit the defense activities of the Department shall be included in the budget for atomic energy defense activities of the Department of Energy.

(Pub. L. 100–180, div. C, title I, §3146, Dec. 4, 1987, 101 Stat. 1243.)

## § 4627. Cost-sharing agreements

#### (a) Permitted provisions

The director of each national laboratory of the Department of Energy that is participating in the Initiative or the contractor operating any such national laboratory, in carrying out programs under a contract with the Department of Energy, may include in any research and development agreement entered into with a domestic firm in connection with such Initiative a cooperative provision for the domestic firm to pay a portion of the cost of the research and development activities.

#### (b) Limitations

- (1) Not more than an amount equal to 1 percent of any national laboratory's annual budget shall be received from nonappropriated funds derived from contracts entered into under the Initiative in any fiscal year, except to the extent approved in advance by the Secretary of Energy.
- (2) No Department of Energy national laboratory may receive more than \$10,000,000 of nonappropriated funds under any cooperative research and development agreement entered into under this subsection in connection with the Initiative, except to the extent approved in advance by the Secretary of Energy.

(Pub. L. 100–180, div. C, title I, §3147, Dec. 4, 1987, 101 Stat. 1244.)

# § 4628. Department of Energy oversight of cooperative agreements relating to Initiative

# (a) Provisions relating to disapproval and modification of agreements

If the Secretary of Energy desires an opportunity to disapprove or require the modification of any agreement under section 4627 of this title, the agreement shall provide a 90-day period within which such action may be taken, beginning on the date the agreement is submitted to the Secretary.

## (b) Record of agreements

Each national laboratory shall maintain a record of all agreements entered into under this section.

(Pub. L. 100–180, div. C, title I, §3148, Dec. 4, 1987, 101 Stat. 1244.)

### § 4629. Avoidance of duplication

In carrying out the Initiative, the Secretary of Energy shall ensure that unnecessary duplicative research is not performed at the research facilities (including the national laboratories of the Department of Energy) that are participating in the Initiative.

(Pub. L. 100–180, div. C, title I, §3149, Dec. 4, 1987, 101 Stat. 1244.)

## § 4630. Authorization of appropriations

There is authorized to be appropriated to the Department of Energy for fiscal year 1988 the sum of \$25,000,000 for general science and research activities of the Department of Energy under the Initiative.

(Pub. L. 100–180, div. C, title I, §3150, Dec. 4, 1987, 101 Stat. 1244.)

#### § 4631. Technology transfer

#### (a) In general

The Secretary of Energy shall adopt procedures to provide for timely and efficient transfer of semiconductor technology developed under the Initiative pursuant to applicable laws, Executive orders, and regulations.

#### (b) Plan for commercialization enhancement

- (1) Not later than one year after the date on which funds are first appropriated to conduct the Initiative, the Secretary of Energy shall transmit to the committees of Congress named in paragraph (2) a plan for the transfer of semiconductor technology and information generated by the Initiative.
- (2) The committees of Congress referred to in paragraph (1) are the Committees on Armed Services of the Senate and House of Representatives, the Committee on Energy and Natural Resources of the Senate, and the Committee on Science, Space, and Technology of the House of Representatives.

(Pub. L. 100–180, div. C, title I, §3151, Dec. 4, 1987, 101 Stat. 1244; Pub. L. 103–437, §5(b)(6), Nov. 2, 1994, 108 Stat. 4582.)

## AMENDMENTS

1994—Subsec. (b)(2). Pub. L. 103–437 substituted "Committee on Science, Space, and Technology" for "Committee on Science and Technology".

## § 4632. Semiconductor research and development

## (a) Short title

This section may be cited as the "National Advisory Committee on Semiconductor Research and Development Act of 1988".

#### (b) Findings and purposes

- (1) The Congress finds and declares that—
- (A) semiconductor technology is playing an ever-increasing role in United States industrial and commercial products and processes, making secure domestic sources of state-of-the-art semiconductors highly desirable;
- (B) modern weapons systems are highly dependent on leading edge semiconductor devices, and it is counter to the national security interest to be heavily dependent upon foreign sources for this technology;

- (C) governmental responsibilities related to the semiconductor industry are divided among many Federal departments and agencies; and
- (D) joint industry-government consideration of semiconductor industry problems is needed at this time.
- (2) The purposes of this section are—
- (A) to establish the National Advisory Committee on Semiconductors; and
- (B) to assign to such Committee the responsibility for devising and promulgating a national semiconductor strategy, including research and development, the implementation of which will assure the continued leadership of the United States in semiconductor technology.

#### (c) Creation of Committee

There is hereby created in the executive branch of the Government an independent advisory body to be known as the National Advisory Committee on Semiconductors (hereafter in this section referred to as the "Committee").

#### (d) Functions

- (1) The Committee shall—
- (A) collect and analyze information on the needs and capabilities of industry, the Federal Government, and the scientific and research communities related to semiconductor technology;
- (B) identify the components of a successful national semiconductor strategy in accordance with subsection (b)(2)(B);
- (C) analyze options, establish priorities, and recommend roles for participants in the national strategy;
- (D) assess the roles for government and national laboratories and other laboratories supported largely for government purposes in contributing to the semiconductor technology base of the Nation, as well as to access the effective use of the resources of United States private industry, United States universities, and private-public research and development efforts: and
- (E) provide results and recommendations to agencies of the Federal Government involved in legislative, policymaking, administrative, management, planning, and technology activities that affect or are part of a national semiconductor strategy, and to the industry and other nongovernmental groups or organizations affected by or contributing to that strategy.
- (2) In fulfilling this responsibility, the Committee shall—
  - (A) monitor the competitiveness of the United States semiconductor technology base;
  - (B) determine technical areas where United States semiconductor technology is deficient relative to international competition;
  - (C) identify new or emerging semiconductor technologies that will impact the national defense or United States competitiveness or both:
  - (D) develop research and development strategies, tactics, and plans whose execution will assure United States semiconductor competitiveness; and
  - (E) recommend appropriate actions that support the national semiconductor strategy.