
2015 REPORT ON FOREIGN POLICY-BASED EXPORT CONTROLS

U.S. Department of Commerce Bureau of Industry and Security

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CHAPTER 1

Introduction

Export controls maintained for foreign policy purposes require annual extension according to the provisions of Section 6 of the Export Administration Act of 1979, as amended¹ (the EAA). Section 6(f) of the EAA requires the President to submit a report to Congress to extend the controls. Authority to submit the report has been delegated to the Secretary of Commerce.² Section 6(f) of the EAA requires the report to specify the determinations or considerations of the Secretary (as delegated by the President) with respect to the criteria set forth in Section 6(b) of the EAA established for imposing, extending, or expanding foreign policy controls. This report complies with all of the requirements set out in the EAA for extending, amending, or imposing foreign policy-based export controls.

The EAA has been in lapse since August 20, 2001. The Department of Commerce is acting under the authority conferred by Executive Order 13222 of August 17, 2001 (Executive Order), as extended most recently by a Presidential Notice of August 7, 2014 (79 Fed. Reg. 46, 959 (Aug. 11, 2014)). In Executive Order 13222, the President invoked his authority, including authority under the International Emergency Economic Powers Act (IEEPA), to continue in effect the system of controls that had been maintained under the EAA. Under a policy of conforming actions under the Executive Order to those under the EAA, the Department of Commerce is following the provisions of Section 6 of the EAA with regard to extending foreign policy-based export controls.

The Department of Commerce extends with this report all foreign policy export controls described in this report for the period from January 21, 2015, through January 20, 2016. The Department takes this action pursuant to the recommendation of the Secretary of State. As further authorized by the EAA, foreign policy export controls remain in effect for replacement parts and for parts contained in goods subject to such controls. The controls administered in accordance with procedures established pursuant to Section 309(c) of the Nuclear Nonproliferation Act of 1978 similarly remain in effect.

Each chapter of this report describes a particular category of foreign policy controls and delineates modifications that have taken place over the past year. Although this report covers the 2014 calendar year, the statistical data presented in the report is based on fiscal year 2014 export licensing statistics, unless otherwise noted. The Department's Bureau of Industry and Security (BIS) generates this data from the computer system it uses to process and track export license activity. The data included may over count a small number of licenses because the computer

¹ 50 U.S.C. app. §§ 2401-2420 (2000).

² Executive Order 12002 (July 7, 1977) (as amended).

system has some limitations in tabulating the occasional license application listing more than one Export Commodity Classification Number (ECCN) or country of destination. In addition, BIS bases the data in this report on values contained in issued export licenses. Such values may not represent the values of actual shipments made against those licenses because an exporter ultimately might not export all the items described in an application.

Some goods, technology, and software described in this report require licenses to export for national security purposes in accordance with Section 5 of the EAA.

Part I: Highlights from 2014 Embargoes, Sanctions, and Other Special Controls

On December 17, 2014, the President announced that the United States will take steps to chart a new course in bilateral relations with Cuba and to further engage and empower the Cuban people. This announcement will result in regulatory changes to the EAR in early 2015 in Cuba export policy.

On November 7, 2014, the Department of Commerce published a final rule in the *Federal Register* that amended Section 744.21 of the EAR to impose military end use and military end user controls on certain items to or within Venezuela. This action was taken in response to the Venezuelan military's violent repression of the Venezuelan people.

On September 17, 2014, BIS amended Section 744.21 of the EAR to add "Russia" to the existing license requirement for exports, reexports and transfer (in-country) of certain items on the Commerce Control List or specified in the list in Supplement No. 2 to Part 744 when the exporter, reexporter, or transferor knows or has been informed by BIS that those items are intended for a "military end use" or "military end user" as those terms are defined in the provision. License Exception GOV, Section 740.11 (b)(2)(i) and (ii), is available for these transactions. Applications intended for military end use or end users will be reviewed with a presumption of denial. As part of the same rule, BIS added to the Entity List five entities operating in the Russian Federation's defense sector and five entities operating in Russia's energy sector in response to Russia's engaging in efforts to destabilize eastern Ukraine. These actions were taken in conjunction with the U.S. Department of the Treasury, which also imposed a new set of targeted prohibitions and designations against a range of Russian entities, including these ten entities.

On August 1, 2014, BIS amended the EAR to impose additional sanctions implementing U.S. policy toward Russia to address that country's continuing policy of destabilization in Ukraine and continuing occupation of Crimea and Sevastopol. BIS imposed controls on certain items when the exporter, reexporter, or transferor knows or is informed by BIS that the item will be used in oil or gas exploration or production from Russian deepwater (greater than 500 feet), Arctic offshore, or shale formations in Russia that have the potential to produce oil or gas in Russia, or is unable to determine whether the items will be used in such projects. In addition, BIS added one person located in Russia to the Entity List.

Toxic Chemicals, Chemical Precursors, Biological Agents and Associated Equipment, Technology, and Software

In a June 6, 2014 statement, the Australia Group (AG) welcomed Mexico as a new participating member in the Group and stated its mission to counter the spread of technologies and materials that may facilitate the development or acquisition of chemical and biological weapons by states and terrorists. A few measures proposed to strengthen Chemical and Biological Weapons (CBW) non-proliferation measures include: encouraging more non-participants to adhere to the AG Guidelines; to decrease the gaps terrorists and proliferators can exploit to receive such weapons; increase efforts against CBW terrorism; sharing more information related to CBW terrorism among AG members and non-members; and the importance of outreach to industry and academia to improve their understanding of the risks of CBW proliferation and how they can help prevent it. Likewise, Members re-affirmed their commitment to ensuring that their export controls did not hinder legitimate trade and technical cooperation in the chemical and biological sectors. AG members agreed to amend AG Guidelines to increase prominence of and priority for “catch-all” controls, clarified the implementation of the AG’s “no-undercut” policy, which promotes uniformity in the implementation of export controls.

In the same statement, the AG published on its website a statement reiterating the need to strengthen global chemical and biological non-proliferation measures underscored by the chemical weapons situation in Syria. AG members re-affirmed their view that the “horrific” use of chemical weapons against the people of Syria necessitates the complete eradication of chemical weapons by all countries by universal adherence to and effective implementation of the Chemical Weapons Convention (CWC). While the AG welcomes the progress made by Syria in the destruction of its chemical weapons program, the international community will not have confidence in Syria meeting its obligations under United Nations (UN) Security Council Resolution 2119 and the CWC in full until the complete destruction of its chemical weapons program is verified. Members expressed concern about continued reports of chemical agents being used in the ongoing conflict in Syria.

In the March 26, 2014 issue of the Federal Register, BIS published the final rules to implement the changes adopted by the Australia Group at its June 2013 plenary meeting and the December 2012 AG intersessional decisions which deal with amendments to the Commerce Control List (CCL) entry in the EAR pertaining to chemical manufacturing facilities and equipment in relation to agitators, equipment capable of handling biological components, and human and animal pathogens; the addition of Mexico to the countries included as participating countries in the EAR’s definition of Australia Group; and a License Exception STA paragraph to the CCL entry that controls human and zoonotic pathogens and toxins.

The rule amended ECCNs 1C350 and 2B350 to reflect the changes to the AG “List of Chemical Agents for Export Control.” Specifically, this rule amends License Requirement Note 1 of ECCN 1C350 (Chemicals that may be used as precursors for toxic chemical agents) to change the reporting requirement from quarterly to annual to be consistent with the frequency of reports required for imports and exports of CWC Schedule 2 and 3 chemicals under Sections 713.3 and

714.2 of the Chemical Weapons Convention Regulations (CWCR). The introductory text of ECCN 2B350 (Chemical manufacturing facilities and equipment) was amended to clarify that ECCN 2B350.b controls only agitators (and impellers, blades or shafts for such agitators) where : (1) The agitators are for use in reaction vessels or reactors described in 2B350.a; and (2) all surfaces of the agitators (and of the impellers, blades or shafts for such agitators) that come in direct contact with the chemical(s) being processed or contained are made from any of the materials identified in ECCN 2B350.b.1 through .b.8.

The rule amended ECCNs IC351, 1C352, 1C353, and 2B352 to reflect the changes to the AG “List of Biological Agents for Export Control.” Specifically, ECCN 1C351.d.5 (Human and zoonotic pathogens and “toxins”) was amended to clarify that export controls on *Clostridium perfringens* apply only to the following exotoxins: *Clostridium perfringens* alpha, beta 1, beta 2, epsilon and iota toxins. In addition, the final rule added a License Exception STA paragraph to the license exceptions section of ECCN 1C351 in order to clarify the existing eligibility requirements that paragraph (c)(1) of License Exception STA (see Section 740.20(c)(1) of the EAR) may be used for items in 1C351.d.1 through 1C351.d.10 and 1C351.d.13 through 1C351.d.19. This clarification limits exports under License Exception STA to small quantities of controlled toxins. ECCN 1C352a.8 (Animal pathogens) was amended to clarify that it controls the Rabies virus and all other members of the *Lyssavirus* genus. ECCN 1C353 (Genetic elements and genetically modified organisms) was amended to clarify that “genetic elements” include inter alia, not only chromosomes, genomes, plasmids, transposons, and vectors, whether genetically modified or unmodified, but also those chromosomes, genomes, plasmids, transposons, and vectors that have been “chemically synthesized in whole or in part.” ECCN 2B352.b was amended to indicate that this ECCN controls fermenters with a capacity of 20 liters or greater that are capable of the cultivation of pathogenic micro-organism, or of live cells, for the production of pathogenic viruses or toxins without the propagation of aerosols.

From February 26, 2014 to September 30, 2014, BIS continued to participate in interagency meetings to discuss technical proposals involving items on the dual-use chemical and biological equipment lists. For the period February 26, 2014 to August 25, 2014, BIS received 20 End-Use Certificates from 5 U.S. companies involving 19 unique end-users and 5 Schedule 3 chemicals subject to the CWC. During the reporting period, Supplement No. 2 to Part 745 of the EAR was amended to add Somalia and Syria to the list of CWC States Parties.

Missile Technology Controls

The annual Plenary of the Missile Technology Control Regime (MTCR) was held in October 2014 in Oslo, Norway. During the Plenary, the MTCR adopted several changes to the list of controlled items that will necessitate modifications to the EAR including a clarification to the scope of control for liquid, slurry and gel propellant (including oxidisers) control systems in ECCN 9A106 to include gas turbines, for liquid propellant turbopumps, with shaft speeds equal to or greater than 8,000 rpm at the maximum operating mode. Additionally, the Plenary adopted MTCR Annex control changes that will require amendments to the EAR to increase the scope of control in ECCNs 9B115 and 9B116 to include “production equipment” and “production

facilities” “specially designed” for combustion chambers and nozzles for liquid propellant rocket engines usable in MT-controlled propulsion subsystems. The 2014 Plenary also highlighted the importance of effectively addressing Intangible Technology Transfer (ITT) control related issues.

A Technical Experts Meeting (TEM) was held in April 2014 in Prague, Czech Republic, to discuss proposed changes to the MTCR Equipment, Software, and Technology Annex. These changes were adopted on June 27, 2014 following a six week silence procedure instituted by the Reinforced Points of Contact (RPOC) meeting on May 15, 2014. Changes to the MTCR Annex that will necessitate modifications to the EAR include an update to the reference to the standard for aluminum powder in ECCN 1C111 and removal of the 8-bit quantization requirement in ECCN 3A001a.5.a for analog to digital converters usable in missiles and unmanned aerial vehicles.

Nuclear Nonproliferation Controls

The 2014 Nuclear Suppliers Group (NSG) Plenary Meeting, 34th Consultative Group (CG) Meeting, the Licensing and Enforcement Experts Meeting (LEEM), and the Information Exchange Meeting (IEM) were held in Buenos Aires, Argentina, from June 23 to 27, 2014. The Plenary endorsed 11 recommendations put forward by the CG Chair. Vigorous discussions took place in the CG and the Plenary on the issue of non-compliance with NSG Transparency and Confidentiality Guidelines. A number of participating governments (PGs) made interventions in favor of India’s membership. The United States, Japan, and Ireland reiterated the request made at the 2013 Plenary for additional information on China’s planned exports to Pakistan in support of the Chasma III & IV and Kanupp II & III reactors. A number of PGs made interventions on reported Iranian noncompliance with non-proliferation treaty (NPT) obligations and called on North Korea to halt development of its production facilities and return to full compliance with the NPT.

The 2nd Nuclear Suppliers Group (NSG) Outreach Meeting, 1st Technical Experts Group (TEG) Meeting, and 33rd Consultative Group Meeting were held in Vienna, Austria the week of April 7-11, 2014. Technical proposals and papers discussed at the TEG included changes to the controls on dual use machine tools, centrifugal multiplane balancing machines, the General Software Note, induction furnace power supplies, neutron detectors, nuclear reactor controls, and nuclear graphite. The 2nd Information Exchange Meeting (IEM) Outreach Seminar was held on April 7 and 8, 2014, and was chaired by Bill Domke of Lawrence Livermore National Laboratory. The IEM Seminar featured presentations by NSG Participating Governments Czech Republic and Germany on national export control systems; France and Czech Republic on licensing dual use goods and end use controls; France and the Netherlands on problems in export control licensing and enforcement; and the Netherlands, United Kingdom and France on topics including brokering, fast parcel operators and proliferators’ procurement strategies. Japan and the United Kingdom presented to the IEM on regulator and licensing authority outreach to industry and industry best practices. The IEM also featured presentations by outreach partners India and Pakistan on their respective compliance with NSG Guidelines and on Government of

India and Government of Pakistan nuclear, dual-use, and WMD related strategic commodity export controls and licensing.

Entity List

On September 18, 2014, BIS published a final rule in the *Federal Register* (79 FR 55998) amending the EAR by adding twenty-eight persons to the Entity List located in Afghanistan, Armenia, Australia, China, Greece, Hong Kong, India, Ireland, Pakistan, Singapore, the U.A.E., and the United Kingdom (U.K.). The End User Review Committee (ERC) determined that they were engaged in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. Specifically, BIS added one person in Australia (*i.e.*, to the Entity List under “Australia”), one person in China (with an additional address in Hong Kong), six persons in Pakistan, and one person in Singapore, for a total of nine persons, for their involvement in procuring sensitive U.S. technology to support the development of Pakistan’s missile and unmanned aerial vehicle programs; four persons in Hong Kong for their activities to receive U.S.-origin items and to evade BIS licensing requirements; one person in Afghanistan for engaging in activities in support of persons designated by the Secretary of State as a Foreign Terrorist Organization; one in the U.A.E. for involvement in the attempted unauthorized export to Iran of a lathe machine used in the production of high grade steel or “bright steel,” an item used in the manufacture of automobile and aircraft parts, in violation of OFAC’s Iran regulations and the EAR. BIS also added eleven persons in Armenia, Greece, India, Ireland, the U.A.E., and the U.K. for engaging in activities in support of the Syrian regime and individuals and companies named on the U.S. Treasury Department’s SDN List, and for weapons trafficking; and two persons in Pakistan for procuring items, including U.S.-origin items, for, or on behalf of, Pakistan’s Atomic Energy Commission (PAEC), an entity on the Entity List.

This final rule also modified two existing entries on the Entity List, one by adding additional addresses to a person listed under Hong Kong, and another by adding a subordinate entity to an existing person on the Entity List under Pakistan. Finally, the rule removed three persons located in Hong Kong from the Entity List because they were determined to no longer meet the criteria for inclusion on the Entity List.

On September 17, 2014, BIS published a final rule in the *Federal Register* (79 FR 55608) amending the EAR by adding ten persons to the Entity List located in Russia. The ERC determined that these persons were engaged in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. Specifically, BIS added five persons to the Entity List in conjunction with OFAC’s designation of them as Specially Designated Nationals pursuant to Executive Order 13661. BIS added the other five persons to the Entity List consistent with Executive Order 13662 (79 FR 16169), *Blocking Property of Additional Persons Contributing to the Situation in Ukraine*, issued by the President on March 20, 2014. Pursuant to Executive Order 13662, OFAC designated these five persons as operating in Russia’s energy sector.

On August 6, 2014, BIS published a final rule in the *Federal Register* (79 FR 45675) amending the EAR by adding one person to the Entity List in Russia. The ERC determined that this person engaged in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. The addition was made in conjunction with OFAC's designation of the person as a Specially Designated National pursuant to Executive Order 13661.

On August 1, 2014, BIS published a final rule in the *Federal Register* (79 FR 44680) amending the EAR by adding sixteen persons to the Entity List located in Afghanistan, China, Hong Kong, Iran, and the U.A.E. The ERC determined that these persons were engaged in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. Specifically, BIS added: five persons located in Afghanistan for engaging in activities in support of persons designated by the Secretary of State as a foreign terrorist organization; five persons located in China for the illicit procurement of commodities and technologies for unauthorized military end-use in China; two persons located in China and Hong Kong for the unauthorized exploitation of computer systems of U.S. companies and cleared defense contractors to obtain information, including technology related to military projects; and four persons located in Iran and the U.A.E. for attempting to reexport U.S.-origin items to Iran without U.S. Government authorization.

On July 22, 2014, BIS published a final rule in the *Federal Register* (79 FR 42452) amending the EAR by adding eleven persons in Crimea (Occupied), Russia, and Ukraine. The ERC determined that these persons were engaged in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. Specifically, BIS added three persons, two persons located in the eastern Ukraine operated by separatist organizations and one person in Crimea (Occupied), in conjunction with OFAC's designation of them as Specially Designated Nationals pursuant to Executive Order 13660. BIS added eight persons located in Russia in conjunction with OFAC's designation of them as Specially Designated Nationals pursuant to Executive Order 13661.

On June 26, 2014, BIS published a final rule in the *Federal Register* (79 FR 36199) amending the EAR by adding four persons to the Entity List located in China and Hong Kong. The ERC determined that these persons were engaged in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. Specifically, the ERC determined that the four persons attempted to supply items to the Chinese Peoples' Liberation Army and/or to export items to other destinations sanctioned by the United States.

On June 5, 2014, BIS published a final rule in the *Federal Register* (79 FR 32441) amending the EAR by adding twenty six persons to the Entity List located in China, Hong Kong, Lebanon, and the United Arab Emirates (U.A.E.). The ERC determined these persons were engaging in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744 of the EAR. Specifically, the ERC added two persons located in Hong Kong because they had prevented the Department of Commerce from accomplishing an end-use

check and because they were involved in reexports of sensitive U.S.-origin items to unauthorized end-users. BIS added five persons located in China and Hong Kong because they had engaged in activities that could enhance the military capabilities or capabilities to support terrorism of the Syrian government, and nineteen persons located in Lebanon and the U.A.E. because they were involved in procuring U.S.-origin items for a person designated by the Secretary of State as a foreign terrorist organization without the required U.S. Government authorizations.

On May 1, 2014, BIS published a final rule in the *Federal Register* (79 FR 24558) amending the EAR by adding thirteen persons to the Entity List under Cyprus, Luxembourg and Russia. The ERC determined these persons were engaged in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 The additions were made in conjunction with OFAC's designation of these thirteen persons as Specially Designated Nationals pursuant to Executive Order 13660 and Executive Order 13661 (79 FR 15533), *Blocking Property of Additional Persons Contributing to the Situation in Ukraine*, issued by the President on March 16, 2014.

On May 1, 2014, BIS published a final rule in the *Federal Register* (79 FR 24563) amending the EAR by adding nine persons to the Entity List located in China. The ERC determined these persons were engaging in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 (license requirements that apply to entities acting contrary to the national security and foreign policy interests of the United State) of the EAR. Specifically, the ERC determined that it has reasonable cause to believe that the nine persons have provided support to Iran's ballistic missile program.

On April 16, 2014, BIS published a final rule in the *Federal Register* (79 FR 21394) amending the EAR by adding one person to the Entity List under Crimea (Occupied) with a cross reference to Ukraine. The ERC determined that this person, a regional oil and gas company in Crimea, was involved in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 (license requirements that apply to entities acting contrary to the national security and foreign policy interests of the United States) of the EAR. The additions were made in conjunction with the Department of the Treasury's Office of Foreign Assets Control (OFAC)'s designation of the person as a Specially Designated Person pursuant to Executive Order 13660 (79 FR 13491), *Blocking Property of Certain Persons Contributing to the Situation in Ukraine*, issued by the President on March 6, 2014.

Effective Enforcement of Controls

The Export Enforcement arm of BIS protects and promotes U.S. national security, foreign policy and economic interests by educating parties to export transactions on how to improve export compliance practices and identify suspicious inquiries, supporting the export licensing process by evaluating the bona fides of transaction parties, conducting end-use checks, interdicting illegal exports, investigating violations, and referring violators of export control laws for administrative penalties or criminal prosecution. Export Enforcement at BIS has evolved over the past 30-plus years into a sophisticated law enforcement agency, with criminal investigators

and enforcement analysts who are singularly focused on export enforcement and work closely together with licensing officers within a single bureau of the government. Using its subject matter expertise in the area of export controls, coupled with its unique administrative enforcement tools, Export Enforcement leverages its relationships with partner law enforcement agencies and industry to maximize its impact.

BIS conducted a number of enforcement actions regarding noncompliance with export controls. The following six cases are among the most significant.

