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Reforming U.S. Export Controls Reforms: Advancing U.S. Army Interests

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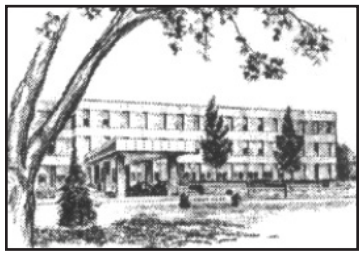

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Comments pertaining to this report are invited and should be forwarded to: Director, Strategic Studies Institute and U.S. Army War College Press, U.S. Army War College, 47 Ashburn Drive, Carlisle, PA 17013-5010.

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FOREWORD

The U.S. defense export system is in need of significant reform to reduce the impact of its core inefficiencies and weaknesses. The International Traffic in Arms Regulations (ITAR) create serious problems for the U.S. defense industry and thereby weaken U.S. national security in several important ways.

While the ITAR is mostly successful in preventing U.S. arms from being used against the United States and its allies, the manner in which the ITAR regulations are enforced presents excessive barriers to U.S. firms that impede their ability to compete in the global defense market. These firms are important contractors to the U.S. military, and their success enables the United States to maintain a technological and industrial advantage. Additionally, when U.S. allies choose to purchase defense products from ITAR-free firms based outside of the United States, U.S. Army interoperability with foreign forces decreases.

In order to maintain its strategic advantages, the United States needs an arms export control system that makes it easier for U.S. defense firms to supply U.S. allies with defense products to support international security and U.S. foreign policy goals. The U.S. Army plans to fight in coalitions but needs interoperable and well-equipped partners to best achieve critical U.S. national security objectives.

DOUGLAS C. LOVELACE, JR.
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SUMMARY

The Barack Obama administration has launched an Export Control Reform (ECR) program to improve the regulations and procedures for controlling the export of U.S. weapons as well as dual-use equipment and technology. Emphasizing that international economic competitiveness is a core component of national security, the administration's stated aim is for the ECR to increase U.S. exports and jobs as well as to strengthen U.S. national security and protect U.S. military technologies.

The Obama administration began by establishing an interagency task force that, unsurprisingly, concluded that the existing U.S. defense export control system—the International Traffic in Arms Regulations—is overly complicated, excessively redundant, and attempts to be too protective. The administration has since been making reforms to U.S. export controls to reduce impediments to U.S. foreign sales and partnerships, while increasing the benefits to U.S. national security through increased interoperability with stronger allies.

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The White House has established the ambitious goal of modernizing the entire U.S. ITAR bureaucracy. Defense export reform is always difficult since it affects a number of cross-cutting national security interests such as nonproliferation, trade, jobs, and preserving the defense industrial base. The Obama administration has achieved some progress in streamlining ITAR licensing and registration process through executive branch regulations as well as updating the U.S. Munitions List (USML). There have been several years of

proposed rules that generally have been adopted following a few months of public comment. However, even the administration acknowledges that progress in ECR will remain modest and major ITAR defects will remain unresolved without deeper changes to the ITAR framework. These changes would require major congressional action, which is unlikely in the two remaining years of this administration given the absence of a congressional consensus on the issue.

HISTORY

With suitable safeguards, foreign defense sales by U.S. companies can serve important U.S. national security interests: they foster U.S. defense ties with allies and partners, they enhance U.S. military technologies, they increase operational and tactical interoperability between the United States and other countries, and sometimes between U.S. friends and allies that acquire the same U.S. weapons systems. They also provide an additional customer base for U.S. defense businesses, whose health is important for sustaining U.S. military primacy. For this reason, the Department of Defense (DoD) has long supported U.S. foreign military sales.

U.S. export controls extend back to the 1930s—the Neutrality Act of 1935 gave the Secretary of State the right to license exports related to defense trade and created USML—but it was really after World War II that the U.S. Government adopted a comprehensive system for controlling defense exports, laying foundations that have persisted to this day. Unlike after World War I, which removed the most significant threats to U.S. national security, World War II soon saw the rise of a new powerful adversary—the Soviet Union. Washington policymakers simultaneously

sought to prevent the Soviet bloc from stealing U.S. military secrets while sustaining U.S. economic superiority as the foundation of U.S. military-industrial might and to augment the capacity of U.S. friends and allies against Soviet-backed threats through arms transfers and other measures. The resulting Mutual Security Act of 1954 and the Arms Export Control Act (AECA) of 1976 served as the legislative basis for ITAR, which falls under the Code of Federal Regulations (CFR) Title 22, Foreign Relations.[2]

ITAR still bears a distinctive Cold War-era stamp. While contemporary debates over ITAR focus on economic concerns, the Act itself is preoccupied with (and prioritizes) security considerations. AECA applies broad U.S. national security strategies to govern U.S. arms exports. USML has been constantly added to, but not significantly subtracted from, since its creation in 1935. As a result, USML has regulated "military railway trains" and other obsolete items. The USML also contains items that pose no significant threat to U.S. security, such as M1A1 Abrams tank brakes, which are identical to fire truck brakes that have no export restraints.[3]

AECA provides for export control with several basic components: an export control list, a license system for would-be exporters, and criminal penalties for violations of AECA.[4] The Act regulates **which** arms are manufactured and exported (through the Munitions list) and **who** manufactures and receives the arms (through the licensing process). The language AECA uses to define what the U.S. President's thought process should be when considering an application are instructive as to the Act's strategic rather than economic purpose:

> Decisions on issuing export licenses under this section shall take into account whether the export of an article would contribute to an arms race, aid in the development of weapons of mass destruction, support international terrorism, increase the possibility of outbreak or escalation of conflict, or prejudice the development of bilateral or multilateral arms control or nonproliferation agreements or other arrangements.[5]

In 1977, President Gerald Ford transferred Arms Control authority from himself to the Department of State in Executive Order 11958. The order charged the Secretary of State to judge whether any "proposed transfer will strengthen the security of the United States and promote world peace."[6] The State Department drafted ITAR later that year to implement Ford's executive order. Though AECA includes certain provisions that concentrate decisionmaking power in the executive branch, Congress included clauses to retain some measure of control. During the 1970s, rather than merely reacting to presidential decisions, Congress tried to participate in the early stages of the decisionmaking process by establishing "framework legislation" that created a general procedural structure in which Congress received information through reporting requirements and compelled consultation through legislative vetoes.[7] Under the original Gaylord Nelson-Jonathan Bingham proposal, the embryonic form of AECA passed in 1974, Congress enjoyed extensive veto power over any proposed government-sponsored sale of U.S. military equipment.[8] Nonetheless, in recent years, the executive branch has dominated implementation of U.S. arms export policies. Both AECA and ITAR stipulate that the President (or State Department) must notify Congress 20 days before any proposed changes are made to the USML.

In 1983, the Supreme Court, in *Immigration and Naturalization Service v. Chadha*, ruled the congressional veto power unconstitutional, even while the rest of AECA, which was meant to bolster that veto power, was upheld. President Bill Clinton issued Executive Order No. 12924 to maintain executive enforcement of the 1949 Export Control Act (ECA) provisions after the original AECA lapsed.[9] Rather than liberalize U.S. arms exports, Congress sought to compel all recipients of U.S.-made weapons to adhere to U.S. arms control policies. It enacted legislation requiring that all countries having bilateral arms trade agreements with the United States establish a similarly restrictive and rigorous "regime" for arms control.[10] Congress further urged "that the President should work actively with all nations to check and control the international sale and distribution of conventional weapons of death and destruction and to encourage regional arms control arrangements."[11]

Faced with a globalizing world and rapidly advancing civilian-made dual-use technologies, the Ronald Reagan administration relaxed some export controls in the 1980s and authorized commercial satellite (COMSATS) exports to France and the use of low-cost Chinese rocket launchers. In 1992, Congress moved all "dual-use" items (those having both civilian and military applications) from USML to the less restrictive Commerce Control List (CCL).[12] The Clinton administration relaxed controls on cryptography and on the export of satellite technology, including exports to China, by transferring its control to the less restrictive Export Administration Regulations (EAR). However, a lack of interagency coordination, bureaucratic infighting, and congressional pushback following the alleged leaking of sensitive dual-use rocket technology

to China, blocked the administration's broader export reform agenda.[13] As a result, the United States lagged behind many other Western countries in relaxing its arms export controls after the Cold War.[14]

The backlash from the Chinese episode presented a decade-long obstacle to major export reform. In 1996, a Long March 3B rocket carrying the U.S.-manufactured Intelsat 708 crashed immediately after takeoff. It was the third launch failure in 3 years by a Long March rocket. China invited U.S. engineers to participate in a review to determine the cause of the continued failures. Hughes, Loral, and other major aerospace companies identified the problem and helped China strengthen its rocket launching capabilities—which also enhanced China's ballistic missile capabilities. The incident led to intense scrutiny by Congress, which launched an investigation chaired by Representative Christopher Cox. The resulting report claimed that U.S. companies were more concerned with profit than with protecting U.S. national security.[15] Congress then enacted the Strom Thurmond National Defense Authorization Act (NDAA) of 1999, which required that space-related items, including all satellites, were to be controlled as defense articles and removed the President's authority to change their jurisdictional status without congressional approval.[16] Furthermore, NDAA changed the language of USML. Whereas previously it only applied to those satellites "specially designed or modified for military use," the new language includes: "communications satellites, remote sensing satellites, scientific satellites, research satellites, navigation satellites, experimental and multi-mission satellites." The change likely explained why, from 1999-2008, U.S. commercial satellite manufacturers' global market share decreased from 83

percent to 50 percent.[17] European countries began to specialize in manufacturing commercial satellites that they marketed as "ITAR-free."

MAIN PROVISIONS

Currently, the United States has two lists of restricted export items; they define issues differently, have different structures, and provide different levels of specificity. The State Department maintains USML, which covers all military and intelligence items from complete aircraft and armored vehicles to ammunition cartridges and specialized software. USML applies primarily to U.S. defense contractors, but also covers certain dual-use components such as aircraft landing gears and marine propulsion units. ITAR establishes the licensing policy for USML items. Meanwhile, the Department of Commerce manages CCL, which covers dual-use technological equipment intended for civilian use but whose sale may have security implications. CCL has Export Control Classification Numbers (ECCN), an alpha-numeric code that specifies which one of 10 categories and five product groups within CCL the item belongs. CCL groups countries into categories determined by the criteria of bilateral relations and security. EAR, administered by the Department of Commerce's Bureau of Industry and Security (BIS), establishes licensing policy for CCL items. DoD is an influential player in both lists since other agencies rely on its technical expertise. There are also many entity lists of end-users, such as terrorist organizations and states of proliferation concern, which cannot legally import sensitive U.S. items.

DoD and State jointly determine the content of ITAR. The Directorate of Defense Trade Controls

(DDTC), a component of the State Department's Bureau of Political-Military Affairs, administers the regulations by creating a licensing process for military exporters and establishes a munitions list to define which articles fall under DDTC regulation and which, by their omission, fall under the Commerce Department's less restrictive EAR, established by the 1949 ECA. For example, in principle, a military-grade set of night vision goggles would be subject to ITAR regulations, while a shipment of office supplies would fall under CCL, based on EAR. Nonetheless, the tension between seeing defense shipments primarily as a tightly guarded security concern or as an economic opportunity fuels much of the discomfort and debate surrounding ITAR today.

The State Department has four offices that work on ITAR. The Office of Defense Trade Controls Management helps design, develop, and refine the processes, tools, and activities related to arms export regimes. The Office of Defense Trade Controls Licensing has responsibilities for licensing and other defense trade authorizations. The Office of Defense Trade Controls Compliance handles potential violations of the law or regulations. The Office of Defense Trade Controls Policy negotiates Defense Trade Cooperation Treaties.[18] ITAR derives its legislative authority from Section 38 of AECA, under 22 USC § 2778, which authorizes the President to control the export and import of defense articles and services.[19] The main force of ITAR is its licensing process. All DDTC registered companies or individuals need individual approval for each export transaction.[20] DDTC generally takes about 45 days to process a license.[21]

ITAR contains 10 sections. Sections 120, "Purpose and Definitions," and 121, "USML," represent the

core of ITAR. USML is comprised of 20 categories of defense-related items ranging from firearms to military vehicles. Through legislation, Congress can exercise the final say as to what items can be placed on and removed from USML.[22] Understanding the definitions employed by this legislation, some of which are contrary to the vernacular connotation, is critical to understanding how ITAR functions. Any commodity that has a potential military application is subject to ITAR regulations as "defense articles" listed on USML.[23] The definition includes any "technical data recorded or stored in any physical form, models, mockups, or other items displaying technical data" related to USML identified items, including encryption techniques.[24] In fact, according to Category XXI of USML, anything "not specifically enumerated in . . . the United States Munitions List which has substantial military applications and which has been specifically designed, developed, configured, adapted, or modified for military purposes" is to be included in USML and subject to ITAR at the discretion of the Director of the Office of Defense Trade Controls Policy. This also includes technical data and defense services, which contains information relating to defense articles or services.[25]

ITAR employs a very broad definition of the concept of an "export."[26] For example, since blueprints and plans for defense-related items are considered tantamount to the items themselves, ITAR can serve as a regulator not only of the exchange of goods, but of ideas as well. ITAR's jurisdiction extends to information on how to make, maintain, or use defense items. Furthermore, ITAR encompasses a broad definition of how exports are transferred. Information that is shared verbally or visually, such as on a computer

screen, is considered an export. Intention is also irrelevant under ITAR. For instance, if a foreign national overhears a conversation about a certain product design, that transfer is considered an export.[27] The definition of "defense service" includes the instruction of any foreign national, whether inside or outside the United States, in the construction or use of defense equipment.[28] Anyone wishing to provide a defense service must go through DDTC registration service, just as would an arms exporter.[29] DDTC registration of any exporting company or freight carrier must be renewed annually.[30]

The regulations become more intricate when involving a "foreign person."[31] In certain circumstances, a transfer can occur entirely within the United States but still be classified as an export since an ITAR-controlled commodity or information transferred to a non-American employee of a U.S.-based corporation would be considered an export and require a license.[32] For instance, shipping technical information from New York to a Canadian citizen living in Seattle and working for a U.S. defense firm would constitute an export, even though the information never left U.S. territory. DDTC considers both the resident country and country of origin of foreign citizens when reviewing export applications. For example, if a U.S. company wants to transfer information to a Sudanese-born citizen of France, the license application would regard the information transfer as an export to both Sudan and France.[33] Additionally, a company must have State Department approval for not only the first transfer of an ITAR-controlled commodity or data outside the country, but also for each subsequent transfer even after the commodity or information has left the United States.[34] In contrast, a "U.S. person" is either an

American citizen, a lawful permanent resident of the United States, or a "protected individual as defined by 8 USC § 1324b(a)(3)."[35] Unlike foreign persons, U.S. persons do not face the same restrictions and are exempt from export licenses in some circumstances. The State Department proposed a rule in May 2015 that would require U.S. persons who work in defense related services for a non-U.S. company to register with DDTC.[36]

USML enumerates the defense articles and services that are subject to ITAR regulations; the executive branch decides which articles and services are on USML as defense-related items.[37] The complete USML list is located at 22 CFR 121.1. It covers "end-items" as well as those partially completed items (such as forgings, castings, extrusions, and machined bodies) that clearly resemble and are identifiable as defense articles. USML defines an "end-item" as a weapon in a finished state that only requires ammunition, fuel, or other energy source to make it operative.[38] In theory, the USML List is supposed to include only an item that is "specifically designed, developed, configured, adapted, or modified for a military application, and does not have a predominately civil application."[39] This encompasses a range of military equipment, from fully integrated advanced defensive or offensive systems to accessories for military equipment (everything from night vision goggles to auto parts). The ITAR list contains all items originally intended for military use, regardless of the intended or declared use by the recipient of an export.[40] Items enumerated on USML must be registered with the State Department's Office of Defense Trade Controls.[41] In contrast, the jurisdiction of the BIS encompasses "dual-use items" that have "both commercial and military or proliferation

applications."[42] Factors that determine whether an item is dual-use include its technical characteristics, its destination, what the exportee (end-user) plans to do with the item, and the other activities in which the end-user generally engages.[43]

In practice, it is not always clear whether an item falls under USML. In these cases, the commodity jurisdiction procedure is used to determine the status of the item in question.[44] This determination is made by the Directorate of Defense Trade Controls upon the submission of a form detailing the article or service, and a history of the product's design, development, and use. The commodity jurisdiction process, rather than categorically ruling on types of items, considers each product individually, determining what the purpose of the item is using a very specific set of "form" criteria.[45] This procedure can be used for items that are not on USML and items that are on the List but whose designation seems ambiguous or obsolete. As stipulated under Section 38(f) of the AECA, the Directorate must provide 30 days' notice to Congress if it sees fit to remove an item from the List.[46] Even when DDTC concludes that the item is not ITAR-regulated, the commodity jurisdiction process often adversely affects the trade of these exempt items due to the protracted review process.

