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The U.S. Export Control System and the Export Control Reform Initiative

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SUMMARY

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The U.S. Export Control System and the Export Control Reform Initiative

Difficulty with striking an appropriate balance between national security and export competitiveness has made the subject of export controls controversial for decades. Through the Arms Export Control Act (AECA), the International Emergency Economic Powers Act (IEEPA), the Export Controls Act of 2018 (ECA), and other authorities, the United States restricts the export of defense articles; dual-use goods and technology; certain nuclear materials and technology; and items that would assist in the proliferation of nuclear, chemical, and biological weapons or the missile technology used to deliver them. U.S. export controls are also used to restrict exports to certain countries on which the United States imposes economic sanctions. The ECA legislates dual-use controls.

The U.S. export control system is diffused among several different licensing and enforcement agencies. Exports of dual-use goods and technologies—as well as some military items—are licensed by the Department of Commerce, munitions are licensed by the Department of State, and restrictions on exports based on U.S. sanctions are administered by the U.S. Department of the Treasury. Administrative enforcement of export controls is conducted by these agencies, while criminal penalties are issued by units of the Department of Homeland Security and the Department of Justice.

Aspects of the U.S. export control system have long been criticized by exporters, nonproliferation advocates, allies, and other stakeholders as being too rigorous, insufficiently rigorous, cumbersome, obsolete, inefficient, or combinations of these descriptions. In August 2009, the Barack Obama Administration launched a comprehensive review of the U.S. export control system. In April 2010, then-Defense Secretary Robert M. Gates proposed an outline of a new system based on four singularities

- a single export control licensing agency for dual-use, munitions exports, and Treasury-administered embargoes,
- a unified control list,
- a single primary enforcement coordination agency, and
- a single integrated information technology (IT) system.

The rationalization of the two control lists was the Obama Administration's focus. The Administration made no specific proposals concerning the single licensing agency, although the Administration implemented some elements of a future single system, such as a consolidated screening list and harmonization of certain licensing policies.

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Overview of the U.S. Export Control System

The United States restricts the export of defense articles; dual-use goods and technology; certain nuclear materials and technology; and items that would assist in the development of nuclear, chemical, and biological weapons or the missile technology used to deliver them. A defense item is defined by regulation as one that "[m]eets the criteria of a defense article or defense service on the U.S. Munitions List" or "[p]rovides the equivalent performance capabilities of a defense article" on that list.[1] Dual-use goods are commodities, software, or technologies that have both civilian and military applications.

The United States also controls certain exports in adherence to several multilateral nonproliferation control regimes. In addition, U.S. export controls are used to restrict exports to certain countries on which the United States imposes economic sanctions, such as Cuba, Iran, and Syria. Through the Export Controls Act of 2018 (ECA), the Arms Export Control Act (AECA), the International Emergency Economic Powers Act (IEEPA), and other authorities, Congress has delegated, in the context of broad statutory power, to the executive branch its express constitutional authority to regulate foreign commerce by controlling exports.

Various aspects of the U.S. export control system have long been criticized by exporters, nonproliferation advocates, allies, and other stakeholders as being too restrictive, insufficiently restrictive, cumbersome, obsolete, inefficient, or any combination of these descriptions. Some contend that such controls overly restrict U.S. exports and make firms less competitive. Others argue that U.S. defense and foreign policy considerations should trump commercial concerns. In January 2007, the Government Accountability Office (GAO) designated government programs designed to protect critical technologies, including the U.S. export control system, as a "high-risk" area warranting a "strategic reexamination of existing programs to identify needed changes." GAO's report named poor coordination among export control agencies, disagreements over commodity jurisdiction between the Departments of State and Commerce, unnecessary delays and inefficiencies in the license application process, and a lack of systematic evaluative mechanisms to determine the effectiveness of export controls.[2] A 2017 GAO report cited "progress" with regard to improving the export control system, but added that

> government-wide challenges remain, including the need to adopt a more consistent leadership approach, improve coordination among programs, address weaknesses in individual programs, and implement export control reform[3].

The 2019 version of the GAO report noted improvements in the export control system, but still cited the need for further action.[4]

On August 13, 2009, President Barack Obama announced the launch of a comprehensive review of the U.S. export control system; then-Secretary of Defense Robert M. Gates announced key elements of the Administration's agenda for reform in an April 2010 speech, with additional elaborations in subsequent months. Former Secretary Gates proposed a four-pronged approach that would establish

[1] *International Traffic in Arms Regulations*, 22 C.F.R. 120.3.

[2] U.S. Government Accountability Office (GAO), *High-Risk Series: An Update*, GAO-07-310, January 2010.

[3] U.S. Government Accountability Office (GAO), *Progress on Many High-Risk Areas, While Substantial Efforts Needed on Others*, GAO-17-317, February 2017.

[4] U.S. Government Accountability Office (GAO), *Substantial Efforts Needed to Achieve Greater Progress on High-Risk Areas*, GAO-19-157SP, March 2019.

- a single export control licensing agency for both dual-use, munitions and exports licensed to embargoed destinations;
- a unified control list;
- a single enforcement coordination agency; and
- a single integrated information technology system, which would include a single database of sanctioned and denied parties.

This section describes the characteristics of the dual-use, munitions, and nuclear controls. The information contained in this section also appears in chart form in **Appendix A**.

The Dual-Use System

Export Controls Act of 2018

The Export Controls Act of 2018 (ECA; P.L. 115-232, Subtitle B, Part I), which became law on August 13, 2018, provides broad, detailed legislative authority for the President to implement dual-use export controls. The law repeals the Export Administration Act EAA of 1979 (EAA; P.L. 96-72), which was the underlying statutory authority for dual-use export controls until it expired in 2001. After the EAA's expiration, the export control system created pursuant to that law was continued by a presidential declaration of a national emergency and the invocation of the International Emergency Economic Powers Act (IEEPA; P.L. 95-223).[5] The ECA directs the President to implement the EAA nonproliferation sanctions provisions pursuant to IEEPA.

The ECA, which has no expiration date, requires the President to control "the export, reexport, and in-country transfer of items subject to the jurisdiction of the United States, whether by United States persons or by foreign persons," as well as

> the activities of United States persons, wherever located, relating to specific (A) nuclear explosive devices; (B) missiles; (C) chemical or biological weapons; (D) whole plants for chemical weapons precursors; (E) foreign maritime nuclear projects; and (F) foreign military intelligence services.

The ECA requires the Secretary of Commerce to "establish and maintain a list" of controlled items and "foreign persons and end-uses that are determined to be a threat to the national security and foreign policy of the United States"; require export licenses; "prohibit unauthorized exports, reexports, and in-country transfers of controlled items"; and "monitor shipments and other means of transfer."

Administration

The Bureau of Industry and Security (BIS) in the Department of Commerce administers the export licensing and enforcement functions of the dual-use export control system. The Ronald Reagan Administration detached those functions from the International Trade Administration (ITA) in 1985 in order to separate them from the export promotion functions of that agency within the Department of Commerce. BIS also enforces U.S. antiboycott regulations concerning the Arab League boycott against Israel.

[5] Under IEEPA authority, the President may "investigate, block during the pendency of an investigation, regulate, direct and compel, nullify, void, prevent or prohibit, any acquisition, holding, withholding, use, transfer, withdrawal, transportation, importation or exportation of, or dealing in, or exercising any right, power, or privilege with respect to, or transactions involving, any property in which any foreign country or a national thereof has any interest by any person, or with respect to any property, subject to the jurisdiction of the United States." P.L. 95-223, §203(a)(1)(B).

Implementing Regulations

The ECA is implemented by the Export Administration Regulations (EAR; 15 C.F.R. 730 et seq). As noted above, the EAR were continued under IEEPA's authority when the EAA was expired. The EAR set forth licensing policy for goods and destinations, the applications process used by exporters, and the CCL, which is the list of specific commodities, technologies, and software controlled by the EAR. The CCL has 10 categories

- nuclear materials, facilities, and equipment;
- materials, organisms, microorganisms, and toxins;
- materials processing;
- electronics;
- computers;
- telecommunications and information security;
- lasers and sensors;
- navigation and avionics;
- marine; and
- propulsion systems, space vehicles, and related equipment.

Each of these categories is further divided into functional groups: equipment, assemblies, and components; test, inspection, and production equipment; materials; software; and technology. Each controlled item has an export control classification number (ECCN) based on the above categories and functional groups. Each ECCN is accompanied by a description of the item and the reason for control. In addition to discrete items on the CCL, nearly all U.S.-origin items are "subject to the EAR"; such items may be restricted to a destination based on the end-use or end-user of the product. For example, a commodity that is not on the CCL may be denied if the good is destined for a military end-use or an entity known to be engaged in weapons proliferation.