Randy Dale Barber/Michael Dragoni/Fortis Data Systems LLC/Greencloud LLC

Diversion of high end computers and parts to Iran

On July 17, 2014, Randy Dale Barber was sentenced in the U.S. District Court for Middle District of Florida to five years of probation, a \$413,106 forfeiture, and a joint restitution payment of \$37,921 to Hitachi Data Systems (HDS) for his role in a criminal conspiracy to export computer equipment to Iran. On July 10, 2014, co-conspirator Michael Dragoni was sentenced by the same court to eight months of home detention, five years of probation, and the joint restitution payment of \$37,921 to HDS. In addition, the Court sentenced Fortis Data Systems LLC and Greencloud LLC, two companies used by Dragoni as part of the conspiracy, to five years of probation and the same joint restitution payment of \$37,921 to HDS. Dragoni, Fortis Data Systems, and Greencloud were additionally ordered to jointly forfeit \$498,706. From August 2009 through at least August 2011, Dragoni and Barber conspired to defraud HDS by making materially false statements in order to purchase computer equipment for resale to Mohammad Reza “Ray” Hajian, who in turn resold the equipment to his customers, an Iranian national and a company in the United Arab Emirates. (Hajian was sentenced in 2012 in connection with the same criminal conspiracy.) By late 2009, Dragoni, Barber and Hajian knew that HDS refused to sell computer equipment to Hajian and his customers because HDS believed that the equipment was being diverted to unauthorized end users. In order to deceive HDS and purchase the computer equipment, Dragoni and Barber made false statements regarding the purchaser, end user, and location of installation of the equipment that they were purchasing. To facilitate the conspiracy, they used front companies to make equipment purchases on their behalf. The conspirators then caused the equipment to be shipped to the United Arab Emirates. This is a joint case involving BIS’s Office of Export Enforcement and U.S. Immigration and Customs Enforcement.

The Parts Guys

Aircraft parts to Iran

On December 10, 2013, Mohammad Tabibi was sentenced in the U.S. District Court for the Middle District of Georgia to 38 months in prison, a \$32,000 forfeiture, and a \$200 special assessment in connection with Tabibi’s role in a conspiracy to illegally export parts for fighter jets and attack helicopters from the U.S. to Iran. In June 2012, Tabibi was extradited to the U.S. from the Czech Republic where he had been arrested in October 2011. Tabibi was the fifth defendant to be sentenced in the case.

Previously, four U.S. nationals or companies had received sentences. Michael Edward Todd was sentenced to 46 months in prison, three years of supervised release, and a forfeiture of \$160,362 shared among Todd, Todd's company The Parts Guys LLC, Hamid Seifi, and Seifi's company Galaxy Aviation Services. Seifi was sentenced to 56 months in prison, three years of supervised release, a \$12,500 criminal fine, and an additional forfeiture of \$153,940 shared with Galaxy Aviation Services. Todd, The Parts Guys LLC, Seifi, and Galaxy Aviation Services also received assessments in the amount of \$100, \$400, \$200, and \$400, respectively.

In addition to the convictions of these defendants, on June 28 2011, BIS added a total of eight other companies and individuals located in France, Iran, and the United Arab Emirates to the Entity List in connection with this investigation.

As part of the procurement network and conspiracy, Todd used his company, The Parts Guys, LLC, to receive and fill orders for components from Seifi, an Iranian-born U.S. national and the owner of Galaxy Aviation Services. Seifi and other entities in the United Arab Emirates purchased components from Todd on the behalf of parties in Iran and conspired to export the components, via France, without obtaining the required export licenses from the U.S. Department of Commerce. The components included parts for the Bell AH-1 attack helicopter, the UH-1 Huey attack helicopter, as well as the F-5 and F-4 fighter jets. This was a joint investigation by the Office of Export Enforcement along with U.S. Immigration and Customs Enforcement and the Federal Bureau of Investigation.

Weatherford International Ltd.

Oil and Gas Equipment to Iran, Syria, Cuba, and Other Countries

On November 26, 2013, Weatherford International agreed to enter into a deferred prosecution agreement for a term of two years, and two of its subsidiaries pled guilty to export controls violations under the International Emergency Economic Powers Act and the Trading with the Enemy Act. Weatherford and its subsidiaries agreed to pay a penalty of \$100 million, with a \$48 million penalty paid pursuant to a deferred prosecution agreement, \$2 million paid in criminal fines pursuant to the two guilty pleas, and a \$50 million civil penalty paid to resolve the violations charged by BIS. Weatherford International and some of its affiliates also signed a \$91 million settlement agreement with the Department of the Treasury, Office of Foreign Assets Control, to resolve their civil liability arising out of this same conduct, which will be deemed satisfied by the payment of the \$100 million in penalties. In conjunction with the sanctions settlement, Weatherford International agreed to enter into an additional deferred prosecution agreement for a term of two years and one of its subsidiaries has agreed to plead guilty to violations of the Foreign Corrupt Practices Act. This agreement also included an additional \$87.2 million criminal penalty and \$65.6 million in civil fines to the Securities and Exchange Commission. This seven-year joint investigation resulted in the conviction of three Weatherford subsidiaries, the entry by Weatherford International into two deferred prosecution agreements, a civil settlement and payment of a total of \$252,690,606 in penalties and fines.

From 1998 through 2007, Weatherford International and four of its subsidiaries, Weatherford Oil Tools Middle East, Weatherford Production Optimization (UK) Limited, Precision Energy Services ULC (Canada) and Precision Energy Services Columbia Limited, engaged in conduct that violated various U.S. export control and sanctions laws by exporting or re-exporting EAR99 oil and gas drilling equipment to, and conducting Weatherford business operations in, sanctioned countries without the required U.S. government authorization. In addition to the involvement of employees of several Weatherford International subsidiaries, some Weatherford International executives, managers or employees on multiple occasions participated in, directed, approved and facilitated the transactions and the conduct of its various subsidiaries. This conduct involved persons within the U.S.-based management structure of Weatherford International participating in conduct by Weatherford International foreign subsidiaries and the unlicensed export or re-export of U.S.-origin goods to Cuba, Iran, Sudan and Syria. Weatherford subsidiaries Precision Energy Services Colombia Ltd. and Precision Energy Services Ltd., both headquartered in Canada, conducted business in the country of Cuba. Weatherford's subsidiary Weatherford Oil Tools Middle East, headquartered in the United Arab Emirates, conducted business in the countries of Iran, Sudan and Syria. Weatherford's subsidiary Weatherford Production Optimisation, formerly known as, eProduction Solutions U.K. Ltd., headquartered in the United Kingdom, conducted business in the country of Iran.

Combined, Weatherford generated approximately \$110 million in revenue from its illegal transactions in Cuba, Iran, Syria and Sudan. This case resulted from a joint investigation with the Department of Justice, Department of Treasury's Office of Foreign Assets Control, Securities and Exchange Commission, the Federal Bureau of Investigation, U.S. Immigration and Customs Enforcement and the Houston Police Department.

Part II: Format of Analysis Used in Chapters 2-13 of this Report

Chapters 2-13 of this report describe the various export control programs maintained by the Department of Commerce for foreign policy reasons. Each of these programs is extended for another year. The analysis required for such an extension is provided in each chapter in the format described below.

Export Control Program Description and Licensing Policy

This section defines the export controls maintained for a particular foreign policy purpose that were imposed or extended for the year 2014. Each of the following chapters describes the licensing requirements and policy applicable to a particular control.

Analysis of Controls as Required by Section 6(f) of the Act

Section 6(f)(2) of the EAA requires that the Secretary of Commerce describe the purpose of the controls and consider or determine whether to impose, expand, or extend foreign policy controls based on specified criteria, including consultation efforts, economic impact, alternative means, and foreign availability. For each control program, the Department of Commerce's conclusions are based on the following required criteria:

A. The Purpose of the Controls

This section provides the foreign policy purpose and rationale for each particular control.

B. Considerations and Determinations of the Secretary of Commerce

This section describes the Secretary's determinations and considerations regarding the following criteria:

- 1. *Probability of Achieving the Intended Foreign Policy Purpose.*** Whether such controls are likely to achieve the intended foreign policy purpose in light of other factors, including the availability from other countries of the goods or technology subject to control, and whether the foreign policy purpose can be achieved through negotiations or other alternative means.
- 2. *Compatibility with Foreign Policy Objectives.*** Whether the controls are compatible with the foreign policy objectives of the United States and with the overall U.S. policy towards the country or the proscribed end use that is subject to the controls.
- 3. *Reaction of Other Countries.*** Whether the reaction of other countries to the extension of such export controls by the United States is likely to render the controls ineffective in achieving the intended foreign policy purpose or to be counterproductive to other U.S. foreign policy interests.
- 4. *Economic Impact on United States Industry.*** Whether the effect of the controls on the export performance of the United States, its competitive position in the international economy,

the international reputation of the United States as a reliable supplier of goods and technology, or the economic well-being of individual U.S. companies exceeds the benefit to U.S. foreign policy objectives.³

5. *Effective Enforcement of Controls.* Whether the United States has the ability to enforce the controls. Some enforcement issues are common to all foreign policy controls. Other enforcement issues are associated with only one or a few controls.

C. Consultation with Industry

This section discusses the results of consultations with industry leading to the extension or imposition of controls. In a September 4, 2014, *Federal Register* notice (79 FR 52630), the Department of Commerce solicited comments from industry on the effectiveness of U.S. foreign policy-based export controls. In addition, comments were solicited from the public via the BIS website. Comments from the Department's seven Technical Advisory Committees are solicited on an ongoing basis and are not specific to this report. The comment period closed on October 6, 2014, and two comments were received. A detailed review of the public comments can be found in Appendix I.

D. Consultation with Other Countries

This section reflects consultations on the controls with countries that cooperate with the United States on multilateral controls and with other countries as appropriate.

E. Alternative Means

This section specifies the nature and results of any alternative means attempted to accomplish the foreign policy purpose, or the reasons for extending the controls without attempting any such alternative means.

F. Foreign Availability

This section considers the availability from other countries of goods or technology comparable to those subject to the proposed export control. It also describes the nature and results of the efforts made pursuant to Section 6(h) of the EAA to secure the cooperation of foreign governments in controlling the foreign availability of such comparable goods or technology. In accordance with the EAA, foreign availability considerations do not apply to export controls in effect prior to June 12, 1985, to export controls maintained for internationally recognized human rights and antiterrorism reasons, or to export controls maintained in support of the international obligations of the United States.

³ Limitations exist when assessing the economic impact of certain controls because of the unavailability of data or because of the influence of other factors, e.g., currency values, foreign economic activity, or foreign governments, that may restrict imports of U.S. products more stringently than the United States restricts exports.

CHAPTER 2

Crime Controls/Human Rights Controls (Sections 742.7, 742.11, 742.17)⁴

Export Control Program Description and Licensing Policy

As required by Section 6(n) of the Export Administration Act of 1979, as amended (EAA), the United States controls the exports of crime control and detection items in support of human rights throughout the world. As set forth in the EAR, the U.S. Government requires a license to export most crime control and detection instruments, equipment, related technology, and software to all destinations, except Australia, Japan, New Zealand, and members of the North Atlantic Treaty Organization (NATO). Additionally, a license is required to export certain crime control items, including restraint type devices (such as handcuffs) and discharge type arms (such as stun guns), to all destinations except Canada. Specially designed implements of torture (such as thumbscrews), which are included in the crime control category, require a license for export to all destinations. In addition, the U.S. Government maintains concurrent export license requirements for certain crime control items in furtherance of the Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials.

Licensing Policy

The U.S. Government considers applications for most crime control items favorably, on a case-by-case basis, unless there is civil disorder in the country or region of concern, or there is evidence that the government may have violated human rights. The judicious use of these controls is intended to deter the development of a consistent pattern of human rights abuses, distance the United States from such abuses, and avoid contributing to civil disorder in a country or region. The U.S. Government maintains a general policy of denial for specially designed implements of torture, regardless of the intended destination.

People's Republic of China (PRC)

Following the 1989 military assault on demonstrators by the PRC government in Tiananmen Square, the U.S. Government imposed constraints on the export to the PRC of certain items on the CCL. Section 902(a)(4) of the Foreign Relations Authorization Act for Fiscal Year 1990-1991, Public Law 101-246, suspends the issuance of licenses under Section 6(n) of the EAA for the export of any crime control or detection instruments or equipment to the PRC. The President may terminate the suspension by reporting to Congress that the PRC has made progress on

⁴ Citations following each of the foreign policy control programs refer to sections of the Export Administration Regulations (EAR), 15 CFR Parts 730-774, that describe the control program.

political reform or that it is in the national interest of the United States to terminate the suspension. The President has not exercised his authority to terminate this suspension.

NATO

Certain crime control and detection instruments, equipment, related technology, and software may be exported to Australia, Japan, New Zealand, and members of NATO without a specific license, consistent with Section 6(n) of the EAA.

Organization of American States Member Countries

In April 1999, the Department of Commerce published a rule implementing the provisions of the Organization of American States (OAS) Model Regulations for the Control of the International Movement of Firearms. The Department of Commerce designed these regulations to harmonize import and export controls on the legal international movement of firearms among OAS member states and to establish procedures to prevent the illegal trafficking of firearms among these countries.

Under these provisions, the Department of Commerce maintains foreign policy controls on exports of Commerce-controlled firearms, including shotguns with a barrel length of 18 inches or over and certain parts, shotgun shells and parts, and optical sighting devices to all OAS member countries, including Canada. Items subject to these controls are identified by “FC Column 1” in the “License Requirements” section of the corresponding ECCN. In support of the OAS Model Regulations for the Control of the International Movement of Firearms, the U.S. Government requires an Import Certificate (IC) for the export to OAS member countries of those items affected by the regulations. In general, the Department approves license applications for the export of firearms to OAS member countries if the applications are supported by ICs. The Department denies applications that involve end uses linked to drug trafficking, terrorism, international organized crime, and other criminal activities.

Other Licensing Considerations

The Department of State annually compiles the Country Reports on Human Rights Practices. The Department of State prepares these reports in accordance with Sections 116(d) and 502B(b) of the Foreign Assistance Act of 1961 for submission to Congress. The factual information presented in these reports is a significant element in dual use export licensing recommendations made by the Department of State. In accordance with the Foreign Assistance Act, the Department denies license applications to export crime control items to any country in which the government engages in a consistent pattern of violations of internationally recognized human rights.

Applications to export crime control items to countries that are not otherwise subject to economic sanctions or comprehensive embargoes, but that are identified by the Department of State as human rights violators, receive additional scrutiny in the license review process. The

Department of State reviews all license applications for these countries on a case-by-case basis and makes recommendations to Commerce as it considers appropriate. Additionally, targeted sanctions maintained by the Department of the Treasury's Office of Foreign Assets Control (OFAC) are currently imposed against certain countries and individuals.

The International Religious Freedom Act of 1998 (IRFA) calls upon the President to take diplomatic or other appropriate action with respect to any country that engages in or tolerates violations of religious freedom. IRFA provides for the imposition of economic measures or commensurate actions when a country has engaged in systematic, ongoing, egregious violations of religious freedom accompanied by flagrant denials of the rights to life, liberty, or the security of persons, such as torture, enforced and arbitrary disappearances, or arbitrary prolonged detention. For such countries, IRFA provides that the Department of Commerce, with the Department of State's concurrence, shall restrict exports of items on the CCL for reasons of crime control or detection, and require export licenses for items that are being used, or are intended for use, directly and in significant measure, to carry out particularly severe violations of religious freedom. In addition, IRFA requires that countries engaging in particularly severe violations of religious freedom be designated as Countries of Particular Concern. The Secretary of State has currently designated nine countries as Countries of Particular Concern: Burma, the PRC, Eritrea, Iran, North Korea, Saudi Arabia, Sudan, Turkmenistan, and Uzbekistan. These countries are subject to the limitations of the IRFA for exports of crime-controlled items.

Analysis of Controls as Required by Section 6(f) of the Export Administration Act

A. The Purpose of the Controls

These controls seek to ensure that U.S.-origin crime control and detection items are not exported to countries where governments fail to respect internationally recognized human rights or where civil disorder is prevalent. Denial of export license applications for crime-controlled items to such countries helps to prevent human rights violations and clearly signals U.S. concerns about human rights in these countries. The license requirements for most destinations allows close monitoring of exports of crime control items that could be misused to commit human rights violations. Controls on implements of torture similarly help to ensure that such items are not exported from the United States.

B. Considerations and Determinations of the Secretary of Commerce

1. *Probability of Achieving the Intended Foreign Policy Purpose.* The Secretary has determined that these controls are likely to achieve the intended foreign policy purpose and that the foreign policy purpose cannot fully be achieved through negotiations or other alternative means. The lack of complementary controls over all of these crime control items by other producer nations limits the effectiveness of these controls in preventing human rights violations, although some countries – notably those of the European Union (EU) – control exports of implements of torture and of lethal items. However, U.S. unilateral controls restrict human rights violators' access to U.S.-origin crime control items and provide important evidence of U.S.

support for the principles of human rights. In addition, stringent licensing requirements for crime control items enable the U.S. Government to closely monitor items that could be used to violate internationally-recognized human rights.

2. *Compatibility with Foreign Policy Objectives.* The Secretary has determined that crime controls are compatible with U.S. foreign policy objectives and that the extension of this control program will not have significant adverse foreign policy consequences. This control program is fully consistent with U.S. policy in support of internationally recognized human rights, as expressed by successive Administrations and by Congress.

3. *Reaction of Other Countries.* The Secretary has determined that any adverse reaction to these controls is not likely to render the controls ineffective, nor will any adverse reaction by other countries be counterproductive to U.S. foreign policy interests. These controls are unique, serve a distinct foreign policy purpose, and arise out of deeply-held convictions of the U.S. Government. Currently, other countries do not have completely equivalent controls, but many have restrictions on exports of lethal products to destinations of civil unrest.

4. *Economic Impact on U.S. Industry.* The Secretary has determined that any detrimental effect of these controls on the economy of the United States, including on the competitive position of the United States in the international economy, does not exceed the benefit to U.S. foreign policy objectives.

In fiscal year 2014, the Department of Commerce approved 4,552 export license applications for crime control items, which were valued at over \$1.1 billion. Another 136 applications for crime control items were returned without action, valued at nearly \$243 million, and an additional 136 applications were denied, with a total value of over \$124 million. These controls have a limited economic impact that is outweighed by the foreign policy objectives they advance.

5. *Effective Enforcement of Controls.* The Secretary has determined that the United States has the ability to enforce these controls effectively. Crime control items and implements of torture are easily recognizable and do not present special enforcement problems related to detecting violations or verifying use. However, enforcement cooperation with other countries generally is difficult in cases involving unilaterally controlled items such as these, and often depends on the type and quantity of goods in question.

BIS gathers leads on activities of concern and conducts end-use checks, primarily through its Export Control Officer and Sentinel programs, to verify the end use and end-users of U.S.-origin items. End-use checks involve the assessment of bona fides (i.e., legitimacy and reliability) of foreign end users that receive U.S.-origin items and prospective end-users on pending license applications for diversion risk, as well as educational outreach to foreign trade groups.

BIS conducted a number of recent enforcement actions regarding noncompliance with these export controls, including:

Lev Steinberg

Riflescopes to Russia

On February 25, 2014, Lev Steinberg was sentenced in the U.S. District Court for the Southern District of New York to one year of probation and a \$4,000 criminal fine. On September 16, 2009, Steinberg, a resident of Brooklyn, NY, pled guilty to violating the International Emergency Economic Powers Act in connection with an unlicensed export of riflescopes as well as to a violation of the Foreign Corrupt Practices Act. Steinberg was arrested in March 2009 for exporting riflescopes controlled for crime control reasons to Russia without the required license from the U.S. Department of Commerce. This was a joint investigation involving the Office of Export Enforcement, U.S. Immigration and Customs Enforcement, and the Defense Criminal Investigative Service.

C. Consultation with Industry

In a September 4, 2014 *Federal Register* notice (79 FR 52630) the Department of Commerce solicited comments from industry and the public on the effectiveness of U.S. foreign policy-based export controls. In addition, comments were solicited from the public via the BIS website. The comment period closed on October 6, 2014. A detailed review of all public comments received can be found in Appendix I.

The Department of Commerce consults with the Regulations and Procedures Technical Advisory Committee, one of seven technical advisory committees that advise BIS, in preparation for publication of major regulatory changes affecting crime controls. In addition, the Department of Commerce has consulted with exporters of crime control items and with human rights groups concerned about the potential for misuse of such items in various parts of the world. BIS has frequent consultations with exporters about specific items proposed for export to specific end users and for specific end uses.

D. Consultation with Other Countries

Most other countries that supply crime control and detection items have not imposed similar export controls. The United Kingdom and Canada maintain controls similar to U.S. controls on certain crime control commodities. Certain European Union member states prohibit or impose a license requirement on the export of dual-use items not covered by the multilateral export control regimes for reasons of public security or human rights considerations.

E. Alternative Means

Section 6(n) of the EAA requires the Department of Commerce to maintain export controls on crime control and detection items. Attempting to achieve the purposes of the crime control restrictions through negotiations or other alternative means would not meet this requirement. The U.S. Government does, however, use diplomatic efforts, sanctions, and other means to convey its concerns about the human rights situation in various countries.