To the frustration of foreign governments and their companies, the extraterritorial application of U.S. export controls is broad. The U.S. Government claims jurisdiction regarding ITAR based on the nationality of the controlled defense article and of the person involved in exporting or importing the item. An item regulated by ITAR will be subject to U.S. export laws regardless of location or ownership. Regulation follows the part, not the person. Consequently,

production abroad of any end item that contains any ITAR-controlled U.S. content is subject to these regulations. Unlike the EAR, ITAR has no *de minimis* exception. If a foreign made product contains any ITAR-controlled component or technology, no matter how insignificant, the entire product is subject to ITAR.[47] Even more controversially, when dealing with brokers of U.S.-origin defense articles, ITAR applies its jurisdiction to any person in the United States or anyone who is otherwise subject to U.S. jurisdiction.[48] ITAR prohibits retransfer (also known as re-export) of any item on USML by foreign persons without prior authorization. Consequently, if a foreign person wants to retransfer an item controlled by ITAR to another foreign person, both parties must have authorization. This could mean that they need "Third Party Transfer Approval" from the U.S. Government, must be named on the export license, or be named as a party to a Technical Assistance Agreement or Manufacturing License Agreement.

Section 122 outlines registration requirements, submission of registration statements, registration fees, notification of changes in information furnished by registrants, and maintenance of records by registrants.[49] At its core, Part 122 mandates that any person in the United States who manufactures or exports defense articles or furnishes defense services must register with the DDTC. A registration exemption is offered for officers and employees of the U.S. Government acting in an official capacity, persons whose business involves only the "production of non-technical data," persons whose activities are licensed by the Atomic Energy Act of 1954, and persons whose "fabrication of articles [are] for experimental or scientific purpose."[50] According to ITAR, the purpose of the

registration is to allow the U.S. Government to identify and account for those involved in the manufacturing and export of defense-related items. ITAR stresses that registration does not confer any special rights or privileges.[51] Section 122.3 concerns the annual registrations fees, which are three-tiered. Each tier involves different levels of payment for different types of entities. New registrants generally fall under the Tier 1 payment scheme, while registrants who have submitted and been approved for more than 10 applications for manufacture or export within a 12-month period would fall into the more advanced Tier 3 category.[52] Additionally, registrants must also maintain highly detailed records "concerning the manufacture, acquisition, and disposition" of all defense articles, defense services, and technical data. Records must be either on paper or in an electronic format that can be easily converted to paper.[53]

Section 123 details how the export and import of defense articles are to be managed. It specifies which forms must be filled out prior to manufacture, export, or temporary import of a defense article or service, and provides for exceptions to this rule, which include shipments with a total value less than $500, exports of defense articles "in furtherance of a manufacturing license agreement, technical assistance agreements, distribution agreements, or arrangements for the distribution of items identified in Category XIII(b)(1)."[54] Category XIII(b)(1), entitled Auxiliary Military Equipment, concerns military cryptographic systems and their components.[55] Section 123.16 includes numerous other exceptions and details which can be found within the document. Section 123 also covers additional topics such as exports and imports that cross the Canadian and Mexican borders (123.19), shipments by

the U.S. Postal Service (123.24), the special licensing regime for the export of commercial satellite equipment to U.S. allies (123.27), and exports to warehouses outside the United States (123.7).[56]

Section 124 is similar to Section 123, but where Section 123 concerns the export and import of defense **articles**, Section 124 deals with the provision and manufacture of defense **services**.[57] This involves the training of foreign military forces, the design of a new type of body armor, the maintenance and operation of a patrol boat, and even the destruction of an obsolete early warning RADAR station. Generally, while Section 123 is concerned with the buying and selling of weapons and information, Section 124 is focused on the development and use of weapons and information. Section 124.11 is worth noting in that it requires, pursuant to the Arms Export Control Act, that:

> certification be provided to Congress prior to the granting of any approval of a manufacturing license agreement or technical assistance agreement…for the manufacturing abroad of any item of significant military equipment.[58]

The only exception to this is an emergency that requires immediate approval of the agreement for purposes of U.S. national security. Otherwise, approval cannot be granted until 15 days after Congress has received the certification for the manufacturing license or technical assistance agreement for North Atlantic Treaty Organization (NATO) countries (including Australia, Japan, New Zealand, and South Korea), and 30 days for all other countries.[59]

Section 125 concerns the export of technical data and "classified defense articles."[60] Information in the public domain is not subject to the licensing require-

ments enumerated in this section.[61] Section 125.3 outlines how classified defense articles and technical data are to be licensed and secured when transferred out of the United States.[62] Section 125 also includes exemptions of general applicability. The exemptions are more or less similar to those specified in Section 122. One interesting exemption is that technical data "in furtherance of a contract between exporter and an agency of the United States government" is exempt from licensing so long as the contract provides for the export of the data.[63]

Section 126 delineates general prohibitions on where defense articles and services can be transferred. As required by the AECA, ITAR sets forth exemptions and extra burdens for certain destinations in accordance with U.S. security goals. Section 126.1 of ITAR rules prohibits exports of controlled articles to some two dozen "proscribed" countries. General prohibitions apply to Belarus, Cuba, Eritrea, Iran, North Korea, Syria, and Venezuela. Exports are also prohibited to countries that are under a U.S. arms embargo, including Burma, China, and the Republic of Sudan.[64] Additionally, exports are prohibited to countries that the United Nations (UN) Security Council has placed under arms embargoes, as well as countries that the U.S. Secretary of State deems to have "repeatedly provided support for acts of international terrorism."[65] Defense articles cannot be transported on aircraft, vessels, or vehicles owned or belonging to any of these countries. Section 126 provides exceptions for the proscribed countries. These must be determined by the Managing Director of the DDTC and require a "case of exceptional or undue hardship."[66] Exporters from countries having a special relationship with the United States also receive special consideration, and

often more lenient treatment, in the licensing process. Canada, the United Kingdom (UK), and Australia are exempt from ITAR's provisions since these countries have treaties with the United States and their industries are considered a critical part of the U.S. defense industry. The U.S. Defense Trade Cooperation Treaties with the UK and Australia reflect that 99 percent of licensing applications between the United States, UK, and Australia are approved.[67] Special procedures for arms exchanges also apply to some other NATO members,[68] but other long-standing U.S. allies still suffer. In 2010, South Korea voiced irritation about waiting for more than 2 years to update its U.S.-made P-3 Orion maritime patrol aircraft because of ITAR-related impediments.[69] Even Israel, one of the most strategic U.S. allies, has started purchasing their COMSATS from other countries due to ITAR's licensing requirements and other ITAR-related frustrations.[70]

Section 127 enumerates what constitutes violations of ITAR and defines consequences. Violations include transfer of defense articles without a license, engaging in behavior that breaches the licensure agreement, and misrepresenting or omitting information on a license application and other documents.[71] ITAR provisions include clearly defined civil and criminal penalties. The Assistant Secretary of State for Political-Military Affairs is authorized to impose a civil penalty that shall not exceed the maximum amount denoted by 22 USC § 2778, 2779a, and 2780 for any applicable violation of any of these sections; this penalty can be in addition to, or in lieu of, any additional civil penalty that might be applicable to a given situation.[72] On the criminal side, the liability standard applies if an exportee makes a false statement or omits a material fact that should be stated in order to mislead; the penalty is to be determined under the auspices of 22

USC §2778(c).[73] The penalties of violating ITAR can be severe. Civil penalties are $500,000 per violation. Violations can accrue easily since multiple shipments of the same defense article without appropriate licensure are usually treated as multiple violations. Making a mistake is not a viable defense to civil charges since penalties "can be imposed without showing any intent to violate ITAR."[74] The criminal penalties for ITAR violations are even greater: $1,000,000 and up to 1 year in prison per violation. Violations accrue in the same way as civil penalties. Businesses convicted of criminal violations are forbidden automatically from exporting under ITAR, and possibly banned from "selling to the US government directly or indirectly."[75] A company facing civil penalties can also be barred from exporting U.S.-made defense articles and technology. Violations of ITAR can compound and multiple violations can result in a combination of several civil and criminal penalties greater than $1,000,000. For example, in 2013, Raytheon and Aeroflex were fined $8 million each for ITAR violations, and in 2012, United Technologies was fined $55 million. ITAR violations are also in the public record, which can inflict further costs on violators in the form of lost business and reputational damage.[76]

Section 128 establishes the administrative procedure and structure for implementation and operation of the Arms Export Control Act. Since the decisions and foreign affairs power inherent in the operation of the AECA is "highly discretionary," the AECA and ITAR are excluded from review under the Administration Procedure Act.[77] Section 128 establishes the authority of Administrative Law Judges within ITAR framework and outlines the mechanics of administrative proceedings, oral hearings, enforcement of discovery rights during an administrative trial, hear-

ings, appeals, and other matters required for the functioning of the administrative legal system supporting ITAR.[78]

Section 129 states that brokers must also be licensed by the DDTC to operate. A broker is defined as "any person who acts as an agent for others in negotiating or arranging contracts, purchases, sales, or transfers of defense articles or defense services in return for a fee, commission, or other consideration."[79] Exemptions to this licensure requirement include employees of the U.S. Government and also those of foreign governments and organizations who are acting in an official capacity, and persons who exclusively transport or forward freight. For example an air carrier "who merely transports . . . licensed USML items [is] not required to register."[80] The section details additional requirements for brokers.

The final section of ITAR, No. 130, elucidates the regulations surrounding fees, commissions, and political contributions. Corporations seeking licenses must disclose to the DDTC any fees, commissions, or political contributions that the "applicant or its vendors have paid."[81] Section 130 also details other information that must be provided by applicants and vendors to the DDTC before receiving approval for the transfer of defense articles and services.[82]

CRITICISMS OF THE EXISTING SYSTEM

Restricting the export of sensitive technologies that provide the United States and its allies with a military advantage over potential military adversaries or commercial rivals is an unobjectionably legitimate purpose for export controls. Professors Jonathan

Caverley and Ethan B. Kapstein argue that "for 2 decades, the United States has dominated the global arms trade, reaping a broad range of economic and geopolitical benefits in the process."[83] Highly sophisticated technologies are a critical enabler of U.S. military capabilities and provide the United States and its allies with unique capabilities against both conventional adversaries and non-state actors. It is widely understood that "[t]he technologies that underpin U.S. military and economic strengths continue to be targets for theft, espionage, reverse engineering, and illegal export."[84] However, this does not mean that additional administrative burdens and micromanaging are necessarily the most efficient responses even if historically they have been lesser priorities to those implementing ITAR, who have focused on national security considerations above all else.[85] Inefficiencies and other burdens risk sapping the economic strength that provides the foundation for U.S. military power and U.S. national security.

Although the United States has a larger share of the global arms market than any other country, the ITAR system likely makes some U.S. defense products and services less competitive. Because of the controls and restrictions, U.S. defense manufacturers cannot sell to certain countries, and some foreign entities may reject U.S. bids because of concerns over constrained technology transfers or supply-chain disruptions. Additionally, since many ITAR-controlled items are available from foreign sources, export controls increase U.S. firms' cost of doing business relative to their foreign competitors.[86] Obtaining all necessary license documentation can take months, if not years; even a repeat export of the same item to the same recipient requires a new license each time. The restric-

tions also complicate U.S. joint ventures with foreign partners by handicapping their access to U.S. technology. Multinationals respond by moving their production offshore, eroding the U.S. defense industrial base and undermining export control regimes. Some firms simply eschew the U.S. defense market altogether to avoid these problems. ITAR-created overhead costs also price U.S. companies out of the market for many defense-related components.[87] Small U.S. businesses are major victims of these requirements since they have less financial and human resources than large firms to spend on hiring and training ITAR specialists and meeting other ITAR-related costs.[88]

ITAR mandates an extra licensing step for any foreign or dual citizen involved in any step of the arms export process including the exporting firm, any intermediate carriers, as well as the final destination. In academic institutions, limitations on the acquisition and sharing of information and innovations, such as with foreign nationals and entities, can impede their serving as laboratories for useful military technologies. There are also substantial monetary costs with fulfilling ITAR obligations.[89] Many larger institutions have the resources and staff to negotiate the licensing red tape, but smaller academic institutions that have limited resources to devote to such nonacademic work will more likely forgo it.[90]

A research group at the Massachusetts Institute of Technology worried that restrictions on dealing with foreign nationals, which became more severe after the September 2001 terrorist attacks, have discouraged international students from applying to U.S. university engineering programs due to limitations on which projects they could work.[91] Some academic institutions decline to compete for contracts requir-

ing them to deal with ITAR restrictions. Furthermore, foreign students or professors cannot participate in some research projects, seminars, and talks involving ITAR. In addition to limiting creativity, this restriction can deter them from even studying or working in the United States or lead foreign students who do obtain a degree in sensitive but vital fields, such as aerospace, to seek employment outside of the United States.[92] ITAR's "Fundamental Research Exception" aims to relax restrictions on institutions doing:

> basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community as distinguished from research the results of which are restricted for proprietary reasons or specific U.S. Government access and dissemination controls.

However, universities believe that, in practice, its exemptions are excessively limited.[93] Ironically, a 2011 U.S. Government Accountability Office (GAO) study found that the licensing system for foreign nationals was simultaneously excessively burdensome and insufficiently strict—both harmful for U.S. security.[94]

The higher operating costs due to ITAR have created a competitive advantage for foreign producers that can offer ITAR-free options without the overhead costs of complying with those regulations.[95] Very public episodes of legal action against foreign firms (like the French satellite manufacturer Thales Alenia Space) for violating ITAR have likely encouraged trends toward ITAR-free product lines. Many European and Asian manufacturers now proudly advertise their products as ITAR-free.[96] To be precise, an ITAR-free product is a defense (or other) article that is designed not to need any ITAR-regulated parts. Making an ITAR-free prod-

uct requires an entity to be aware of possible ITAR jurisdiction at each step of the manufacturing process, so a foreign entity must segregate U.S. involvement from the creation of the product.