Licensing Policy

The EAR set out the licensing policy for dual-use and certain military items; the regulations control items for reasons of national security, foreign policy, or short supply. National security controls are based on a common multilateral control list; however, the designation of countries to which those controls are applied is based on U.S. policy. Foreign policy controls may be unilateral or multilateral in nature. The EAR unilaterally control items for antiterrorism, regional stability, or crime control purposes. Antiterrorism controls proscribe nearly all exports to North Korea and the four countries designated as state sponsors of terrorism by the Secretary of State—Cuba, Iran, Sudan, and Syria. These regulations also impose foreign policy controls on encryption items and on hot section technology, which is "for the development, production, or overhaul of commercial aircraft engines, components, and systems."[6] The EAR include "enhanced controls" on hot section technology and require a license "for exports and reexports to all destinations, except Canada."[7] The U.S. government reviews license applications for such technology "on a case-by-case basis to determine whether the proposed export or reexport is consistent with U.S. national security and foreign policy interests."[8] Foreign policy-based controls are also based on

[6] Bureau of Industry and Security 2016, *Report on Foreign Policy-Based Export Controls*, U.S. Department of Commerce.

[7] Ibid.

[8] Ibid.

adherence to multilateral nonproliferation control regimes, such as the Nuclear Suppliers' Group, the Australia Group (chemical and biological precursors), and the Missile Technology Control Regime (MTCR).

The EAR set out timelines for the consideration of dual-use licenses and the process for resolving interagency disputes. Within nine days of receipt, Commerce must refer the license to other agencies (State, Defense, and Energy, as appropriate), grant the license, deny it, seek additional information, or return it to the applicant. If Commerce refers the license to other agencies, the agency to which it is referred must recommend that the application be approved or denied within 30 days. The EAR provide a dispute resolution process for a dissenting agency to appeal an adverse decision. The entire licensing process, to include the dispute resolution process, is designed to be completed within 90 days. This process is depicted graphically in **Appendix B**.

BIS noted in its Fiscal Year 2017 Budget Submission that its increased responsibility for exports as a result of export control reform has increased the burden on the bureau's licensing and enforcement functions.[9]

Enforcement and Penalties

For criminal penalties, the ECA sanctions individuals up to $1 million or up to 20 years imprisonment, or both, per violation. This law also provides for civil penalties; for each violation, individuals may be fined up $300,000 "or an amount that is twice the value of the transaction that is the basis of the violation with respect to which the penalty is imposed, whichever is greater." Such penalties may also include revocation of export licenses and prohibitions on the offender's ability to export. Enforcement is carried out by the Office of Export Enforcement (OEE) at BIS. OEE's headquarters is in Washington, DC, and the office has 10 offices outside of Washington, DC. U.S. field offices, as well as export control officers in seven foreign countries. OEE is authorized to carry out investigations domestically and works with DHS to conduct investigations overseas. The office, along with in-country U.S. embassy officials overseas, also conducts prelicense checks and postshipment verifications.

Military Export Controls

Arms Export Control Act (AECA)

The AECA of 1976 (P.L. 90-629)[10] provides the President with the statutory authority to control the export of defense articles and services. The AECA also contains the statutory authority for the Foreign Military Sales (FMS) program, under which the U.S. government sells U.S. defense equipment, services, and training on a government-to-government basis. The law also specifies criteria for Direct Commercial Sales (DCS), whereby eligible foreign governments and international organizations purchase some defense articles and services directly from U.S. firms.

The AECA sets out foreign and national policy objectives for international defense cooperation and military export controls. Section 3(a) of the AECA specifies the general criteria for countries or international organizations to be eligible to receive U.S. defense articles and defense services provided under the act. The law also sets express conditions on the uses to which these defense articles may be put. Section 4 of the AECA states that U.S. defense articles and defense services shall be sold to friendly countries "solely" for use in "internal security"; for use in "legitimate

[9] Bureau of Industry and Security, Department of Commerce, *Budget Estimates, President's Submission, Fiscal Year 2017*.

[10] Originally titled The Foreign Military Sales Act.

self-defense"; to enable the recipient to participate in "regional or collective arrangements or measures consistent with the Charter of the United Nations"; to enable the recipient to participate in "collective measures requested by the United Nations for the purpose of maintaining or restoring international peace and security"; and to enable the foreign military forces "in less developed countries to construct public works and to engage in other activities helpful to the economic and social development of such friendly countries."

Congressional Requirements

A prominent feature of the AECA is the requirement for congressional consideration of certain foreign defense sales proposed by the President. This procedure includes consideration of proposals to sell major defense equipment and services, or to retransfer such military items to other countries.[11] The procedure is triggered by a formal report to Congress under Section 36 of the AECA. In general, the executive branch, after complying with the terms of the applicable section of U.S. law (usually those contained in the AECA), is free to proceed with the sale unless Congress passes legislation prohibiting or modifying the proposed sale.

Under Section 36(b) of the ACEA, Congress must be formally notified 30 calendar days before the Administration can take the final steps to conclude a government-to-government foreign military sale or issue an export license for commercial sales of major defense equipment valued at $14 million or more, defense articles or services valued at $50 million or more, or design and construction services valued at $200 million or more. In the case of such sales to NATO member states Japan, Australia, or New Zealand, Congress must be formally notified 15 calendar days before the Administration can proceed with the sale. However, the prior notice thresholds are higher for Japan, Australia, and New Zealand. These higher thresholds are $25 million for the sale, enhancement, or upgrading of major defense equipment; $100 million for the sale, enhancement, or upgrading of defense articles and defense services; and $300 million for the sale, enhancement, or upgrading of design and construction services, so long as such sales to these countries do not include or involve sales to a country outside of this group of nations.

Licensing Policy

The International Traffic in Arms Regulations (ITAR) set out licensing policy for exports (and temporary imports) of U.S. Munitions List (USML) items. A license is required for the export of nearly all items on the USML. There is a limited license exemption for USML items for Canada because the United States considers Canada to be part of the U.S. defense industrial base. In addition, the United States has treaties with the United Kingdom and Australia to exempt certain defense articles from licensing obligations to approved end-users in those countries; the Senate gave its advice and consent to ratification of these treaties in 2010. Unlike some Commerce Department dual-use controls, licensing requirements are based on the nature of the article and not the end-use or end-user of the item. The United States implements a range of prohibitions on munitions exports to countries unilaterally or based on adherence to United Nations (U.N.) arms embargoes. In addition, any firm engaged in manufacturing, exporting, or brokering any item on the USML must register with the Directorate of Defense Trade Controls (DDTC) at the State Department and pay a yearly fee whether or not the firm seeks to export during the year.

[11] For more information, see CRS Report RL31675, *Arms Sales: Congressional Review Process*, by Paul K. Kerr.

Administration

Exports of defense goods and services are administered by DDTC, which is a component of the Department of State's Bureau of Political-Military Affairs and consists of four offices: Management, Policy, Licensing, and Compliance. DDTC also processes commodity jurisdiction requests, which determine the regulatory regime to which an item is subject.

Critics of the defense trade system had previously decried the delays and backlogs in processing license applications at DDTC. A National Security Presidential Directive (NSPD-56), signed by President Bush on January 22, 2008, directed that the review and adjudication of defense trade licenses submitted under ITAR are to be completed within 60 days, except where six "national security exceptions apply."[12] Previously, except for the congressional notification procedures discussed above, DDTC had no defined timeline for the application process.

Enforcement and Penalties

The AECA provides for criminal penalties of up to $1 million or 20 years of imprisonment, or both, for each violation. The AECA also authorizes civil penalties of up to $500,000 and debarment from future exports. Civil penalties increase annually pursuant to Section 701 of the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 (P.L. 114-74). DDTC has an enforcement staff and works with the Defense Security Service and the Customs and Border Protection and Immigration and Customs Enforcement (ICE) units at the Department of Homeland Security (DHS). In addition to adjudicating civil cases, DDTC assists DHS and the Department of Justice (DOJ) in pursuing criminal investigations and prosecutions. DDTC also coordinates the Blue Lantern end-use monitoring program, in which in-country U.S. embassy officials conduct prelicense checks and postshipment verifications of items transferred via DCS. The Department of Defense's Defense Security Cooperation Agency manages the department's Golden Sentry program, which performs an analogous function for FMS transfers.

Nuclear Controls[13]

A subset of the above-mentioned dual-use and military controls are controls on nuclear items and technology. Controls on nuclear goods and technology are derived from the Atomic Energy Act of 1954 (P.L. 83-703), as amended, as well as from the ECA and the AECA. Controls on nuclear exports are divided among several agencies, based on the product or service being exported. The Nuclear Regulatory Commission (NRC) regulates exports of nuclear facilities and material. The NRC licensing policy and control list are located at 10 C.F.R. 110. BIS licenses "outside the core" civilian power plant equipment and maintains the Nuclear Referral List as part of the CCL. The Department of Energy authorizes the export of nuclear technology. DDTC exercises licensing authority over nuclear items in defense articles under the ITAR.