F. Foreign Availability

The foreign availability provision does not apply to Section 6(n) of the EAA.⁵ Congress has recognized the usefulness and symbolic value of these controls in supporting U.S. Government policy on human rights issues, foreign availability notwithstanding.

⁵ Provisions pertaining to foreign availability do not apply to export controls in effect before July 12, 1985, under Sections 6(i) (International Obligations), 6(j) (Countries Supporting International Terrorism), and 6(n) (Crime Control Instruments). See the Export Administration Amendments Act of 1985, Public Law No. 99-64, Section 108(g)(2), 99 Stat. 120, 134-35. Moreover, Sections 6(i), 6(j), and 6(n) require that controls be implemented under certain conditions without consideration of foreign availability.

CHAPTER 3

Regional Stability Controls (Section 742.6)

Export Control Program Description and Licensing Policy

Regional Stability (RS) controls ensure that exports and re-exports of controlled items support U.S. foreign policy objectives and do not contribute to the destabilization of the region to which the items are destined. These controls traditionally cover items “specially designed” or modified for military purposes and certain dual-use items that can be used to manufacture military equipment.

License Requirements and Licensing Policy

RS Column 1

Section 742.6 of the Export Administration Regulations (EAR) requires a license for RS reasons (RS Column 1 on the CCL) to export, among other things, certain image-intensifier tubes, infrared focal plane arrays, certain imaging cameras incorporating image-intensifier tubes and infrared focal plane arrays, certain software and technology for inertial navigation systems, gyroscopes, accelerometers, micro and millimeter wave electronic components, as well as items not listed elsewhere on the CCL, to all destinations except Canada. These items are included in Export Control Classification Numbers (ECCNs) 0A521, 0B521, 0C521, 0D521, 0E521, 0A919, 6A002.a.1, 6A002.a.2, 6A002.a.3, 6A002.c, 6A003.b.3, 6A003.b.4, 6A008.j.1, 6A998.b, 6D001, 6D002, 6D003.c, 6D991, 6E001, 6E002, 6E991, 7A994, 7D001, 7E001, 7E002, 7E101, 9A515, 9B515, 9D515, and 9E515. In addition to these items, munitions items which are controlled under the 600-series ECCNs are controlled for RS Column 1 on the CCL, with the exception of ECCN 0A606.b, which is controlled for RS Column 2 on the CCL.

The U.S. Government reviews all license applications for these items on a case-by-case basis to determine whether the export could contribute, directly or indirectly, to a country’s military capabilities in a manner that would destabilize or alter a region’s military balance contrary to U.S. foreign policy interests. See the discussion below for special RS control provisions for thermal imaging cameras (ECCNs 6A003 and 0A919) and items not listed elsewhere on the CCL (0Y521).

RS Column 2

In addition, Section 742.6 of the EAR imposes a license requirement for RS reasons (RS Column 2 on the CCL) to export explosives detection equipment and related software and technology, military-related items (e.g., searchlights, bayonets, certain vehicles and trainer aircraft), concealed object detection equipment, and certain commodities used to manufacture military equipment to all destinations except member nations of the North Atlantic Treaty Organization

(NATO), Australia, Japan, and New Zealand. These items are described on the CCL under ECCNs 0A918, 0E918, 1A004.d, 1B018.a, 1D003, 1E001, 2A983, 2A984, 2B018, 2D983, 2D984, 2E983, 2E984, and 0A606.b. The U.S. Government will generally consider applications for such licenses favorably, on a case-by-case basis, unless the export would significantly affect regional stability. For explosives detection equipment and related technology classified under ECCNs 2A984, 2D984, and 2E984, license applications are reviewed with a presumption of approval when destined for a government end-user in Austria, Cyprus, Finland, Ireland, Israel, Malta, Mexico, Singapore, or Sweden.

RS Controls for Certain Exports to Iraq

In addition, there are RS controls in place for certain items when exported or re-exported to Iraq (or transferred within Iraq). These items are covered under the following ECCNs: 0B999 (specific processing equipment such as hot cells and glove boxes suitable for use with radioactive materials); 0D999 (specific software for neutronic calculations, radiation transport calculations, and hydrodynamic calculations/modeling); 1B999 (specific processing equipment, such as electrolytic cells for fluorine production and particle accelerators); 1C992 (commercial charges containing energetic materials, not elsewhere specified); 1C995 (certain mixtures and testing kits); 1C997 (ammonium nitrate); 1C999 (specific materials, not elsewhere specified); and 6A992 (optical sensors not controlled under ECCN 6A002). The licensing policy for these items is set forth in Section 746.3 of the EAR, and is consistent with the broader controls maintained on Iraq. These controls are discussed in more detail in Chapter 5 of this report.

RS Controls for Certain Thermal Imaging Cameras

Special RS Column 1 requirements apply to certain thermal imaging cameras classified under ECCN 6A003b.4.b. Export and re-export license requirements and license review policies for these products vary depending on certain technical specifications of the cameras as well as the proposed end uses. Almost all cameras controlled by ECCN 6A003.b.4.b are controlled under Regional Stability Column 1 (RS1) and require an export or re-export license for all destinations other than Canada. Cameras classified under ECCN 6A003.b.4.b are subject to a more favorable licensing policy, however, if they are packaged for civil end use and destined only for Albania, Australia, Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey, or the United Kingdom. A license is required to export or re-export to Hong Kong any item classified under ECCN 6A003.b.4.b.

Cameras controlled by ECCN 6A003.b.4.b that fall below certain technical thresholds are controlled at the lower Regional Stability control level (RS2) when fully packaged for use as a consumer-ready civil product. Applications to export or re-export these cameras will be considered favorably unless there is evidence the export or re-export would contribute

significantly to the destabilization of the region to which the camera is destined or is otherwise not authorized by U.S. law.

There is also a license requirement on re-exports of military commodities produced outside the United States that incorporate one or more cameras controlled under ECCN 6A003.b.4.b. These products are controlled in ECCN 0A919 and are subject to RS Column 1 controls. Re-exports of these military commodities requires a license to all destinations except Canada, unless the military commodities are being re-exported as part of a military deployment by a unit of the governments of Albania, Australia, Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, or the United States. Applications for re-exports of these military commodities will be reviewed applying policies for similar commodities that are subject to the International Traffic in Arms Regulations (22 CFR parts 120-130).

RS Controls for ECCN 0Y521 Items

Items classified under ECCNs 0A521, 0B521, 0C521, 0D521 and 0E521 (referred to collectively as “ECCN 0Y521 items”) are items subject to the EAR that are not listed elsewhere in the CCL, but which the Department of Commerce, with the concurrence of the Departments of Defense and State, has determined should be controlled for export because the items provide a significant military or intelligence advantage to the United States or other foreign policy reasons justify such a control. While an item is temporarily classified under ECCN 0Y521, the U.S. Government will work to adopt a control through the relevant multilateral regime and to determine an appropriate longer-term control over the item. Items classified under an ECCN 0Y521 must be reclassified under another ECCN within one year (with the possibility for extension while multilateral controls are being sought); any item that is not so reclassified will be designated EAR99. Items classified under ECCN 0Y521 are subject to Regional Stability Column 1 (RS1) controls.

Summary of 2014 Changes

As part of Export Control Reform, less sensitive items, such as parts and components, are being transferred on a rolling basis from the U.S. Munitions List to the Commerce Control List. Once on the Commerce Control List, these items will be controlled within the 600 Series. All “600 Series” items will be controlled for Regional Stability reasons (RS Column 1). Applications for exports and re-exports of 600 series items will be reviewed on a case-by-case basis to determine whether the transactions are contrary to the national security or foreign policy interests of the United States. The majority of these items were transferred from the USML to the CCL on a rolling basis throughout FY 2014, beginning with controls relating to certain aircraft and gas turbine engines, which were officially moved to the CCL on October 15, 2013. In addition, certain satellites and spacecraft were transferred from the USML to the CCL effective on

November 10, 2014. These items are included in new ECCNs 9X515 and are controlled for regional stability (RS Column 1). Items in the remaining USML categories will be transferred to the CCL during FY2015 and will be subject to regional stability controls.

On December 23, 2014, the Department of Commerce revised the controls paragraph in ECCN 3A001 to add a national security (NS column 1) control and a regional stability (RS column 1) control to certain Microwave Monolithic Integrated Circuit (MMIC) power amplifiers and certain discrete microwave transistors, except those that are being exported or reexported for use in civil telecommunications applications. Prior to this change, the items were controlled under NS column 2. The anti-terrorism (AT column 1) control remains unchanged.

Analysis of Controls as Required by Section 6(f) of the Export Administration Act

A. The Purpose of the Controls

Regional Stability controls provide a mechanism for the U.S. Government to monitor the export of controlled items, to restrict their use in instances that would adversely affect regional stability or the military balance within a region, and to protect the national security and foreign policy interests of the United States.

B. Considerations and Determinations of the Secretary of Commerce

1. *Probability of Achieving the Intended Foreign Policy Purpose.* The Secretary has determined that these controls are likely to achieve the intended foreign policy purpose, although most of these items are increasingly available from abroad. The Secretary has also determined that the foreign policy purpose cannot fully be achieved through negotiations or other alternative means, and that some of the items subject to these controls are also controlled, as a result of international negotiations, by U.S. partners in the Wassenaar Arrangement and the Missile Technology Control Regime (MTCR). Regional stability controls contribute to U.S. national security and foreign policy objectives by enabling the United States to restrict the use or availability of certain sensitive U.S.-origin goods and technologies that would adversely affect regional stability or the military balance in certain areas.

2. *Compatibility with Foreign Policy Objectives.* The Secretary has determined that these controls are compatible with U.S. foreign policy objectives and that the extension of these controls will not have any significant adverse foreign policy consequences. Regional stability controls are consistent with U.S. foreign policy goals to promote peace and stability and prevent U.S. exports that might contribute to weapons production, destabilizing military capabilities, or acts of terrorism.

3. *Reaction of Other Countries.* The Secretary has determined that any adverse reaction to these controls is not likely to render the controls ineffective, nor will any adverse reaction by other countries be counterproductive to U.S. foreign policy interests. A number of other

countries limit exports of items and technologies with military applications to areas of concern, recognizing that such items and technologies could adversely affect regional stability and military balances. For example, each member country of the Wassenaar Arrangement has its own national controls on the export of certain night vision devices. All members of the MTCR maintain controls on software and technology related to missile guidance and control devices. Although other countries may object to new unilateral RS controls, allies and partners of the United States support U.S. efforts against regional conflict and terrorism and appreciate the need to keep certain equipment and technologies from persons who could misuse the items to destabilize countries or regions.

4. *Economic Impact on U.S. Industry.* The controls on cameras controlled by ECCN 6A003, which exceed the controls on similar products imposed by other producing countries, have significantly and adversely affected the competitiveness of this industry sector. The Secretary nevertheless has determined that the detrimental effect of these controls on the economy of the United States, including on the competitive position of the United States in the international economy, does not exceed the benefit to U.S. foreign policy objectives. Cameras controlled by ECCN 6A003 account for a large percentage of RS-controlled exports. Items controlled for RS reasons generally require licenses for export to all destinations except NATO countries, Australia, Japan, and New Zealand. However, certain RS-controlled items, including those controlled concurrently for Missile Technology reasons as well as cameras controlled under ECCN 6A003, require licenses for export to all destinations except Canada.

5. *Effective Enforcement of Controls.* The Secretary has determined that the United States has the ability to enforce these controls effectively. Image intensifier tubes, infrared focal plane arrays, certain software and technology for inertial navigation systems, gyroscopes, accelerometers, and other items controlled for RS purposes are almost all subject to multilateral controls for either National Security (NS) or Missile Technology (MT) reasons.

Other RS controls cover items of lower level technologies that have been de-controlled by the multilateral regimes and are widely available from other exporting countries. The Department of Commerce effectively enforces RS controls by focusing on preventive enforcement, using regular outreach efforts to keep businesses informed of U.S. concerns, and gathering leads on activities of concern. Additionally, exporters are required to report to BIS on exports of thermal imaging cameras decontrolled by a May 2009 regulatory change described below, thereby enabling BIS to verify that the cameras continue to be sold to appropriate end users and that the changes in controls are not jeopardizing U.S. national security or foreign policy interests. Given the enhanced anti-terrorism and national security efforts of the U.S. Government, it is expected that industry will continue to support enforcement efforts.

BIS gathers leads on activities of concern and conducts end-use checks, primarily through its Export Control Officer and Sentinel programs, to verify the end use and end-users of U.S.-origin items. End-use checks involve the assessment of bona fides (i.e., legitimacy and reliability) of

foreign end users that receive U.S.-origin items and prospective end-users on pending license applications for diversion risk, as well as educational outreach to foreign trade groups.

BIS conducted a number of enforcement actions regarding noncompliance with these export controls, including:

ARC Electronics

Microelectronics to Russia

On October 3, 2012, an indictment was unsealed charging members of a Russian military procurement network operating in the United States and Russia. Among others, Texas-based Arc Electronics, one of its owners, Alexander Fishenko, and some of its employees and associates, were charged in part with violations of the International Emergency Economic Powers Act (IEEPA) for illegally exporting high-tech microelectronics from the United States to Russian military and intelligence agencies. Fishenko was also charged with operating as an unregistered agent of the Russian government in the United States. Microelectronics are controlled under ECCN 3A001, for national security reasons, and have a wide range of potential uses in military systems, including radar and surveillance systems, weapons guidance systems, and detonation triggers. The defendants allegedly obtained these items by submitting false information regarding the true identity of the users and intended uses of the high-tech items before exporting the items without the required licenses. While criminal prosecution is ongoing, over the past several years BIS has added to the Entity List approximately 160 foreign individuals and companies who received, transshipped, or otherwise facilitated the export of controlled microelectronics in connection with Arc Electronics. The Entity List prohibits these entities from receiving any item subject to the EAR unless the exporter, reexporter, or in-country transferor obtains a BIS license. This is an ongoing joint investigation involving the Federal Bureau of Investigation, Defense Criminal Investigative Service, and Naval Criminal Investigative Service.

C. Consultation with Industry

On September 4, 2014, the Department of Commerce solicited public comments in the *Federal Register* (79 FR 52630) on the effectiveness of U.S. foreign policy-based export controls, including controls on RS items. The comment period on the *Federal Register* notice closed on October 6, 2014. A detailed review of all public comments received can be found in Appendix I. In addition, comments were solicited from the public via the BIS website. Comments from the Department's seven Technical Advisory Committees are solicited on a regular basis but are not detailed in this report. In particular, the Department holds quarterly consultations with the Sensors and Instrumentation Technical Advisory Committee (SITAC). The SITAC frequently addresses the RS controls on thermal imaging cameras and related items and technology.

D. Consultation with Other Countries

Wassenaar Arrangement member countries hold extensive consultations, and certain member countries hold bilateral discussions regarding items on the Wassenaar control list. During 2014, the U.S. Government engaged in extensive consultations with its Wassenaar partners. Wassenaar participating states incorporate the Wassenaar Dual-Use Control List into their own national export controls to prevent exports that could contribute to destabilizing buildups of conventional arms.

E. Alternative Means

The United States has undertaken a wide range of actions to support and encourage regional stability and has specifically encouraged efforts to limit the flow of arms and militarily useful goods and other special equipment to regions of conflict and tension. U.S. regional stability export controls remain an important element in U.S. efforts to enhance regional stability. The United States opposes the use of U.S.-origin items to destabilize legitimate political regimes or fuel regional conflicts, notwithstanding the availability of such items from other sources. Accordingly, there are no alternative means to achieve this policy objective.

F. Foreign Availability

Some military vehicles and other military-type equipment that are controlled for RS purposes may be obtained from foreign sources. Software, technology, chemicals, low capability sensors, and other items controlled for RS purposes are widely available. However, in some cases there are overlapping multilateral NS controls on many RS-controlled items. Some of the commodities, related software, and technology controlled for RS purposes are also subject to multilateral controls for either NS or MT reasons under multilateral regimes. Therefore, controls imposed by multilateral regime members restrict foreign availability of these items.

Manufacturers of imaging cameras controlled under ECCN 6A003 have voiced concern to the Department of Commerce that there is considerable foreign availability of these items from Europe, Japan, and China. This foreign availability and differences in licensing practices were major factors that led the Department of Commerce to revise RS controls on certain thermal imaging cameras in a regulation published on May 22, 2009 (74 FR 23941). This regulation eliminated licensing requirements for certain cameras when exported to 37 countries, reduced licensing volume significantly, and mitigated industry's concerns about foreign availability.

CHAPTER 4

Anti-Terrorism Controls (Sections 742.8, 742.9, 742.10, 746.2)

Export Control Program Description and Licensing Policy

The U.S. Government controls exports of items subject to the Export Administration Regulations (EAR) for Anti-Terrorism reasons under Sections 6(a) and 6(j) of the Export Administration Act of 1979, as amended (EAA). Pursuant to Section 6(j) of the EAA, the Secretary of State has designated four countries—Cuba, Iran, Sudan, and Syria—as nations with governments that have repeatedly provided support for acts of international terrorism and has designated these countries as state sponsors of terrorism.⁶ Controls imposed for Anti-Terrorism reasons are identified in the EAR as Anti-Terrorism (AT) controls. Additionally, the United States maintains broad controls, and in some cases comprehensive sanctions, on exports and re-exports to Cuba, Iran, Sudan, and Syria. The broader controls applicable to such countries are discussed in Chapter 5 of this report.

Since December 1993, the U.S. Government has reviewed license applications involving the export or re-export of the following five categories of dual-use items to military, police, intelligence, and other sensitive end-users within countries designated as terrorist-supporting countries in accordance with the criteria set forth in Section 6(j)(1)(B) of the EAA:

- all items on the CCL subject to national security controls;
- all items on the CCL subject to chemical and biological weapons proliferation controls;
- all items on the CCL subject to missile proliferation controls;
- all items on the CCL subject to nuclear weapons proliferation controls; and
- all military-related items on the CCL (items controlled by CCL entries ending with the number 18 and 600 series items).

Specifically, on December 28, 1993, the Acting Secretary of State determined that items in these categories, if exported or re-exported to military, police, intelligence organizations, or to other sensitive end-users in a designated terrorist-supporting country, could make a significant contribution to that country's military potential or could enhance its ability to support acts of international terrorism. As a result, any export or re-export of an item in these categories is subject to a 30-day congressional notification period prior to approval.

⁶Although the designation of North Korea as a state sponsor of terrorism was rescinded on October 11, 2008, BIS continues to maintain AT controls on the country. Moreover, additional export control requirements under the EAR apply to exports and reexports to North Korea on the basis of other laws and regulations, and in accordance with United Nations Security Council Resolution 1718 (UNSCR 1718 of October 14, 2006).

The United States controls exports and re-exports of such items to other, non-sensitive end users, as well as exports and re-exports of certain other CCL items to all end users, in designated state sponsors of terrorism for foreign policy purposes under Section 6(a) of the EAA, which provides the general authority for foreign policy controls. Such transactions are also reviewed against the Section 6(j) standard to determine the applicability of Section 6(j) controls.

License Requirements and Licensing Policy

Pursuant to the 1993 determination of the Acting Secretary of State and subsequent action consistent with it, exports and re-exports of items in the five categories described above to certain sensitive end users in terrorist-supporting countries are controlled for AT reasons pursuant to Section 6(j) of the EAA. In accordance with Section 6(a) of the EAA, the Department of Commerce requires a license for the export and/or re-export of items in these five categories to non-sensitive end users and certain items on the CCL to all end users in designated terrorist-supporting countries for AT reasons. The applicable controls are contained in the relevant EAR sections pertinent to each country.

The Department of Commerce refers all license applications for items controlled for AT reasons to the Department of State for review. With respect to items controlled pursuant to Section 6(a) (including exports or re-exports of items on the CCL to non-sensitive end-users), an initial determination is made whether the requirements of Section 6(j) apply. If the Secretary of State determines that the particular export or re-export to a state sponsor of terrorism “could make a significant contribution to the military potential of the destination country, including its military logistics capability, or could enhance the ability of such country to support acts of international terrorism” pursuant to Section 6(j)(1)(B), a license will be required and the Departments of Commerce and State must notify the appropriate congressional committees 30 days before issuing one, consistent with the provisions of Section 6(j)(2) of the EAA. Transactions that do not rise to the Section 6(j)(1)(B) standard are generally reviewed on a case-by-case basis.

Pursuant to Section 6(a) of the EAA, the Department of Commerce requires a license for the export and/or re-export of certain items on the CCL to all end users in all designated terrorist-supporting countries for AT reasons. The applicable controls are contained in the relevant EAR sections pertinent to each country. All applicable controls currently maintained for AT reasons pursuant to either Section 6(j) or Section 6(a) of the EAA continue in force.

Moreover, as described further in Chapter 5, the United States maintains additional controls on exports and re-exports to Cuba, Iran, North Korea, Sudan, and Syria. As a result, the U.S. Government reviews license applications for exports and re-exports of most AT-controlled items to these countries under a general policy of denial, with limited exceptions.