In the case of technical data, U.S. persons must not be involved with any technical assistance or product design.[97] With few exemptions, a product can also become subject to ITAR by entering the United States. The competitive advantage of ITAR-free products—those using exclusively foreign-origin content and that avoid U.S.-origin content to escape ITAR export controls—is mostly anecdotal. It is unclear how pervasive ITAR-free products are and how much advantage they enjoy over U.S.-origin goods subject to ITAR. However, there are commonly cited examples. In 2011, Lockheed Martin and Boeing were eliminated from the bidding for a $10-billion contract to build medium multirole combat aircraft (MMRCA) for the Indian Air Force.[98] The higher cost of the U.S. systems regarding long-term maintenance and technology transfer may have played a role. Each order of replacement parts would need its own ITAR clearance, as would any software or technology required to run the planes.[99] Similar factors likely contributed to the Brazilian Air Force's decision to forego U.S.-built planes (and even Swedish-built planes that use U.S.-made engines) in a similar bidding competition.[100] Other manufacturers and exporting countries gain an advantage from offering products that eschew the bureaucratic hassle of ITAR. The result is that the United States has less influence over the global sale of militarily sensitive technologies.

The lack of consistency or predictability caused by the historical ITAR process increases the risks perceived by potential foreign investors and buyers of U.S. goods. The broad discretion afforded the Com-

merce, State, and Defense bureaucracies in delegating, suspending, and/or rescinding export licenses—as well as their ability to establish broad license exception categories that permit a controlled item to be exported under certain conditions without a transaction-specific license—forces foreign companies to incur additional risk in doing business with the United States. Importantly, the Defense and Commerce Departments are not subject to the licensing standards of the Administrative Procedures Act (APA), which tempers administrative discretion by mandating a precedent-based decision process.[101] The ITAR system is widely considered to apply overly broad requirements to U.S. dual-use exports.[102] This makes it more difficult for U.S. entities to expand into foreign countries and increases their regulatory and compliance costs.

Each year the U.S. Government reviews thousands of applications and approves nearly all of them, the majority of which are for end-user items the U.S. Government has previously approved. Even so, the ITAR system forces U.S. and foreign partners to obtain separate approvals for almost every aspect of a weapon system.[103] Even though the majority of important technologies today incorporate dual-use items, defining terms negatively (as ITAR does) introduces ambiguity in what is covered by regulation. Firms that maintain research and development facilities in foreign countries, or employ foreign persons domestically, must compartmentalize access to information to exclude nonauthorized persons. Because of the currently broad wording of the technical data definition, theoretical access could be considered a breach of ITAR. This compartmentalization increases the incentives to not hire employees designated as foreign persons by ITAR, which reduces the talent pool available for U.S.

defense firms. ITAR also creates problems for U.S. companies that want to cooperate with foreign entities on new products. Foreign companies believe that the ITAR process causes delays, discourages cost savings, restricts information sharing, and complicates supply chains.[104] As a result, many foreign companies decide that the cost of obtaining ITAR-regulated goods is not worth the potential benefit. Consequently, these companies choose to invest in ITAR-free countries. Additionally, companies selling widely available technologies and goods will, everything else being equal, seek out ITAR-free non-U.S. buyers. These activities doubly harm U.S. national security by reducing U.S. economic advantages and decreasing the impact of U.S. export controls.

An example of how foreign companies will run from ITAR and look for non-U.S. locations has been seen in the space manufacturing industry. In 1999, Congress transferred jurisdiction of space-related equipment from the EAR under the Department of Commerce to the more restrictive ITAR.[105] The placing of space systems on Category XV of USML, with all its associated licensing requirements, has made it considerably more difficult for U.S. entrepreneurs to enter the international commercial space market. The production, transfer, and use of everything, including launch vehicles, navigation equipment, ground control stations, and space-qualified photovoltaic arrays is now illegal without appropriate DDTC approval. This has dramatically increased the operating costs of the U.S. commercial space industry and commercial satellite owners at a time when the technology and other capabilities to design rockets have spread well beyond the United States and the Soviet Union.[106] In fact, the decision to move space related items from the EAR to ITAR likely contributed to the subsequent

dramatic fall in the U.S. market share of the commercial space industry—from 63 percent of the market share before implementation of the stricter ITAR controls in 1998, to only 42 percent in 2002.[107] In the geocommunications satellite sector, the U.S. market share similarly fell from 73 percent in 1995 to 25 percent by 2005.[108] According to the Space Foundation, ITAR most burdened the small, lower-tier contractors that "are a significant source of . . . new technology and innovation."[109] Moreover, ITAR regulations have dissuaded collaboration between U.S. firms and foreign corporations.[110] These changes have also made the space industry heavily dependent on purchases from the U.S. Government, which now accounts for about 90 percent of the industry's sales.[111] In the 1990s, many of the specialized small parts used by international satellite companies to make their equipment came from the United States.[112] With a new license required for each order, however, foreign satellite companies naturally decided to minimize their use of ITAR-regulated U.S. parts. Non-U.S. manufacturers increased their coordination of satellite parts as seen in how European firms began to make products compatible with Chinese Long March rocket launchers.[113]

To protect U.S. national security, the U.S. export control system hampers international law enforcement by monitoring and regulating purchases of military technologies by inappropriate state and nonstate actors. The contested jurisdictions and competing licensing requirements allow export violators to escape prosecution by showing they received permission from at least one entity. On occasion, two agencies will review independently the same license application and render different decisions. Clever exporters and malign actors will try to game the system through forum shopping. Many assessments of how to apply

the controls are highly subjective and rely on the "pornography" standard (regulators judge on the basis of appearance). The large volume of licensing decisions dissipates enforcement resources on items of little military value while weakening protection of key U.S. military and technological advantages. Unneeded export restrictions impede U.S. military interoperability with foreign partners since they cannot obtain the same or compatible weapons systems. Even allies may worry about buying ITAR-controlled items since they may encounter difficulties obtaining urgently needed spare parts for vital U.S.-made defense equipment. The Pentagon has also expressed worries that strict ITAR regulations are incentivizing producers of defense products to invest in projects elsewhere, and this is improving the military-industrial capabilities of potential competitor countries rather than those of the United States.[114]

At the advent of the Obama administration, the U.S. export system presented a maze of institutions with potentially contradictory requirements and enforcement agencies with overlapping authorities. It employed two different control lists, was administered by two different departments, involved three different primary licensing agencies, as well as about a dozen end-user screening lists. Information technologies (IT) and systems, which were largely incompatible and often inaccessible to each other, made it difficult to integrate their coverage. The system also resulted in a stove-piped licensing structure with frequent disputes over commodity and jurisdiction; the agencies involved did not know when others were reviewing or issuing licenses. In addition to USML run by the State Department and the Commerce Department's list of dual-use items, the Treasury Department managed economic sanctions on a wide range of entities. The

Nuclear Regulatory Commission and Energy Department had the special responsibility of regulating the export of certain nuclear materials and technologies.

The ITAR process is infamous for its slow pace in processing a massive number of license applications. DDTC receives tens of thousands of applications annually and approval can take months.[115] The average time to approve technical assistance agreements increased from an average of 52 days in 2003 to 106 days in 2006.[116] In 2008, President George W. Bush signed *National Security Presidential Directive* (NSPD) 56, which mandated the DDTC to review and rule upon a licensing application within 60 days of receiving the application. Nonetheless, the chair of the International Space Station Independent Safety Task Force has since testified to the fact that the "ITAR restrictions and the IP's objections to signing technical assistance agreements are a threat to the safe and successful integration and operations of the Station." He estimates that ITAR-related restrictions lose U.S. space companies an estimated $600 million in revenues each year. [117]

Businesses cite the resulting lengthy time and uncertainties of securing a license as major problems with ITAR. In a Booz Allen survey of U.S. industry executives in May 2006, 85 percent of the respondents "agreed" or "strongly agreed" with the statement that "the unpredictable amount of time that it takes my company to obtain an export license hinders my company's strategic decision making." When asked whether government regulators provide timely responses to requests for guidance, 64 percent either disagreed or strongly disagreed. When presented with the statement, "I can predict with confidence the amount of time it takes for my company to obtain an export license from my government," 71.4 percent either disagreed or strongly disagreed.[118]

Many laws and regulations have been adopted over the years on an ad hoc basis that urgently required streamlining. In 2010, Defense Secretary Robert Gates correctly called the U.S. export control system a "byzantine amalgam of authorities, roles, and missions scattered around different parts of the federal government."[119] Before the Obama administration, there had been little effort at harmonization and little distinction between widely available, low-technology items that could easily be obtained by foreign buyers and the few most sensitive "crown jewel" U.S. technologies that warrant the greatest security often went unprotected due to the system's vast purview and demands. The system has an overly broad definition of what should be subject to export classification and control, requiring the annual issuance of more than 100,000 licenses each year. The natural tendency of that number is to increase since it is easy to get on a control list (bureaucrats consider it safer to regulate than risk being blamed for exporting dangerous items) but very hard to get off (requires senior-level approval as well as congressional notification). Since almost all license applications were approved, this is a very expensive and resource-demanding process. It also presents the danger that, with such a dissipation of effort, the most sensitive items are slipping through the cracks since the lengthy list of controlled technologies taxes the finite U.S. intelligence monitoring capabilities and resources. Agency actors can focus their energies on the process—determining which list an item falls into and which agency has jurisdiction—rather than whether an item can be safely exported and to whom.

Some claim that ITAR's national security benefits outweigh potential economic costs. They cite numerous cases in which tight export controls have resulted in the apprehension of illegal traffickers.[120] Proponents

also state that the United States is better able to retain its technological advantage by instituting tougher restrictions on the flow of weapons in and out of the country, and thus stifling the ability of competitors or third-party subversive elements to obtain sensitive technology.[121] Moreover, they claim that the government has discretion in licensing to further domestic/international aims of the country, i.e., by leveraging the issuance of licenses against perceived state interests in export controls.[122] Moreover, despite the ITAR process, the United States remains the largest weapons exporter in the world by far. Whether these perceived benefits appear collectively to outweigh the quantifiable economic detriment they place on certain export markets is questionable, but, of course, those working to improve ITAR want to retain its benefits while reducing its costs, resulting in a net gain for the United States.

RECENT AND PROPOSED CHANGES

Proposals to reform the U.S. export controls have been discussed for years, especially after the end of the Cold War, but it was not until recent years that a U.S. presidential administration made export control reform a priority.[123] The administration's export reform drive has been based on several principles, as outlined in an ECR 2010 work plan:

- focus only on most militarily significant items;
- fully coordinate controls with multilateral regimes since export control typically requires transnational partners to succeed;
- unilateral controls must support a legal or foreign policy objective;
- lists must clearly identify controlled items and be easily updated as technology emerges,

matures, or becomes widely available (items can "cascade" between categories, typically from more to less restrictive);
- make licensing processes predictable and timely;
- enhance enforcement capabilities; and,
- facilitate exports of items promoting U.S. counterterrorism goals.

In their public statements, administration officials have described export reform mostly as a national security goal with ancillary commercial benefits rather than primarily as an export promotion or comprehensive deregulation initiative.

The reform process began as soon as the Obama administration assumed office, appointed its national security team, and established its national security decisionmaking system. On August 13, 2009, Obama directed the National Economic Council and the National Security Council to conduct a comprehensive interagency review of the U.S. export control system in order to craft a series of recommendations that better promoted U.S. national security and nonproliferation goals and begin implementing them.[124] The President also directed the U.S. intelligence community to conduct the first ever U.S. National Intelligence Estimate (NIE) on export controls. Among other results, this NIE concluded that the U.S. commercial sector, rather than the military, was leading development of the next generation of national security-related technologies, which resulted in the administration's stressing the goal of supporting the U.S. defense industry as a foundation of U.S. power.[125] Among other adverse effects, ITAR restrictions on high-end exports likely decrease U.S. comparative advantage in international trade. In a speech on April 20, 2010, Gates, who

became a leading force for the new reforms, proposed a four-pronged approach towards a more effective and efficient export control system based on achieving four "singularities." The first step was a single unified tiered control list for both dual-use and munitions exports, based on three tiers of controls for different types of items, with the most stringent controls on exports viewed as those most dangerous for U.S. security interests:

- Tier 1 items are weapons of mass destruction, almost exclusively available from the United States, that provide critical military or intelligence advantage and, therefore, should be the most strictly guarded.
- Tier 2 items are almost exclusively available from multinational export regime partners or adherents; they provide a substantial military or intelligence advantage to the United States or its allies, who would import these items without a license.
- Tier 3 items are widely available goods and services that provide only some military or intelligence advantage; this tier would include other items controlled for national security, foreign policy, or human rights reasons.

The second objective was to establish a single licensing entity that used standardized processes and had jurisdiction over both munitions and dual-use items and technologies. The administration has sought to streamline the review process to ensure that export decisions are consistent and to clarify where and how to submit export license applications, as well as which technologies and items are likely to be approved. The third goal has been to create a single enforcement coordination entity that employed a frequently updated

and consolidated list of banned end-users. The fourth and last of these objectives would be to form a single IT system that used a single online database for receiving, processing, and screening new license applications and their intended end-users.

The Obama administration has been employing a three-phase approach, doing what it can on its own initiative while seeking to work with Congress to secure authorization and funding for a more comprehensive transition to a new system. In Phase I, the administration has tried to make immediate improvements and establish the foundation for creating the new system. Using its existing authorities, the administration has developed a single license application form, established a single electronic gateway for exporters to access the licensing system, created a government-wide consolidated end-user screening list, increased coordination among export control enforcement agencies, and established Strategic Trade Authorization (STA) for dozens of close allies and regime partners. The administration also launched a successful campaign to secure Senate approval of the defense trade cooperation treaties with Australia and the UK, but has not sought additional bilateral treaties, instead aiming for comprehensive and universally applicable export reform that the United States can implement through its national legislation and regulations, albeit coordinated with foreign partners when possible.

In Phase II, which is currently underway, the administration aims to transition to a new U.S. export control system by restructuring the two control lists into identical tiered structures to reduce the quantity of licenses required. They are using the same definitions on both lists and establishing a framework, where, if the President determines it is warranted, an item can be moved from the USML to the CCL,

or it may be removed from the lists altogether. The administration launched its efforts to reform the categories in the Munitions List by making the previous nebulous classifications more clear and distinct, using "positive" definitions that define what items fall within a category. Of special interest to the U.S. Army, the Departments of Commerce and State chose to start this process by converting Category VII of USML, which covers Tanks and Military Vehicles, as well as Category VIII (military aircraft). U.S. defense exporters and foreign importers now can work with a narrower list that excludes many items that previously had been considered defense ground vehicles. Excluding clearly defined military vehicles and "specially designed" (as defined by the regulations) parts, components, accessories, attachments, and related technology and software, the remaining items in Category VII have been moved to the CCL. The State and Commerce Departments now consider the completed reclassification for Category VII as an example of how to approach the other categories. The administration has also sought to transition toward a single IT system for export licensing and enforcement, remove or add unilateral controls as appropriate, work with foreign partners to change multilateral controls, and expand enforcement compliance, but also outreach, with domestic and foreign partners.