Defense Technology Security Administration (DTSA)

A Department of Defense (DOD) Field Activity under the Under Secretary of Defense for Policy, DTSA coordinates the technical and national security review of direct commercial sales export

[12] These are required Congressional notification; failure to submit required government assurances; incomplete end-use checks; incomplete Department of Defense review; a required waiver; "[w]hen a related export policy is under active review and pending final determination by the Department of State." ("Policy on Review Time for License Applications," *Federal Register*, vol. 74, No. 231, December 3, 2009, p. 63497.)

[13] For more information, see CRS Report RS22937, *Nuclear Cooperation with Other Countries: A Primer*, by Paul K. Kerr and Mary Beth D. Nikitin.

licenses and commodity jurisdiction requests received from the Departments of Commerce and State. It develops the recommendation of DOD on these referred export licenses or commodity jurisdictions based on input provided by the various DOD departments and agencies and represents DOD in the interagency dispute resolution process. Not all licenses from DDTC or BIS are referred to DTSA; memorandums of understanding govern the types of licenses referred from each agency. DTSA coordinates the DOD position with regard to proposed changes to the ITAR and the EAR. It also represents DOD in the interagency process responsible for compliance with multinational export control regimes.

Enforcement of U.S. Export Controls

Enforcement of the U.S. export control system is undertaken by the agencies responsible for export licensing, the Department of Homeland Security (DHS), the Department of Justice (DOJ) (National Security Division and the Federal Bureau of Investigation [FBI]), and the Defense Criminal Investigative Service (DCIS). Their activities can be summarized as follows:

- **Office of Export Enforcement (OEE) of the Bureau of Industry and Security (BIS), Department of Commerce.** OEE investigates criminal and administrative violations of the dual-use export control regime. OEE is authorized to conduct domestic investigations and works with ICE on investigations of export control violations overseas. OEE refers civil violations to the Office of Chief Counsel of BIS and criminal violations to DOJ.
- **Office of Defense Trade Compliance (ODTC) in DDTC, Department of State.** ODTC primarily administers civil enforcement actions, including charging letters and consent agreements, policies of denial, debarments, transaction exceptions, and reinstatements. ODTC provides agency support to investigations and criminal enforcement actions primarily conducted by ICE and the FBI.
- **Office of Enforcement, Nuclear Regulatory Commission (NRC).** Investigates export control violations of nuclear facilities and material licensed by the NRC's Office of International Programs. The Office of Enforcement refers criminal violations to DOJ.
- **ICE, Department of Homeland Security.** As with its predecessor at the U.S. Customs Service, ICE has been the lead agency for criminal export enforcement activities. The Counter-Proliferation Investigations Unit investigates violations of dual-use and munitions export controls, exports to sanctioned countries, and violations of economic embargoes. ICE supplements and provides enforcement capacity to the export licensing agencies (BIS and DDTC) and undertakes investigations based on its own and other agency intelligence. In addition, export controls are enforced at the port of departure by DHS Customs and Border Protection.
- **National Security Division of DOJ.** The counterespionage section of this division undertakes criminal prosecutions resulting from investigations conducted by the licensing agencies, ICE, and the FBI. An October 2007 DOJ National Export Enforcement Initiative established task forces between the licensing and enforcement agencies and U.S. Attorney's Offices in 20 cities to coordinate export control prosecutions and has facilitated new counterproliferation coordination among law enforcement agencies, export licensing agencies, and the intelligence community.

- **FBI.** The FBI's Weapons of Mass Destruction Directorate receives and analyzes intelligence regarding proliferation networks, provides specialized training on counterproliferation for the National Export Enforcement Initiative, and cooperates with above-mentioned investigative partners and export licensing agencies.
- **DCIS, Department of Defense.** DCIS is the criminal investigative arm of the Inspector General of DOD. Among its varied activities, DCIS investigates the transfer of sensitive defense technologies to proscribed nations and criminal elements.

Multilateral Control Regimes

In addition to U.S. controls, internationally there are four major multilateral control regimes: the Australia Group, the Missile Technology Control Regime (MTCR), the Nuclear Suppliers Group (NSG), and the Wassenaar Arrangement.[14] The Commerce Department observed on December 9, 2010, that "[m]ost items on the CCL are controlled in accordance with the United States' commitments" to four major multilateral export control regimes.[15] In addition to the controls described in the box below, all of these regimes have catch-all controls, which allow for the control of nonlisted items if they are to be used for a military or proliferation-related purpose.

Multilateral Control Regimes

- **Australia Group:** a voluntary, informal, export control arrangement founded in 1985 and consisting of 42 members. It has a set of export guidelines, as well as six common control lists. These lists include dual-use chemical manufacturing and biological equipment, chemical weapons precursors, and biological agents.
- **Missile Technology Control Regime (MTCR):** an informal voluntary export control arrangement established in 1987. The 35 members of the regime agree to adhere to common export policy guidelines applied to lists of controlled items. The MTCR guidelines call on each partner country to exercise restraint when considering transfers of equipment or technology, as well as "intangible" transfers, that would provide, or help a recipient country build, a missile capable of delivering a 500 kilogram warhead to a range of 300 kilometers or more. The MTCR annex contains two categories of controlled items. Category I items are the most sensitive. There is "a strong presumption to deny" such transfers, according to the MTCR guidelines. Regime partners have greater flexibility with respect to exports of Category II items.
- **Nuclear Suppliers Group (NSG):** an informal association of nuclear exporters founded in 1975 and currently consisting of 48 members. NSG members voluntarily agree to coordinate exports of civilian nuclear material, as well as nuclear-related equipment and technology, to nonnuclear-weapon states.[16] The group's guidelines include lists of materials and equipment subject to export control, in addition to requiring importers to offer nonproliferation and physical security assurances.
- **Wassenaar Arrangement:** a voluntary export control regime approved in 1996 and currently consisting of 42 members. Its participants agree to control exports and retransfers of items on a munitions list and a list of dual-use goods and technologies. According to its Guidelines and Procedures, the Wassenaar Arrangement is not formally targeted at "any state or group of states," but is designed "to contribute to regional and international security and stability, by promoting transparency and greater responsibility in transfers of conventional arms and dual-use goods and technologies, thus preventing destabilizing accumulations." Participants exchange information regarding transfers and licenses for items covered by the arrangement.

[14] For more information about these regimes, see CRS Report RL33865, *Arms Control and Nonproliferation: A Catalog of Treaties and Agreements*, by Amy F. Woolf, Paul K. Kerr, and Mary Beth D. Nikitin.

[15] "Commerce Control List: Revising Descriptions of Items and Foreign Availability," 75 *Federal Register*, No. 236, December 9, 2010.

[16] The Nonproliferation Treaty (NPT) defines a nuclear-weapon state as "one which has manufactured and exploded a nuclear weapon or other nuclear explosive device" prior to January 1, 1967. These states are China, France, Russia, the United Kingdom, and the United States.

The Arms Export Control Act requires the Secretary of State to maintain, as part of the USML, "a list of all items on the MTCR Annex" that are not controlled as a dual-use item. The AECA requires the executive branch to control nuclear-related items, but the law does not explicitly require that these items be the same as those controlled by the NSG.

President Obama's Export Control Initiative

On August 13, 2009, President Obama announced the launch of a comprehensive review of the U.S. export control system. Then-Defense Secretary Robert M. Gates announced key elements of the Administration's agenda for reform in a speech on April 20, 2010, with additional elaborations in subsequent months. Former Secretary Gates proposed a four-pronged approach that would create a single primary export control licensing agency for both dual-use and munitions exports; adopt a unified control list; establish a single enforcement coordination agency; and create a single integrated information technology system, which would include a single database of sanctioned and denied parties.

The Administration's blueprint envisioned that these changes would be implemented in three phases, with the final phase requiring legislative action. Phase I would undertake preparatory work to harmonize the Commerce Control List (CCL) with the U.S. Munitions List (USML). This phase would also develop standardized licensing processes among the control agencies; it would also create an "Enforcement Fusion Center" to synchronize enforcement, along with a single electronic gateway to access the licensing system. Phase II would implement a harmonized licensing system with two identically-structured tiered control lists, potentially allowing for a reduction in the amount of licenses required by the system. This phase would include moving certain items from the USML to the CCL, for which congressional notification would be required;[17] examining unilateral controls on certain items; and undertaking consultations with multilateral control regime partners to add or remove multilateral controls on certain items.

Under the proposal, the new export control system would debut in Phase III, which would establish a single licensing agency; merge the two harmonized, tiered control lists, with mechanisms for review and updating; merge the two primary export control enforcement agencies, OEE and ICE; and operationalize a single IT system for licensing and enforcement. Changes in agency structure would require legislation.