Analysis of Controls as Required by Section 6(f) of the Export Administration Act

A. The Purpose of the Controls

Anti-Terrorism controls are intended to prevent acts of terrorism and to distance the United States from nations that have repeatedly supported acts of international terrorism and from individuals and organizations that commit terrorist acts. The controls demonstrate U.S. resolve not to trade with nations, entities, or individuals that fail to adhere to acceptable norms of international behavior. The policy provides the United States with the means to control U.S. goods or services that might contribute to the military potential of designated countries and to limit the availability of such goods or services for use in support of international terrorism. U.S. foreign policy objectives are also furthered by ensuring that items removed from multilateral regime lists continue to be controlled to designated terrorist-supporting countries on an alternative basis. With respect to exports and re-exports to Cuba, Iran, North Korea, Sudan, and Syria, AT controls are maintained as part of broader U.S. sanctions discussed in Chapter 5.

B. Considerations and Determinations of the Secretary of Commerce

1. *Probability of Achieving the Intended Foreign Policy Purpose.* The Secretary has determined that these controls are likely to achieve the intended foreign policy purpose, namely, deterring acts of international terrorism and distancing the U.S. from designated terrorist-supporting countries. The Secretary has also determined that the foreign policy purpose cannot be achieved through negotiations or other alternative means. Although widespread availability of comparable goods from foreign sources limits the effectiveness of these controls, the controls restrict access to U.S.-origin commodities, technology, and software, and demonstrate U.S. determination to oppose and distance the United States from international terrorism.

2. *Compatibility with Foreign Policy Objectives.* The Secretary has determined that these controls are generally compatible with U.S. foreign policy objectives and specifically with U.S. policy toward the designated terrorist-supporting countries. The Secretary has also determined that the extension of these controls will not have any significant adverse foreign policy consequences. These controls affirm the U.S. commitment to restrict the flow of items intended for material support to countries, individuals, or entities for terrorist purposes.

3. *Reaction of Other Countries.* The Secretary has determined that any adverse reaction to these controls is not likely to render the controls ineffective; nor will any adverse reaction by other countries be counterproductive to U.S. foreign policy interests. Most countries are generally supportive of U.S. efforts to fight terrorism and to stop the proliferation of weapons of mass destruction and the export and re-export of sensitive items to governments that have repeatedly provided support for acts of international terrorism, as well as to individuals and entities that commit terrorist acts.

4. *Economic Impact on United States Industry.* The Secretary has determined that the detrimental effect of these controls on the economy of the United States, including on the

competitive position of the United States in the international economy, does not exceed the benefit to United States foreign policy objectives. While U.S. industry has reported that AT controls have had a detrimental effect, the Secretary has determined that the effect has been modest, especially when viewed in relation to U.S. foreign policy and national security objectives.

5. *Effective Enforcement of Controls.* The Secretary has determined the United States has the ability to enforce these controls effectively. Because of the well-publicized involvement of these countries in acts of international terrorism, there is public knowledge of and support for U.S. controls, which facilitates enforcement. However, the large number of items exported in normal trade to other countries, including some aircraft items and consumer goods that have many producers and end users around the world, creates procurement opportunities for brokers, agents, and front companies working in and behalf of end users in the designated terrorist-supporting countries. In addition, differences in export laws and standards of evidence for violations complicate law enforcement cooperation among countries.

Notwithstanding these challenges, the Department of Commerce has developed effective mechanisms to enforce these controls, which serve vital U.S. foreign policy objectives. The Department of Commerce views these controls as a key enforcement priority, and uses outreach efforts and other programs to keep businesses informed of concerns and their obligations. BIS gathers leads on activities of concern and conducts end-use checks, primarily through its Export Control Officer and Sentinel programs, to verify the end use and end-users of U.S.-origin items. End-use checks involve the assessment of bona fides (i.e., legitimacy and reliability) of foreign end users that receive U.S.-origin items and prospective end-users on pending license applications for diversion risk, as well as educational outreach to foreign trade groups. The Department addresses procurement by or destined for designated terrorist-supporting countries through a variety of means, including enhanced agent training, a targeted outreach program to familiarize U.S. businesses with concerns, and close cooperation with other agencies working on terrorism issues.

BIS conducted a number of enforcement actions regarding noncompliance with these export controls, including:

Randy Dale Barber/Michael Dragoni/Fortis Data Systems LLC/Greencloud LLC
Diversion of high end computers and parts to Iran

On July 17, 2014, Randy Dale Barber was sentenced in the U.S. District Court for Middle District of Florida to five years of probation, a \$413,106 forfeiture, and a joint restitution payment of \$37,921 to Hitachi Data Systems (HDS) for his role in a criminal conspiracy to export computer equipment to Iran. On July 10, 2014, co-conspirator Michael Dragoni was sentenced by the same court to eight months of home detention, five years of probation, and the joint restitution payment of \$37,921 to HDS. In addition, the Court sentenced Fortis Data Systems LLC and Greencloud LLC, two companies used by Dragoni as part of the conspiracy, to five years of probation and the same joint restitution payment of \$37,921 to HDS. Dragoni,

Fortis Data Systems, and Greencloud were additionally ordered to jointly forfeit \$498,706. From August 2009 through at least August 2011, Dragoni and Barber conspired to defraud HDS by making materially false statements in order to purchase computer equipment for resale to Mohammad Reza “Ray” Hajian, who in turn resold the equipment to his customers, an Iranian national and a company in the United Arab Emirates. (Hajian was sentenced in 2012 in connection with the same criminal conspiracy). By late 2009, Dragoni, Barber and Hajian knew that HDS refused to sell computer equipment to Hajian and his customers because HDS believed that the equipment was being diverted to unauthorized end users. In order to deceive HDS and purchase the computer equipment, Dragoni and Barber made false statements regarding the purchaser, end user, and location of installation of the equipment that they were purchasing. To facilitate the conspiracy, they used front companies to make equipment purchases on their behalf. The conspirators then caused the equipment to be shipped to the United Arab Emirates. This was a joint case involving BIS’s Office of Export Enforcement and U.S. Immigration and Customs Enforcement.

Lisong Ma

Illegal Export of Carbon Fiber to China

On May 24, 2014, Lisong Ma was sentenced in U.S. District Court for the Eastern District of New York to 46 months in prison. On May 30, 2013, Ma, a Chinese citizen, pled guilty in connection with the illegal attempted export of weapons-grade carbon fiber to the People’s Republic of China. Ma, who sought to negotiate the purchase of up to five tons of this carbon fiber, which has applications in the defense and aerospace industries, attempted to export a sample of the carbon fiber, falsely labeled as “clothing,” from the United States to China without the required Department of Commerce export license. Ma was arrested in April 2013, in Los Angeles, CA, on his way to China, after attempting to close a deal to acquire and export the specialized, weapons-grade materials. This was a joint investigation involving the Office of Export Enforcement, U.S. Immigration and Customs Enforcement, and the Defense Criminal Investigative Service.

The Parts Guys

Aircraft parts to Iran

On December 10, 2013, Mohammad Tabibi was sentenced in the U.S. District Court for the Middle District of Georgia to 38 months in prison, a \$32,000 forfeiture, and a \$200 special assessment in connection with Tabibi’s role in a conspiracy to illegally export parts for fighter jets and attack helicopters from the United States to Iran. In June 2012, Tabibi was extradited to the United States from the Czech Republic, where he had been arrested in October 2011. Tabibi was the fifth defendant to be sentenced in the case.

Previously, four U.S. nationals or companies had received sentences. Michael Edward Todd was sentenced to 46 months in prison, three years of supervised release, and a forfeiture of \$160,362 shared between Todd, Todd's company The Parts Guys LLC, Hamid Seifi, and Seifi’s company Galaxy Aviation Services. Seifi was sentenced to 56 months in prison, three years of supervised

release, a \$12,500 criminal fine, and an additional forfeiture of \$153,940 shared with Galaxy Aviation Services. Todd, The Parts Guys LLC, Seifi, and Galaxy Aviation Services also received assessments in the amount of \$100, \$400, \$200, and \$400, respectively.

In addition to the convictions of these defendants, on June 28, 2011, BIS added a total of eight other companies and individuals, located in France, Iran, and the United Arab Emirates, to the Entity List in connection with this investigation.

As part of the procurement network and conspiracy, Todd used his company, The Parts Guys LLC, to receive and fill orders for components from Seifi, an Iranian-born U.S. national and the owner of Galaxy Aviation Services. Seifi and other entities in the United Arab Emirates purchased components from Todd on the behalf of parties in Iran and conspired to export the components, via France, without obtaining the required export licenses from the U.S. Department of Commerce. The components included parts for the Bell AH-1 attack helicopter, the UH-1 Huey attack helicopter, as well as the F-5 and F-4 fighter jets. This was a joint investigation by the Office of Export Enforcement along with U.S. Immigration and Customs Enforcement and the Federal Bureau of Investigation.

C. Consultation with Industry

In a September 4, 2014 *Federal Register* notice (79 FR 52630), the Department of Commerce solicited comments from industry and the public on the effectiveness of U.S. foreign policy-based export controls. The comment period closed on October 6, 2014. A detailed review of all public comments received may be found in Appendix I. The Department continues to engage in an ongoing dialogue with the Regulations and Policy Technical Advisory Committee (RPTAC) concerning items controlled only for AT reasons. The RPTAC has asserted that many such items are widely available from foreign sources and therefore has questioned the effectiveness of the controls. The RPTAC also has stated that every country currently subject to AT controls is also subject to comprehensive sanctions or embargoes. The RPTAC, however, has not disputed either the importance of the controls to United States foreign policy or the effectiveness of the particular enforcement mechanisms used by the Department.

D. Consultation with Other Countries

The United States continues to consult with a number of countries, both on a bilateral and a multilateral basis, regarding activities of designated terrorist-supporting countries. In general, most countries are supportive of U.S. anti-terrorism efforts but do not implement export control programs comparable to that of the United States. However, the continued maintenance of sanctions by many other countries limits foreign availability for some destinations.

E. Alternative Means

The United States has taken a wide range of diplomatic, political, and security-related steps, in addition to economic measures such as export controls, to persuade certain countries to

discontinue their support for terrorist activities. The methods that the United States uses against a country, terrorist organization, or individual vary and are dictated by the circumstances prevailing at any given time. In general, the United States believes that maintenance of AT controls is an appropriate method to deter acts of state-sponsored terrorism by the designated terrorism-supporting countries and encourage those designated terrorism-supporting countries to act against terrorist-supporting entities and individuals within their jurisdiction or control. See also Chapter 13 for a discussion of the Entity List, a list set forth in the EAR of foreign persons to which license requirements apply based on criteria that include support for terrorism.

F. Foreign Availability

The foreign availability provision does not apply to items determined by the Secretary of State to require control under Section 6(j) of the EAA.⁷ Congress specifically excluded AT controls from foreign availability assessments otherwise required by the EAA, due to the value of such controls in emphasizing the U.S. position on countries whose governments support international terrorism. However, the Department of Commerce has considered the foreign availability of items controlled to designated terrorist-supporting countries under Section 6(a) of the EAA. Although there are numerous foreign sources for items similar to those subject to control, the maintenance of sanctions by many other countries limits foreign availability for some destinations. In addition, the U.S. Government's AT controls serve important foreign policy interests.

⁷ Provisions pertaining to foreign availability do not apply to export controls in effect before July 12, 1985, under sections 6(i) (International Obligations), 6(j) (Countries Supporting International Terrorism), and 6(n) (Crime Control Instruments). See the Export Administration Amendments Act of 1985, Public Law 99-64, section 108(g)(2), Stat. 120, 134-35. Moreover, Sections 6(i), 6(j), and 6(n) of the EAA require that controls be implemented under certain conditions without consideration of foreign availability.

Chapter 5

Embargoes, Sanctions, and Other Special Controls (Sections 744.8, 744.12, 744.13, 744.14, 744.18, 744.20, 744.21, 744.22, 746.2, 746.3, 746.4, 746.7, 746.9, and General Order No. 2 (Supplement No. 1 to Part 736))

Export Control Program Description and Licensing Policy

This Chapter discusses the Department of Commerce's implementation of comprehensive and partial embargoes and sanctions programs, and other special controls maintained by the U.S. Government pursuant to the Export Administration Regulations (EAR), either unilaterally or to implement United Nations (UN) Security Council Resolutions. Specifically, the U.S. Government maintains either partial or comprehensive economic and trade sanctions on Cuba, Iran, Russia, Sudan, Syria, and certain designated terrorist persons. The U.S. Government also maintains certain special export control programs, including programs relating to Iraq, North Korea, and certain other countries, consistent with international obligations. Finally, the U.S. Government maintains special controls on certain end uses and end users, including controls intended to curtail the proliferation of weapons of mass destruction. See also Chapter 13 for a discussion of the Entity List.

License Requirements and Licensing Policy

Certain Designated Persons

The Department of Commerce requires a license for the export or re-export of all items subject to the EAR to Specially Designated Global Terrorists (SDGTs), Specially Designated Terrorists (SDTs), and Foreign Terrorist Organizations (FTOs), and a general policy of denial applies to all applications for such exports or re-exports. SDGTs, SDTs, and FTOs are identified with the bracketed suffixes [SDGT], [SDT], and [FTO], respectively, on a list of designated persons maintained by the Office of Foreign Assets Control (OFAC), U.S. Department of the Treasury, in Appendix A to 31 CFR Chapter V. Exports and re-exports made by U.S. Persons to SDGTs and SDTs that are authorized by OFAC generally do not require separate Bureau of Industry and Security (BIS) authorization; this rule does not apply to FTOs.

Furthermore, the Department of Commerce requires a license for exports and re-exports of all items subject to the EAR to persons designated in or pursuant to Executive Order 13382 of June 28, 2005 (Weapons of Mass Destruction Proliferators and their Supporters), and a general policy of denial applies to all license applications for such transactions. The persons whose property or interests in property are blocked pursuant to Executive Order 13382 are identified by OFAC in Appendix A to 31 CFR Chapter V with the bracketed suffix [NPWMD]. Exports and re-exports made by U.S. Persons to NPWMDs that are authorized by OFAC generally do not require separate BIS authorization.

In addition, the Department of Commerce requires licenses for exports, re-exports, and in-country transfers to persons whose property and interests in property are blocked in response to

the conflict in Burma pursuant to Executive Order 13310 of July 28, 2003, Executive Order 13448 of October 18, 2007, and Executive Order 13464 of April 30, 2008, and a general policy of denial applies to all license applications for such transactions. These license requirements apply to all items subject to the EAR other than agricultural commodities, medicine, or medical devices designated as EAR99 that are destined for persons whose property and interests in property are blocked pursuant to any of the Executive Orders. All persons listed in or designated pursuant to Executive Orders 13310, 13448, or 13464 are identified by OFAC in Appendix A to 31 CFR Chapter V with the bracketed suffix [BURMA]. Exports, re-exports, or in-country transfers made by U.S. Persons to persons designated in or pursuant to these Executive Orders that are authorized by OFAC generally do not require separate BIS authorization.

Certain Military End Uses and Military End Users

The Department of Commerce requires a license for the export, re-export, or transfer (in-country) of certain items⁸ when the exporter, reexporter, or transferor knows or is informed that the items are intended for a “military end use” in the People’s Republic of China (PRC) or a military end use or military end user in Russia or Venezuela. Applications subject to this license requirement are denied if the transactions would make a material contribution to the military capabilities of the PRC, Russia, or Venezuela and would result in advancing the country’s military activities contrary to the national security interests of the United States.

Cuba

The Department of Commerce requires a license for export or re-export to Cuba of virtually all commodities, technology, and software subject to the EAR, with a few narrow exceptions for items generally authorized by a License Exception such as:

- food and certain items to meet basic human needs;
- certain types of personal baggage;
- certain foreign-origin items in transit from Canada through the United States;
- items for U.S. Government personnel and agencies, and agencies of cooperating governments;
- certain donated consumer communications devices; and
- gift parcels containing items normally exchanged as gifts between individuals (and in quantities normally exchanged between individuals), including food, medicine, clothing, and certain consumer communications devices, provided that the value of non-food items does not exceed \$800.⁹

The Department of Commerce generally denies license applications for exports or re-exports to Cuba. However, the Department considers applications for a few categories of exports,

⁸ Supplement No. 2 to Part 744 of the EAR lists the items that are subject to this license requirement.

⁹ An individual donor does not require a license to send a gift parcel addressed to an individual recipient. A gift parcel consolidator who exports multiple parcels in a single shipment for delivery to Cuba does require a license. (See note to Section 740.12(a) of the EAR.)

including the following, on a case-by-case basis when the exports are intended to provide support for the Cuban people or the transactions would be consistent with the foreign policy interests of the United States:

- exports from third countries of non-strategic, foreign-made products containing 20 percent or less U.S.-origin parts, components, or materials, provided the exporter is not a U.S.-owned or controlled foreign firm in a third country;
- exports and re-exports of items necessary to provide efficient and adequate telecommunications links between the United States and Cuba, including links established through third countries, and including the provision of satellite radio or satellite television services to Cuba;
- exports of certain commodities and software destined to human rights organizations or to individuals and non-governmental organizations that promote independent activity;
- exports of certain commodities and software for U.S. news bureaus in Cuba;
- exports of certain agricultural items not eligible for License Exception Agricultural Commodities (AGR); and
- exports of certain vessels and aircraft on temporary sojourn to Cuba.

The Department of Commerce reviews applications for exports of donated and commercially supplied medicine or medical devices to Cuba on a case-by-case basis, pursuant to the provisions of Section 6004 of the Cuban Democracy Act of 1992. The United States will generally approve such exports, except in the following cases:

- to the extent Section 5(m) of the Export Administration Act of 1979, as amended (EAA) or Section 203(b)(2) of the International Emergency Economic Powers Act (IEEPA) permit such restrictions;
- when there is a reasonable likelihood the item to be exported will be used for purposes of torture or other human rights abuses;
- when there is a reasonable likelihood the item to be exported will be re-exported;
- when the item to be exported could be used in the production of any biotechnological product; or
- if it is determined that the U.S. Government is unable to verify, by on-site inspection and other appropriate means, that the item to be exported will be used only for its intended purpose and only for the use and benefit of the Cuban people. This exception does not apply to donations of medicine for humanitarian purposes to non-governmental organizations in Cuba.

The Department authorizes exports and certain re-exports of agricultural commodities to Cuba under License Exception AGR, pursuant to section 906(a)(1) of the Trade Sanctions Reform and Export Enhancement Act of 2000 (TSRA). Under License Exception AGR, an exporter must submit prior notification of a proposed transaction to the Department of Commerce. The exporter may proceed with the shipment when the Department confirms that no reviewing agency has raised an objection (generally within 12 business days), provided the transaction

meets all of the other requirements of the License Exception. This expedited review includes the screening of the ultimate recipient of the commodities to ensure that it is not involved in promoting international terrorism.

On December 17, 2014, the President announced several changes in United States policy toward Cuba. To the extent relevant to the EAR, these changes will be reflected in amendments made by BIS in early 2015.

Iran

OFAC administers the U.S. Government's comprehensive trade and investment sanctions against Iran. No person may export or re-export items subject to the EAR if such transaction is prohibited by OFAC's Iranian Transactions and Sanctions Regulations¹⁰ and not authorized by OFAC. Virtually all trade and investment activities with Iran by U.S. persons, wherever located, are prohibited by the Iranian Transactions and Sanctions Regulations. Certain trade activities by non-U.S. persons, including some re-exports, are also prohibited by OFAC under these regulations.

The Department of Commerce imposes license requirements for exports and re-exports to Iran of most items on the CCL. The Iran-Iraq Arms Non-Proliferation Act of October 23, 1992 (IIANPA) requires BIS to deny licenses for items controlled to Iran for national security (Section 5 of the EAA) or foreign policy (Section 6 of the EAA) reasons. License applications for exports or re-exports of these items are subject to a general policy of denial, absent contract sanctity or a Presidential waiver of restrictions under IIANPA. In some cases, the EAR impose license requirements on items designated as EAR99 that are (1) destined to end-users listed in OFAC's list of SDNs, or (2) destined to end uses or end users prohibited by Part 744 of the EAR. Because they are not specific to Iran, the license requirements for items designated as EAR99 are listed in either this Chapter's description of controls on certain designated persons or in Chapter 13's discussion of the BIS Entity List.

Notwithstanding Department of Commerce license requirements and licensing policies, OFAC is the primary licensing agency for exports and re-exports to Iran, and BIS does not, in practice, receive or process license applications for transactions involving Iran except under the following circumstances: (1) the license is for the release (deemed export) of technology or source code on the CCL to Iranian nationals in the United States or of the release (deemed re-export) of such technology or source code to Iranian nationals located abroad; or (2) the license is for the export or re-export of EAR99 items to certain end users or for certain end uses in Iran that are prohibited pursuant to provisions of the EAR that are not specific to Iran (e.g., Part 744 end-use/end-user controls).

¹⁰ 31 C.F.R. Part 560. On October 22, 2012, OFAC issued a final rule that renamed the Iranian Transactions Regulations as the Iranian Transactions and Sanctions Regulations and amended and reissued them in their entirety. *See* 77 FR 64664 (Oct. 22, 2012).

