

**§ 4817. Requirements to identify and control the export of emerging and foundational technologies**

**(a) Identification of technologies**

**(1) In general**

The President shall establish and, in coordination with the Secretary, the Secretary of Defense, the Secretary of Energy, the Secretary of State, and the heads of other Federal agencies as appropriate, lead, a regular, ongoing interagency process to identify emerging and foundational technologies that—

- (A) are essential to the national security of the United States; and
- (B) are not critical technologies described in clauses (i) through (v) of section 4565(a)(6)(A) of this title.

**(2) Process**

The interagency process established under subsection (a) shall—

- (A) be informed by multiple sources of information, including—
  - (i) publicly available information;
  - (ii) classified information, including relevant information provided by the Director of National Intelligence;
  - (iii) information relating to reviews and investigations of transactions by the Committee on Foreign Investment in the United States under section 4565 of this title; and
  - (iv) information provided by the advisory committees established by the Secretary to advise the Under Secretary of Commerce for Industry and Security on controls under the Export Administration Regulations, including the Emerging Technology and Research Advisory Committee;
- (B) take into account—
  - (i) the development of emerging and foundational technologies in foreign countries;
  - (ii) the effect export controls imposed pursuant to this section may have on the development of such technologies in the United States; and
  - (iii) the effectiveness of export controls imposed pursuant to this section on limiting the proliferation of emerging and foundational technologies to foreign countries; and
- (C) include a notice and comment period.

**(b) Commerce controls**

**(1) In general**

Except to the extent inconsistent with the authorities described in subsection (a)(1)(B), the Secretary shall establish appropriate controls under the Export Administration Regulations on the export, reexport, or in-country transfer of technology identified pursuant to subsection (a), including through interim controls (such as by informing a person that a license is required for export), as appropriate, or by publishing additional regulations.

**(2) Levels of control**

**(A) In general**

The Secretary may, in coordination with the Secretary of Defense, the Secretary of

State, and the heads of other Federal agencies, as appropriate, specify the level of control to apply under paragraph (1) with respect to the export of technology described in that paragraph, including a requirement for a license or other authorization for the export, reexport, or in-country transfer of that technology.

**(B) Considerations**

In determining under subparagraph (A) the level of control appropriate for technology described in paragraph (1), the Secretary shall take into account—

- (i) lists of countries to which exports from the United States are restricted; and
- (ii) the potential end uses and end users of the technology.

**(C) Minimum requirements**

At a minimum, except as provided by paragraph (4), the Secretary shall require a license for the export, reexport, or in-country transfer of technology described in paragraph (1) to or in a country subject to an embargo, including an arms embargo, imposed by the United States.

**(3) Review of license applications**

**(A) Procedures**

The procedures set forth in Executive Order 12981 (50 U.S.C. 4603 note; relating to administration of export controls) or a successor order shall apply to the review of an application for a license or other authorization for the export, reexport, or in-country transfer of technology described in paragraph (1).

**(B) Consideration of information relating to national security**

In reviewing an application for a license or other authorization for the export, reexport, or in-country transfer of technology described in paragraph (1), the Secretary shall take into account information provided by the Director of National Intelligence regarding any threat to the national security of the United States posed by the proposed export, reexport, or transfer. The Director of National Intelligence shall provide such information on the request of the Secretary.

**(C) Disclosures relating to collaborative arrangements**

In the case of an application for a license or other authorization for the export, reexport, or in-country transfer of technology described in paragraph (1) submitted by or on behalf of a joint venture, joint development agreement, or similar collaborative arrangement, the Secretary may require the applicant to identify, in addition to any foreign person participating in the arrangement, any foreign person with significant ownership interest in a foreign person participating in the arrangement.

**(4) Exceptions**

**(A) Mandatory exceptions**

The Secretary may not control under this subsection the export of any technology—

(i) described in section 1702(b) of this title; or

(ii) if the regulation of the export of that technology is prohibited under any other provision of law.

**(B) Regulatory exceptions**

In prescribing regulations under paragraph (1), the Secretary may include regulatory exceptions to the requirements of that paragraph.

**(C) Additional exceptions**

The Secretary shall not be required to impose under paragraph (1) a requirement for a license or other authorization with respect to the export, reexport, or in-country transfer of technology described in paragraph (1) pursuant to any of the following transactions:

(i) The sale or license of a finished item and the provision of associated technology if the United States person that is a party to the transaction generally makes the finished item and associated technology available to its customers, distributors, or resellers.