In a February 2011 speech, then-BIS Assistant Secretary Kevin Wolf elucidated seven principles driving the Administration's export control reform efforts

- Controls should focus on a small core set of key items that can pose a serious national security or intelligence threat to the United States and its interests;
- Controls should be fully coordinated with the multilateral export control regimes in order to be effective;
- Unilateral controls must address an existing legal or foreign policy objective;
- Control lists must clearly identify which items are controlled and be easily updated as technology emerges, matures, or becomes widely available;
- Licensing processes must be predictable and timely;

[17] Under Section 38(f) of the Arms Export Control Act, the President may not remove any article from the USML until 30 days after providing notice to the House Foreign Affairs Committee, and the Senate Foreign Relations Committee, including a description of the nature of any subsequent controls on the item.

- Enforcement capabilities must be enhanced to address noncompliance and increase capacity to interdict unapproved transfers; and
- Controls must address counterterrorism policy and the need to export items that support homeland security priorities.[18]

The Four Singularities

A Single Licensing Agency

In his speech introducing the Administration's reform efforts, then-Secretary Gates described the bureaucratic structure of the U.S. export control system as a "byzantine amalgam of authorities, roles, and missions scattered around different parts of the federal government."[19] As noted above, licensing is divided among the Department of Commerce for dual-use and certain military items, the Department of State for munitions, the Department of the Treasury for certain sanctions, and the Nuclear Regulatory Commission and Department of Energy for certain nuclear materials and technologies. These entities operate under different statutory authorities and enforce different regulations. While there are mechanisms in place for license referrals and to address licensing disagreements, critics have long maintained that the multi-agency structure contributes to institutional disputes among the different agencies responsible for export control licensing. Having one licensing system would also end disputes about commodity jurisdiction over a given item.

On June 30, 2010, then-National Security Adviser General Jim Jones announced that the Obama Administration intended to create an independent licensing agency with Cabinet members from existing control agencies serving as a board of directors. While that Administration did not provide specific details, this new agency is expected to take over the licensing functions of BIS, DDTC, and OFAC; this agency would likely house the civil and administrative enforcement functions of BIS and DDTC. The Obama Administration did not propose moving licensing procedures of the NRC for nuclear materials and of the Department of Energy for nuclear-related technology; an Obama Administration official attributed this decision to the relatively small volume of licensing undertaken by these agencies as well as by the small universe of exporters.[20]

General Jones argued that a unified licensing structure would end the situation in which no agency knew the total of export licenses granted or denied by the U.S. government. Under current referral processes, dual-use and certain military items licenses are referred by BIS to the Department of Defense, the Department of State (Economic Energy and Business Bureau [EEB], International Security and Non-Proliferation Bureau, and the regional bureaus), and the Department of Energy for review. However, BIS licenses are not referred to DDTC. DDTC refers munitions licenses to DOD and to the above-mentioned bureaus at State, and in some instances to Energy, but not to BIS. Some OFAC licenses are referred only to State's EEB. As a result, situations have arisen whereby licenses requested by the same exporter to the same destination have been approved by one license agency and denied by another.

Brian Nilsson, then-Deputy Assistant Secretary of State for Defense Trade Controls, indicated during a February 2016 hearing that that the single information technology system in use by the

[18] Remarks of BIS Assistant Secretary for Export Administration, Kevin Wolf, to Exportkontrolltag 2011, Munich, Germany, February 25, 2011.

[19] Secretary of Defense Robert M. Gates, speech before the Business Executives for National Security, April 20, 2010.

[20] Discussion with National Security Council official, March 18, 2011.

Departments of Commerce, Energy, and State (see below) has begun to address the lack of agencies' visibility regarding license information.[21] Yet, interagency policy differences may continue to exist because agencies would continue to refer licenses to ensure continued checks and balances.

Table 1. President's Export Control Reform Initiative

Phase	Control List	Licensing	Enforcement	Information Technology
I	Refine, understand, harmonize definitions to end jurisdictional confusion between two lists; establish new control criteria	Implement regulatory-based improvements to streamline licensing	Synchronize and de-conflict enforcement; create Enforcement Fusion Center	Determine enterprise-wide needs
II (requires congressional notification; requires additional funding)	Restructure two lists into identical tiered structures; apply criteria; remove unilateral controls where appropriate; submit proposals multilaterally to add/remove controls	Complete transition to mirrored control list; fully implement licensing harmonization	Expand outreach and compliance	Transition toward a single electronic licensing system
III (requires legislation)	Merge two lists into a single list; implement process for updating list	Implement single licensing agency	Consolidate enforcement activities under one agency	Implement a single system for licensing and enforcement

Source: Prepared by Dianne Rennack, CRS, based on White House Fact Sheet, April 20, 2010.

Dual-Nationals

An issue concerning dual-nationals may provide an example of the effort that will be necessary to create a unified export control system. The White House announced on March 11, 2010, that it would take action to eliminate "obstacles to exporting to companies employing dual nationals." Specifically, the Obama Administration announced that it would "begin to harmonize" conflicting standards used by the Departments of Commerce and State to determine a foreign person's nationality—a step that these departments must take in order to make certain export control decisions.[22]

The Commerce Department, according to a 2010 Government Accountability Office (GAO) report, determines "nationality for release of technology to a foreign national" based on that person's "most recent citizenship or permanent residence."[23] The State Department, however,

[21] "Export Control Reform: Challenges for Small Business? (Part I)," Hearing Before the House Committee on Small Business, February 11, 2016.

[22] For example, determining the appropriateness of releasing technical data to employees of a foreign firm engaged in a defense project with a U.S. firm.

[23] Government Accountability Office, Export Controls: Observations on Selected Countries' Systems and Proposed

considered not only a foreign national's current citizenship status, but also their country of birth if it differs from the person's country of citizenship or permanent residency. Even if a foreign entity is approved for a manufacturing license agreement or a technical assistance agreement with a U.S. firm, the State Department must approve the transfer of technical data, defense services, and defense articles to dual nationals and third-party nationals employed by the foreign entity.[24] "If a person's country of birth is prohibited from receiving U.S. arms, as are China, Iran, and North Korea, State [collected] additional information to confirm that the individual has no significant ties to his or her country of birth," according to the GAO. However, the State Department stopped using "country of birth" as of 2015, although the department does "consider all current and former citizenships, in addition to current permanent residency."[25]

Both the State Department and private-sector experts argue that these requirements are contentious because, in addition to being administratively burdensome, they are a potential employment discrimination issue in other countries; in order to comply with the regulations, non-U.S. employers may need to limit employment opportunities in potential violation of their countries' employment laws.[26]

After publishing a proposed rule on August 11, 2010,[27] the State Department published a final rule on May 16, 2011, amending the ITAR to allow the transfer of defense articles and technical data to dual or third-party nationals who are "bona fide, regular employees, directly employed by the foreign consignee or end-user."[28] Such transfers

> must take place completely within the physical territory of the country where the end-user is located, where the governmental entity or international organization conducts official business, or where the consignee operates, and be within the scope of an approved export license, other export authorization, or license exemption.

The end user or consignee must take a variety of measures designed to prevent the diversion of any exports; the final rule includes a requirement for the end user to screen employees for "substantive contacts with restricted or prohibited countries" listed in the ITAR.[29] The rule, which became effective on August 15, 2011, also explains that, although "nationality does not, in and of itself, prohibit access to defense articles or defense services, an employee that has substantive contacts" with persons from prohibited countries "shall be presumed to raise a risk of diversion," unless the State Department determines otherwise. It is worth noting that, according to the State

Treaties, May 2010, GAO-10-557.

[24] The State Department's Directorate of Defense Trade Controls, according to the GAO, "considers a third-country national to be an individual from a country other than the country which is the foreign signatory" to a "technical assistance or manufacturing license agreement. A third-country national may also be a dual national if he or she holds nationality from more than one country." GAO-10-557.

[25] Email from State Department official, January 16, 2018.

[26] "Amendment to the International Traffic in Arms Regulations: Dual Nationals and Third-Country Nationals Employed by End-Users," *Federal Register*, vol. 75, no. 154, August 11, 2010, p. 48625.

[27] Ibid.

[28] "International Traffic in Arms Regulations: Dual Nationals and Third-Country Nationals Employed by End-Users," *Federal Register*, vol. 76, no. 94, May 16, 2011, p. 28174. Paul Conlin, Sebastien Beauregard, R. Luc Beaulieu, and Richard A. Wagner, "Proposed ITAR Amendment Regarding Dual Nationals and Third-Country Nationals," *Mondaq*, August 31, 2010.

[29] "Substantive contacts," according to the rule, "include regular travel to such countries, recent or continuing contact with agents, brokers, and nationals of such countries, continued demonstrated allegiance to such countries, maintenance of business relationships with persons from such countries, maintenance of a residence in such countries, receiving salary or other continuing monetary compensation from such countries, or acts otherwise indicating a risk of diversion."