The proposed Phase III reforms require congressional legislation to complete the transition to a fundamentally new U.S. export control system. This new system would merge the two control lists into one single list, create a single Export Licensing Agency, a single Primary Enforcement Coordination Agency, and one enterprise-wide IT system for both licensing and enforcement.

The Obama administration has made progress toward updating USML from a negative list, characterized by general and vague descriptions of defense articles and design intent, to a positive list specifying what precisely is controlled, increasing its resemblance to the current CCL.[126]

In terms of procedure, the Obama administration's ECR initiative has drafted many proposed new "final rules." Each final rule is effective 180 days after being published in the *Federal Register.* Before each rule is finalized, the Department of State publishes proposed rules for public comment. The Department of Commerce publishes its own separate rules regarding the CCL. Each comment period for the CCL lasts 30 days and any entity may provide comments to that Department. After reviewing these comments, Commerce may publish an updated proposed rule for additional comment.

In early-2013, the administration published its first final categories (for gas turbine engines, aircraft, classified articles, and miscellaneous articles). These revised Categories, VIII, XVII, XIX, and XXI of USML, took effect in October 2013.[127] On July 8, 2013, Commerce released additional amendments to Categories VI, VII, XIII, and XX; these new final categories for vessels, military vehicles, auxiliary military equipment, and submersibles took effect in early January 2014. In April 2013, the State and Commerce Departments modified the definition of "aircraft" in USML to include only those planes that are used for military purposes, which allowed the transfer of thousands of items from USML to the less stringent CCL.[128] The already published final rules revise ITAR sections on aircraft, gas turbine engines, technical data, naval equipment, military vehicles, "auxiliary military equipment," and submersibles.[129] On January 2, 2015,

the Departments of Commerce and State issued additional final rules revising USML Categories IV (launch vehicles and missiles), V (explosives), IX (military training equipment), X (protective personnel equipment), and XVI (nuclear testing equipment) which took effect that summer.[130] These 13 Munitions List categories (of the 21 in total) that have been published in final form encompass almost 90 percent of U.S. export licensing and more than $80 billion in actual exports each year, which generates almost 450,000 jobs in the United States. The next priority for revising the Munitions List is to publish final rules for satellites, electronics, and chemicals.[131] Accompanying this process, Commerce also created a new "600 Series" of Export Control Classification Numbers for each CCL category.[132] As of mid-2014, 15 of 21 USML categories have been updated. Figure 1, from the State Department's Directorate of Defense Trade Controls, illustrates this progress.[133]

USML	Category	Key Milestones		Federal Notice (s)	Register
No.	Description	Effective Date	Transition End Date	Final Rule	Correction Rule
I	Firearms	TBD	TBD	TBD	TBD
II	Artillery	TBD	TBD	TBD	TBD
III	Ammunition	TBD	TBD	TBD	TBD
IV	Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs, and Mines	7/1/2014	6/30/2016	79 FR 34	79 FR 36393
V	Explosives and Energetic Materials, Propellants, Incendiary Agents, and Their Constituents	7/1/2014	6/30/2016	79 FR 34	79 FR 36393

Figure 1. USML Update Progress.

USML	Category	Key Milestones		Federal Notice (s)	Register
No.	Description	Effective Date	Transition End Date	Final Rule	Correction Rule
VI	Surface Vessels of War and Special Naval Equipment	1/6/2014	1/5/2016	78 FR 40922	79 FR 26
VII	Ground Vehicles	1/6/2014	1/5/2016	78 FR 40922	79 FR 26
VIII	Aircraft and Related Articles	10/15/2013	10/14/2015	78 FR 22740	78 FR 61750
IX	Military Training Equipment	7/1/2014	6/30/2016	79 FR 34	79 FR 36393
X	Personal Protective Equipment	7/1/2014	6/30/2016	79 FR 34	79 FR 36393
XI	Military Electronics	12/30/2014	12/29/2016	79 FR 37536	TBD
XII	Fire Control/Sensors/Night Vision	TBD	TBD	TBD	TBD
XIII	Materials and Miscellaneous Articles	1/6/2014	1/5/2016	78 FR 40922	79 FR 26
XIV	Toxicological Agents	TBD	TBD	TBD	TBD
XV	Spacecraft and Related Articles	11/10/2014	11/9/2016	79 FR 27180	TBD
XVI	Nuclear Weapons Related Articles	7/1/2014	6/30/2016	79 FR 34	79 FR 36393
XVII	Classified Articles, Technical Data, and Defense Services	10/15/2013	10/14/2015	78 FR 22740	78 FR 61750
XVIII	Directed Energy Weapons	TBD	TBD	TBD	TBD
XIX	Gas Turbine Engines and Associated Equipment	10/15/2013	10/14/2015	78 FR 22740	78 FR 61750
XX	Submersible Vessels and Related Articles	1/6/2014	1/5/2016	78 FR 40922	79 FR 26
XXI	Articles, Technical Data, and Defense Services Otherwise Not Enumerated	10/15/2013	10/14/2015	78 FR 22740	78 FR 61750

Figure 1. USML Update Progress. (cont.)

USML Update Progress.

The revisions of the Munitions List have been continuing throughout 2015. On May 5, 2015, the DDTC published a proposed rule revising USML Category XII (fire control, range finder, optical, and guidance and control equipment), while the BIS issued a proposed rule detailing how items removed from Category XII would be controlled under the CCL 600 series. The BIS also proposed to expand controls and create new ECCNs for certain software and technology related to night vision items. On June 17, 2015, the DDTC published a proposed amendment to revise USML Categories XIV (toxicological agents, including chemical agents, biological agents, and associated equipment) and XVIII (directed energy weapons), while the BIS again simultaneously issued a proposed rule describing how articles removed from Categories XIV and XVIII would be controlled under the CCL.[134] Phase II of ECR will be complete when all 21 categories have been updated and approved, and when all pertinent departments (State, Commerce, Defense, and Treasury) have transitioned to a unified database.

The relaxation of restrictions on commercial space exports has attracted much attention. Section 1248 of the National Defense Authorization Act for Fiscal Year 2010 directed the Secretaries of Defense and State to conduct an assessment of the risks associated with removing commercial satellites and related components from USML.[135] The Departments of State and Commerce issued rules regarding these items at the end of 2011.[136] The study, known as the 1248 Report and completed in April 2012, showed that certain satellite-related technologies were inappropriately listed under ITAR because these items were not critical to

U.S. national security and did not contain technology exclusively available to the United States.[137] The report provided a list of articles that could be transferred from ITAR to the EAR due to their lower sensitivity.[138] In October 2013, the White House issued a "Presidential Determination to Facilitate Satellite Reclassification" to transition export controls for certain satellites and related items from USML to the CCL.[139]

The U.S. space industry has welcomed these changes but called for further measures. For example, to help small space companies, the Space Foundation proposes eliminating the requirement for a license to transfer defense articles between "U.S. and overseas divisions of the same company . . . provided all sites are ITAR-compliant."[140] Another solution is to create a database that allows exporters to "see which customers have been granted access to certain categories of ITAR-controlled exports and which customers require greater scrutiny for certain transactions."[141] This step would save exporters time and money by allowing them to determine more easily which customers were ITAR-compliant and would also incentivize foreign companies to improve their compliance to avoid obtaining a negative rating in the database.[142] These solutions might also be applicable to other ITAR-controlled industries.

Most of the work done on these parts of USML has been to eliminate "catch-all" clauses with the result that all items that are not specifically affirmatively listed on USML move to the more lenient Commerce EAR list.[143] One primary aim of the changes is to decrease the stringency of rules that affect small machine parts that could have multiple uses. Furthermore, the USML has reclassified commercial satellites (COMSATS) as civilian goods, thus, they have become

ITAR-Free.[144] Section 1261 of the National Defense Authorization Act for Fiscal Year 2013 returned to the President the power to determine which regulations govern the export of satellites and/or satellite-related articles. On May 13, 2014, DDTC and BIS established final interim rules for satellite export control revisions and less-sensitive items were moved from USML to CCL.[145] The rules implemented a proposal to establish four new ECCNs that would fall under Category 9 of the CCL. They define the controls of EAR for items that the President deems are unnecessarily controlled under Category XV of USML and that do not fit into any current ECCNs. ECCN 9A515 pertains to "specially designed" parts, components, attachments, and accessories as well as ground stations and spacecraft; 9B515 pertains to associated inspection, production, and test equipment, in addition to the "specially designed" components; 9D515 pertains to associated software; and 9E515 pertains to associated technology.

Further rules came into effect in late-2014 that amended Category XV of USML, which includes spacecraft and associated articles, and Category IV, concerning "spacecraft-launching vehicle integration and launch failure analysis services." Other changes include adapting modifications to the specific export controls for satellites and satellite launches and adding telemetry data to the group of exclusions from technical data.[146] Certain articles have been transferred from USML to CCL Category 9, such as some remote sensing satellites, planetary rovers, and the majority of commercial communications satellites, as well as associated technologies, components, and parts. Also newly subjected to the EAR are:

> data transmitted to or from a satellite or spacecraft, when limited to information about the health, operational status, or function of, or measurements or raw sensor output from, the spacecraft, spacecraft payload, or associated subsystems or components,[147]

labeled as EAR99. Although commonly less strict than ITAR, satellite products, technology, and software on the CCL will still be regulated by end use, end-user, and country-based controls through the EAR. Remaining under the export control of ITAR in USML's Category XV are items with high-level sensors and those that have space-related military functions, as well as the majority of manned spacecraft.[148]

The changes notably depart from ITAR's "see-through" rule, as items on the new ECCN 9A515 still fall under the control of the EAR, even if "exported, re-exported, or transferred in-country with ITAR-controlled items integrated into and included as integral parts of the EAR-controlled commodity."[149] COMSATs new control under 500 series classification numbers of the CCL help to avoid this rule, which forces manufacturers to tell all customers that their product is a defense article, establishing that it will always be controlled as a U.S. munition. However, the rules still include a restriction to embargoed countries like China. Critics worry that a new see-through rule will be developed under the EAR, which will have a similar effect of causing foreign manufacturers to avoid American technology. Given Europe's negative history with ITAR's see-through rule and the European Union's recent promotion of space collaboration with the Chinese, the European space industry will likely seek to avoid any new see-through rule under the EAR by avoiding the use of U.S.-origin items.[150]

The Obama administration also wants to address the problem that the U.S. Munitions List often blurs the lines between the separate lists of regulated products managed by both the State and the Commerce Departments, potentially confusing a contractor or exporter about where to apply for licensing. For example, many items on USML were listed as subject to ITAR if they were "specifically designed" for military applications. The lack of clarity in the phrase "specifically designed" was brought into sharp relief in the 2009 circuit court case of *United States v. Palungun*, in which a man exported riflescopes without a DDTC-issued license. DDTC deemed him in violation of the AECA, but his conviction in a lower court was overturned on appeal. The reviewing judge found that the DDTC's decision that the riflescopes constituted a regulated defense article was arbitrary, and the rule (written into the AECA) that the decision could not be subjected to judicial review was inappropriate.[151] The term "specifically designed" applies to devices or software designed for defense usage that do not constitute a defense article on their own (a large category, given how many modern defense items are built with small parts and run on complex software).

Because the "specifically designed" distinction remains in several parts of USML, the first newly published rules sought to update the definition and clarify the boundary lines between Commerce and State in order to facilitate the transfer of items from USML to the CCL.[152] The new definition employs a "catch and release" approach, whereby the first part of the definition may capture an item as specially designed for military use and the second part may release it provided the item does not meet specific parameters. The goal is to allow the more flexible rules of the EAR to

apply to less sensitive items, while the State Department focuses its resources on more sensitive items and on eliminating ambiguity regarding the scope of each set of regulations. Since the "specifically designed" designation is often very unclear, the ECR has tried to limit the number of times where it appears, opting instead to describe defense articles in terms of their size, shape, lethality, or other factors. Under the new interpretation, if an article is built with the intent of helping another item on USML achieve its intended aims, it is considered "specifically designed" for that purpose.[153] The second part of the definition offers a set of caveats, essentially saying that "a commodity should not be ITAR controlled if it has a predominant civil application or has performance equivalent (defined by form, fit, and function) to a commodity used for civil applications."[154] These definitional changes likely will streamline the process of applying for licensing, eliminate the need for commodity jurisdiction requests, and save defense companies valuable time.[155]

On January 15, 2014, the Obama administration issued Presidential Policy Directive 27 to ensure that U.S. conventional arms transfers support the U.S. national security and U.S. foreign policy goals. Yet, 13 months later, the State Department released a new policy concerning U.S. exports of military unmanned aerial vehicles (UAVs) and their technologies.[156] The new policy will assess on a case-by-case basis the proposed sale of U.S.-made military and commercial unmanned aircraft systems (UAS) and will require recipient nations to agree to "end use assurances" that they will use such purchases only in accordance with U.S. security interests and international law. Although permitting the export of Category I UAS on "rare occasions," the new policy reaffirms the U.S. commitment to the

Missile Technology Control Regime (MTCR), which maintains a "strong presumption of denial" against the sale of Category I UAS capable of delivering a payload of at least 500 kilograms with a range of 300 kilometers.[157] This separate approach reflects the fact that the administration does not view UAVs as typical conventional weapons, but wants enhanced oversight of them to ensure a disciplined framework in which the United States can exercise restraint in sales while enhancing bilateral ties with allies and trusted foreign partners.[158] Thus, the new U.S. drone policy, while accelerating decisionmaking and benefitting particular firms, may restrict some UAV sales.[159] Conversely, those countries participating in the Wassenaar Arrangement, a voluntary group of 41 nations including the United States that aim to promote international security in transfers of conventional arms and dual-use technologies, have since liberalized the sale of commercial UAVs outside of the United States. Due to this ruling, commercial UAVs possessing a range of less than 30 minutes will no longer require an export license from the Department of Commerce, which will amend the EAR.[160]

Beyond the reforms to the Munitions Lists, some progress already has been achieved in facilitating the employment of foreign nationals. New regulations enacted in 2011 facilitate approval of the transfer of defense articles to dual and third country nationals. Before this reform, a company needed to seek approval before allowing either a dual or third country national to work with defense articles. A "dual country national" is one who is a national of their employer and a national outside of the United States, while a "third country national" is one who is neither a national of their employer nor the United States. One of the main

issues stemming from this former regulation was that companies had to question potential employees as to what their national origin was, which could violate labor and human rights laws if an employee was not hired due to their national origin. This new rule aimed "to replace the current restrictions based on nationality with restrictions based on concrete risk factors to mitigate the likelihood of unauthorized transfers."[161] As long as an entire transaction is under the proper ITAR licensing process, the presence of foreign nationals in companies carrying out the transactions no longer needs separate approval.[162]

Treatment of nationals of the NATO countries, Australia, New Zealand, and Japan is even more favorable under the new rules.[163] The only two requirements regarding dual and third country nationals under this new law are that "the transfer takes place completely within the physical territory of the country where the end-user is located and the end-user has effective procedures in place to prevent diversions to unauthorized destinations."[164] The second requirement forces companies to create a screening program to prove to the DDTC that their dual and third country national employees do not have substantive contact with proscribed countries, unless that employee has a security clearance from their government in which the substantive contact rule would not matter. The DDTC defines substantive contact as:

> regular travel to such countries; recent or continuing contacts 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; acts otherwise indicating a risk of diversion.[165]

In May 2015, DDTC proposed to amend section 22 CFR §126.4(a) to permit "permanent" exports for official use (existing regulations permit "temporary" imports and exports under conditions of "urgency") by U.S. Government agencies working outside the United States. This proposed rule would help alleviate some confusion that U.S. Government contractors face when exporting ITAR-controlled products, technical data, and software to U.S. Government customers that happen to be located outside the United States or to their American employees in foreign offices that work as "contractor support personnel" for U.S. Government customers situated overseas.[166] Furthermore, in June 2015, the Department of Commerce and the Department of State narrowed the definition of a digital export. The transfer of data is no longer considered an export if the data is unclassified, secured with encryption and cryptographic modules, and not stored in a country listed on the Country Group D:5 profile (Bureau of Industry and Security [BIS] countries subject to U.S. arms embargoes as identified by the State Department) or in the Russian Federation.[167] Yet, critics claim that the new rule will burden U.S. and foreign companies with establishing a system to ensure that their employees do not violate the substantive contact rule.[168]

One recommendation is to grant the individual, agency, or country a comprehensive blanket license once they have received an ITAR license. This option would be geared towards the academic community so that universities do not have to apply for a new license—and wait for an approval—whenever they want to start a new project.[169] An "academic" license might be developed that would apply to an entire foreign country and allow its students to study and

work in the United States without having to apply for a separate license for themselves. Another proposal is that once a country, agency, or company receives a license for one item, then that license could apply to the same items in the future.[170] All these recommendations would benefit not only the license recipients but would also ease the DDTC's workload, lowering its costs and allowing licenses to be issued faster.