(ii) The sale or license to a customer of a product and the provision of integration services or similar services if the United States person that is a party to the transaction generally makes such services available to its customers.

(iii) The transfer of equipment and the provision of associated technology to operate the equipment if the transfer could not result in the foreign person using the equipment to produce critical technologies (as defined in section 4565(a) of this title).

(iv) The procurement by the United States person that is a party to the transaction of goods or services, including manufacturing services, from a foreign person that is a party to the transaction, if the foreign person has no rights to exploit any technology contributed by the United States person other than to supply the procured goods or services.

(v) Any contribution and associated support by a United States person that is a party to the transaction to an industry organization related to a standard or specification, whether in development or declared, including any license of or commitment to license intellectual property in compliance with the rules of any standards organization (as defined by the Secretary by regulation).

**(c) Multilateral controls**

**(1) In general**

The Secretary of State, in consultation with the Secretary and the Secretary of Defense, and the heads of other Federal agencies, as appropriate, shall propose that any technology identified pursuant to subsection (a) be added to the list of technologies controlled by the relevant multilateral export control regimes.

**(2) Items on commerce control list or United States munitions list**

If the Secretary of State proposes to a multilateral export control regime under para-

graph (1) to add a technology identified pursuant to subsection (a) to the control list of that regime and that regime does not add that technology to the control list during the 3-year period beginning on the date of the proposal, the applicable agency head may determine whether national security concerns warrant the continuation of unilateral export controls with respect to that technology.

**(d) Report to Committee on Foreign Investment in the United States**

Not less frequently than every 180 days, the Secretary, in coordination with the Secretary of Defense, the Secretary of State, and the heads of other Federal agencies, as appropriate, shall submit to the Committee on Foreign Investment in the United States a report on the results of actions taken pursuant to this section.

**(e) Report to Congress**

Not less frequently than every 180 days, the Secretary, in coordination with the Secretary of Defense, the Secretary of State, and the heads of other Federal agencies, as appropriate, shall submit a report on the results of actions taken pursuant to this section, including actions taken pursuant to subsections (a), (b), and (c), to—

(1) the Committee on Banking, Housing, and Urban Affairs, the Committee on Foreign Relations, the Committee on Armed Services, and the Select Committee on Intelligence of the Senate; and

(2) the Committee on Financial Services, the Committee on Foreign Affairs, the Committee on Armed Services, and the Permanent Select Committee on Intelligence of the House of Representatives.

**(f) Modifications to Emerging Technology and Research Advisory Committee**

**(1) In general**

The Secretary shall revise the objectives of the Emerging Technology and Research Advisory Committee, established by the Secretary under the Export Administration Regulations, to include advising the interagency process established under subsection (a) with respect to emerging and foundational technologies.

**(2) Duties**

The Secretary—

(A) shall revise the duties of the Emerging Technology and Research Advisory Committee to include identifying emerging and foundational technologies that may be developed over a period of 5 years or 10 years; and

(B) may revise the duties of the Advisory Committee to include identifying trends in—

(i) the ownership by foreign persons and foreign governments of such technologies;

(ii) the types of transactions related to such technologies engaged in by foreign persons and foreign governments;

(iii) the blending of private and government investment in such technologies; and

(iv) efforts to obfuscate ownership of such technologies or to otherwise circumvent the controls established under this section.

**(3) Meetings****(A) Frequency**

The Emerging Technology and Research Advisory Committee should meet not less frequently than every 120 days.

**(B) Attendance**

A representative from each agency participating in the interagency process established under subsection (a) should be in attendance at each meeting of the Emerging Technology and Research Advisory Committee.

**(4) Classified information**

Not fewer than half of the members of the Emerging Technology and Research Advisory Committee should hold sufficient security clearances such that classified information, including classified information described in clauses (ii) and (iii) of subsection (a)(2)(A), from the interagency process established under subsection (a) can be shared with those members to inform the advice provided by the Advisory Committee.

**(5) Applicability of Federal Advisory Committee Act**

Subsections (a)(1), (a)(3), and (b) of section 10 and sections 11, 13, and 14 of the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Emerging Technology and Research Advisory Committee.

**(6) Report**

The Emerging Technology and Research Advisory Committee shall include the findings of the Advisory Committee under this subsection in the annual report to Congress required by section 4824 of this title.