Department, "most diversions of U.S. Munitions List ... items appear to occur outside the scope of approved licenses, not within foreign companies or organizations providing access to properly screened dual national or third country national employees."[30]

The Single Control List

The Obama Administration concentrated on rationalizing the control lists to form the basis from which other reforms will flow. The Administration first worked to transform the current USML from a "negative list" characterized by general descriptions of articles and design-intent-based criteria to one resembling the current CCL, a "positive" list of dual-use items that are controlled according to objective criteria or parameters. This is being done through the "bright line" process to determine which items should be controlled as dual-use goods and which should be controlled as munitions. The bright line is being determined at the commodity level, based on technical specification and military needs, and is not an overarching concept or framework. The Obama Administration argued that the bright line is necessary, in part, because of the USML's current reliance on design intent (i.e., whether an item was "specifically designed, modified, or adapted" for military use) and its catch-all controls of parts and components of these items.[31] While the CCL is described as more "positive," it too contains entries containing the term "specially designed" for a specific purpose that may need to be modified to conform to bright line standards.

Each category of the USML has been screened by an interagency team led by DOD; proposed rewrites to each USML category, including certain items proposed to be moved to the CCL, have been published as proposed rulemakings. Originally, each of the items on the resulting USML list was to have been assigned to a tier to determine its level of control. The Obama Administration created three tiers applicable to both the CCL and the USML to categorize a different level of control.[32] However, the Administration postponed this process, reportedly because it would have been necessary to decide on the tiers for all USML items prior to publishing any revised USML categories. Deputy Assistant Secretary Nilsson testified that the Obama Administration prioritized revising the categories which have the greatest effect on U.S. military interoperability with allied governments.[33]

To date, the executive branch has completed transferring items in the following categories from the USML to the CCL:

- Category I (firearms and related articles);
- Category II (guns and armament);
- Category III (ammunition and ordnance);
- Category IV (launch vehicles, missiles, rockets, torpedoes, bombs, mines, and other military explosive devices);

[30] *Federal Register*, vol. 75, no. 154.

[31] "Revisions to the U.S. Munitions List, Advanced Notice of Proposed Rulemaking," 75 *Federal Register* 76935, December 9, 2010, at 76937.

[32] As originally postulated, Tier 1 articles are those that are almost exclusively available from the United States and provide a *critical* military or intelligence advantage. Tier 2 articles are those that are almost exclusively available from countries that are members of the multilateral export control regimes that control such items and (1) provide a *substantial* military or intelligence advantage, or (2) make a substantial contribution to the indigenous development, production, use, or enhancement of a Tier 1 or Tier 2 item. Tier 3 articles are those that provide a *significant* military or intelligence advantage; make a significant contribution to the indigenous development, production, use, or enhancement of a Tier 1, Tier 2, or Tier 3 item; or are otherwise controlled for national security, foreign policy, or human rights reasons.

[33] Hearing Before the House Committee on Small Business, February 11, 2016.

- Category V (explosives and energetic materials, propellants, incendiary agents and their constituents);
- Category VI (vessels of war and naval equipment);
- Category VII (tanks and military vehicles);
- Category VIII (aircraft and associated equipment);
- Category IX (military training equipment);
- Category X (protective personal equipment and shelters);
- Category XI (military electronics);
- Category XII (fire control, range finder, optical and guidance and control equipment);
- Category XIII (auxiliary military equipment);
- Category XIV (toxicological agents, including chemical agents, biological agents, and associated equipment);
- Category XV(spacecraft and related articles);
- Category XVI (nuclear weapons related articles);
- Category XVIII (directed energy weapons); and
- Category XX (submersible vessels and oceanic equipment).

The State Department also created a new USML Category XIX (gas turbine engines).[34]

A final rule on a new "0Y521" classification series became effective on April 12, 2013. This series is used for items that are neither identified under an existing ECCN nor controlled under an existing U.S. or multilateral export control regime, but warrant control for foreign policy reasons or because they could provide a significant military or intelligence advantage. According to the EAR, such items "are typically emerging technologies."[35] BIS has subsequently added new items to this series. Items so classified "must be re-classified under another ECCN within one calendar year from the date they are listed" in the relevant part of the EAR. If they are not reclassified, the items "are designated as EAR99 items unless either the CCL is amended to impose a control on such items under another ECCN or the ECCN 0Y521 classification is extended."[36] BIS may extend this classification "for two one-year periods, provided that the U.S. Government has submitted a proposal to the relevant multilateral regime(s) to obtain multilateral controls over the item." BIS may further extend the classification "only if the Under Secretary for Industry and Security makes a determination that such extension is in the national security or foreign policy interests of the United States."

According to the Obama Administration, the USML would contain "only those items that provide at least a significant military or intelligence applicability that warrant the controls the AECA requires."[37] The reconstituted Munitions List may then be aligned with the CCL by adopting its A-E commodity organization structure and adding two additional categories: F and G for ITAR

[34] "Revisions to the International Traffic in Arms Regulations: Initial Implementation of Export Control Reforms," 78 *Federal Register* 22740, April 16, 2013.

[35] Export Administration Regulations Part 742.6 (7).

[36] EAR99 items are subject to the EAR but not specifically listed on the CCL. Such items may require a license if destined for a prohibited or restricted end user, end use, or destination (Supplement No. 4 to Part 774—Commerce Control List Order of Review (a)(6)).

[37] Remarks of BIS Assistant Secretary for Export Administration Kevin Wolf to the Update 2011 Conference; Washington, DC; July 19, 2011.

specific controls. As a result of this alignment, each USML category will be divided into seven groups: A—equipment, assemblies, and components; B—test, inspection, and production equipment; C—materials; D—software; E—technology; F—defense services; and G—manufacturing and production authorizations.

"600 Series"

As a result of the bright line process, the Obama Administration moved some USML items to the CCL. Under Section 38(f) of the AECA, the President may not remove any article from the USML until 30 days after providing notice to the House Foreign Affairs Committee, and the Senate Foreign Relations Committee, including a description of the nature of any subsequent controls on the item. Section 38(f)(6) of the AECA requires that "any major defense equipment" on the 600 series "shall continue to be subject to" several "notification and reporting requirements" of the AECA and the Foreign Assistance Act of 1961 (P.L. 87-195).[38]

In order to comply with Section 38(f), the manner in which USML items transferred to the CCL are to be controlled is described in a proposed rulemaking on July 15, 2011,[39] and is part of the "mega rule" issued on April 16, 2013.[40] It involves the creation of a "600 Series" subcategory of Export Control Classification Numbers (ECCNs) for each category on the CCL.[41] This new series is populated by items that are judged not to need the relatively-stricter controls mandated under the USML. Items moved to the CCL in this manner require a license to all destinations except Canada. All items controlled pursuant to multilateral control regimes retain their existing controls. In addition, "600 Series" items will be subject to a general policy of denial to countries subject to a U.S. or U.N. arms embargo. Such items are also subject to the prohibition on Defense Department procurement of "goods and services" on the USML "from any Communist Chinese military company" mandated by the National Defense Authorization Act for Fiscal Year 2006 (P.L. 109-163).

The rule also places restrictions on the extent to which certain license exceptions can be applied. End-use items transferred to the 600 Series would be eligible for the recently announced Strategic Trade Authorization (STA) license exception (described below) only after a determination is jointly made by the State, Defense, and Commerce Departments that such an exception should be made available for the item in question. Most parts, components, and accessories transferred under this process would be automatically eligible for an STA license exception for exports to the governments of STA-eligible countries. Items expressly defined as "less significant" would be eligible for a license exception for destinations other than those controlled for antiterrorism reasons. "600 Series" items would also be eligible for other preexisting license exceptions.

The U.S. control status of parts and components also is addressed by the 600 Series. Under the EAR, the license requirement is based on the finished product, generally without regard to its parts and components. However, a foreign product containing more than 25% controlled U.S. content (10% controlled U.S. content in the case of a transaction to a country identified as a state

[38] The AECA defines "major defense equipment" as "any item of significant military equipment on the United States Munitions List having a nonrecurring research and development cost of more than $50,000,000 or a total production cost of more than $200,000,000."

[39] "Proposed Revisions to the Export Administration Regulations: Control of Items the President Determines No Longer Warrant Control Under the U.S. Munitions List," Proposed Rule, 76 *Federal Register* 41958, July 15, 2011.

[40] "Revisions to the Export Administration Regulations: Initial Implementation of Export Control Reform," 78 *Federal Register* 22660, April 16, 2013.

[41] The 600 Series has also been referred to as the Commerce Munitions List. Series 600 items are to be designated with a 6 in the ECCN. For example, applicable aircraft will have a 9A610 ECCN.

sponsor of terrorism) may require a reexport license from the United States. However, for ITAR-controlled items, DDTC has employed a jurisdictional interpretation known as a "see-through" rule, which subjects to ITAR control U.S.-origin parts and components incorporated into end products manufactured overseas. For items migrating to the 600 Series, a 25% rule applies, but no *de minimus* amount would apply to embargoed destinations.