BIS takes enforcement action against violators of the Iran-related provisions of the EAR. It is a violation of the EAR to export or re-export to Iran any item that is subject to the EAR – including items designated as EAR99 – if such transaction requires authorization by OFAC pursuant to the Department of the Treasury’s Iranian Transactions and Sanctions Regulations and such authorization has not been obtained.

Iraq

The Department of Commerce requires a license for the export or re-export to Iraq, or in-country transfer within Iraq, of the following:

- any item controlled on the CCL for National Security (NS), Missile Technology (MT), Nuclear Nonproliferation (NP), Chemical Weapons Convention (CW), Chemical & Biological Weapons (CB), Regional Stability (RS), Crime Control (CC), Encryption Information (EI), Significant Items (SI), or Surreptitious Listening (SL) reasons;
- any item controlled on the CCL for UN reasons;
- items on the CCL controlled for RS reasons under the following ECCNs: 0B999, 0D999, 1B999, 1C992, 1C995, 1C997, 1C999 and 6A992;
- any item subject to the EAR if, at the time of the export, re-export or transfer, it is known the item will be, or is intended to be, used for a military end use or by a military end user.

As defined specifically for Iraq, a military end user is any person or entity whose actions or functions are intended to support “military end uses” and who is not recognized as a legitimate military organization by the U.S. Government. “Military end use” is the incorporation of an item into a military item described on the USML (22 CFR Part 121, ITAR), or the Wassenaar Arrangement Munitions List (WAML); or use, development, or deployment of military items described on the USML or the WAML. The Department reviews license applications destined to such end users under a policy of denial.

The Department of Commerce also reviews license applications for the following items under a general policy of denial:

- items destined for use in Iraqi civil nuclear or military nuclear activity (except for use of isotopes for medical, industrial, or agricultural purposes);
- machine tools controlled for NS reasons, machine tools controlled for NP reasons, any item controlled for CC or UN reasons, or any item controlled under an ECCN ending in the number “018,” if such item would make a material contribution to the production, research, design, development, support, maintenance, or manufacture of Iraqi weapons of mass destruction, ballistic missiles, or arms and related materiel; and
- items controlled for RS reasons under ECCNs 0B999, 0D999, 1B999, 1C992, 1C995, 1C997, 1C999, or 6A992 that will not contribute to the building of Iraqi civil infrastructure.

The Department of Commerce additionally requires a license for exports, re-exports, or in-country transfers of any item subject to the EAR to persons listed in the Annex to Executive

Order 13315, as amended (“Blocking Property of the Former Iraqi Regime, Its Senior Officials and Their Family Members, and Taking Certain Other Actions”), as well as persons subsequently designated by the Secretary of the Treasury pursuant to that Executive Order. U.S. persons are not required to seek separate BIS authorization for an export, re-export, or in-country transfer to a designated person that has already been authorized by the Department of the Treasury; however, license applications for such transactions are subject to a general policy of denial by the Department of Commerce.

North Korea

North Korea is subject to sanctions based on its nuclear and ballistic missile activities, engagement in proliferation and other illicit activities, and commission of human rights violations. Consistent with UN Security Council Resolutions 1718 and 1874, and as set forth in Section 746.4 of the EAR, BIS requires a license for the export or re-export to North Korea of all items subject to the EAR, except food and medicine designated as EAR99. Other controls on North Korea are located in Section 742.19 of the EAR.¹¹

Pursuant to Section 746.4 of the EAR, applications for items requiring a license for export or re-export to North Korea are subject to case-by-case review, except as follows:

- Applications to export or re-export luxury goods are subject to a general policy of denial.
- Applications to export or re-export arms and related materiel; items specified by UN documents S/2006/814, S/2006/815 and S/2006/853; and other items that the UN Security Council or the Sanctions Committee established pursuant to UN Security Council Resolution 1718 has determined could contribute to North Korea's nuclear-related, ballistic missile-related or other weapons of mass destruction-related programs, are subject to a general policy of denial.
- Applications to export or re-export items controlled for nuclear nonproliferation (NP) and missile technology (MT) reasons (except ECCN 7A103 items) are subject to a general policy of denial.
- Applications to export or re-export items controlled for chemical and biological weapons (CB) and national security (NS) reasons, as well as applications to export or re-export many items only controlled for anti-terrorism (AT) reasons, are subject to a general policy of denial.
- Applications to export or re-export humanitarian items (e.g., blankets, basic footwear, heating oil, and other items meeting subsistence needs) intended for the benefit of the North Korean people; items in support of UN humanitarian efforts; and agricultural commodities or medical devices that are determined by BIS, in consultation with the interagency license review community, not to be luxury goods are subject to a general policy of approval.

¹¹ Although the Secretary of State rescinded North Korea's designation as a state sponsor of terrorism on October 11, 2008, Section 742.19 of the EAR maintains anti-terrorism export controls with respect to North Korea.

Additionally, certain categories of items are authorized for export or reexport to North Korea under License Exceptions:

- Items for the use of the news media under certain conditions;
- Exports for U.S. Government personnel and agencies, the International Atomic Energy Agency (IAEA), or the European Atomic Energy Community (Euratom);
- Certain gift parcels by individuals and humanitarian donations by groups or organizations, except for luxury goods;
- Certain operation technology and software, sales technology, and software updates;
- Personal baggage for individuals leaving the United States; and
- Temporary sojourn of certain civil aircraft reexported to North Korea.

Russian Industry Sector Sanctions

The Department of Commerce requires a license for the export, re-export, or transfer (in-country) of certain items¹² when the exporter, reexporter, or transferor knows or is informed by BIS that the item will be used, directly or indirectly, in the exploration for, or production of, oil or gas in Russian deepwater (greater than 500 feet) or Arctic offshore locations or shale formations in Russia, or is unable to determine whether the items will be used in the aforementioned activities. Applications subject to these controls are reviewed with a presumption of denial when the items are for use, directly or indirectly, in exploration or production from Russian deepwater (greater than 500 feet), Arctic offshore, or shale projects in Russia that have the potential to produce oil.

Sudan

The U.S. Government requires a license for the export and re-export of nearly all items on the CCL to Sudan. Many items controlled on the CCL to Sudan may require a license from both the Departments of Commerce and the Treasury. License applications may be submitted to both agencies concurrently.

The Department of Commerce reviews, under a general policy of denial, applications for the export and re-export of all items controlled for chemical, biological, missile, and nuclear proliferation reasons, military-related items controlled for national security or regional stability reasons (CCL entries ending in the number 018), and certain items controlled for national security or foreign policy reasons, such as aircraft, cryptologic items, and explosive device detectors, for all end users in Sudan. Other non-military-related items that are controlled to Sudan for national security or foreign policy reasons are subject to a general policy of denial for military end users or end uses, and case-by-case review for non-military end users or end uses.

¹² Section 746.5 and Supplement No. 2 to Part 746 of the EAR list the items that are subject to this license requirement.

Syria

The Department of Commerce requires a license for the export or re-export to Syria of all commodities, technology, and software subject to the EAR, except food and medicine designated as EAR99, and “deemed exports” or “deemed re-exports” to Syrian nationals of technology or source code designated as EAR99. Additionally, certain categories of items are authorized for export or re-export to Syria under License Exceptions:

- Personal baggage for individuals leaving the United States;
- Items for the use of the news media under certain conditions;
- Exports for U.S. Government personnel and agencies;
- Certain operation technology and software, sales technology, and software updates; and
- Temporary sojourn of certain civil aircraft re-exported to Syria.

The Department of Commerce generally denies license applications for exports or re-exports to Syria. However, pursuant to the President’s exercise of waiver authority, the Department considers applications for the following on a case-by-case basis:

- Items necessary to carry out the President's constitutional authority to conduct U.S. foreign affairs and as Commander-in-Chief, or in support of U.S. Government activities;
- Medicine on the CCL and medical devices;
- Parts and components intended to ensure the safety of civil aviation and safe operation of commercial passenger aircraft;
- Aircraft chartered by the Syrian Government for the transport of Syrian Government officials on official Syrian Government business;
- Telecommunications equipment and associated computers, software, and technology to enhance the free flow of information, including items for general academic, administrative, business, and personal use;
- Items in support of UN operations in Syria; and
- Items in support of the Syrian people, including, but not limited to, items related to water supply and sanitation, agricultural production and food processing, power generation, oil and gas production, construction and engineering, transportation, and educational infrastructure.¹³

¹³ Pursuant to E.O. 13338 of May 11, 2004, the President exercised national security waiver authority set forth in Section 5(b) of the Syria Accountability and Lebanese Sovereignty Restoration Act of 2003 (the SAA), which authorized case-by-case licensing of the first six categories of items in this list. *See* General Order No. 2 to Supp. No. 1 to Part 736 of the EAR and Section 746.9 of the EAR. The President delegated his authority to issue additional waivers to the Secretary of State. On June 12, 2013, the Secretary of State issued a national security waiver consistent with the SAA and E.O. 13338 that applies to the items listed in the final bullet point.

United Nations Security Council Arms Embargoes

Pursuant to Part 746.1(b) of the EAR, the Department of Commerce requires a license for the export or re-export of items controlled for “UN” reasons to countries subject to United Nations Security Council arms embargoes: the Côte d’Ivoire, the Democratic Republic of the Congo, Eritrea, Iran, Iraq, Lebanon, Liberia, Libya, North Korea, Somalia, and Sudan.

Summary of 2014 Changes

On November 7, 2014, the Department of Commerce published a final rule in the *Federal Register* that amended Section 744.21 of the EAR to impose military end use and military end user controls on certain items to or within Venezuela. This action was taken in response to the Venezuelan military’s violent repression of the Venezuelan people.

On September 17, 2014, BIS amended Section 744.21 of the EAR to add "Russia" to the existing license requirement for exports, reexports and transfer (in-country) of certain items on the Commerce Control List or specified in the list in Supplement No. 2 to Part 744 when the exporter, reexporter, or transferor knows or has been informed by BIS that those items are intended for a “military end use” or “military end user” as those terms are defined in the provision. License Exception GOV Section 740.11 (b)(2)(i) and (ii) is available for these transactions. Applications intended for military end use or end users will be reviewed with a presumption of denial. As part of the same rule, BIS added to the Entity List five entities operating in the Russian Federation’s defense sector and five entities operating in Russia’s energy sector in response to Russia’s engaging in efforts to destabilize eastern Ukraine. These actions were taken in conjunction with the U.S. Department of the Treasury, which also imposed a new set of targeted prohibitions and designations against a range of Russian entities, including these ten entities.

On August 1, 2014, BIS amended the EAR to impose additional sanctions implementing U.S. policy toward Russia to address that country's continuing policy of destabilization in Ukraine and continuing occupation of Crimea and Sevastopol. BIS imposed controls on certain items when the exporter, reexporter, or transferor knows or is informed by BIS that the items will be used in the exploration or production from deepwater (greater than 500 feet), Arctic offshore, or shale formations that have the potential to produce oil or gas in Russia, or is unable to determine whether they will be used in such projects. In addition, BIS added one person located in Russia to the Entity List.

Analysis of Controls as Required by Section 6(f) of the Export Administration Act

A. The Purpose of the Controls

Certain Designated Persons

The purpose of controls on designated terrorist persons (natural persons, entities, and groups) and proliferators of weapons of mass destruction and their supporters is to restrict exports of

items that would be useful in enhancing the capability of these persons to undertake activities that support terrorism or contribute to the development of WMD. Additionally, the purpose of controls on political and military leaders and other persons in Burma that contribute to civil unrest and suppression of basic rights and freedoms in that country is to prevent these persons from acquiring items that could be used to carry out activities that are detrimental to U.S. foreign policy interests.

Certain Military End Uses and Military End Users

The purpose of these controls is to prevent certain sensitive items from being used in the PRC, Russia, or Venezuela to threaten the national security and foreign policy interests of the United States.

Cuba

The United States imposed an embargo on Cuba five decades ago because Cuban Government actions posed a serious threat to the stability of the Western Hemisphere and the Cuban Government expropriated property of U.S. citizens without compensation. In March 1982, the Secretary of State designated Cuba as a state sponsor of terrorism under Section 6(j) of the EAA. The purpose of the controls is to restrict exports that would allow Cuba to act as a destabilizing force and/or to support terrorism. The controls demonstrate the United States' resolve to maintain stability in the region and to actively work against the threat of terrorism and those who support it. At the same time, U.S. support for the export of food, gift parcels, and other humanitarian items, such as medicines and medical devices, ensures that the Cuban population is not deprived of basic supplies.

Iran

The purpose of the controls is to restrict exports of items that could enhance Iran's terrorism-supporting capabilities and to address other U.S. and international foreign policy concerns, including nonproliferation, human rights, and regional stability. By restricting the export of items that could have a military use, the controls demonstrate the resolve of the United States not to provide any direct or indirect military support for Iran and to support other U.S. foreign policy objectives. The controls also implement United Nations Security Council resolutions prohibiting the export of certain items that could assist Iran's nuclear missile weapons development programs. The United States' support for exports and re-exports of food items, medical supplies, and medical equipment is designed to ensure that U.S. export controls on Iran do not prevent the Iranian population from receiving what it needs for humanitarian purposes.

Iraq

The purpose of the controls is to restrict exports that might adversely affect the security situation in Iraq.

North Korea

The purpose of the controls is to restrict certain exports and reexports to North Korea to comply with the United States' obligations as a member of the United Nations, and to demonstrate the

United States' concern over North Korea's development, testing, and proliferation of nuclear weapons, missiles and missile technology, and other weapons of mass destruction.

Persons Sanctioned by the State Department

The purpose of the controls is to restrict exports to persons engaged in activities that are contrary to the foreign policy interests of the United States or who have violated U.S. export control laws. These controls demonstrate the United States' opposition to activities of concern as well as its resolve to actively work against the diversion of sensitive items to unauthorized end users or end uses.

Russia

The U.S. sanctions and export controls have been implemented against Russia due to its continuing policy of destabilization in eastern Ukraine and continuing occupation of Crimea and Sevastopol. Additionally, the deployment of Russian Federation military forces in Crimea (Occupied) undermines democratic processes and institutions in Ukraine; threatens its peace, security, stability, sovereignty, and territorial integrity; and contributes to the misappropriation of its assets, and thereby constitutes an unusual and extraordinary threat to the national security and foreign policy of the United States.

Sudan

The U.S. sanctions and export controls remain in place against Sudan due to its continued support for international terrorism. The controls maintained by BIS pursuant to the EAR support the broader sanctions maintained by OFAC pursuant to several Executive Orders and applicable laws.

Syria

The Government of Syria engages in widespread acts of violence against its own citizens and has used chemical weapons in heavily populated areas. Additionally, Syria's ongoing internal conflict significantly contributes to the destabilization throughout the region. Syria hosts various terrorist organizations and provides political and material support to Hezbollah in Lebanon. Moreover, the Syrian Government allows Iran to resupply Hezbollah through Syrian territory. The U.S. Government also remains concerned about Syria's interference in the internal affairs of Iraq as well as Lebanon. U.S. export controls reflect U.S. opposition to these activities. The controls also promote other U.S. foreign policy interests, including the protection of human rights, the encouragement of regional stability, and the safeguarding and destruction of chemical and biological weapons.

United Nations Security Council Arms Embargoes

The United States maintains export controls in accordance with the UN Security Council arms embargoes and partial embargoes on the Democratic Republic of the Congo, Côte d'Ivoire, Eritrea, Iran, Iraq, Lebanon, Liberia, Libya, North Korea, Somalia, and Sudan.

B. Considerations and Determinations of the Secretary of Commerce

1. Probability of Achieving Intended Foreign Policy Purpose. The Secretary has determined that the controls described in this Chapter are likely to achieve the intended foreign policy purpose, in light of other factors, including foreign availability from other countries. She has further determined that the foreign policy purpose cannot be achieved through negotiations or alternative means. For each of the controls described in this Chapter, the Secretary has determined that such restrictions have denied the targeted countries and persons access to resources for use in activities that are contrary to the foreign policy of the United States. The controls described in this Chapter seek to have the targeted entities or governments modify their actions. In addition, the applicable controls may reduce the potential for conflict.

Certain Designated Persons

The Secretary has determined that foreign policy controls will help thwart the access that these persons have had to U.S.-origin items that could support terrorist operations, WMD proliferation, or other restricted activities.

Certain Military End Uses and Military End Users

The Secretary has determined that these controls will help restrict the availability of certain sensitive items for military end uses and to military end users in PRC, Russia, and Venezuela, thereby advancing U.S. national security and foreign policy interests.

Cuba

The Secretary has determined that the sanctions will help to bring about a peaceful and stable transition toward democracy and a free market economy in Cuba while providing for the basic human needs of the Cuban people.

Iran

The Secretary has determined that foreign policy controls will restrict Iran's access to specified U.S.-origin items that could contribute to Iran's nuclear weapons development program and Iranian support of terrorism and promotion of regional threats to U.S. interests.

Iraq

The Secretary has determined that foreign policy controls will restrict the ability of terrorists and insurgent groups to obtain and use U.S.-origin items to attack U.S. forces or to destabilize the current Government of Iraq.

North Korea

The Secretary has determined that the foreign policy controls will meet U.S. obligations under relevant UN Security Council resolutions and impede North Korea's development, testing, and proliferation of conventional and nuclear weapons and other WMDs, and may help to persuade it to eventually abandon its nuclear weapons program.

Persons Sanctioned by the State Department

The Secretary has determined that foreign policy controls will thwart the access that these persons have to U.S.-origin items and their ability to divert such items to unauthorized end users or end uses.

Russian Industry Sector Sanctions

The Secretary has determined that the imposition of these foreign policy controls is likely to achieve the intended national security and foreign policy purposes. These sanctions enable Commerce to control and, if necessary, prevent the export, reexport or transfer (in-country) of items that could enhance Russia's energy sector production and therefore contribute directly or indirectly to the financial enrichment or to the military capabilities of the Russian government, which continues its actions in Crimea (Occupied) and in eastern Ukraine.

Sudan

The Secretary has determined that foreign policy controls will restrict the government of Sudan's ability to obtain and use U.S.-origin items in support of military activities. The controls are also likely to impede terrorist activities in Sudan and support international efforts to end the humanitarian crisis in Darfur.

Syria

The Secretary has determined that foreign policy controls will impede the further development of Syria's Weapons of Mass Destruction programs and restrict the government's ability to commit acts of violence against its own people while certain licensing policies will allow the provision of aid and other material to support the Syrian opposition. The Secretary has also determined that foreign policy controls will contribute to the government of Syria ending its support of terrorist groups in Lebanon and elsewhere and its abuse of the human rights of its citizens.

United Nations Security Council Arms Embargoes

The Secretary has determined that the foreign policy controls will meet U.S. obligations under the relevant UN Security Council arms embargoes and partial embargoes on the Democratic Republic of the Congo, Côte d'Ivoire, Eritrea, Iran, Iraq, Lebanon, Liberia, Libya, North Korea, Somalia, and Sudan.

- 2. *Compatibility with Foreign Policy Objectives.*** The Secretary has determined that these controls are compatible with U.S. foreign policy objectives, and that the extension of these controls will not have any significant adverse foreign policy consequences. The controls complement U.S. foreign policy and other aspects of U.S. relations with these persons and countries. They encourage these persons and governments to modify their actions with the goal of improving conditions in their region. These controls are consistent with U.S. foreign policy goals of promoting peace and stability, and preventing weapons proliferation and human rights abuses.
- 3. *Reaction of Other Countries.*** The Secretary has determined that any adverse reaction to these controls is not likely to render the controls ineffective and that any adverse reaction by other countries would not be counterproductive to U.S. foreign policy interests. Notwithstanding

the fact that most countries have not imposed embargoes as comprehensive as those of the United States, and that some countries have challenged certain U.S. controls as unwarranted extraterritorial measures, the overriding foreign policy objective of maintaining these controls outweighs negative foreign reactions. Opposition to U.S. foreign policy-based controls by many of our major trading partners, including some close allies, continues to be a point of contention. This reaction has led some foreign firms to “design out” U.S. components or to cite the lack of their own national sanctions as a marketing tool to secure business contracts that might have gone to U.S. companies. In some instances, foreign governments have instructed foreign firms to ignore U.S. re-export controls. However, in certain areas, such as the nuclear threat posed by Iran and North Korea, Russia’s destabilization of eastern Ukraine and Crimea, the Government of Syria’s egregious abuses of human rights and use of chemical weapons, including the use of violence and torture, arbitrary arrests, detentions and executions of peaceful civilians, and the genocide in the Darfur region of Sudan, the United States has received broader international support for its sanctions policies from other countries.

Certain Designated Persons

Many countries support U.S. efforts to ensure that exports and re-exports of U.S.-origin items are not used in terrorist activities, the development of WMD, or by entities or foreign governments that are perpetrating or promoting civil unrest in their own or other countries. The Department of Commerce promotes these shared objectives by blocking designated groups and individuals from acquiring items that could aid or assist these groups in committing future acts deemed to support these activities. Although some countries have imposed restrictive legislation, very few maintain export controls similar to those implemented by the United States. Many countries have imposed controls on entities specifically designated in UNSCRs.

Certain Military End Uses and Military End Users

Although the United States primarily maintains these military end use and military end user controls unilaterally, many countries appreciate the concerns that precipitated their imposition.