**(g) Rule of Construction**

Nothing in this chapter shall be construed to alter or limit—

(1) the authority of the President or the Secretary of State to designate items as defense articles and defense services for the purposes of the Arms Export Control Act (22 U.S.C. 2751 et seq.) or to otherwise regulate such items; or

(2) the authority of the President under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), the Nuclear Non-Proliferation Act of 1978 (22 U.S.C. 3201 et seq.), the Energy Reorganization Act of 1974 (42 U.S.C. 5801 et seq.), or the Export Administration Act of 1979 (50 U.S.C. 4601 et seq.) (as continued in effect pursuant to the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.)) or any other provision of law relating to the control of exports.

(Pub. L. 115-232, div. A, title XVII, §1758, Aug. 13, 2018, 132 Stat. 2218.)

## REFERENCES IN TEXT

Executive Order 12981, referred to in subsec. (b)(3)(A), is Ex. Ord. No. 12981, Dec. 5, 1995, 60 F.R. 62981, which is set out as a note under former section 4603 of this title.

The Federal Advisory Committee Act, referred to in subsec. (f)(5), is Pub. L. 92-463, Oct. 6, 1972, 86 Stat. 770, which is set out in the Appendix to Title 5, Government Organization and Employees.

This chapter, referred to in subsec. (g), was in the original “this subtitle”, meaning subtitle B (§§1741-1781) of title XVII of div. A of Pub. L. 115-232, Aug. 13, 2018, 132 Stat. 2208, known as the Export Control Reform Act of 2018, which is classified principally to this chapter. For complete classification of subtitle B to the Code, see section 1741 of Pub. L. 115-232, set out as a Short Title note under section 4801 of this title and Tables.

The Arms Export Control Act, referred to in subsec. (g)(1), is Pub. L. 90-629, Oct. 22, 1968, 82 Stat. 1320, which is classified principally to chapter 39 (§2751 et seq.) of Title 22, Foreign Relations and Intercourse. For complete classification of this Act to the Code, see Short Title note set out under section 2751 of Title 22 and Tables.

The Atomic Energy Act of 1954, referred to in subsec. (g)(2), is act Aug. 1, 1946, ch. 724, as added by act Aug. 30, 1954, ch. 1073, §1, 68 Stat. 919, which is classified principally to chapter 23 (§2011 et seq.) of Title 42, The Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under section 2011 of Title 42 and Tables.

The Nuclear Non-Proliferation Act of 1978, referred to in subsec. (g)(2), is Pub. L. 95-242, Mar. 10, 1978, 92 Stat. 120, which is classified principally to chapter 47 (§3201 et seq.) of Title 22, Foreign Relations and Intercourse. For complete classification of this Act to the Code, see Short Title note set out under section 3201 of Title 22 and Tables.

The Energy Reorganization Act of 1974, referred to in subsec. (g)(2), is Pub. L. 93-438, Oct. 11, 1974, 88 Stat. 1233, which is classified principally to chapter 73 (§5801 et seq.) of Title 42, The Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under section 5801 of Title 42 and Tables.

The Export Administration Act of 1979, referred to in subsec. (g)(2), is Pub. L. 96-72, Sept. 29, 1979, 93 Stat. 503, which was classified principally to chapter 56 (§4601 et seq.) of this title and was substantially repealed by Pub. L. 115-232, div. A, title XVII, §1766(a), Aug. 13, 2018, 132 Stat. 2232. For complete classification of this Act to the Code, see Tables.

The International Emergency Economic Powers Act, referred to in subsec. (g)(2), is title II of Pub. L. 95-223, Dec. 28, 1977, 91 Stat. 1626, which is classified generally to chapter 35 (§1701 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 1701 of this title and Tables.

**§ 4818. Review relating to countries subject to comprehensive United States arms embargo****(a) In general**

The Secretary, the Secretary of Defense, the Secretary of State, the Secretary of Energy, and the heads of other Federal agencies as appropriate, shall conduct a review of license requirements for exports, reexports, or in-country transfers of items to countries subject to a comprehensive United States arms embargo, including, as appropriate—

(1) the scope of controls under title 15, Code of Federal Regulations, that apply to exports, reexports, and in-country transfers for military end uses and military end users in countries that are subject to a comprehensive United States arms embargo and countries that are subject to a United Nations arms embargo; and

(2) entries on the Commerce Control List maintained under title 15, Code of Federal Regulations, that are not subject to a license requirement for the export, reexport, or in-country transfer of items to countries subject