Perhaps the most ambitious ECR attempt to streamline the process is to create a single U.S. arms export licensing agency in order to reduce wait times for export licenses (which can be over a month) and decrease general confusion about licensing.[171] Unlike other countries that export defense articles, the U.S. arms export regime is controlled by three agencies: DDTC, BIS, and the Treasury Department's Office of Foreign Assets Control. They have overlapping functions when it comes to ITAR. A GAO report found that only one out of the six major foreign defense exporters they studied had more than one agency handling defense exports, thereby avoiding the problem of overlapping jurisdiction.[172] The U.S. multiagency approach is a creature of another era, when products were designed with only a military or a civilian intent.[173] Another common problem is that the different agencies often do not communicate with one another regarding which license requests have been accepted or denied, leading to surprises and misunderstandings.

In 2010, the Obama administration recommended that a "single control list, enforcing agency, information technology system, and licensing agency" be implemented to make all exports, especially ITAR products, more efficient.[174] It is unclear whether a single licensing agency is necessary to solve this problem; perhaps better information technology (also on the ECR agenda) might do just as well.[175] On June 3,

2015, the Departments of Commerce and State published notices in the *Federal Register* proposing rules to harmonize the definitions used in ITAR and EAR as a step toward establishing a single shared export control list.[176]

On June 16, 2011, the Bureau of Industry and Security published a new Strategic Trade Authorization (STA) licensing exception to expedite transfers to as many as 44 countries that pose limited risk and to stimulate coordination among allies.[177] The STA authorizes the export, re-export and in-country transfer of certain dual-use items and less significant munitions items, predominantly parts and components, on the CCL to allies and friendly countries deemed as posing a low risk of unauthorized or impermissible end uses.[178] Although they are exempt from acquiring a specific license for these transactions, they must meet enhanced compliance requirements to prevent the re-export of covered U.S. EAR goods to unauthorized end-users. For example, they must certify that they will adhere to U.S. export control regulations, such as obtaining a U.S. license to export these items to non-STA eligible countries, and meet notification and consignee statement requirements.[179] The License Exemption STA applies to two groups of countries. The STA authorizes the first group, consisting of 36 countries, to export, re-export, and make in-country transfers of products and technologies that are controlled for multiple reasons, including national security, nuclear nonproliferation, regional stability, crime control, chemical or biological weapons, and "significant items."[180] The remaining eight countries are authorized to export, re-export, and make in-country transfers that are subject only to national security controls.[181] Items excluded from License Exception STA include encryption, certain pathogens and toxins, certain gas turbine

engine-related software and technology, certain types of missile technologies, and crime control items.[182] The Department of Commerce estimated that the STA will remove the need for tens of thousands of export licenses and retransfer authorizations annually.[183]

After struggling with its IT system, the BIS replaced all of its computers in 2010 in order to facilitate the transition to one single IT system. The U.S. Export Systems (USXPORTS) database of the DoD is expanding to include the State Department and the Department of Commerce.[184] As these three departments begin to use the same platform, the White House explains that "the three largest departments involved in export licensing will be on a single IT system, enabling them to better administer the licensing process and ensure that decisions made by the different departments are fully informed."[185] Designed to rationalize the licensing review process among the various agencies, it will serve as a foundation for the desired single licensing agency following completion. First, the administration wants USXPORTS to be adopted for internal communications. The administration has also created a single license application form.[186] Instead of applying for multiple licenses, Special Comprehensive Licenses (SCL) authorize companies who have established License Control Programs to conduct multiple exports. The administration hopes that in the future it will realize not only a single license review platform, but also a system for single submission and review.[187]

DEFENSE SECURITY COOPERATION AGENCY VISION 2020 STRATEGY

The Defense Security Cooperation Agency (DSCA), the office responsible for initiating Foreign Military Sales (FMS) with other governments, recently issued

a new strategy aimed at rationalizing the FMS process and strengthening coordination with partner nations. A major component of the policy is the *Vision 2020* strategy, which pushes Congress to streamline certain provisions under the Arms Export Control Act that permits government sales to allied countries, but restricts the transfer of such products to a third country. As NATO attempts to improve coordination through initiatives for joint development and the merging of assets and technology, this restriction is becoming a problem. It hinders the United States from being able to coordinate and support nonmember partner nations that need military assistance.[188]

DSCA states that *Vision 2020* aims to promote "a whole-of-government effort to build and maintain networks of defense relationships that achieve U.S. national security goals." Its three main goals are to synchronize "security cooperation activities," meet "customer expectations," and ensure "the effective and efficient use of community resources." Regarding the synchronization of security cooperation activities, it strives to lead coordination throughout the Security Cooperation Enterprise (SCE) by enabling effective decisionmaking and breeding adaptability in its procedures. In terms of meeting customer expectations, it stresses the need to cater its solutions to specific customer concerns in order to stay competitive in the international market and employ complete strategies. Pursuing efficiency and effectiveness, the DSCA highlights the need to use all the tools at its disposal and best manage declining resources.[189]

In order to avoid the roadblocks to effective cooperation brought on by the Arms Export Control Act, DSCA is making certain structural changes to its organization. For example, it has created integrated

regional teams that coordinate with the Pentagon's geographic combatant commanders in order to identify the specific needs of allied countries so that they can proactively address them. These reforms have been driven by tightening U.S. and foreign budgets, as well as increasing competition in the global marketplace, raising consumer pricing, and improving quality demands. While the United States historically has approached FMS conservatively, the evolving international market has forced them to adapt.[190] DSCA Senior Strategic Analyst Clayton Holt explained: "We had to be more responsive and provide our customers with a more responsive organization with more transparency, more visibility, so people could understand what's happening."[191]The new approach aims to make the government more proactive in supporting the defense needs of non-NATO foreign partners.[192] Still, it is only a modest step in the process and other reforms must come as well.[193]

EXPORT-IMPORT BANK

A related issue that could impact export control reform is the future role of the Export-Import (Ex-Im) Bank, whose future is under debate in Congress and beyond. The administration wants to renew its charter, but opposition in Congress to the Bank is strong, while some proponents want the Ex-Im Bank to return to its earlier mission of funding U.S. arms sales. The Bank is the official U.S. credit export agency offering loans to finance U.S. exports. The Bank's website states that it "enables U.S. companies—large and small—to turn export opportunities into real sales that help to maintain and create U.S. jobs and contribute to a stronger national economy."[194] It is an independent

agency and functions through the Export-Import Bank Act of 1945, a renewable charter. Congress establishes that financing by the Ex-Im must have assurance for repayment and stresses that it is to complement, rather than compete, with private money. The Ex-Im bank also follows the international guidelines laid out by the Organization for Economic Cooperation and Development. In fiscal year (FY) 2013, the Bank authorized 3,842 deals of support, resulting in $37.4 billion in American exports. As of March 31, 2014, the Ex-Im declares a default rate of 0.211 percent and claims that since 1992, it has a 50 cents on the dollar recovery rate for defaults. Most of its work revolves around direct "loans, loan guarantees, working capital finance, and export credit insurance." Normally, sales to military purchasers and defense or military goods are ineligible for financing, but there are some exceptions.[195]

Until the end of the Cold War, the Ex-Im Bank supported U.S. national security endeavors. As World War II escalated, President Franklin Roosevelt used the Ex-Im bank to support the new Soviet Union and to counter Japanese economic control in China and growing German influence in Latin America. The Bank bought foreign government notes, such as those from Mexico and Nicaragua, seeking to keep these states politically and economically tied to the United States.[196] The Bank financed close to $500 million per year in arms sales during the Cold War.[197] The executive branch also used the Ex-Im Bank to avoid foreign aid restrictions, which brought criticism from both sides of the political sphere. Republicans opposed issuing loans to build plants in Soviet bloc states, while the left was outraged when the Bank evaded congressional restrictions on military assistance for Vietnam. They also complained when the Bank funded both

sides of a conflict, such as India and Pakistan.[198] Congress eventually ended the Bank's direct arms export role by creating a distinct defense loan guarantee program that is hardly ever used.[199] Nonetheless, a major component of the debate over the Bank's reauthorization is the effect that changes will have on U.S. arms and defense exports. Citing an already large defense industry, opponents of the Bank believe that U.S. arms exporters do not need further financial support, while advocates for the Bank, often defense and aerospace companies themselves, state that the Bank is essential for allowing U.S. exporters to compete effectively with major foreign powers.

Critics of the Ex-Im believe it inappropriately tries to choose winners and losers when deciding whom to support.[200] Detractors argue that the Bank represents an example of unjustified, inefficient corporate welfare by giving wealth to major corporations that are politically connected.[201] American taxpayers must assume the risk of these loans, while the reward goes to corporations.[202] Opponents believe that companies that utilize the Bank's programs could, if they are good at what they do, easily obtain alternative private sector funding. Furthermore, U.S. firms that do not receive as much help from the Ex-Im Bank sometimes must compete with foreign companies that do.[203] Critics claim that issuing direct subsidies would more efficiently support U.S. arms sales.[204] They also complain about the distortions that result when unsubsidized exports struggle to obtain funding because the Ex-Im Bank encourages lenders to focus on subsidized projects. Thus, contrary to supporters of the Bank, foreign governments are not threatening the health of U.S. exports, but rather the American government itself.[205]

Supporters of the Ex-Im Bank contend that letting the bank's charter expire would be a poor strategy and unilaterally disarming since many other countries have agencies that finance exports.[206] The Ex-Im Bank's greatest benefactors and often greatest supporters are the U.S. defense and aerospace giants such as Boeing. The Bank helps them increase exports without having to conduct all the demanding financing work.[207] Proponents also believe that the Bank can help the United States to remain competitive in the international nuclear energy market, which will support U.S. nuclear nonproliferation goals.[208] Some want to enlarge the Bank's mandate to renew its authority to fund major arms deals.[209] A priority would be offering loans to less developed countries in Latin America, the Middle East, and Africa, where Russian and Chinese arms dealers are most active.[210] Critics condemn the idea that the Bank should finance arms deals and should, instead, support other U.S. foreign policy goals. Among other concerns, they worry that the Ex-Im Bank is controlled not by the Departments of State or Defense but by major, politically connected corporations who would prioritize their corporate interest over the national interest.[211]

EFFECTS AND OBSTACLES

If implemented as intended, an improved export reform system would benefit many U.S. exporters as well as several manufacturing sectors and countries. Fewer controls, clearer criteria, and more rapid licensing would eliminate some export barriers and produce additional benefits. A standardized export control system for U.S. technologies and manufacturers would make U.S. products and services more compet-

itive by making the licensing process clearer and more efficient. The rationalization of export controls would make the United States more attractive to foreign direct investment because such companies would find it easier to export products from the United States. U.S. businesses could leverage new technology transfer flexibility for more advantageous joint ventures. In terms of specific goods and services, all exporters will benefit from reduced jurisdictional conflicts and streamlined government oversight, but some sectors will benefit more than others. Many items on USML would be moved to CCL, while many items would be exempt from all controls. Restrictions could decrease on marine navigation systems, hydraulic parts, civilian microprocessors, computerized tools, construction equipment, and medical devices. Automobile and electricity generation equipment manufacturers could avoid the burden of obtaining government approval to export each part. U.S. national security should improve if U.S. law enforcement and intelligence entities were able to focus more on protecting only the most sensitive U.S. technologies and exports. The expanded opportunities for U.S. arms exports would increase interoperability with allies and partners that use the same military equipment.

The reforms would reduce the cost and delivery time of arms sales to foreign countries that otherwise must obtain individual export licenses for all spare parts and weapons subsystems. U.S. friends and allies would find it easier to purchase logistic support from U.S. arms manufacturers. For example, 20 percent of the export permits issued by the State Department in the past decade were for British customers and more than 90 percent were approved. The new STA allows for license-free export, with restrictions on re-export-

ing, of many dual-use items to two groups of countries. First, most European countries, plus Australia, Canada, New Zealand, Japan, South Korea, and Argentina, can import almost all items on the CCL that do not require a license by statute. Second, Albania, Hong Kong, India, Israel, Malta, Singapore, South Africa, and Taiwan are eligible for all items on the Wassenaar Arrangement Basic List. Meanwhile, countries like China and Saudi Arabia, whose governments are unpopular in the United States, would further benefit from depoliticizing the export approval process, which would decrease opportunities for U.S. domestic lobbies to oppose certain exports such as the sale of F-15 fighters to Saudi Arabia, the nuclear cooperation agreement with India, or the sale of communications routers to China.

Many U.S. investment projects in China depend on technology transfer and co-production with Chinese corporations; obtaining U.S. Government approval is difficult. India would also benefit from export control liberalization, especially with regards to dual-use materials. U.S. electrical and aviation goods account for 40 percent of total U.S. exports to India. The Indian Space Research Organization currently faces difficulty in gaining access to sensitive aerospace items and software. Foreign partners could more easily purchase middle- and lower-tier military equipment necessary for routine maintenance, research and development, and training. Such items could include satellite navigation guidance systems for precision-guided munitions, gas turbine engines for armored fighting vehicles, night vision gear, armor piercing ammunition, and nonlethal crowd suppression weaponry, which is also available from U.S. allies like France, Israel, and the UK.