Cuba

Although most countries recognize the right of the United States to determine its own foreign policy and security concerns and share U.S. concerns regarding Cuba, many countries continue to oppose controls on trade between the United States and Cuba, and an annual United Nations General Assembly resolution condemning the embargo passes each year with overwhelming support, with only the United States and Israel voting against it. Although many nations support greater freedoms and economic reforms in Cuba, they refrain from overt criticism of the Cuban Government.

Iran

Other countries share U.S. concerns regarding Iran’s support of terrorism, human rights abuses, and attempts to acquire WMD. This is especially the case in the nuclear context, where international concerns with Iran’s intentions vis-à-vis its nuclear program have led to the unanimous adoption of UN Security Council resolutions imposing sanctions on Iran pursuant to Chapter VII of the UN Charter. The member states of the Group of Eight, the European Union,

the members of the Nuclear Suppliers Group, and other multilateral bodies have joined the United States in expressing their concern over Iran's pursuit of a nuclear weapons capability and have called on Iran to cooperate fully and transparently with the International Atomic Energy Agency (IAEA). The European Union implements an oil embargo on Iran. In general, however, U.S. controls on commercial goods to Iran are more stringent than most other countries' controls.

Iraq

In accordance with its obligations as a member of the United Nations, the United States continues to impose an arms embargo on military end users not under the authority of the Iraqi Government.

North Korea

The United States maintained a comprehensive trade embargo against North Korea for 50 years, until June 19, 2000. During that time period, U.S. allies largely acted in coordination with the United States to deny North Korea strategic equipment and technology. Similarly, the easing of U.S. sanctions on North Korea and the removal of some sanctions in June 2000 were echoed by other countries. However, as a result of North Korea's nuclear and missile tests in 2006 and 2009, the United Nations Security Council adopted UNSCRs 1718 and 1874, respectively, imposing additional sanctions on North Korea and demonstrating international disapproval of North Korea's nuclear and ballistic missile-related activities. The Department of Commerce imposed stringent export sanctions on the country consistent with these UNSCRs and in accordance with various legal obligations. North Korea's subsequent missile testing and activity on April 13, 2012 and December 12, 2012 was also condemned by most nations, and in January 22, 2013, UNSCR 2087 passed unanimously condemning North Korea's December 2012 launch as a violation of the UN ban on North Korean ballistic missile tests. North Korea's nuclear testing on February 12, 2013 was likewise condemned, and on March 7, 2013, UNSCR 2094 passed, also unanimously, condemning the tests and imposing additional sanctions on North Korea. Pursuant to these UN sanctions, and on the basis of other relevant laws and regulations, the Department of Commerce continues to apply sanctions on North Korea which other countries generally support.

Persons Sanctioned by the State Department

Although other countries share U.S. concerns regarding the diversion of goods to unauthorized end users or end uses, few countries maintain controls similar to those implemented by the United States.

Russian Industry Sector Sanctions

The Secretary has determined that other countries are unlikely to raise objections to the controls. Other countries have condemned Russia's illegal actions in Ukraine and taken steps to impose costs on Russia such as the suspension of military cooperation and sales with Russia. Controls on energy sector exports and military exports are consistent with sanctions imposed by the European Union pertaining to exports to Russia's energy sector, as well as steps taken by other countries to impose sanctions on Russia in the financial, defense and energy sectors. Although the United States is implementing these sanctions in cooperation only with European Union

member states and Norway, that is not likely to render them ineffective, nor will adverse reaction by other countries be counterproductive to U.S. national security and foreign policy interests

Sudan

The United States maintains sanctions on Sudan because of its continued support for international terrorism, ongoing efforts to destabilize neighboring governments, and because of the prevalence of human rights violations, including slavery and the denial of religious freedom to Sudanese religious minorities, and the commission of atrocities in Darfur. Sanctions against Sudan have not been modified because Sudan has not taken sufficient steps to resolve the conflict in Darfur or undertaken reform in these other areas. The United States continues to consult with other countries regarding the humanitarian crisis in Darfur bilaterally and multilaterally, including through the United Nations.

Syria

The United States maintains controls in response to Syria's attacks on its own citizens, its use of chemical weapons against its own citizens, its continued support for terrorist groups, its failure to interdict the flow of foreign fighters destined for Iraq, its interference in Lebanon's internal affairs, and the ongoing abuse of the human rights of its citizens. Many other countries concur that Syria's regional activities are destabilizing, and a small but growing number of countries maintain controls similar to, but less comprehensive than, those implemented by the United States.

United Nations Security Council Arms Embargoes

The United States maintains controls in accordance with the UN Security Council arms embargoes and partial embargoes on the Democratic Republic of the Congo, Côte d'Ivoire, Eritrea, Iran, Iraq, Lebanon, Liberia, Libya, North Korea, Somalia, and Sudan. These controls are compatible and consistent with the controls adhered to by the 41 participating states in the Wassenaar Arrangement, and with the controls imposed by other UN member states as a result of the UN Security Council arms embargoes.

4. *Economic Impact on United States Industry.* The Secretary has determined that any adverse effect of these controls on the economy of the United States, including on the competitive position of the United States in the international economy, does not exceed the benefit to U.S. foreign policy objectives.

Certain Designated Persons

The Department of Commerce only reviewed a small number of license applications for the particular persons designated by the Treasury Department in fiscal year 2014. This limited set of applications suggests that the economic impact of these controls is likely minimal. The Treasury Department maintains restrictions on activities of U.S. persons involving designated terrorist entities and proliferators, and persons involved in civil unrest and suppression of basic rights and freedoms in Burma. The Department of Commerce's controls complement the Treasury Department's controls.

Certain Military End Uses and Military End Users

These controls only apply to transactions involving a military end use or military end user and only a small, discrete group of items are subject to them. Therefore, their overall impact on U.S. industry is likely limited.

Cuba

The U.S. Government requires authorization in the form of either a license or a License Exception Agricultural commodities (AGR) confirmation for the export or reexport to Cuba of most U.S.-origin commodities, technology, and software subject to the EAR. The number of licenses and confirmations that the Department of Commerce issued for exports or re-exports to Cuba increased significantly from 1998 through 2002, due to changes in U.S. export policies made during the late 1990s. Since then, there has been a general decline in the number of licenses and confirmations issued. U.S. export sanctions on Cuba have had some impact on U.S. industry. However, the authorized export of large volumes of agricultural commodities since the enactment of TSRA in 2000 has somewhat offset this impact.

In fiscal year 2014, the Department of Commerce approved 296 license applications for exports and re-exports to Cuba, valued at nearly \$1 billion. Also during fiscal year 2014, the Department issued 55 confirmations of authorization under AGR valued at approximately \$2.6 billion. The Department of Commerce and reviewing agencies had no objections to the License Exception AGR notices submitted during that period. The number of approved licenses and confirmations totaled 351, valued at nearly \$3.6 billion.

In fiscal year 2014, the Department returned without action 66 license applications for exports and re-exports to Cuba, valued at over \$600 million, and denied seven Cuba license applications, valued at over \$64,000,000. The Department did not revoke any previously validated licenses during this period.

According to the Central Intelligence Agency's (CIA) *World Factbook*, Cuba imported an estimated \$13.6 billion in commodities in 2013 (the most recent year for which statistics are available), down from \$13.72 billion the year before. Leading Cuban imports included petroleum, food, machinery and equipment, and chemicals. Cuba's leading suppliers were Venezuela (38.3 percent), the People's Republic of China (10.8 percent), Spain (8.9 percent), Brazil (5.2 percent) and the United States (4.3 percent).

Iran

The U.S. Government maintains a policy of denial for license applications for exports and re-exports of items on the CCL to Iran, consistent with the provisions of the Iran-Iraq Arms Non-Proliferation Act of 1992 and the U.S. trade and investment embargo implemented in 1995.

Consistent with the Trade Sanctions Reform and Export Enhancement Act of 2000 (TSRA), the U.S. Government authorizes exports and re-exports of food, agricultural equipment, medicine, and medical supplies and equipment to Iran. According to the U.S. Census Bureau statistics, total U.S. exports to Iran were valued at \$312 million in calendar year 2013, an increase from \$251 million in 2012. The top U.S. commodities exported to Iran in 2012 were agricultural commodities, medical equipment, and pharmaceutical preparations.

Since 1997, the Department of the Treasury has had primary jurisdiction for the export and re-export of items subject to the EAR to Iran, and the Department of Commerce has sole jurisdiction for deemed exports or deemed re-exports (releases of U.S. technology or source code subject to the EAR to Iranian nationals in the United States or abroad). The Department of Commerce approved 75 deemed export licenses for Iranian nationals during fiscal year 2014.

Prior to the sanctions, the United States competed with Iran's major trading partners in exports of industrial machinery, motor vehicles and auto parts, power generating machinery, measuring and controlling devices, computers, plastics and resins, and industrial organic chemicals. According to the CIA *World Factbook*, Iran imported an estimated \$64.4 billion worth of industrial supplies, capital goods, foodstuffs and other consumer goods, and technical services in 2013. Iran's leading suppliers were the United Arab Emirates (UAE) (32.2 percent), People's Republic of China (13.8 percent), Turkey (11.8 percent), and South Korea (7.4 percent).

The U.S. sanctions on Iran, while necessary to put pressure on Iran to comply with its nuclear nonproliferation obligations, have had a detrimental effect on U.S. industry. Immediately prior to the sanctions, U.S. exports to Iran totaled close to \$2.2 billion annually; however, the sanctions resulted in a substantial decline in U.S. exports to the country.

Iraq

Although the security situation in Iraq continues to be of concern to the United States, the United States also fully supports Iraq's reconstruction and economic revival. Current licensing policy and requirements reflect the complexity and challenges of doing business in Iraq.

U.S. export controls specific to Iraq have had little impact on U.S. industry, because the primary focus of those controls is on arms sales to non-coalition forces. Since licensing jurisdiction for Iraq was returned to the Department of Commerce in 2004, the majority of license applications received have been for equipment in support of or for use in the reconstruction of Iraq and training activities for its police and military.

In fiscal year 2014, the Department approved 140 license applications for Iraq, valued at over \$2 billion. The Department returned 38 license applications without action in 2014, valued at over \$427 million. In 2014, the Department did not deny any license applications for Iraq.

According to the CIA *World Factbook*, Iraq imported an estimated \$66.61 billion in commodities in 2013 (the most recent year for which statistics are available), up from an estimated \$50.16 billion in 2012. Leading Iraqi imports included food, medicine, and manufactured goods. Iraq's leading suppliers were Turkey (27.5 percent), Syria (16.2 percent), the People's Republic of China (12.5 percent), the United States (5.2 percent) and South Korea (4.7 percent).

North Korea

A BIS license is required for the export or reexport to North Korea of all items subject to the EAR, with the exception of food and medicines designated as EAR99 (i.e., medicines subject to the EAR but not listed on the CCL). As a result of the small size of the North Korean economy, U.S. export sanctions on North Korea have had a minimal impact on U.S. industry. Agricultural products and humanitarian goods are the primary U.S. exports to North Korea.

In fiscal year 2014, the Department approved 21 license applications, valued at \$4.4 million. The total license value in 2014 was lower than in 2013 (\$14.0 million), while the number of licenses approved increased (14 in 2013). The Department of Commerce returned without action 15 license applications. Applications were returned without action most often because the applicants accidentally selected North Korea instead of South Korea in the application system. BIS denied one application for the proposed export of telecommunications equipment during 2014.

The CIA *World Factbook* estimates that North Korean imports totaled \$4.8 billion in 2012 (the most recent year for which figures are available) with primary imports including petroleum, coking coal, machinery and equipment, textiles, and grain. North Korea's leading sources of imports in 2012 were the People's Republic of China (73 percent) and South Korea (19 percent).

Persons Sanctioned by the State Department

The impact on U.S. industry of these controls is minimal as they target a very limited number of persons listed on the Entity List (Supplement No. 4 to Part 744 of the EAR).

Russian Industry Sector Sanctions

The Secretary has determined that the foreign policy controls on Russia's energy sector on U.S. industry will have an impact on U.S. oil field servicing industries, but that the cost to these industries resulting from these sanctions does not exceed the benefit to U.S. foreign policy. In 2013, U.S. companies exported \$470 million worth of oil and gas equipment to Russia. Russia ranked as the 9th largest export destination of U.S. oil and gas equipment, accounting for 3.2% of total of U.S. oil and gas equipment exports, valued at \$14.6 billion in 2012. Parts for boring and sinking equipment account for 73% of U.S. oil and gas equipment exports to Russia. Over 100 U.S. companies exported oil and gas equipment to Russia in 2012, while well over 100

Russian companies imported oil and gas equipment from the United States in 2013. U.S. exports to Russia constituted about three percent, by dollar value, of all U.S. exports of such equipment in 2013 (\$472 million of \$18 billion). The controls imposed by these sanctions do not cover all U.S. oil-related exports to Russia but only those known to be destined for production of or exploration for oil or gas in Russian deepwater, or Arctic offshore, and shale formations in Russia or when exporters do not know whether the items will be used in those projects.

Sudan

The United States imposed sanctions on Sudan in 1997 in response to the Government of Sudan's support for international terrorism, efforts to destabilize neighboring governments, and commission of human rights violations. Both the Departments of Commerce and the Treasury maintain license requirements for certain exports and re-exports to Sudan of items subject to the EAR. As a general matter, the Department of Commerce issues export licenses for items on the CCL. The Department of the Treasury is solely responsible for licensing the export of agricultural commodities, medicines, and medical items that are not listed on the CCL under the provisions of the TSRA and is also responsible for licensing other items not listed on the CCL (items designated as EAR99). As noted above, licenses may be required from both agencies for the same transaction.

U.S. unilateral export sanctions on Sudan have had a minor impact on U.S. industry. Sudan was not a significant export market for the United States before sanctions were imposed in 1997. Moreover, a large proportion of exports to Sudan prior to the imposition of sanctions involved items designated as EAR99, which do not require a Department of Commerce license for export to Sudan.

In fiscal year 2014, the Department of Commerce approved 61 license applications for Sudan, valued at over \$6 million. The Department returned 13 license applications without action in 2014. The Department of Commerce denied one license application, valued at \$397,442.

According to the *CIA World Factbook*, Sudan's total imports from all sources were valued at \$88.3 million in 2013. Leading suppliers to Sudan were Macau (18.1 percent), India (8.8 percent), Saudi Arabia (7.9 percent), Egypt (6.7 percent), and the U.A.E. (5.2 percent). Leading imports were foodstuffs (including wheat), manufactured goods, refinery and transport equipment, medicines and chemicals, textiles and wheat.

Syria

The U.S. Government requires a license for the export and reexport to Syria of all U.S.-origin commodities, technology, and software subject to the EAR except for food and certain medicine designated as EAR99. U.S. export sanctions on Syria have had a minimal impact on U.S. industry. Medical items, humanitarian goods, and exports in support of the Syrian opposition and the Syrian people are the primary U.S. exports to Syria.

Fiscal year 2014 licensing volume increased to 344 approved licenses compared to 223 in 2013, while dollar values increased to \$1.94 billion in 2014 compared to \$788.6 million in 2013. Also

during fiscal year 2014, the Department returned without action 20 license applications. BIS denied 1 license application for the export of server equipment and database management software to an entity listed on the Department of the Treasury's Specially Designated Nationals list, and denied 1 license application for database management software to a telecommunications services provider.

The licensing dollar values have remained historically high for Syria over the past two reporting periods, which reflects an increase in humanitarian aid, support for Syrian democracy activists, and support for Syrian opposition forces. BIS issued more than 50 licenses in FY 2014 in support of these activities related to the unrest in Syria, the overwhelming majority of which were funded by the United States Department of State.

According to the CIA *World Factbook*, Syria imported an estimated \$8.9 billion in commodities in 2013. Leading Syrian imports include machinery and transport equipment, electric power machinery, food and livestock, metal and metal products, chemicals and chemical products, plastics, yarn, and paper. Syria's leading suppliers in 2012 (the most recent year for which figures are available) were Saudi Arabia (22.8 percent), the UAE (11.2 percent), Iran (8.3 percent), the People's Republic of China (7.3 percent), and Iraq (6.8 percent).

United Nations Security Council Arms Embargoes

The UN currently maintains embargoes, or partial embargoes, on the export of certain arms and related materiel to the Democratic Republic of the Congo, Côte d'Ivoire, Eritrea, Iran, Iraq, Lebanon, Liberia, Libya, North Korea, Somalia, and Sudan.

5. *Effective Enforcement of Controls.* The Secretary has determined that the United States has the ability to effectively enforce these controls. Controls on exports to embargoed and sanctioned countries and persons, including those discussed in this Chapter, raise a number of challenges. These include the need to concentrate limited resources on priority areas, develop new strategies to limit re-export violations, strengthen the cooperative relationship with other law enforcement agencies in the United States and overseas, and maintain a consistent outreach effort to help limit U.S. business vulnerability. Overall, the sanctions are generally understood and supported by the U.S. public. Voluntary cooperation from most U.S. exporters is common.

BIS gathers leads on activities of concern and conducts end-use checks, primarily through its Export Control Officer and Sentinel programs, to verify the end use and end-users of U.S.-origin items. End-use checks involve the assessment of bona fides (i.e., legitimacy and reliability) of foreign end users that receive U.S.-origin items and prospective end-users on pending license applications for diversion risk, as well as educational outreach to foreign trade groups.

The Department conducted a number of enforcement actions regarding noncompliance with these export controls, including:

Farhad Jenabfar

Aircraft parts with military uses to Iran

On December 16, 2013, Farhad Jenabfar was sentenced in U.S. District Court for the District of Columbia to 28 months in prison and a \$50,704 forfeiture for his part in a conspiracy to export military items and aircraft components, as well as related services, from the United States to Iran in violation of the embargo imposed on Iran, and without obtaining authorization from the Department of the Treasury's Office of Foreign Assets Control, in violation of the International Emergency Economic Powers Act, and the Iranian Transaction Regulations. Jenabfar concealed the actual end user by falsely stating to the U.S. exporter that he was contacting it on behalf of a customer located in the United Arab Emirates. Jenabfar subsequently facilitated the shipment of goods from the United Arab Emirates to Iran. This is a joint case involving the Office of Export Enforcement, U.S. Immigration and Customs Enforcement, and the Federal Bureau of Investigation.

Mehdi Khorramshahgol

Temperature transmitters, temperature sensors, vibration switches, and flow sensors to Iran

On December 13, 2013, Mehdi Khorramshahgol, a naturalized U.S. citizen born in Iran, was sentenced in the U.S. District Court for the Eastern District of Virginia to 36 months in prison, three years of probation, and a \$600 special assessment. On August 22, 2013, Khorramshahgol was convicted after a bench trial for violating U.S. economic sanctions against Iran by sending EAR99 explosion-graded industrial parts, including temperature transmitters, temperature sensors, vibration switches, and flow sensors, to a petrochemical company in Iran via a freight forwarder in the United Arab Emirates (UAE). Khorramshahgol was found guilty on four counts of violating the International Emergency Economic Powers Act (IEEPA), one count of making false statements, and one count of conspiracy to violate the IEEPA. Khorramshahgol falsely represented that the end users for his purchases were in Dubai, UAE. After he purchased the goods and shipped them to Dubai, his co-conspirators repackaged the goods for shipment to Iran. The conspiracy used a series of false invoices, false end users, and front companies to hide the illicit activity. This case was a joint investigation with U.S. Immigration and Customs Enforcement.

Weatherford International Ltd.

Oil and Gas Equipment to Iran, Syria, Cuba, and Other Countries

On November 26, 2013, Weatherford International agreed to enter into a deferred prosecution agreement for a term of two years, and two of its subsidiaries pled guilty to export controls violations under the International Emergency Economic Powers Act and the Trading with the Enemy Act. Weatherford and its subsidiaries agreed to pay a penalty of \$100 million, with a \$48 million penalty paid pursuant to a deferred prosecution agreement, \$2 million paid in criminal fines pursuant to the two guilty pleas, and a \$50 million civil penalty paid to resolve the violations charged by BIS. Weatherford International and some of its affiliates also signed a \$91 million settlement agreement with the Department of the Treasury, Office for Foreign Assets

Control to resolve their civil liability arising out of this same conduct, which will be deemed satisfied by the payment of the \$100 million in penalties. In conjunction with the sanctions settlement, Weatherford International agreed to enter into an additional deferred prosecution agreement for a term of two years and one of its subsidiaries has agreed to plead guilty for violations of the Foreign Corrupt Practices Act. This agreement also included an additional \$87.2 million criminal penalty and \$65.6 million in civil fines to the Securities and Exchange Commission. This seven-year joint investigation resulted in the conviction of three Weatherford subsidiaries, the entry by Weatherford International into two deferred prosecution agreements, a civil settlement and payment of a total of \$252,690,606 in penalties and fines.