"Specially Designed"

To facilitate the transfer of items from the USML to the CCL, the Obama Administration proposed a new definition of "specially designed." As noted above, the Administration sought to move away from the design-intent standard of the USML and the use of the catch-all phrase "specifically designed" for military use to subject parts and components to ITAR jurisdiction. The Obama Administration argued that new definition was necessary because "specifically designed" in the USML did not have the same meaning as the term "specially designed" which appears in the CCL and also in various multilateral control lists. The Administration also argued that removing the term(s) entirely by enumerating each part and component being moved from the USML to the CCL was infeasible.

The Obama Administration published its final rule on the definition of "specially designed" on April 16, 2013.[42] Some have dubbed the two-part definition as a "catch and release" approach because the first part may capture an item as specially designed for military use and the second part may release the item from control under the definition if it does not qualify under certain parameters. Under the first part of the regulation, an item qualifies as specially designed if

> (1) As a result of "development" has properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions in the relevant ECCN or U.S. Munitions List (USML) paragraph; or
>
> (2) Is a "part," "component," "accessory," "attachment," or "software" for use in or with a commodity or defense article 'enumerated' or otherwise described on the CCL or the USML.

Under the regulation, if neither of these criteria apply to an item, then the item is not specially designed. If one or more of these criteria describes an item, the item is potentially qualified as specially designed and is subject to the following six exclusions. The item is excluded from being specially designed if it

> (1) Has been identified to be in an ECCN paragraph that does not contain "specially designed" as a control parameter or as an EAR99 item in a commodity jurisdiction (CJ) determination or interagency-cleared commodity classification (CCATS);
>
> (2) Is, regardless of 'form' or 'fit,' a fastener (*e.g.*, screw, bolt, nut, nut plate, stud, insert, clip, rivet, pin), washer, spacer, insulator, grommet, bushing, spring, wire, solder;
>
> (3) Has the same function, performance capabilities, and the same or 'equivalent' form and fit, as a commodity or software used in or with an item that:
>
> (i) Is or was in "production" (*i.e.*, not in "development"); *and*
>
> (ii) Is either not 'enumerated' on the CCL or USML, or is described in an ECCN controlled only for Anti-Terrorism (AT) reasons;
>
> (4) Was or is being developed with "knowledge" that it would be for use in or with commodities or software (i) described in an ECCN *and* (ii) also commodities or software

[42] "Revisions to the Export Administration Regulations: Initial Implementation of Export Control Reform," 78 *Federal Register* 22660, April 16, 2013; 78 *Federal Register* 22740, April 16, 2013.

> either not 'enumerated' on the CCL or the USML (e.g., EAR99 commodities or software) or commodities or software described in an ECCN controlled only for Anti-Terrorism (AT) reasons;
>
> (5) Was or is being developed as a general purpose commodity or software, i.e., with no "knowledge" for use in or with a particular commodity (e.g., an F/A-18 or HMMWV) or type of commodity (e.g., an aircraft or machine tool); *or*
>
> (6) Was or is being developed with "knowledge" that it would be for use in or with commodities or software described (i) in an ECCN controlled for AT-only reasons and also EAR99 commodities or software; or (ii) exclusively for use in or with EAR99 commodities or software."[43]

Under this decision approach, the item is potentially "caught" as specially designed by the first two criteria, but it may be "released" from that definition if any of the six subsequent qualifiers apply. The Commerce regulations apply to the "600 series" of items moved from the USML. The proposed regulation to define specially designed in the ITAR as a replacement for the currently utilized "specifically designed" is similar in nature.

In a speech on July 17, 2012, then-BIS Assistant Secretary Kevin Wolf acknowledged that the specially designed concept is "inherently difficult to apply in reality," and that it is "not consistent with the "ultimate goal of creating a truly positive, objective list of controlled items."[44] However, he noted that, concurrent with this approach, BIS also published an advanced notice of proposed rulemaking in June 2012 seeking comments on the feasibility of enumerating or positively identifying each item determined classified as specially designed on the CCL.[45]

Strategic Trade Authorization License Exception

In 2011, the Obama Administration devised a new license exception known as the Strategic Trade Authorization (STA), which was designed to facilitate transfers to low-risk countries and to promote interoperability to allies in the field.[46] To be eligible, exporters must provide notification to BIS of the transaction and a destination control statement notifying the foreign consignee of the exception's safeguard requirements; exporters must also obtain from the foreign consignee a statement acknowledging the consignee's understanding and willingness to comply with the requirements of the license exception. STA-eligible recipients of U.S. munitions items contained on the CCL are not allowed to reexport such items without a license. Such recipients are also prohibited from reexporting "STA-eligible items to any destination outside the STA-eligible countries."[47]

Under the final rulemaking, STA is available to 2 groups consisting of 44 countries. To a group of 36 countries made up of NATO partners and members of all 4 multilateral nonproliferation control regimes, dual-use items controlled for national security (NS), chemical or biological weapons, nuclear nonproliferation, regional stability, crime control, or significant items (hot section jet technology) are eligible for an STA. This includes almost all items on the CCL that are not controlled for statutory reasons. An additional eight countries are eligible for exports,

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[43] Ibid.

[44] Remarks of Kevin Wolf, Assistant Secretary for Export Administration, to the Update 2012 Conference, July 17, 2012. http://www.bis.doc.gov/news/2012/wolf_update_2012.htm.

[45] "Feasibility of Enumerating "Specially Designed" Components," 77 *Federal Register* 36419, June 19, 2012.

[46] "Export Control Reform Initiative: Strategic Trade Authorization License Exception," 76 *Federal Register* 35276, June 16, 2011.

[47] Export Control Reform Initiative Factsheet #4: License Exception "Strategic Trade Authorization" (STA).

reexports, or transfers controlled for NS-only and that are not designated as STA-excluded.[48] The United States-Israel Strategic Partnership Act of 2014 (P.L. 113-296) requires the President, "consistent with the commitments of the United States under international arrangements," to "take steps" to move Israel from the second list of countries to the first list of countries. However, Israel's STA status does not appear to have changed. An August 3, 2018, Commerce Department rule moved India from the second list of countries to the first list of countries.[49]

Dual-use items controlled for missile technology, chemical weapons, short supply, or surreptitious listening are not be eligible for export under an STA. Certain implements of execution and torture, pathogens and toxins, software and technology for "hot-sections" of aero gas-turbine engines, and encryption have also been excluded from the STA.

[48] The final rule excludes NS controlled items from the Wassenaar Arrangement's Sensitive List to the eight countries.

[49] "U.S.-India Major Defense Partners: Implementation Under the Export Administration Regulations of India's Membership in the Wassenaar Arrangement and Addition of India to Country Group A:5," *83 Federal Register 38018*, August 3, 2018.

Commercial Communications Satellites

Although most items on either the CCL or the USML were placed there by executive discretion or pursuant to international agreement, one category of items was on the USML by statute: commercial communications satellites (CCS). Prior to 1990, CCS were controlled exclusively by the Department of State under the authority of Section 38 of the Arms Export Control Act (P.L. 90-629). Despite having both military and civilian uses, CCS were considered munitions, as many satellites and associated technologies were originally designed "specifically" for military purposes and continue to have "significant military or intelligence applications as defined by regulation." In 1990, however, President George H. W. Bush ordered a review of dual-use items, including CCS, on the U.S. Munitions List (USML), which resulted in satellites without military performance characteristics being moved to Department of Commerce jurisdiction. In 1996, President Clinton transferred all CCS (along with commercial jet hot section technology) to Commerce jurisdiction with enhanced licensing procedures. Following 1998 revelations by the Cox Committee that U.S. satellite manufacturers provided missile design information and skills to China through the improper transfer of launch failure analysis, Congress passed legislation transferring the authority, effective March 15, 1999, to license exports of CCS to the Department of State (Strom Thurmond National Defense Authorization Act for Fiscal Year 1999; P.L. 105-261).

The satellite industry has argued that this transfer has led to licensing delays and lost sales resulting from regulatory uncertainty, and it has lobbied to revert export controls to Commerce Department jurisdiction. Satellites launched for commercial communication purposes may contain embedded sensitive technology, such as positioning thrusters, signal encryption, mating and separation mechanisms, and multiple satellite/reentry vehicle systems, which as stand-alone items are also controlled under the USML. Industry claims that because of State's "see-through" policy of requiring licenses for parts and components embedded in CCS, foreign satellite manufacturers are designing out U.S. parts and components and advertising them as ITAR-free (i.e., free of munitions licensing requirements). In addition, Tiananmen Square sanctions and other waiver restrictions have precluded U.S. exports to China, a competitive launch destination.

Section 1248 of the 2010 National Defense Authorization Act (P.L. 111-84) directed the Secretaries of State and Defense to conduct a review of U.S. space export control policy, including a risk assessment of removing satellite and related components from the USML. An interim assessment, which was reported to Congress in May 2011, found that CCS, related components, and integration and launch information "with certain exceptions, conditions and limitations" could be removed from the USML and transferred to the CCL "without posing an unacceptable security risk." The final review, which was delivered to Congress on April 18, 2012, recommended that Congress should return export control jurisdiction for CCS to presidential discretion, as well as to authorize the Department of Defense to determine the need for special export control monitoring and oversight services for CCS and authorize DOD to be reimbursed for those services.