Human rights groups and others have already raised significant concerns about the potential of these reforms to erode the current laws that were established to keep U.S. defensive assets out of the hands of terrorists, torturers, and belligerents. They believe that the decontrols will make it more likely that dangerous items will reach such recipients. Furthermore, they expect that the resources needed to move large numbers of items from USML to the CCL may divert attention to oversight of items still on USML. Critics also fear that the new STA exemption may increase the amount of sensitive items sent to allies and friends that could become available to hostile third party actors.[212] The administration argues that it is "a misconception that ECR is simply a decontrol effort that will result in U.S.-origin items being more widely available for use in human rights abuses. In fact, the opposite is true." According to the administration, for example, even for the STA countries, the United States is relaxing controls only on less-sensitive items and strengthening the audit trail for any sales of these articles. In addition, for items removed from USML, "the eased licensing burden will be balanced by an increase in the enforcement resources focused on the export of items" moved to the CCL. Furthermore, the administration claims that it is expanding exports controls to items on the CCL that had not previously been subject to UN and U.S. arms embargoes.[213]

U.S. industry hopes that the reforms will continue to remove items from ITAR jurisdiction, resulting in greater predictability in the licensing system, reducing delays, and making U.S. exporters more competitive.[214] For example, the reforms have been welcomed by the Aerospace Industries Association, whose members believe that the changes will strengthen oppor-

tunities for U.S. companies to sell space and satellite products internationally and level the playing field for the global market of such products.[215] As of 2015, the average time to process an ITAR license request had fallen to about 25 days.[216]

Even so, while moving items from ITAR to the EAR presents visible action, sometimes the regulatory burden on U.S. exporters or foreign importers is not significantly eased. For example, changes in the EAR regulations created a new category for many aircraft parts moved off of USML, called the "600 Series."[217] This new category requires more stringent licensing than other EAR items, which some exporters complain makes it hard to distinguish from previous ITAR-mandated licensing processes.[218] Although Gates and other officials have claimed that creating a single list of restricted national security exports would streamline the U.S. arms export process, the new distinctions ("tiers") within the list could engender more problems with arbitrary distinctions. Moreover, with so many different satellite and spacecraft items being transferred from USML and ITAR control to CCL and EAR control, space exporters and manufacturers may find it challenging to establish how their products fit into the new, complex, and shifting control system. They must master the regulations and licensing procedures of the DOC, which differ sharply from those of the DDTC.[219]

On November 9, 2010, Executive Order 13558 created the new Export Enforcement Coordination Center (E2C2), a first step toward building a single clearinghouse for handling exports and coordinating licensing. The new center will coordinate the efforts of eight U.S. governmental departments and 15 federal agencies to detect, prevent, disrupt, investigate, and

prosecute violations of U.S. export control laws by increasing the sharing of intelligence and law enforcement data.[220] The E2C2's mission aims to create:

> a more robust whole-of-government approach to enforcement that ensures interagency coordination, promotes multiagency collaboration, minimizes the duplication of efforts and strengthens the link between law enforcement, the intelligence community, and export licensing entities.[221]

On November 20, 2014, the Department of Commerce launched a web search tool for the Consolidated Screening List (CSL), a streamlined collection of nine different "screening lists" managed by the Commerce, State, and Treasury Departments. Altogether, CSL holds the names of more than 8,000 firms and individuals subject to U.S. export regulations, sanctions, or other restrictions—U.S. companies are generally prohibited from doing business with them.[222] However, creating a single export licensing and screening agency would require legislation by a Congress still dissatisfied by the perceived problems of the most recent consolidation of executive agencies, the Department of Homeland Security, in 2003.[223] It is unclear how beneficial a single licensing agency would be for U.S. arms exporters. It would likely reduce agency overhead and save money, but it may not accelerate the issuing of export licenses. Would a single agency, tasked with twice the work and twice as complicated a job as the DDTC and EAR, be more efficient? Probably not, though such an agency would also make the export process more transparent and organized.

Although the ECR should save the Pentagon money in the long run, the current budgetary crisis is impeding the reform's implementation. To take one recent example, the DoD Better Buying initiative promotes the principle of design for exportability by mandating the use of "defense exportability features" in choosing weapons systems. However, the debate continues over who should pay for the short-term costs, which, in the long run, should increase U.S. military exports, raise interoperability, and reduce costs through larger production runs and other efficiencies.

The U.S. system of separation of powers presents major institutional barriers to export control reform. ECR Phase III will require major legislative changes to consolidate the reorganizations. Many different congressional committees have some authority over U.S. exports, and, at times, the different congressional committees have favored diverging approaches. One consideration that can often unite them is limiting the discretion of the executive branch and constraining near-term spending on reforms that will only have long-term payoffs. The Congress has not fully supported the administration's reform plan, and no consensus has arisen behind the legislation required for wholesale reform. Even within the executive branch bureaucracy, the export reform issue pits U.S. national security against economic agencies.

The final objective of the reform process is to amend every USML category, but the Obama administration is unlikely to complete revisions of the list by the time it leaves office in January 2017. The other envisaged reforms may take considerably longer than updating the Munitions List, raising the obvious question of whether the next administration will be as committed to reforming ITAR as the Obama administration, as

well as whether it will seek the same export reforms or proceed in a different direction.

RECOMMENDATIONS

The U.S. Army should welcome efforts to reform the U.S. arms export process. A more competitive and vibrant U.S. defense industry can provide better military technologies to the Army and its allies. U.S. economic strength, reflecting general U.S. defense industrial capabilities, is the foundation of U.S. national power. U.S. arms sales reduce the Army's overhead costs, maintain U.S. defense production lines and a highly skilled and trained workforce essential for resetting and reconstituting the force, expand the range of foreign defense suppliers, promote interoperability between U.S. and foreign military forces, and make important contributions to U.S. international account balances and national security.

The current regulations adopted during the Cold War are outdated in a global environment characterized by the proliferation and constant evolution of weapons technology. ITAR has long impeded U.S. defense firms seeking to compete in an increasingly global defense market. Although the United States has a larger share of the global arms market than any other country, reductions to the market, such as those caused by ITAR, impede U.S. Army goals. These impediments make it more difficult to sustain core U.S. defense technological and industrial advantages, reduce U.S. Army interoperability with foreign partners that purchase non-U.S. weapons, and create other undesirable effects for the U.S. Army and other U.S. military services.

Reform would allow the U.S. export managers to concentrate more on the national security concerns of the greatest importance, rather than wasting time and resources on insignificant considerations. By replacing a redundant, complex, and inefficient system, the United States would better secure U.S. national security interests, apply limited resources mostly to the most important threats, strengthen interoperability with allies through expedited and expanded access to U.S. weaponry, and bolster the U.S. defense industrial base by decreasing incentives for foreign companies and militaries to stop using U.S. exports. The creation of a single arms export list with "tiered" controls, with the most stringent controls applied only to the most sensitive exports, along with a single U.S. arms export-licensing agency to manage the process by adjudicating license applications and enforcing these decisions, would reduce the time to approve export licenses and decrease the general confusion about licensing.

The *Quadrennial Defense Review* directs DoD, including the Army, to promote innovation, prepare to fight with partners as well as alone, ensure that critical skills are retained, and be able to mobilize its capabilities for sustained conflict. Whatever the result of the current effort, it will be essential for future U.S. presidential administrations, members of Congress, and U.S. Army leaders to treat export control reform as a living and likely unending process, and to take into constant account any changes in threats, technology and other critical variables.

ENDNOTES

1. "The International Traffic in Arms Regulations (ITAR)," Washington, DC: U.S. Department of State, Directorate of Defense Trade Controls, July 7, 2015, available from *https://www.pmddtc.state.gov/regulations_laws/itar.html*.

2. "Export Control Provisions," Washington, DC: Federation of American Scientists, October 12, 1998, available from *www.fas.org/nuke/control/export/provisions.htm.*

3. *Ibid*.

4. Ronald J. Stay, "Cryptic Controversy: U.S. Government Restrictions on Cryptography Exports and the Plight of Philip Zimmermann," *Georgia State University Law Review,* Vol. 13, No. 2, February 1997, p. 586.

5. "22 U.S. Code § 2778—Control of arms exports and imports," *Cornell University Law School: Legal Information Institute*, 2013, available from *www.law.cornell.edu/uscode/text/22/2778.*

6. "Executive Order 11958—Administration of arms exports controls," Washington, DC: U.S. National Archives and Records Administration, January 18, 1977, available from *www.archives.gov/federal-register/codification/executive-order/11958.html*.

7. Peter Tompa, "The Arms Export Control Act and Congressional Codetermination over Arms Sales," *The American University International Law Review,* Vol. 1, No. 1, p. 293.

8. *Ibid*., pp. 296, 298.

9. "Export Control Provisions."

10. "Arms Export Control Act (P.L. 90-629)," Washington, DC: U.S. Congress, October 8, 2010, p. 433.

11. "22 USC § 2751—Need for international defense cooperation and military export controls: Presidential waiver; report to Congress: arms sales policy," *Cornell University Law School: Legal Information Institute*, 2013, available from *https://www.law.cornell.*

edu/uscode/text/22/2751; see also Cristy Passman, "International Security Assistance and Arms Export Control Act of 1976," *Maryland Journal of International Law*, Vol. 2, No. 2, May 4, 1976, p. 174, available from *digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1029&context=mjil*.

12. Morgan Dwyer, Gwen Gettliffe, Whitney Lohmeyer, Annie Marinan, Erik Stockham, Annalisa Weigel, and Kerri Cahoy, "The Global Impact of ITAR on the For-Profit and Non-Profit Space Communities," Cambridge, MA: Massachusetts Institute of Technology, May 10, 2012, available from *ssl.mit.edu/files/website/class_reports/student_paper-The%20Global%20Impact%20of%20ITAR%20on%20the%20For%20Profit%20and%20Non%20Profit%20Space%20Communities.pdf.*

13. "Administration of Export Controls on Encryption Products," *Federal Register: The Daily Journal of the United States Government*, November 19, 1996, available from *https://www.federalregister.gov/articles/1996/11/19/96-29692/administration-of-export-controls-on-encryption-products.*

14. Benjamin Stone and Hugo Posey, "U.S. Defense-Export Controls: Stuck in Cold War," *National Defense Magazine,* September 2004, available from *www.nationaldefensemagazine.org/archive/2004/September/Pages/US_Defense-Export3439.aspx.*

15. Christopher Cox, Chairman, "Final Report of the United States House of Representatives Select Committee on U.S. National Security and Military/Commercial Concerns with the People's Republic of China," Chapter 6, May 1999, available from *www.house.gov/coxreport/body/ch6bod.html*; see also Jonathan D. Pollack, "The Cox Report's 'Dirty Little Secret,'" *Arms Control Today*, April-May 1999, available from *www.armscontrol.org/act/1999_04-05/jpam99.*

16. U.S. Congress, "The Strom Thurmond National Defense Authorization Act For Fiscal Year 1999," 105th Cong., 2nd sess., October 17, 1998, Washington, DC: U.S. Government Printing Office, 1999, pp. 1-359.

17. "Earthbound," *The Economist,* August 21, 2008, available from *www.economist.com/node/11965352/print.*

18. "Subchapter M—International Traffic in Arms Regulations," Washington, DC: U.S. Department of State, 2013, available from *https://www.pmddtc.state.gov/regulations_laws/documents/official_itar/2013/ITAR_Part_120.pdf.*

19. *Ibid*.

20. "Notification of Changes in Registration Information," Washington, DC: U.S. Department of State, Directorate of Defense Trade Controls, November 6, 2012, available from *www.pmddtc.state.gov/registration/notification_chreg.html*; see also 22 .F.R. §120.4, *Cornell University Law School: Legal Information Institute*, 2013, available from *https://www.law.cornell.edu/cfr/text/22/120.4*.

21. "Registration," Washington, DC: U.S. Department of State, Directorate of Defense Trade Controls, October 24, 2013, available from *www.pmddtc.state.gov/registration/*.

22. John A. Ordway, "U.S. International Traffic in Arms Regulations ('ITAR')," Washington, DC: Berliner, Corcoran & Rowe, L.L.P., p. 7, available from *www.cistec.or.jp/english/service/report/0802ITARarticleforCISTEC.pdf*.

23. 22 CFR § 120.6. Items currently on USML belong to one of the following categories: Firearms, close assault weapons and combat shotguns, guns and armament, ammunition/ordinance, launch vehicles, guided missiles, ballistic missiles, rockets, torpedoes, bombs and mines, explosives and energetic materials, propellants, incendiary agents and their constituents, vessels of war and special naval equipment, aircraft and associated equipment, military training equipment and training, protective personnel equipment and shelters, military electronics, fire control, range finder, optical and guidance and control equipment, auxiliary military equipment, toxicological agents, including chemical agents, biological agents and related equipment, nuclear weapons and design and testing related items, directed energy weapons, submersible vessels, oceanographic and associated equipment "Subchapter M—International Traffic in Arms Regulations, Part 121-The United States Munitions List," Washington, DC: U.S. Department of State, available from *www.ecfr.gov/cgi-bin/text-idx?SID=86008bdffd1fb2e79cc5df41a180750a&node=22:1.0.1.13.58&rgn=div5*.

24. 22 CFR § 121.1.

25. 22 CFR Part 120.10, available from *https://www.pmddtc.state.gov/regulations_laws/itar.html*.

26. Formally, ITAR defines "exports" to include:

Sending or taking a defense article out of the United States in any manner, except by mere travel outside of the United States by a person whose personal knowledge includes technical data; or

Transferring registration, control or ownership to a *foreign person* of any aircraft, vessel, or satellite covered by the US Munitions List, whether in the United States or abroad; or

Disclosing (including oral or visual disclosure) or transferring in the United States any defense article to an embassy, any agency or subdivision of a foreign government (e.g. diplomatic missions); or,

Disclosing (including oral or visual disclosure) or transferring technical data to a foreign person, whether in the United States or abroad;

Performing a defense service on behalf of, or for the benefit for, a foreign person, whether in the United States or abroad. A launch vehicle or payload shall not, by reason of the launching of such a vehicle, be considered an export for purposes of this subchapter. However for certain limited purposes, the controls of this subchapter may apply to any sale, transfer or proposal to sell or transfer defense articles or defense services.

22 CFR § 120.17.

27. ExportSolutionsInc, "The Best Webinar You'll Ever Attend About Export Control," September 11, 2015, available from *www.youtube.com/watch?v=XYuZtdeJOBo*.

28. ITAR, p. 463, available from *www.gpo.gov/fdsys/pkg/CFR-2005-title22-vol1/pdf/CFR-2005-title22-vol1-part123.pdf*; see also 22§ CFR 120.9.

29. "Notification of Changes in Registration Information," Washington, DC: Department of State, Directorate of Defense Trade Controls, May 28, 2013, available from *www.pmddtc.state.gov/registration/notification_chreg.html.*

30. "Renewing Your Registration," Washington, DC: Department of State, Directorate of Defense Trade Controls, January 29, 2015, available from *www.pmddtc.state.gov/registration/renewing_yr.html*.

31. Section 120.16 defines as any natural person who is not a lawful permanent resident . . . or who is not a protected individual . . . [or] any foreign corporation, business association, partnership, trust, society or any other entity or group that is not incorporated or organized to do business in the United States, as well as international organizations, foreign government, and any agency or subdivision of foreign governments (e.g., diplomatic missions).
22 CFR § 120.16.

32. Ordway.

33. David M. Dunbar, "Key Concepts and Definitions," College Park, MD: University of Maryland, p. 2, available from *www.docsrush.net/2521710/key-concepts-and-definitions-under-the-international-traffic.html*.

34. Ordway, p. 1.

35. 22 CFR § 120.15. Protected individuals include certain refugees and those who have been granted political asylum, See USC 8 1324b(a)(3).

36. Tamer A. Soliman, Mac B. Fadlallah and Alan M. Hayes, "Inside New ITAR Rules For US Defense Service Providers," *Law 360*, June 29, 2015, *www.law360.com/articles/673558/inside-new-itar-rules-for-us-defense-service-providers.*

37. 22 CFR Part 120.2.

38. 22 CFR Part 120.4(2).