From 1998 through 2007, Weatherford International and four of its subsidiaries, Weatherford Oil Tools Middle East, Weatherford Production Optimization (UK) Limited, Precision Energy Services ULC (Canada) and Precision Energy Services Columbia Limited, engaged in conduct that violated various U.S. export control and sanctions laws by exporting or re-exporting EAR99 oil and gas drilling equipment to, and conducting Weatherford business operations in, sanctioned countries without the required U.S. government authorization. In addition to the involvement of employees of several Weatherford International subsidiaries, some Weatherford International executives, managers or employees on multiple occasions participated in, directed, approved and facilitated the transactions and the conduct of its various subsidiaries. This conduct involved persons within the U.S.-based management structure of Weatherford International participating in conduct by Weatherford International foreign subsidiaries and the unlicensed export or re-export of U.S.-origin goods to Cuba, Iran, Sudan, and Syria. Weatherford subsidiaries Precision Energy Services Colombia Ltd. and Precision Energy Services Ltd., both headquartered in Canada, conducted business in the country of Cuba. Weatherford's subsidiary Weatherford Oil Tools Middle East, headquartered in the United Arab Emirates, conducted business in the countries of Iran, Sudan and Syria. Weatherford's subsidiary Weatherford Production Optimisation, formerly known as, eProduction Solutions U.K. Ltd., headquartered in the United Kingdom, conducted business in the country of Iran.

Combined, Weatherford generated approximately \$110 million in revenue from its illegal transactions in Cuba, Iran, Syria, and Sudan. This case resulted from a joint investigation with the Department of Justice, Department of Treasury's Office of Foreign Assets Control, Securities and Exchange Commission, the Federal Bureau of Investigation, U.S. Immigration and Customs Enforcement, and the Houston Police Department.

C. Consultation with Industry

In a September 4, 2014 *Federal Register* notice (79 FR 52630), the Department of Commerce solicited comments from industry and the public on the effectiveness of U.S. foreign policy-based export controls. The comment period closed on October 6, 2014. A detailed review of all public comments received may be found in Appendix I. Comments from the Department's seven Technical Advisory Committees are solicited on a regular basis and are not specific to this report.

D. Consultation with Other Countries

The U.S. Government has made reasonable efforts to achieve the purposes of the U.S. embargoes and sanctions through negotiations with other countries, through international fora, and through the United Nations, as outlined in the specific descriptions that follow.

Certain Designated Persons

The United States cooperates with allies and partners and shares information on the activities of designated terrorist entities. It is expected that strong international support for the U.S. fight against terrorism will further facilitate dialogue on foreign export control expansion.

Certain Military End Uses and Military End Users

The United States works with other nations multilaterally and bilaterally to address concerns about the adverse actions of certain militaries. Other countries share these concerns and join in the United States' efforts to find diplomatic solutions.

Cuba

The U.S. Government has worked diligently with other nations, especially countries in Europe and Latin America, to resolve disputes that arise as a result of the U.S. embargo. Differences remain between the United States and other countries concerning the best method to encourage democracy and human rights. However, many nations share with the United States the ultimate goal of a free, peaceful, democratic, and market-oriented Cuba.

Iran

The United States has an ongoing dialogue with its allies and partners on Iran's activities, particularly the permanent members of the United Nations Security Council and Germany (P5+1), as well as other members of the United Nations Security Council, the IAEA Board of Governors, and like-minded countries. The United States continues to work with other states to prevent Iran's acquisition of a nuclear weapons capability by pursuing a dual track strategy that includes pressure on Iran to comply with its international obligations and offers of engagement. The United States is also working with the IAEA to ensure that the agency has the capabilities it needs to verify Iran's compliance with its safeguards agreement, work with Iran to resolve the outstanding questions and issues regarding Iran's nuclear program, and monitor UN Security Council requests that Iran suspend its proliferation-sensitive nuclear activities as required in UN Security Council Resolutions 1737, 1747, 1803, and 1929.

Iraq

The United States continues multilateral and bilateral discussions with several countries concerning effective implementation of the United Nations arms embargo.

North Korea

The United States continues multilateral and bilateral discussions with various countries, including the People's Republic of China, Japan, the Republic of Korea (South Korea), and Russia on the ongoing issues concerning the nuclear and ballistic missile-related activities of

North Korea. The United States is working with these and other countries to ensure effective implementation of sanctions under UN Security Council Resolutions, and will continue to work with these countries to achieve the verifiable denuclearization of the Korean Peninsula.

Persons Sanctioned by the State Department

The United States consults on a regular basis with other countries on proliferation and trafficking-related issues. Although other countries share U.S. concerns regarding the diversion of goods to unauthorized end-users or end uses, few countries maintain controls similar to those implemented by the United States, beyond those entities included in UNSCRs.

Russian Industry Sector Sanctions

European allies have coordinated their imposition of sanctions with the United States, and U.S. sanctions against Russian interests have international support. The Administration will continue to consult with our partners and allies and strive to coordinate the application of multilateral sanctions in order to dissuade Russia from further destabilizing actions against Ukraine.

Sudan

The United States continues to consult with the United Nations, in addition to other countries and entities in both bilateral and multilateral fora, regarding the regional conflicts in Sudan and the commission of human rights abuses against civilians and to address the humanitarian needs of the population.

Syria

The United States worked in a multilateral manner to dismantle Syria's stockpile of chemical and biological weapons, and continues to coordinate with other countries to prevent the resumption of these programs or the development of any nuclear or missile proliferation programs, as well as the Syrian government's interference in Lebanon and its support for terrorism, its commission of human rights abuses against its citizens, and the flow of foreign fighters through Syria destined for Iraq. Additionally, although the U.S. Embassy in Syria has closed for security reasons, the United States continues to communicate its concerns to the government of Syria directly and forcefully through the Syrian Ambassador in Washington and other diplomatic channels.

United Nations Security Council Arms Embargoes

Most countries support international efforts to stabilize affected countries in order to prevent further ethnic conflict and regional instability, including through compliance with the United Nations arms embargoes.

CHAPTER 6

Toxic Chemicals, Chemical Precursors, and Associated Equipment, Technology, and Software Controls (Sections 742.2, 742.18, 744.4, 744.6, and 745)¹⁴

Export Control Program Description and Licensing Policy

The U.S. Government maintains export controls on certain chemicals, equipment, materials, software, technology, and entire plants to further U.S. foreign policy and prevent the proliferation and use of chemical weapons. The U.S. Government implements these controls in coordination with the Australia Group (AG), an informal forum of 41 nations and the European Commission that is dedicated to halting the proliferation of chemical and biological weapons. (See Appendix II for a complete list of AG members.) Also, the United States fulfills its obligations under the Chemical Weapons Convention (CWC or the Convention) by maintaining controls on certain chemicals.¹⁵

Australia Group Controls

The AG was formed in 1985 when the United States and 14 other nations agreed to enhance and harmonize controls on chemicals that could be used to produce chemical weapons. Since then, the AG has expanded its membership and has expanded its export control list to cover toxic biological agents and dual-use chemical and biological production related equipment and technologies. Member countries use the AG common control list and guidelines as a basis for developing and imposing their domestic export controls. The AG has a “no-undercut” policy, which requires consultation with another AG partner that had previously denied an AG-controlled item if a proposed transaction is essentially identical.

License Requirements and Licensing Policy for AG Controls

The licensing requirements for chemicals, equipment, materials, software, technology, and entire production facilities imposed in accordance with AG commitments are noted below. There are 20 entries on the CCL that are subject to chemical controls.

The U.S. Government requires a license for the export to all destinations other than AG member countries of chemical weapons precursor and intermediate chemicals, as identified on the AG common control list, technology for the development, production, and disposal of such items, relevant process control software, and the facilities designed to produce such chemicals.

¹⁴ Chapter 7 of this report addresses U.S. biological controls.

¹⁵ The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (the “Chemical Weapons Convention” or CWC) was ratified by the United States on April 25, 1997, and entered into force on April 29, 1997.

The U.S. Government also requires a license for the export to all destinations, other than AG member countries, of certain chemical manufacturing facilities and equipment, toxic gas monitoring systems and detectors that can be used in the production of chemical warfare agents, and the technology for the development, production, and disposal of such items. The countries to which these licensing requirements apply are listed in Column CB2 of the Commerce Country Chart, Part 738, Supplement No. 1 of the Export Administration Regulations (EAR). These licensing requirements also apply to the export of these items to designated terrorist-supporting countries.

In addition, the U.S. Government also controls all items subject to the EAR because of chemical weapon end use or end-user concerns as part of the Enhanced Proliferation Control Initiative (EPCI).

- The U.S. Government requires a license for the export of any commodity, technology, or software to all destinations, worldwide, including to AG member countries, when the exporter knows that it will be used in the design, development, production, stockpiling, or use of chemical weapons. In addition, the U.S. Government may inform an exporter or re-exporter that a license is required due to an unacceptable risk that the items will be used in, or diverted to, chemical weapons proliferation activities anywhere in the world.
- No U.S. person may knowingly support such an export, re-export, or in-country transfer without a license. “Support” is defined as any action, including financing, transportation, or freight forwarding that facilitates the export, re-export, or in-country transfer of these items.
- In addition, no U.S. person may, without a license, perform any contract, service, or employment knowing that it will directly assist the design, development, production, stockpiling, or use of chemical weapons in, or by, any country or destination worldwide.

The Department of Commerce, in coordination with the Departments of Defense, Energy, and State, reviews applications for licenses to export AG-controlled items on a case-by-case basis to determine whether the export would make a material contribution to the design, development, production, stockpiling, or use of chemical weapons. When the Department of Commerce determines, after interagency review, that an export will make a contribution meeting this standard, the Department will deny the application. For licenses to export AG-controlled items to the People’s Republic of China (PRC), this standard, which is set forth in Section 742.2 (b)(1) of the EAR applies, as does an additional review standard set forth in Section 742.4 (b) (7) – whether the items would make a direct and significant contribution to China’s military capabilities. Exports of AG-controlled items to the PRC must be reviewed under both standards. When the Department of Commerce determines, after interagency review, that an export of an AG-controlled item to the PRC would meet either of these two standards, the Department will deny the license.

Trade Restrictions under the Chemical Weapons Convention

The CWC, which entered into force in April 1997, bans the development, production, acquisition, stockpiling, retention, use, or transfer of chemical weapons, and establishes an extensive verification regime. The CWC Annex on Chemicals groups specified chemicals, including toxic chemicals and chemical precursors, into three “Schedules.” Chemicals are listed in a schedule based on factors specified in the Convention, such as the level of toxicity and other properties that enable their use in chemical weapons applications.

The toxic chemicals and precursors on Schedule 1 were previously developed, produced, stockpiled or used as chemical weapons, or pose a high risk to the object and purpose of the CWC based on the dangers identified in the Convention and have little, if any, use in legitimate commercial applications. The toxic chemicals and precursors on Schedule 2 pose a significant risk to the object and purpose of the CWC, in light of the dangers identified in the Convention, and are not produced in large commercial quantities for legitimate purposes. The toxic chemicals and precursors on Schedule 3 have been produced or used as chemical weapons or pose a risk to the object and purpose of the CWC, based on the dangers identified in the CWC, and are produced in large commercial quantities for legitimate purposes.

The Department of State, under the International Traffic in Arms Regulations (ITAR), controls exports of the chemical warfare agents deemed to have military application, which by their ordinary and direct chemical action produce a powerful physiological effect. The Department of State controls all CWC Schedule 1 chemicals, except ricin and saxitoxin, which are under the control of the Department of Commerce. The Department of Commerce controls all Schedule 2 chemicals, except six chemical precursors that are controlled through the ITAR and therefore fall under the jurisdiction of the Department of State. All Schedule 3 chemicals are controlled by the Department of Commerce.

License Requirements and Licensing Policy for CWC Controls

The following is a summary of the export restrictions and licensing requirements for chemicals subject to the EAR that are imposed to fulfill CWC treaty obligations, as set forth in Section 742.18 of the EAR:

A. CWC Schedule 1 chemicals may only be exported or re-exported to CWC States Parties, and a license is required. Additionally, there are advance notification and annual reporting requirements for such exports. A license is also required for the export or re-export of Schedule 2 chemicals to countries that are not States Parties to the CWC. Exports of Schedule 3 chemicals destined to States not Party to the CWC require a license. Re-exports of Schedule 3 chemicals require a license when they are re-exported from a State not Party to the CWC to any other State not Party to the CWC.

B. Export license applications for Schedule 1 chemicals to CWC States Parties are reviewed on a case-by-case basis. The Department of Commerce approves exports of Schedule 1 and

Schedule 2 chemicals to CWC States Parties only for purposes not prohibited by the Convention. This is the underlying basis for the policy of denial for applications to export Schedule 1 and Schedule 2 chemicals to States not Party to the CWC. Additionally, there is a policy to deny applications to export Schedule 3 chemicals to States not Party to the CWC unless the importing country provides an End-Use Certificate. In addition, the U.S. Government reviews exports and re-exports of technology related to the development and production of mixtures containing perfluoroisobutene, phosgene, cyanogen chloride, and hydrogen cyanide on a case-by-case basis.

Summary of 2014 Changes

In a June 6, 2014 statement, the AG welcomed Mexico as a new participating member in the Group and stated its mission to counter the spread of technologies and materials that may facilitate the development or acquisition of chemical and biological weapons by states and terrorists. A few measures proposed to strengthen CBW non-proliferation measures include: encouraging more non-participants to adhere to the AG Guidelines; to decrease the gaps terrorists and proliferators can exploit to receive such weapons; increase efforts against CBW terrorism; sharing more information related to CBW terrorism among AG members and non-member; and the importance of outreach to industry and academia to improve their understanding of the risks of CBW proliferation and how they can help prevent it. Likewise, Members re-affirmed their commitment to ensuring that their export controls did not hinder legitimate trade and technical cooperation in the chemical and biological sectors. AG members agreed to amend AG Guidelines to increase prominence of and priority for “catch-all” controls, clarified the implementation of the AG’s “no-undercut” policy, which promotes uniformity in the implementation of export controls.

In the same statement, the AG published on its website a statement reiterating the need to strengthen global chemical and biological non-proliferation measures underscored by the chemical weapons situation in Syria. AG members re-affirmed its view that the “horrific” use of chemical weapons against the people of Syria necessitates the complete eradication of chemical weapons by all countries by universal adherence to and effective implementation of the CWC. While the AG welcomes the progress made by Syria in the destruction of its chemical weapons program, the international community will not have confidence in Syria meeting its obligations under UN Security Council Resolution 2119 and the CWC in full until the complete destruction of its chemical weapons program is verified. Members expressed concern about continued reports of chemical agents being used in the ongoing conflict in Syria.

In the March 26, 2014 issue of the Federal Register, BIS/DOC published the final rules to implement the changes adopted by the Australia Group at its June 2013 plenary meeting and the December 2012 AG intersessional decisions which deal with amendments to the Commerce Control List (CCL) entry in the EAR pertaining to chemical manufacturing facilities and equipment in relation to agitators, equipment capable of handling biological components, and human and animal pathogens; an amendment to the definition of Australia Group that appears in

the EAR to reflect the addition of Mexico as a participating country; and the License Exception STA paragraph to the CCL entry that controls human and zoonotic pathogens and toxin.

The rule amended ECCNs 1C350 and 2B350 to reflect the changes to the AG “List of Chemical Agents for Export Control.” Specifically, this rule amends License Requirement Note 1 of ECCN 1C350 (Chemicals that may be used as precursors for toxic chemical agents) to change reporting requirement from quarterly to annual, consistent with the frequency of reports required for imports and exports of CWC Schedule 2 and 3 chemicals under Sections 713.3 and 714.2 of the CWC. The introductory text of ECCN 2B350 (Chemical manufacturing facilities and equipment) was amended to clarify that ECCN 2B350.b controls only agitators (and impellers, blades or shafts for such agitators) where : (1) The agitators are for use in reaction vessels or reactors described in 2B350.a; and (2) all surfaces of the agitators (and of the impellers, blades or shafts for such agitators) that come in direct contact with the chemical(s) being processed or contained are made from any of the materials identified in ECCN 2B350.b.1 through .b.8.

The rule amended ECCNs 1C351, 1C352, 1C353, and 2B352 to reflect the changes to the AG “List of Biological Agents for Export Control.” Specifically, ECCN 1C351.d.5 (Human and zoonotic pathogens and “toxins”) was amended to clarify that export controls on *Clostridium perfringens* apply only to the following exotoxins: *Clostridium perfringens* alpha, beta 1, beta 2, epsilon and iota toxins. In addition, the final rule added a License Exception STA paragraph to the license exceptions section of ECCN 1C351 in order to clarify the existing eligibility requirements that paragraph (c)(1) of License Exception STA (see Section 740.20(c)(1) of the EAR) may be used for items in 1C351.d.1 through 1C351.d.10 and 1C351.d.13 through 1C351.d.19 . This clarification limits exports under License Exception STA to small quantities of controlled toxins. ECCN 1C352a.8 (animal pathogens) was amended to clarify that it controls the Rabies virus and all other members of the *Lyssavirus* genus. ECCN 1C353 (genetic elements and genetically modified organisms) was amended to clarify that “genetic elements” include inter alia, not only chromosomes, genomes, plasmids, transposons, and vectors, whether genetically modified or unmodified, but also those chromosomes, genomes, plasmids, transposons, and vectors that have been “chemically synthesized in whole or in part.” ECCN 2B352.b was amended to indicate that this ECCN controls fermenters with a capacity of 20 liters or greater that are capable of the cultivation of pathogenic micro-organism, or of live cells, for the production of pathogenic viruses or toxins without the propagation of aerosols.

From February 26, 2014 to September 30, 2014, BIS continued to participate in interagency meetings to discuss technical proposals involving items on the dual-use chemical and biological equipment lists. For the period February 26, 2014 to August 25, 2014, BIS received 20 End-Use Certificates from 5 U.S. companies involving 19 unique end-users and 5 Schedule 3 chemicals subject to the CWC. During the reporting period, Supplement No. 2 to Part 745 of the EAR was amended to add Somalia and Syria to the list of CWC States Parties.

Analysis of Controls as Required by Section 6(f) of the Export Administration Act

A. The Purpose of the Controls

The purpose of these controls is to support the efforts of the AG to halt the development and production of chemical weapons and to comply with international obligations under the CWC. In addition, these controls implement certain measures specified in Executive Order 12735 of November 16, 1990, its successor, Executive Order 12938 of November 14, 1994, and the EPCI announced on December 13, 1990. In so doing, the controls provide the U.S. Government with the authority to regulate the export or re-export of any item from the United States when there is a significant risk that it will be used for chemical weapons proliferation purposes.

The AG works to further nonproliferation objectives through harmonizing export controls, exchanging information, and other diplomatic means. In addition to furthering the objectives of the AG, these controls support U.S. compliance efforts with the CWC. To ensure that States Parties to the Convention do not transfer chemicals that could assist other states to acquire chemical weapons, the CWC requires that States Parties restrict the export of certain chemicals listed in the CWC's Annex on Chemicals. The controls also support the goals of the 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous, or other Gases, and of Bacteriological Methods of Warfare.

B. Considerations and Determinations of the Secretary of Commerce

1. *Probability of Achieving the Intended Foreign Policy Purpose.* The Secretary has determined that these controls are likely to achieve the intended foreign policy purpose, in light of other factors, including AG membership of other producing countries, and that the foreign policy purpose cannot fully be achieved through negotiations or other alternative means. Many of the items covered by these controls have commercial uses and are widely available from foreign sources. Some of the major sources of these items are located in industrialized countries that are members of the AG and States Parties to the CWC. Although it is not expected that export controls alone can prevent the proliferation of chemical weapons, these controls strengthen U.S. and like-minded states' efforts to stem the spread of such weapons and continue to be a significant part of the overall nonproliferation strategy of the United States.

2. *Compatibility with Foreign Policy Objectives.* The Secretary has determined that these controls are compatible with U.S. foreign policy objectives and that the extension of these controls will not have any significant adverse foreign policy consequences. The U.S. Government has a strong interest in remaining at the forefront of international efforts to stem the proliferation of chemical weapons. These controls are compatible with the multilateral export controls for chemicals and related equipment and technology agreed to by the AG. Moreover, the U.S. Government has binding international obligations under the CWC: to refrain from developing, producing, acquiring, stockpiling, retaining, using or engaging in military preparations for the use of chemical weapons; to refrain from assisting, encouraging or inducing anyone to engage in prohibited activity; preventing anyone from engaging or assisting in

prohibited chemical weapons activities; and implementing national legislation to penalize prohibited activities and to control certain chemical exports.

3. *Reaction of Other Countries.* The Secretary has determined that any adverse reaction to these controls is not likely to render the controls ineffective; nor will any adverse reaction by other countries be counterproductive to U.S. foreign policy interests. The U.S. Government continues to discuss chemical export controls with countries outside of the AG to advance the goals of nonproliferation. The governments of some developing countries claim that AG export controls discriminate against less industrialized nations by depriving them of goods and assistance in the field of chemical technology. The United States considers that these assertions are incorrect. In fact, in international forums, the U.S. Government has sought to dispel this perception by clarifying the purpose of the controls and by demonstrating that the U.S. Government denies few export license requests for shipment to developing countries.

4. *Economic Impact on United States Industry.* The Secretary has determined that any detrimental effect of these controls on the economy of the United States, including on the competitive position of the United States in the international economy, does not exceed the benefit to U.S. foreign policy objectives.