Section 1261 of the National Defense Authorization Act of 2013 (P.L. 112-239) repealed P.L. 105-261's provision transferring "satellites and related items" to the USML. But this law contains some restrictions. "Satellites or related items" may not be "exported, reexported, or transferred, directly or indirectly," to China, North Korea, "[a]ny country that is a state sponsor of terrorism," or "any entity or person in or acting for or on behalf of such government, entity, or person." This section also prohibits such items from being launched in any of those countries, even as "part of a launch vehicle owned, operated, or manufactured by the government of such country or any entity or person in or acting for or on behalf of such government, entity, or person." The President may waive this prohibition if the President "determines that it is in the national interest of the United States to do so" and notifies Congress. The law also specifies that licenses for the export of "satellites and related items to a country with respect to which the United States maintains a comprehensive arms embargo shall be subject to a presumption of denial." The Obama Administration moved CCS to the CCL in January 2017.[50]

The Single Enforcement Structure

The third singularity involves the creation of a streamlined export enforcement system. Under Phase I of the new approach, a single export "fusion center" would be created to "coordinate and de-conflict investigations, serve as a central point of contact for coordinating export control

[50] "Revisions to the Export Administration Regulations (EAR): Control of Spacecraft Systems and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML)," *Federal Register*, Vol. 82, No. 6, January 10, 2017, p. 2875; "International Traffic in Arms Regulations: Revision of U.S. Munitions List Category XV," *Federal Register*, Vol. 82, No. 6, January 10, 2017, p. 2889.

enforcement with Intelligence Community activities, and synchronize overlapping outreach programs."[51] On November 9, 2010, the Obama Administration issued Executive Order 13558, which created the Export Enforcement Coordination Center (EECC). The center officially opened in March 2012 within the Department of Homeland Security and replaced and expanded on the functions of the existing National Export Enforcement Coordination Network in ICE. It consists of a director from the Department of Homeland Security and two deputies appointed from the Departments of Commerce and Justice, with an intelligence community liaison designated by the Director of National Intelligence.

The center functions as the primary forum to coordinate export control enforcement efforts among the Departments of State, the Treasury, Commerce, Defense, Justice, Energy, and Homeland Security and the Director of National Intelligence and to resolve potential conflicts in criminal and administrative export control enforcement. The center is also able to screen all license applications. Previously, the OEE at BIS was the only entity that could screen dual-use licenses, whereas ICE could screen licenses from DDTC and OFAC. The unit will also establish government-wide statistical tracking capabilities for criminal and administrative enforcement activities. Also in March 2012, an Information Triage Unit was established in the Department of Commerce to serve as an information gathering and screening unit among law enforcement agencies, the intelligence community, and the export licensing agencies. The unit is designed to serve as a central point to disseminate relevant information for each license application prior to decisionmaking.[52]

There may be weaknesses in the EECC's mission execution. "[P]rocedures for coordination between the investigative export control enforcement agencies and the intelligence community have not been finalized," according to a March 2019 GAO report, which adds that the center's "lack of formal coordination" limits its effectiveness and has stalled "its efforts to develop standard operating procedures."[53] Absent such coordination, the center "is limited in its ability to realize its full potential to facilitate enhanced coordination and intelligence sharing."[54]

The EECC is not to be confused with the National Export Control Coordinator, housed in the Justice Department, which is "responsible for ensuring full coordination between the Justice Department and the many other US law enforcement, licensing, and intelligence agencies that play a role in export enforcement."[55] The role of the coordinator has been described as the chief prosecutor of export control enforcement with the authority to determine which cases to bring for criminal prosecution.

The Donald Trump Administration may request the movement of the BIS Office of Export Enforcement to ICE. Currently, ICE conducts investigations and criminal enforcement for DDTC and OFAC, and by virtue of its authority under the IEEPA, it shares dual-use investigations with OEE. Removal of OEE to ICE will end this overlap of authority. The Obama Administration envisioned that a consolidated licensing agency would continue to have authority over administrative enforcement actions.[56]

[51] Speech of General Jim Jones, June 30, 2010.

[52] Department of Commerce, Press Release, March 7, 2012.

[53] GAO-19-157SP, March 2019.

[54] Ibid.

[55] Department of Justice Press, Release, June 20, 2007, http://www.justice.gov/opa/pr/2007/June/07_nsd_440.html.

[56] Conversation with NSC Official, March 18, 2011.

A Single Information Technology System

The fourth singularity is the creation of a single information technology system for administering the export control system. The Departments of Commerce, State, and Defense have begun using the USXPORTS database, originally used by the Department of Defense to track referred license applications.[57] The reform effort envisions that USEXPORTS will become the platform for a proposed single export license application form to be used by State, Commerce, and the Treasury's Office of Foreign Assets Control. The Department of Energy, Immigration and Customs Enforcement, and the Export Coordination Enforcement Center are also to use the database.

The Obama Administration's plan called for the adoption of USXPORTS first for internal communications such as license referrals, while exporters would continue to use the existing SNAP-R and D-Trade electronic license filing portals. The Obama Administration indicated that eventually it wanted to facilitate interoperability between the license portals, the internal system, and Customs' Automated Export System (AES), the information system that tracks actual movement of goods.

In conjunction with the single IT system, the Obama Administration developed a single license application form. To make this possible, the Administration standardized certain definitions between the different regulations, such as the use of the term "technology" in the EAR as opposed to the term "technical data" used in the ITAR.[58] To assist in compliance with U.S. export regulations, the Obama Administration also compiled a consolidated screening list of over 24,000 entities from existing Commerce, Treasury, and State Department screening lists. The list consolidates the BIS Denied Person List, Unverified List, and Entity List; the Department of State's Nonproliferation Sanctions List; the Directorate of Defense Trade Controls Debarred List; and the Office of Foreign Assets Control Specially Designated Nationals List.

Encryption

While not announced as part of the four singularities, the Obama Administration proposed reforming encryption controls as one of the first deliverables in the export control reform process. The Administration announced on March 11, 2010, that it would change a filing requirement for exporters of products with encryption capabilities. At the time, exporters of such products were required to file for a technical review by the Commerce Department, a process that, according to the White House announcement, could take "between 30-60 days." The announcement advocated replacing this process with "a more efficient one-time notification-and-ship process," which would ensure that the "U.S. government still receives information it needs for its national security requirements while facilitating U.S. exports and innovation for new products and new technologies."[59]

The Commerce Department announced on June 25, 2010, that it was amending the Export Administration Regulations (EAR) as "the first step in the President's effort to reform U.S.

[57] GAO-17-317, February 2017.

[58] "Single Export Application for All Agencies to be Unveiled, White House Official Says," *Export Practitioner*, January 2011, p. 31.

[59] According to an Obama Administration official, controlling the export of products with encryption capabilities differs from controlling other exports because the United States generally wants to obtain information on exported encryption technology rather than prevent its export.

encryption export controls."[60] As described by the Commerce Department's Bureau of Industry and Security, the amendment to the EAR includes[61]

- replacing, for encryption products "of lesser national security concern," the "30-day waiting requirement for a technical review" with a "provision that allows immediate authorization to export and reexport these products" after the exporter submits an electronic encryption registration to BIS;
- similarly replacing the 30-day requirement for most mass-market encryption products;[62]
- an "overarching note to exclude particular products that use cryptography from being controlled as 'information security' items"—a measure that implements changes approved by the Wassenaar Arrangement members in December 2009; this regulatory change eliminates controls under the CCL on "[m]any items in which the use of encryption is ancillary to the primary function of the item"; and
- a provision that makes most encryption technology eligible for export and reexport to nongovernmental end-users in countries other than those of "greater national security concern."

According to the June 2010 announcement of the EAR amendment, the United States "will also review other issues related to encryption controls." Decontrolling additional items would require approval by the members of the Wassenaar Arrangement.

[60] "Encryption Export Controls: Revision of License Exception ENC and Mass Market Eligibility, Submission Procedures, Reporting Requirements, License Application Requirements, and Addition of Note 4 to Category 5, Part 2," 75 *Federal Register* 36481, June 25, 2010.

[61] Quotations describing the June 25 announcement are taken from 75 *Federal Register*, no. 122 and from BIS statements available at http://www.bis.doc.gov/encryption/default.htm.

[62] The Commerce Department classifies certain products with encryption capabilities as "mass market" pursuant to a procedure described in the EAR.