39. 22 CFR Part 120.3

40. ITAR, p. 423, available from *www.gpo.gov/fdsys/pkg/CFR-2005-title22-vol1/pdf/CFR-2005-title22-vol1-part120.pdf*; see also CFR 22 120.3.

41. "Export Control Provisions."

42. "Dual Use Export Licenses," Washington, DC: International Trade Administration, October 4, 2012, available from *export.gov/regulation/eg_main_018229.asp*.

43. *Ibid*.

44. 22 CFR Part 120.4.

45. "The form of the item is its defined configuration, including the geometrically measured configuration, density, and weight or other visual parameters which uniquely characterize the item, component or assembly." See ITAR, p. 464, available from *www.gpo.gov/fdsys/pkg/CFR-2005-title22-vol1/pdf/CFR-2005-title22-vol1-part123.pdf*.

46. 22 CFR Part 120.4.

47. 22 CFR 123.9(b).

48. 22 CFR 129.3(c).

49. 22 CFR § 122.1-122.5.

50. 22 CFR § 122.1.

51. *Ibid*.

52. 22 CFR § 122.3.

53. 22 CFR § 122.5.

54. 22 CFR § 123.16.

55. 22 CFR § 121.1, Category XIII(b)(1).

56. 22 CFR § 123.

57. 22 CFR § 124.

58. 22 CFR § 124.11.

59. *Ibid*.

60. 22 CFR § 125.1.

61. *Ibid*.

62. 22 CFR § 125.3.

63. 22 CFR § 125.4.

64. 22 CFR § 126.1.

65. *Ibid*.

66. 22 CFR § 126.3.

67. Frank Ruggiero, "Defense Trade Issues," *Defense News*, April 21, 2008, available from *2001-2009.state.gov/t/pm/rls/rm/104012.htm*.

68. 22 CFR § 126.14.

69. "USA Moves to Improve Arms Export Regulation Process," *Defense Industry Daily,* July 20, 2011, available from *www.defenseindustrydaily.com/usa-moves-to-reform-arms-export-regulation-process-04665/.*

70. Taylor Dinerman, "America's Economic War Against Itself: US Export Controls," New York: GateStone Institute, January 2, 2012, available from *www.gatestoneinstitute.org/2717/us-export-controls.*

71. These documents officially include an application for permanent export or a temporary import license and supporting documents, Shipper's Export Declaration, Invoice, Declaration of destination, Delivery verification, Application for temporary export, Application for registration, Purchase order, Foreign import certificate, Bill-of-lading, Airway bill, Nontransfer and use certificate, and any other document used in the regulation or control of a defense article, defense service or technical data for which a license or approval is required . . .
22 CFR § 127.2.

72. 22 CFR Part 127.

73. *Ibid*.

74. Ordway, pp. 4-5.

75. *Ibid*.

76. ExportSolutionsInc, "The Best Webinar You'll Ever Attend About Export Control," September 11, 2015, *https://www.youtube.com/watch?v=XYuZtdeJOBo.*

77. 22 CFR §128.1.

78. 22 CFR § 128.1-128.17.

79. 22 CFR § 129.1.

80. 22 CFR § 129.3.

81. 22 CFR § 130.9.

82. 22 CFR § 130.1-130.17.

83. Jonathan Caverley and Ethan B. Kapstein, "Arms Away: How Washington Squandered Its Monopoly on Weapons Sales," *Foreign Affairs,* October 2012, available from *www.foreignaffairs.com/articles/138035/jonathan-caverley-and-ethan-b-kapstein/arms-away*.

84. "High Risk Series: An Update," Washington, DC: U.S. Government Accountability Office (GAO), January 2007, p. 2, available from *www.gao.gov/assets/260/255951.pdf*; see also "Failure to Protect Sensitive Technology," Washington, DC: Center for Public Integrity, December 10, 2008, available from *www.publicintegrity.org/2008/12/10/6256/failure-protect-sensitive-technology*.

85. *Export Controls: State and Commerce Have Not Taken Basic Steps to Better Ensure U.S. Interests Are Protected*," Statement of Ann Calvaresi Barr, Director Acquisition and Sourcing Management, Testimony Before the Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of

Columbia, Committee on Homeland Security and Governmental Affairs, U.S. Senate, Washington, DC: GAO, April 24, 2008, p. 2, available from *www.gao.gov/new.items/d08710t.pdf.*

86. Mitchell B. Wallerstein, "Losing Controls: How U.S. Export Restrictions Jeopardize National Security and Harm Competitiveness," *Foreign Affairs,* Vol. 88, No. 6, November-December 2009, p. 14.

87. "Briefing of the Working Group on the Health of the U.S. Space Industrial Base and the Impact of Export Controls," Washington, DC: Center for Strategic and International Studies, February 2008, available from *csis.org/files/media/csis/pubs/021908_csis_spaceindustryitar_final.pdf.*

88. "From Reform to Revenue: The Impact of Amending ITAR on New Space Markets," *New Space Global Analysis*, March 29, 2013, available from *bigthink.com/above-the-clouds/from-reform-to-revenue-the-impact-of-amending-itar-on-newspace-markets.*

89. Dwyer *et al*.; see also Tobin L. Smith, Josh Trapani, Anthony Decrappeo, David Kennedy, "Reforming Regulation of Research Universities," *Issues in Science and Technology*, Summer 2011, pp. 57-64.

90. David A. Broniatowski *et al*., "Balancing the Needs for Space Research and National Security in ITAR," Reston, VA: American Institute of Aeronautics and Astronautics, p. 8, available from *www.academia.edu/1416900/Balancing_the_Needs_for_Space_Research_and_National_Security_in_the_ITAR.*

91. *Ibid*., p. 6.

92. Dwyer et al.

93. *Ibid*.

94. "Export Controls: Improvements Needed to Prevent Unauthorized Technology Releases to Foreign Nationals in the United States," GAO-10-557, Washington, DC: GAO, February 2, 2011, p. 7, available from *www.gao.gov/products/GAO-11-354*.

95. John McHale, "Export compliance reforms on the way for aircraft and satellite suppliers," Military Embedded Systems, available from *mil-embedded.com/articles/export-reforms-the-for-aircraft-satellite-suppliers/*.

96. Jim Wolf, "Exclusive: U.S. squeezes French-led satellite maker over China," Reuters, February 9, 2012, available from *www.reuters.com/article/2012/02/09/us-usa-france-china-satellite-idUSTRE8181F020120209*.

97. Steve Brotherton, "Beyond Reach? How to Develop ITAR-free systems?" WorldECR, March 2011, pp. 3-4, available from *www.worldecr.com/archives/beyond-reach-how-to-develop-itar-free-systems-2/*.

98. Pranab Dhal Samanta, "Your firms are out of fighter contract fray, India to US," *Indian Express*, April 28, 2011, available from *www.indianexpress.com/news/your-firms-are-out-of-fighter-contract-fray-india-to-us/782696/*.

99. Sandra I. Irwin, "U.S. Industry Loses Big in India: Is ITAR to Blame?" *National Defense Magazine,* April 28, 2011, available from *www.nationaldefensemagazine.org/blog/lists/posts/post.aspx?ID=402*.

100. "Brazil's F-X2 Fighter Competition," *Defense Industry Daily*, June 19, 2013, available from *www.defenseindustrydaily.com/brazil-embarking-upon-f-x2-fighter-program-04179/*.

101. Harrison G. Wolf, "ITAR Reforms for Dual-Use Technologies: A Case Analysis and Policy Outline," Los Angeles: CA, Viterbi School of Engineering, 2012, available from *viterbi.usc.edu/aviation/assets/002/79883.pdf*.

102. Michèle Flournoy, "Want to Export an F-16 Fighter Jet?" *The Wall Street Journal,* March 11, 2013, available from *online.wsj.com/article/SB10001424127887324128504578346332458725010.html*.

103. Mitchell B. Wallerstein, "Losing Controls: How U.S. Export Restrictions Jeopardize National Security and Harm Competitiveness," *Foreign Affairs,* Vol. 86, No. 6, November-December 2009, p. 13.

104. Peter Ito, David M. Moore, Stuart Young, Kevin Burgess, and Peter Antill, "Impact of U.S. Export Control and Technology Transfer Regime on the Joint Strike Fighter (JSF) Project-Views of Key UK Stakeholders," *International Journal of Defense Acquisition Management,* Vol. 4, 2011, pp. 1-52, available from *www.acquisitionjournal.org/articles/NPS2011-01.pdf*.

105. Rachel Lehmer Claus, "Space-Based Fundamental Research and ITAR: A Study in Vagueness, Overbreadth, and Prior Restraint," *Santa Clara Journal Of International Law*, Vol. 2, No. 1, 2004, p. 4.

106. Zach Rosenberg, "Space industry unites in criticism of ITAR restrictions," Flight Global, November 24, 2011, available from *www.flightglobal.com/news/articles/in-focus-space-industry-unites-in-criticism-of-itar-restrictions-364544*; and Ryan J. Zelnio, "Determining the Effects of ITAR Regulation on the Commercial Space Manufacturing Sector," Fairfax, VA: George Mason University, p. 17, available from sc*holar.googleusercontent.com/scholar?q=cache:V0f2Esmwj9IJ:scholar.google.com/+%22ITAR%22&hl=en&as_sdt=0,47*.

107. "Defense Industrial Base Assessment: U.S. Space Industry—Final Report," Dayton, OH: U.S. Air Force, August 31, 2007, available from *https://www.bis.doc.gov/index.php/forms-documents/doc_view/38-defense-industrial-base-assessment-of-the-u-s-space-industry-2007.*

108. "Competing for Space: Satellite Export Policy and U.S. National Security," Arlington, VA: Aerospace Industries Association, January 2012, p. iii, available from *www.aia-aerospace.org/assets/CompetingForSpaceReport.pdf.*

109. Marty Hauser and Micah Walter-Range, "ITAR and the U.S. Space Industry," Washington, DC: Space Foundation, 2008, p. 1, available from *www.spacefoundation.org/sites/default/files/downloads/SpaceFoundation_ITAR_0.pdf*.

110. Peter B. de Selding, "U.S. Satellite Export Regs Remain a Frustration for European Industry," *Space News*, February 7, 2014, available from *spacenews.com/39414us-satellite-export-regs-remain-a-frustration-for-european-industry*.

111. Sandra I. Erwin, "Export Rules Under Fire for Eroding U.S. Space Industry," *National Defense Magazine,* June, 2009, available from *www.nationaldefensemagazine.org/archive/2009/June/Pages/ExportRulesUnderFireforErodingUSSpaceIndustry.aspx.*

112. Steven Overly, "For the U.S. Satellite Industry, Strict Export Controls Cost Market Share," *The Washington Post*, March 27, 2011, available from *articles.washingtonpost.com/2011-03-27/business/35260683_1_export-controls-satellite-industry-iridium*.

113. Richard Kusiolek, "ITAR: Balancing the Global Playing Field?" *Satellite Today,* August 1, 2008, available from *www.satellitetoday.com/via/features/ITAR-Balancing-the-Global-Playing-Field_23882.html*.

114. Sandra I. Erwin, "Export Rules Under Fire for Eroding U.S. Space Industry," *National Defense Magazine,* June, 2009, available from *nationaldefensemagazine.org/archive/2009/June/Pages/ExportRulesUnderFireforErodingUSSpaceIndustry.aspx.*

115. John Hillery, "U.S. Satellite Export Control Policy," Washington, DC: Center for Strategic and International Studies, September 20, 2006, p. 1, available from *csis.org/files/media/csis/pubs/060921_sat_export_controls.pdf*.

116. *Ibid*.

117. "Health of the U.S. Space Industrial Base."

118. Marty Bollinger and Joshua M. Boehm, "Moving Toward a Faster and More Predictable Process of Licensing Defense Articles and Services for Export: Recommendations for Government and Industry," Frederick, MD: Booz Allen Hamilton, May 2006, available from *www.boozallen.com/media/file/Export_Controls_Survey.pdf*. See also "U.S. Space Industry "Deep Dive" Assessment: Impact of U.S. Export Controls on the Space Industrial Base," Washington, DC: U.S. Department of Commerce, February 2014, available from *www.bis.doc.gov/index.php/forms-documents/doc_view/898-space-export-control-report*.

119. Robert M. Gates, "Business Executives for National Security" Speech, Washington, DC: U.S. Department of Defense, April 20, 2010, available from *archive.defense.gov/Speeches/Speech.aspx?SpeechID=1453*.

120. Department of Justice, "Fact Sheet: Major U.S. Export Enforcement Actions in the Past Year," Washington, DC: Department of Justice, October 11, 2007, available from *www.justice.gov/opa/pr/2007/October/07_nsd_807.html*. See also U.S. Attorney's Office, District of New Mexico, "Chinese National Pleads Guilty to Arms Export Control Act Violations," Albuquerque, NM: Foreign Bureau of Investigation, July 23, 2014, available from *www.fbi.gov/albuquerque/press-releases/2014/chinese-national-pleads-guilty-to-arms-export-control-act-violations*.

121. Wolf.

122. *Ibid*.

123. The preceding George Bush administration also made a modest effort at export reform. For example, a Presidential Directive issued in January 2008 called for reducing the export licensing time to no more than 60 days and for streamlining the process of how technology is assessed in regards to the USMCL.

124. Evelyn N. Farkas, "U.S. Export Controls: Emerging Consensus on Increasing Risk," Washington, DC: American Security Project, April 2010, p. 1, available from a*mericansecurityproject.org/wp-content/uploads/2010/09/US-Export-Controls-Consensus-and-Risk-FINAL.pdf*.

125. Caroline Atkinson, "The Path Forward on Export Control Reform," Washington, DC: Center for Strategic and International Studies, February 4, 2014, available from *csis.org/event/path-forward-export-control-reform*.

126. Ian F. Fergusson and Paul K. Kerr, "The U.S. Export Control System and the President's Reform Initiative," Washington, DC: Congressional Research Service, April 19, 2013, p. 14, available from *www.fas.org/sgp/crs/natsec/R41916.pdf*.

127. U.S. Department of State, "Amendment to the International Traffic in Arms Regulations: Initial Implementation of Export Control Reform," *Federal Register*, Vol. 78, No. 73, April 16, 2013, p. 22740.

128. Daniel Shortt, "State Department Exports Items From ITAR to EAR," May 15, 2013, available from *www.wecomply.com/*

blog/post/1639480-State-Department-Exports-Items-From-ITAR-to-EAR.

129. "Export Control Reform News," U.S. Export Control Reform, July 30, 2013, available from *export.gov/ecr/eg_main_043652.asp*.

130. "President's Export Control Reform Initiative," ECR Blog, July 28, 2015, available from *www.export.gov/ecr/*.

131. Atkinson.

132. *Ibid*.

133. "Export Control Reform," Washington, DC: Department of State, Directorate of Defense Trade Controls, July 31, 2014, available from *www.pmddtc.state.gov/ECR/index.html.*

134. "President's Export Control Reform Initiative."

135. The National Defense Authorization Act For Fiscal Year 2010, Pub. Law, No. 111-84, 123 Stat. 2190, 2010, available from *www.gpo.gov/fdsys/pkg/PLAW-111publ84/html/PLAW-111publ84.htm*.

136. Christopher R. Wall, Stephan E. Becker, and Benjamin J. Cote, "Obama Administration Moves Forward With Export Control Reform," Washington, DC: Pillsbury Law, March 15, 2013, available from *www.pillsburylaw.com/publications/obama-administration-moves-forward-with-export-control-reform*.