Appendix A. Basic Export Control Characteristics

Table A-1. Export Control Characteristics

Characteristic	Dual-Use	Munitions	Nuclear
Legislative Authority	Export Controls Act of 2018 (ECA); International Emergency Economic Powers Act of 1977 (IEEPA)	Arms Export Control Act of 1968, 1976 (AECA)	Atomic Energy Act of 1954
Agency of Jurisdiction	Bureau of Industry and Security (BIS)(Commerce)	Directorate of Defense Trade Controls (DDTC)(State)	Nuclear Regulatory Commission (NRC) (facilities and material) Department of Energy (DOE) (technology) BIS ("outside the core" civilian power plant equipment) DDTC (nuclear items in defense articles)
Implementing Regulations	Export Administration Regulations (EAR) (15 C.F.R. 730 et seq)	International Traffic in Arms Regulations (ITAR) (22 C.F.R. 120 et seq)	10 C.F.R. 110—Export and Import of Nuclear Material and Equipment (NRC) 10 C.F.R. 810—Assistance to Foreign Atomic Energy Activities (DOE)
Control List	Commerce Control List (CCL)	Munitions List (USML)	List of Nuclear Facilities and Equipment; List of Nuclear Materials (NRC) Nuclear Referral List (CCL) USML Activities Requiring Specific Authorization (DOE)
Relation to Multilateral Controls	Wassenaar Arrangement (dual-use) Missile Technology Control Regime (MTCR) Australia Group (CBW) Nuclear Suppliers' Group	Wassenaar Arrangement (munitions) MTCR	Nuclear Suppliers' Group International Atomic Energy Agency
Licensing Policy	Based on item, country, or both. Antiterrorism controls proscribe exports to five countries for nearly all CCL listings	Most Munitions License items require licenses; 20 proscribed countries.	General/Specific Licenses (NRC) General/Specific Authorizations (DOE)

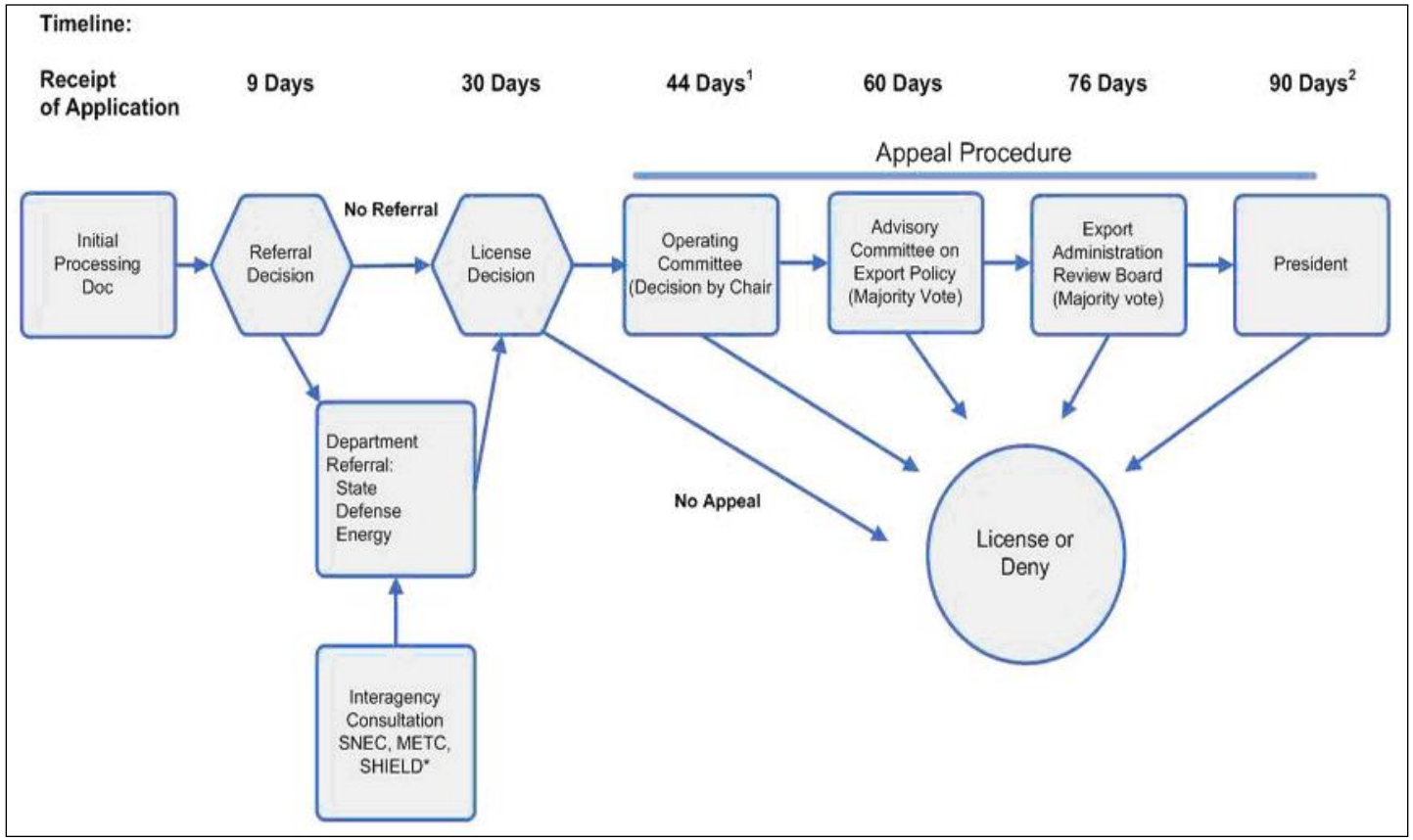
Characteristic	Dual-Use	Munitions	Nuclear
Licensing Application Timeline	Initial referral within 9 days; agency must approve/deny within 30 days; 90-day appeal process (see **Appendix B**)	60 days with national security exceptions; congressional notification period for significant military equipment	No timeframe for license applications
Enforcement	Office of Export Enforcement (BIS) (OEE) (domestic) Homeland Security (DHS): Immigration and Customs Enforcement (ICE); Customs and Border Protection (CBP) Justice (DOJ): National Security Division; FBI	Office of Defense Trade Compliance (DDTC) Defense Criminal Investigation Service (DCIS)(DOD) Defense Security Service (DOD) DHS: ICE, CBP DOJ: National Security Division; FBI	Office of Enforcement (NRC) BIS-OEE DDTC-ODTC DCIS (DOD) DHS: ICE, CBP DOJ: National Security Division; FBI
Penalties	Criminal: $1 million/20 years imprisonment Civil: Denial of export privileges.	Criminal: $1 million/20 years imprisonment Civil: Penalties increase annually pursuant to Section 701 of the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 (P.L. 114-74). Denial of export privileges.	Criminal: Individual—$250,000/12 years to life imprisonment; Firm—$500,000 (NRC and DOE) Civil: Penalties increase annually pursuant to Section 701 of the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 (P.L. 114-74).

Source: Congressional Research Service (CRS).

Appendix B. Dual-Use Export Licensing Process

Figure B-1. Dual-Use Export Licensing Process

(Executive Order 12981, December 1995)



Source: Prepared by Ian F. Fergusson, Congressional Research Service (CRS).

Notes: [1] The time periods for the appeal procedure reflect a 5-day window of appeal and an 11-day period for each body to make a decision.

[2] A license application must be resolved or appealed to the President within 90 days. The order does place a time limit on a presidential decision.

* SNEC, Sub-Groups on Nuclear Export Policy, MTEC, Missile Technology/Export Control Group; SHIELD Chemical and Biological Weapons Control Group.

Appendix C. List of Acronyms

AECA—Arms Export Control Act

AES—Automated Export System

BIS—Bureau of Industry and Security, Department of Commerce

CBP—Customs and Border Protection, Department of Homeland Security

CCL—Commerce Control List

CML—Commerce Munitions List

CPI—Counter-Proliferation Investigations

DCIS—Defense Criminal Investigation Service

DDTC—Directorate of Defense Trade Controls, Department of State

DHS—Department of Homeland Security

DOJ—Department of Justice

DTSA—Defense Technology Security Administration

EAA—Export Administration Act

EAR—Export Administration Regulations

ECCN—Export Control Classification Number

EECC—Export Enforcement Coordination Center

EEB—Economic, Energy, and Business Bureau, Department of State

FP—Foreign Policy Controls

GAO—Governmental Accountability Office

IEEPA—International Emergency Economic Powers Act

ICE—Immigration and Customs Enforcement Agency, Department of Homeland Security

ISN—International Security and Nonproliferation Bureau, Department of State

ITA—International Trade Administration, Department of Commerce

ITAR—International Traffic in Arms Regulations

MTCR—Missile Technology Control Regime

NRC—Nuclear Regulatory Commission

NS—National Security Controls

NSG—Nuclear Suppliers Group

OEE—Office of Export Enforcement

ODTC—Office of Defense Trade Compliance, DDTC

OFAC—Office of Foreign Assets Control, Department of the Treasury

SI—Significant Items Controls

SL—Surreptitious Listening Controls

SS—Short Supply Controls

STA—Strategic Trade Authorization

USML—U.S. Munitions List

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