137. "Amendment to the International Traffic in Arms Regulations: Revision of U.S. Munitions List Category XV and Definition of 'Defense Service'," Washington, DC: *U.S. Federal Register*, 2013, available from *https://www.federalregister.gov/articles/2013/05/24/2013-11985/amendment-to-the-international-traffic-in-arms-regulations-revision-of-us-munitions-list-category-xv#h-8*.

138. Jeffrey P. Nosanov, "Viewpoint: International Traffic in Arms Regulations—Controversy and Reform," *Astropolitics: The International Journal of Space Politics & Policy*, November 3, 2009, available from *www.tandfonline.com/loi/fast20.*

139. "President Obama Issues Presidential Determination to Facilitate Satellite Reclassification," *Global Trade Expertise*, November 8, 2013, available from *www.globaltradeexpertise.com/news/2013/11/8/president-obama-issues-presidential-determination-to-facilitate-satellite-reclassification*.

140. Hauser and Walter-Range, p. 2.

141. *Ibid*.

142. *Ibid*.

143. Sheppard Mullin, "ECR Series—Episode II: The First Change—Reevaluating your ITAR Aircraft Parts," July 11, 2013, available from *www.globaltradelawblog.com/2013/07/11/what-export-control-reform-means-for-you-let-us-cl-ear-up-changes-to-the-itar-episode-ii-the-first-change-reevaluating-your-itar-aircraft-parts/*.

144. Veronica Magan, "President Obama Signs Law, Makes Communications Satellites Legal for Export," *Satellite Today,* January 7, 2013, available from *www.satellitetoday.com/st/curated/40373.html*.

145. John R. Shane, Lori Scheetz, and Laura El-Sabaawi, "U.S. State and Commerce Departments reform export controls applicable to satellites and spacecraft systems," Winchester Walk, London, UK: Globe Business Publishing Ltd, May 16, 2014, available from *www.lexology.com/library/detail.aspx?g=f1958030-537d-40dd-aeef-1f363dcd1797*.

146. Rick Phipps, "Reforms on Satellites Arrive," *Commonwealth Trading Partners*, May 14, 2014, available from *www.ctp-inc.com/reforms-satellites-arrive/*.

147. Shane, Scheetz, and El-Sabaawi.

148. *Ibid*.

149. *Ibid*.

150. Goldstein PLLC, "Amid Many Stumbles, One Giant Leap for ECR," *Defense Trade Law Blog*, May 21, 2014, available

from *defensetradelaw.com/2014/05/21/amid-many-stumbles-one-giant-leap-for-ecr/.*

151. Nina Shenai, "Export Control Reform 2010: Transforming the Legal Architecture of Dual-Use and Defense Trade Controls," Washington, DC: American Enterprise Institute, February 2, 2010, pp. 8-9, available from *www.aei.org/files/2010/02/02/Export%20Control%20Reform%20Paper.pdf*.

152. "Revisions to the Export Administration Regulations: Initial Implementation of Export Control Reform," *Federal Register*, Vol. 78, April 16, 2013, pp. 22660 and 22740.

153. *Ibid.,* p. 22744.

154. U.S. Department of State, "Amendment to the International Traffic in Arms Regulations: Initial Implementation of Export Control Reform," *Federal Register,* Vol. 78, No. 73, April 2013, p. 22745.

155. The new rules do confirm, however, that existing commodity jurisdiction judgments will not be reversed by the new rules. U.S. Department of State, "Amendment to the International Traffic in Arms Regulations: Initial Implementation of Export Control Reform," *Federal Register,* Vol. 78, No. 73, p. 22745.

156. Micah Zenko, "The Great Drone Contradiction," *Foreign Policy*, February 19, 2015, available from *foreignpolicy.com/2015/02/19/the-great-drone-contradiction-unmanned-aircraft-systems/.*

157. Bill Carey, "U.S. Export Policy Allows Wider Unmanned Aircraft Sales," AINonline, February 17, 2015, available from *www.ainonline.com/aviation-news/defense/2015-02-17/us-export-policy-allows-wider-unmanned-aircraft-sales*.

158. Office of the Spokesperson, "U.S. Export Policy for Military Unmanned Aerial Systems," Washington, DC: U.S. Department of State, February 17, 2015, available from *www.state.gov/r/pa/prs/ps/2015/02/237541.htm*.

159. Andrew Hunter and Andrew Metrick, "Not So Fast-U.S. Drone Export Policy Isn't as 'New and Improved' as Advertised," *FYSA: For Your Situational Awareness*, Issue 17, CSIS, March 2015, *csis.org/files/publication/150401_ISP_FYSA_Issue_17_MAR_2015.pdf*.

160. Carey.

161. John M. Hynes, "New ITAR Rule on Transfer of Defense Articles to Dual and Third-Country Nationals Creates Substantial New Compliance Obligations," *The National Law Review,* June 23, 2011, available from *www.natlawreview.com/article/new-itar-rule-transfer-defense-articles-to-dual-and-third-country-nationals-creates-substant*.

162. U.S. Department of State, "International Traffic in Arms Regulations: Dual Nationals and Third-Country Nationals Employed by End-Users," *Federal Register*, Vol. 76, No. 94, p. 28177.

163. *Ibid*.

164. Hynes.

165. *Ibid*.

166. Thomas B. McVey, "Proposed ITAR Amendment Provides Important Benefit for Government Contractors," *Williams Mullen*, July 9, 2015, *www.williamsmullen.com/news/proposed-itar-amendment-provides-important-benefit-government-contractors*. A copy of the proposed regulation can be found at: *www.pmddtc.state.gov/FR/2015/2015-12295_05_22_2015.pdf*.

167. Thomas B. McVey, "Proposed Amendments Provide Data Security Standard Under ITAR and EAR," Williams Mullen, September 15, 2015, *www.williamsmullen.com/news/proposed-amendments-provide-data-security-standard-under-itar-and-ear#_ftn3*.

168. *Ibid*.

169. Dwyer *et al*.

170. *Ibid*.

171. Doug Messier, "Obama's ITAR Reform Includes Creation of Single Agency to Oversee Export Control," *Parabolic Arc,* July 5, 2010, available from *www.parabolicarc.com/2010/07/05/obamas-itar-reform-includes-creation-single-agency-oversee-export-control/*.

172. "Export Controls: Observations on Selected Countries' Systems and Proposed Treaties," GAO-10-557, Washington, DC: GAO, May 27, 2010.

173. U.S. Department of State, "Export Control Reform Initiative Fact Sheet #3: Rebuilding the Control Lists," January 2, 2013, p. 1, available from *export.gov/static/ECR%20Factsheet%203%20-%20Rebuilding%20the%20Control%20Lists%20v%202_Latest_eg_main_047474.pdf*.

174. Dwyer *et al*.

175. Fergusson and Kerr, p. 11.

176. "President's Export Control Reform Initiative."

177. 15 CFR § 740.12; Federal Register Notice 76, *Federal Register,* p. 35276, available from *www.gpo.gov/fdsys/pkg/FR-2011-06-16/pdf/2011-14705.pdf*.

178. Export Control Reform Initiative Factsheet #4: License Exception "Strategic Trade Authorization" (STA), January 25, 2012, available from *https://new.export.gov/cms_files/ECR%20Factsheet%204%20-%20STA_Latest_eg_main_047475.pdf*.

179. George Tuttle III, "Commerce Announces Its New strategic Trade Authorization (STA) License Exception," George R. Tuttle Law Offices, July 28, 2011, available from *www.tuttlelaw.com/newsletters/sta_license_exception7-26-2011.html*.

180. The 36 countries included in the § 740.20(c)(1) group one (STA1) are Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, the Netherlands, New Zealand,

Norway, Poland, Portugal, Romania, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, and UK.

181. The eight countries included in § 740.20(c)(2) group two (STA2) are Albania, Hong Kong, India, Israel, Malta, Singapore, South Africa, and Taiwan.

182. Tuttle.

183. Export Control Reform Initiative Factsheet #4.

184. Fergusson and Kerr.

185. "Fact Sheet: Announcing the Revised U.S. Export Control System," Washington, DC: The White House Office of the Press Secretary, October 15, 2013, available from *www.whitehouse.gov/the-press-office/2013/10/16/fact-sheet-announcing-revised-us-export-control-system*.

186. Fergusson and Kerr, pp. 20-21.

187. "IT Systems for Export Control," Washington, DC: U.S. Department of Commerce, Bureau of Industry and Security, July 17, 2012, available from *mtitv.com/Conference2012/PDF/it_systems_update_2012.pdf*.

188. Paul McLeary, "Reforms Push New Day for US Foreign Military Sales," *Defense News*, October 1, 2014, available from *www.defensenews.com/article/20141001/DEFREG02/310010036/*.

189. "Vision 2020," Washington, DC: Defense Security Cooperation Agency, October 2014, pp. 4-8, available from *www.dsca.mil/sites/default/files/StratPlanImages/2014%20Strategic%20Plan%20-%20Vision%202020.pdf*.

190. Paul McLeary, "Reforms Push New Day for US Foreign Military Sales," *Defense News*, October 1, 2014, available from *www.defensenews.com/article/20141001/DEFREG02/310010036/*.

191. Mary-Louise Hoffman, "Kidd Manville: DSCA Eyes Streamlined Foreign Defense Sales," Executive Gov., October 2, 2014, available from *www.executivegov.com/2014/10/kidd-manville-dsca-eyes-streamlined-foreign-defense-sales/*.

192. "Editorial: Time to Reform Export Rules," *Defense News*, October 6, 2014, available from *www.defensenews.com/article/20141006/DEFFEAT05/310060014/Editorial-Time-Reform-Export-Rules.*

193. Paul McLeary, "DoD Kicks Off Fiscal Year With Streamlined Export Rules," *Defense News*, October 5, 2014, available from *www.defensenews.com/article/20141005/DEFREG02/310050005/DoD-Kicks-Off-Fiscal-Year-Streamlined-Export-Rules.*

194. "Our Mission," Washington, DC: Export–Import Bank of the United States, available from *www.exim.gov/about/.*

195. Shayerah Ilias Akhtar, "Export-Import Bank: Overview and Reauthorization Issues," Washington, DC: Congressional Research Service, June 30, 2014, pp. i-10, available from *www.fas.org/sgp/crs/misc/R43581.pdf.*

196. Justin Raimondo, "Why the War Party Loves the Export-Import Bank," AntiWar.com, June 30, 2014, available from *original.antiwar.com/justin/2014/06/29/why-the-war-party-loves-the-export-import-bank/.*

197. Thomas Donnelly, "Don't kill the Ex-Im Bank," Washington, DC: American Enterprise Institute, July 1, 2014, available from *www.aei.org/article/foreign-and-defense-policy/defense/dont-kill-the-ex-im-bank/.*

198. Raimondo.

199. Donnelly.

200. Vicki Needham and Kevin Cirilli, "GOP calls to mend, not end, Ex-Im," *The Hill*, June 25, 2014, available from *thehill.com/policy/finance/210640-gop-calls-to-mend-not-end-ex-im.*

201. Alan Greenblatt, "Congress' Latest Death Match Involves A Bank You've Never Heard Of," National Public Radio, July 13, 2014, available from *www.npr.org/2014/07/10/330434582/congress-latest-death-match-involves-a-bank-youve-never-heard-of?ft=1&f=1001.*

202. Ian Katz, Kevin Hamlin, and Brian Parkin, "Rivals Already Outgun U.S. on Trade Subsidies as Ex-Im Imperiled," Bloomberg, June 30, 2014, available from *www.promote-trade.org/blog/072014/rivals-already-outgun-us-trade-subsidies-ex-im-imperiled.*

203. Greenblatt.

204. Timothy P. Carney, "The Export-Import Bank's corporate welfare: War by other means," *The Washington Examiner*, June 27, 2014, available from *washingtonexaminer.com/the-export-import-banks-corporate-welfare-war-by-other-means/article/2550256*.

205. Veronique de Rugy, "The Unseen Costs of the Export-Import Bank," *U.S. News and World Report*, July 7, 2014, available from *www.usnews.com/opinion/economic-intelligence/2014/07/07/export-import-bank-hurts-businesses-and-taxpayers*.

206. Vicki Needham, "Report: Failure to fund Ex-Im Bank puts US manufacturers at global disadvantage," *The Hill*, July 29, 2014, available from *thehill.com/policy/finance/213637-report-failure-to-fund-ex-im-bank-puts-us-manufacturers-as-global-disadvantage*.

207. Veronique de Rugy, "The Crony Capitalism Machine: The Export-Import Bank is inefficient and immoral," *Reason*, August-September 2014, available from *reason.com/archives/2014/07/19/the-crony-capitalism-machine%20*.

208. "Export-Import Bank Keeps America Competitive in Foreign Markets," Washington, DC: Nuclear Energy Institute, available from *www.nei.org/Issues-Policy/Exports-Trade/Ex-Im-Bank-Re-authorization.*

209. Raimondo.

210. Donnelly.

211. Salim Furth, "The Export-Import Bank: What the Scholarship Says," Washington, DC: The Heritage Foundation, August 7, 2014, available from *www.heritage.org/research/reports/2014/08/the-export-import-bank-what-the-scholarship-says.*

212. William D. Hartung, "Risk and Returns: The Economic Illogic of the Obama Administration's Arms Export Reforms," Washington, DC: Center for International Policy, August, 21, 2013, available from *www.ciponline.org/research/entry/risk-and-returns-the-economic-illogic-of-the-obama-administrations-arms-exp*.

213. "President's Export Control Reform Initiative."

214. Sandra I. Irwin, "Export Reforms Can't Come Soon Enough for Defense Industry," *National Defense Magazine,* May 2, 2013, available from *www.nationaldefensemagazine.org/blog/Lists/Posts/Post.aspx?ID=1133*.

215. "Export control norms on satellites, components relaxed by US," *The Economic Times*, May 14, 2014, available from *articles.economictimes.indiatimes.com/2014-05-14/news/49846681_1_satellites-components-aia*.

216. "License Processing Times," Washington, DC: U.S. Department of State, Directorate of Defense Trade Controls, September 2, 2015, available from *www.pmddtc.state.gov/metrics/index.html*.

217. U.S. Department of Commerce, "Revisions to the Export Administration Regulations: Initial Implementation of Export Control Reform," *Federal Register,* Vol. 78, No. 73, p. 22660.

218. John J. Burke, "U.S. Export Control Reform to Move Wide Array of Aircraft Parts off the Munitions List but Still Prohibit Many of them from Being Exported to China," *Lexology,* June 4, 2013, available from *www.lexology.com/library/detail.aspx?g=994253e1-c983-4834-92be-7f39e48d7941.*

219. Shane, Scheetz, and El-Sabaawi.

220. "Export Enforcement Coordination Center," Export.gov, January 17, 2014, available from *export.gov/%5C%5C/e2c2/index.asp.*

221. U.S. Export Control Reform, "Export Enforcement Coordination Center," November 14, 2012, available from *export.gov/e2c2/index.asp*.

222. "President's Export Control Reform Initiative."

223. Colin Clark, "Hill Balks at Arms Export Agency," DoD Buzz, June 30, 2010, available from *www.dodbuzz.com/2010/06/30/hill-balks-at-arms-export-agency/#ixzz0spjQj0lB*.

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