In fiscal year 2014, the Department of Commerce approved 3,229 license applications, valued at \$1,822,518,414, for the export or re-export of chemical precursors, equipment, and related technology. The majority of the value of these approvals (80.40 percent) was for precursor chemicals controlled under ECCN 1C350, which are chemicals that have many commercial uses. The bulk of the remaining value of these approvals (17.59 percent) was for chemical processing equipment controlled under ECCN 2B350. The Department denied 3 license applications valued at \$62,630, and returned without action 279 license applications valued at \$213,553,294. The primary reason for returning applications was for insufficient information about the transaction. The actual trade in these controlled commodities is significantly greater than the value of the license applications submitted because exporters may export many of these commodities to AG member countries without a license.

5. *Effective Enforcement of Controls.* The Secretary has determined that the United States has the ability to enforce these controls effectively. The size, dispersion, diversity, and specialized nature of the dual-use chemical industry make detecting and investigating potential violations challenging for enforcement personnel. Challenges include distinguishing commercial procurement from chemical weapons-related transactions, and establishing appropriate commodity thresholds for targeting and tracking exports and re-exports for verification of end uses and end users. It is also difficult to detect and investigate cases under the “knowledge” standard set by the EPCI “catch-all” provision and some countries have different standards for “catch-all,” which complicates law enforcement cooperation. In addition, enforcement officers may be exposed to personal safety risks when seizing and inspecting chemical materials.

To meet the challenge of effective enforcement of these controls, the Department of Commerce has directed resources toward preventive enforcement, in addition to continued efforts to pursue

all leads on activities of concern provided by intelligence, industry, and other sources. Also, the Department of Commerce's extensive outreach program educates companies about export controls related to chemical products and helps prevent the illegal export of dual-use products that can be used to make chemical weapons. In cases where unlicensed shipments of chemical materials have already taken place, the Department of Commerce has found that, as in other export control enforcement cases, analysis of commercial shipping documentation can lead to successful investigations and prosecutions.

BIS gathers leads on activities of concern and conducts end-use checks, primarily through its Export Control Officer and Sentinel programs, to verify the end use and end-users of U.S.-origin items. End-use checks involve the assessment of bona fides (i.e., legitimacy and reliability) of foreign end users that receive U.S.-origin items and prospective end-users on pending license applications for diversion risk, as well as educational outreach to foreign trade groups.

Violations of the Chemical Weapons Convention Regulations (CWCR)

There are no CWCR violations to report for fiscal year 2014.

C. Consultation with Industry

The Department of Commerce interacts with the chemical industry in a number of ways, including with individual companies seeking export licenses, through technical advisory committees (TACs), and through trade associations. BIS consults regularly with exporting firms on proposed export transactions and marketing plans to facilitate the thorough, yet prompt, review of export license applications. Through the TACs, the Department of Commerce keeps industry representatives abreast of proposals for the review of items on the CCL and gives them the opportunity to provide technical input. Comments from the Department's seven TACs are solicited on an ongoing basis and are not specific to this report.

The Department of Commerce works with chemical industry associations, including the American Chemistry Council and the Society of Chemical Manufacturers and Affiliates, and with government agencies such as the Departments of State, Defense, Energy and the Federal Bureau of Investigation, to gain valuable input regarding CWC implementation and to meet the United States' CWC responsibilities.

D. Consultation with Other Countries

These controls are consistent with the multilateral export control criteria of the AG, which includes many of the world's major chemical producers and traders. As such, the controls have been agreed through negotiations with the member countries of the AG. In addition, a number of non-AG countries, including Russia and China, have taken steps to adopt AG-type controls. An important element of the AG's efforts to curb the development of chemical weapons is encouraging non-members to observe similar export controls. The U.S. Government continues to encourage harmonization of export control provisions among AG participants to ensure a level playing field for U.S. exporters.

E. Alternative Means

The U.S. Government continues to address the problem of the proliferation of chemical weapons on a number of fronts. Direct negotiations with countries intent on acquiring chemical weapons are not likely to prevent the use of controlled materials in such activities, nor are such negotiations likely to affect the behavior of these countries.

Alternative means to curtail the acquisition and development of chemical warfare capabilities, such as diplomatic negotiations, do not obviate the need for controls. Examples of additional means that the U.S. Government has used and will continue to use, in an attempt to curb the use and spread of weapons of mass destruction, include:

- **Sanctions:** U.S. laws such as the Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (Pub. L. 102-182, Title III, Dec. 4, 1991, 105 Stat. 1245), the Iran-Iraq Arms Non-Proliferation Act of 1992 (Pub. L. 102-484) (Title XVI), and the Iran, North Korea, and Syria Nonproliferation Act (Pub. L. 105-292, 112 Stat. 2787, 50 U.S.C. § 1701 (note)) provide for the imposition of sanctions on foreign entities and countries for certain kinds of chemical and biological weapons-related activity. The U.S. Government has imposed sanctions under these authorities on certain entities for chemical weapons-related activities.
- **Universality of the CWC:** The CWC imposes a global ban on the development, production, stockpiling, retention, and use of chemical weapons by States Parties and prohibits States Parties from assisting, encouraging, or inducing a non-State Party to engage in such activities. The CWC also prohibits the direct or indirect transfer of chemical weapons, restricts trade in certain chemicals to States that are not States Parties to the CWC, and has created an international organization to monitor the destruction of chemical weapons and the production, use, and trade of toxic chemicals and chemical precursors in and among States Parties to the CWC.

As part of its CWC implementation activities, the Department of Commerce also collects industry reports regarding the production, processing, consumption, import, and export of toxic

chemicals and chemical precursors for purposes not prohibited by the CWC (e.g., industrial, agricultural, and other peaceful purposes), which are forwarded to the Organization for the Prohibition of Chemical Weapons (OPCW) as part of the U.S. declaration. The Department of Commerce also acts as the lead, host, and escort for OPCW inspection teams as they inspect certain U.S. chemical facilities to verify that activities are consistent with the information provided in the U.S. declaration.

F. Foreign Availability

Past reviews conducted by the Department of Commerce revealed that a wide range of AG chemical precursors and production equipment are available from non-AG countries. Non-AG suppliers of precursors and related production equipment include Brazil, Chile, Colombia, India, China, South Africa, Malaysia, Taiwan, and Thailand. However, almost all non-AG suppliers have become States Parties to the CWC and take steps under this treaty to prevent chemical weapons development and production. Moreover, successful outreach by AG countries has led most non-AG suppliers to adopt export controls that closely mirror the AG's. As such, the U.S. Government has made efforts through its membership in both the AG and CWC to secure the cooperation of foreign governments to control the foreign availability of chemical precursors and production equipment.

CHAPTER 7

Biological Agents and Associated Equipment and Technology Controls (Sections 742.2, 744.4 and 744.6)¹⁶

Export Control Program Description and Licensing Policy

The U.S. Government controls the export of certain microorganisms, toxins, biological equipment, and related technology to further U.S. foreign policy interests in opposing the proliferation and use of biological weapons. The U.S. Government implements these export controls multilaterally in coordination with the Australia Group (AG), an informal forum of 41 nations and the European Commission, cooperating to halt the proliferation of chemical and biological weapons. The U.S. Government also supports international efforts to secure a total ban on biological weapons in compliance with the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BWC).¹⁷

Australia Group Controls

The AG was formed in 1985 when the United States and 14 other nations agreed to enhance and harmonize controls on chemicals that could be used to produce chemical weapons. Since then, the AG has expanded its membership and its export control list to cover toxic biological agents and dual-use chemical and biological production related equipment and technologies. AG member countries use the AG common control list and guidelines as a basis for developing and imposing their domestic export controls. The AG has a “no-undercut” policy, which requires consultation with another AG partner that previously denied an AG-controlled item if a proposed transaction is essentially identical.

License Requirements and Licensing Policy

The licensing requirements for biological agents, related equipment, and technology, imposed in accordance with AG commitments, are noted below. There are 12 entries on the CCL that are subject to biological controls.

A. The U.S. Government requires a license for the export to all destinations of certain human pathogens, zoonoses, toxins, animal pathogens, genetically modified microorganisms and plant pathogens, and the technology for the production and disposal of such items.

¹⁶ Chapter 6 of this report addresses U.S. chemical controls.

¹⁷ The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BWC) was signed in 1972 and ratified by the United States in 1975.

The U.S. Government requires a license for export to all destinations, other than AG member countries, of certain dual-use equipment and materials that can be used to produce biological agents and related technology. The countries for which this licensing requirement applies are those indicated in Column CB2 (Chemical and Biological Weapons, Column 2) of the Commerce Country Chart, Supplement No. 1 to Part 738 of the Export Administration Regulations (EAR), as well as the sanctioned destinations identified in Part 746 of the EAR.

The U.S. Government requires a license for the export of medical products identified in Export Control Classification Number (ECCN) 1C991.d. The countries for which this licensing requirement applies are those indicated in Column CB3 (Chemical and Biological Weapons, Column 3) of the Commerce Country Chart, Supplement No. 1 to Part 738 of the Export Administration Regulations (EAR), as well as the sanctioned destinations identified in Part 746 of the EAR.

The U.S. Government requires a license for the export of medical products identified in Export Control Classification Number (ECCN) 1C991 (all paragraphs except d). The countries for which this licensing requirement applies are those indicated in Column AT1 (Anti-terrorism, Column 1) of the Commerce Country Chart, Supplement No. 1 to Part 738 of the Export Administration Regulations (EAR), as well as the sanctioned destinations identified in Part 746 of the EAR.

The U.S. Government also controls items subject to the EAR because of biological end-use or end-user concerns. These controls are part of the Enhanced Proliferation Control Initiative (EPCI), announced by President George H.W. Bush on December 13, 1990.

- The U.S. Government requires a license for the export of any commodity, technology, or software when the exporter knows that it will be used in the design, development, production, stockpiling, or use of biological weapons in, or by, any country anywhere in the world, including AG member countries. In addition, the U.S. Government may inform an exporter or re-exporter that a license is required due to an unacceptable risk that the items will be used in, or diverted to, biological weapons proliferation activities anywhere in the world.
- No U.S. person may knowingly support such an export, re-export, or in-country transfer without a license. “Support” is defined as any action, including financing, transportation, or freight forwarding that facilitates the export, re-export, or in-country transfer of these items.
- In addition, no U.S. person may perform, without a license, any contract, service, or employment knowing that it will directly assist the design, development, production, stockpiling, or use of biological weapons in, or by, any destination or country anywhere in the world.

B. The Department of Commerce, in coordination with the Departments of Defense, Energy, and State, reviews applications for licenses on a case-by-case basis in accordance with Section 742.2(b)(1) of the EAR to determine whether the export would make a material contribution to the design, development, production, stockpiling, or use of biological weapons. When the Department of Commerce determines as a result of an interagency review that an export would make such a contribution, it will deny the application. A license application to export AG-controlled items to the People's Republic of China (PRC) must be reviewed in accordance with Section 742.2 (b) (1) of the EAR and a second review standard set forth in Section 742.4 (b) (7) – whether the items would make a direct and significant contribution to China's military capabilities. When the Department of Commerce determines, after interagency review, that an export of an AG-controlled item to the PRC would meet either of these two standards, the Department will deny the application.

Summary of 2014 Changes

Analysis of Controls as Required by Section 6(f) of the Export Administration Act

A. The Purpose of the Controls

The controls described above are intended to prevent a U.S. contribution to the proliferation and illegal use of biological weapons and to promote U.S. foreign policy objectives that seek to inhibit the proliferation of biological weapons. The controls also provide the regulatory authority to stop the export of any item from the United States when there is a significant risk that it will be used for biological weapons purposes. In addition, the controls implement certain measures directed in Executive Order 12735 of November 16, 1990; its successor, Executive Order 12938 of November 14, 1994; and the EPCI, announced on December 13, 1990.

The U.S. Government implements these controls in coordination with the AG. The AG works to accomplish multilateral objectives through harmonizing export controls, exchanging information, and other diplomatic means. In addition, these controls demonstrate the commitment of the United States to its obligation under the BWC not to develop, produce, stockpile, acquire, or retain biological agents, weapons, equipment, or the means of delivery for warfare purposes, or to assist others in such activities. The controls also advance the goals of the 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous, or other Gases and of Bacteriological Methods of Warfare (Geneva Protocol).

B. Considerations and/or Determinations of the Secretary of Commerce

1. Probability of Achieving the Intended Foreign Policy Purpose. The Secretary has determined that these controls are likely to achieve the intended foreign policy purpose, in light of other factors, including availability of relevant items from other countries, and that the foreign policy purpose cannot fully be achieved through negotiations with its partners in the AG and in the BWC. The Secretary has made this determination despite the existence of certain factors, including availability of these items from other sources, which challenge the full achievement of

foreign policy goals. These controls affirm U.S. opposition to the development, proliferation, and use of biological weapons and serve to distance the United States from such activities.

2. *Compatibility with Foreign Policy Objectives.* The Secretary has determined that these controls are compatible with U.S. foreign policy objectives and that the extension of these controls will not have any significant adverse foreign policy consequences. The U.S. Government has a strong interest in remaining at the forefront of international efforts to stem the proliferation of biological weapons. Also, these controls are compatible with the multilateral export controls for biological materials agreed to by the AG.

3. *Reaction of Other Countries.* The Secretary has determined that any adverse reaction to these controls is not likely to render the controls ineffective, nor will any adverse reaction by other countries be counterproductive to U.S. foreign policy interests. The U.S. Government continues to discuss biological export controls with countries outside of the AG to advance the goals of nonproliferation.

4. *Economic Impact on U.S. Industry.* The Secretary has determined that any detrimental effect of these controls on the economy of the United States, including on the competitive position of the United States in the international economy, does not exceed the benefit to United States foreign policy objectives.

In fiscal year 2014, the Department of Commerce approved 1,224 license applications valued at \$246,158,583 for the export or re-export of biological agents, vaccines and equipment. The majority of the value of these approvals (83.41 percent) was for human pathogens, zoonoses, and toxins controlled under ECCN 1C351. The bulk of the remaining value of these approvals (15.69 percent) was for biological processing and handling equipment controlled under ECCN 2B352. The Department denied one license application valued at \$89,208 and returned without action 58 license applications valued at \$37,069,178. The primary basis for returning applications was insufficient information about the transactions.

5. *Effective Enforcement of Controls.* The Secretary has determined that the United States has the ability to enforce these controls effectively. Enforcing controls on biological weapons-related materials poses challenges similar to the enforcement of chemical controls, but with additional factors. Biological agents are microscopic organisms that require technical expertise and specialized facilities to identify and to handle. Because of their size, biological agents can often be concealed and transported with ease.

To meet the challenge of effectively enforcing these proliferation controls, the Department of Commerce focuses resources on preventive enforcement. Commerce personnel conduct an extensive, ongoing outreach program to educate industry about export controls. The program is designed to increase industry's awareness of suspicious orders for products or equipment that could be used for biological weapons proliferation. In cases where unlicensed shipments of biological materials have already taken place, the Department of Commerce has found that, as in

other export control enforcement cases, analysis of commercial shipping documentation can lead to successful investigations and prosecutions.

BIS gathers leads on activities of concern and conducts end-use checks, primarily through its Export Control Officer and Sentinel programs, to verify the end use and end-users of U.S.-origin items. End-use checks involve the assessment of bona fides (i.e., legitimacy and reliability) of foreign end users that receive U.S.-origin items and prospective end-users on pending license applications for diversion risk, as well as educational outreach to foreign trade groups.

C. Consultation with Industry

Biological products exporters include commercial firms as well as academic and government entities. The Department of Commerce maintains ongoing interaction with individual exporters, TACs, and trade associations to discuss proposed export transactions and marketing plans to facilitate the thorough, yet prompt, review of export license applications. Through the TACs, the Department keeps industry representatives abreast of licensing proposals for items on the control list and gives them the opportunity to provide technical input. Comments from the Department's seven TACs are solicited on an ongoing basis and are not specific to this report.

D. Consultation with Other Countries

Recognizing that multilateral coordination of export controls and enforcement actions is the most effective means of restricting proliferation activities, the U.S. Government coordinates its controls on biological items with other countries in the AG.

The U.S. Government continues to address the problem of biological weapons proliferation through a variety of international forums and urges other AG members to pursue export control cooperation with non-members on a bilateral or regional basis.

E. Alternative Means

The U.S. Government continues to address the problem of biological weapons proliferation on a number of fronts. Direct negotiations with countries intent on acquiring biological weapons are not likely to prevent the use of U.S.-origin materials for such activities and negotiations are unlikely to affect the behavior of these countries.

Alternative means to curtail the acquisition and development of biological warfare capabilities, such as diplomatic negotiations, do not obviate the need for controls. The following examples demonstrate additional means that have been, and will continue to be, used in an attempt to curb the use and spread of weapons of mass destruction:

- Regulations issued by the Public Health Service (42 CFR Part 72) pursuant to the Antiterrorism and Effective Death Penalty Act of 1996 (Sec. 511 of Pub. L.104-132, April 24, 1996, 110 Stat. 1214) place additional shipping and handling requirements on

laboratory facilities that transfer or receive select infectious agents capable of causing substantial harm to human health.

- The Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (Pub. 102-182, Title III, December 4, 1991, 105 Stat. 1245), the Iran-Iraq Arms Nonproliferation Act of 1992 (Pub. L. 102-484) (Title XVI), and the Iran, North Korea, and Syria Nonproliferation Act (Pub. L. 105-292, 112 Stat. 2787, 50 U.S.C. § 1701 note) provide for the imposition of sanctions on foreign persons or countries for certain kinds of chemical and biological weapons-related activity. The U.S. Government has imposed sanctions under these authorities on certain entities for chemical and biological weapons-related activities.
- In accordance with the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, the Select Agent Regulations are administered by the U.S. Departments of Health and Human Services (42 CFR Part 73) and Agriculture (7 CFR Part 331 and 9 CFR Part 121). These regulations list biological agents and toxins that potentially pose a severe threat to public health and safety (“select agents and toxins”) while placing additional restrictions on their possession, use and transfer. As amended on October 5, 2012 (77 FR 61084 and 77 FR 61056), the select agents and toxins most likely to be misused are designated as Tier 1 Select Agents and require additional enhanced security measures.

The negotiations and alternative means undertaken by the U.S. Government demonstrate that it has made reasonable efforts to achieve the purposes of the controls; however, these actions have not had results that are as effective as the maintenance and renewal of the controls.

F. Foreign Availability

Most of the AG-controlled biological agents, and related equipment to produce them, are available from many sources. Biological agents are, in fact, endemic. Notwithstanding the difficulties related to controlling these items effectively, the United States and its AG partners consider it necessary to maintain controls in order to stem shipments to potential weapons developers. Foreign availability is a factor considered by the AG member countries in their coordination of controls though many non-AG suppliers model their own export controls on the Australia Group’s export controls.

CHAPTER 8

Missile Technology Controls (Sections 742.5 and 744.3)

Export Control Program Description and Licensing Policy

The U.S. Government maintains export controls on certain equipment, materials, software, and technology to further the U.S. foreign policy of stemming the proliferation of missiles capable of delivering weapons of mass destruction (WMD). The U.S. Government implements these controls in coordination with the members of the Missile Technology Control Regime (MTCR), an informal political arrangement of 34 nations that cooperate to halt the proliferation of such missiles. (See Appendix II for a complete list of MTCR members.) Of note, member countries adhere to the MTCR Guidelines and several other countries, including India, Israel, Macedonia, Romania, and Slovakia, unilaterally adhere to them.

Section 1512 of the National Defense Authorization Act for Fiscal Year 1999 permits the export to the People's Republic of China (PRC) of "missile-related equipment or technology," as defined in Section 74 of the Arms Export Control Act, only if the President certifies to Congress that (1) the export is not detrimental to the United States space launch industry and (2) the equipment or technology to be exported, including any indirect technical benefit that could be derived from the export of the items, will not measurably improve the missile or space launch capabilities of the PRC. In 2009, the President delegated the authority to make such certifications to the Secretary of Commerce. *See* Presidential Determination No. 2009-31 of September 29, 2009 (74 FR 50913 (Oct. 2, 2009)). Assessments of whether the criteria for such certifications are met continue to be made on an interagency basis.

Missile Technology Control Regime Controls

On April 16, 1987, the United States, Canada, France, Germany, Italy, Japan, and the United Kingdom created the MTCR to limit the proliferation of missiles capable of delivering nuclear weapons. Since that time, the number of MTCR Partners has increased to 34 countries. Member countries agreed to further expand the MTCR controls in 1993 to include missile delivery systems for all types of WMD. The MTCR Equipment, Software, and Technology Annex lists missile-related items controlled pursuant to the MTCR Guidelines. It is divided into two categories. Category I items include complete missile systems, complete subsystems, production facilities, production equipment, and associated software and technology for missile systems capable of delivering at least a 500 kilogram (kg) payload to at least a 300 kilometer (km) range. Category II items include materials, components, and production and test equipment associated with Category I items, as well as missile systems, major subsystems, production facilities, production equipment, and associated software and technology for missile systems with a range equal to or greater than 300 km, regardless of payload.

License Requirements for MTCR Controls

The Department of Commerce is responsible for administering controls on some Category I items, manufacturing equipment for Category I items, and all dual-use items in Category II. The MTCR Guidelines and the Equipment, Software, and Technology Annex form the basis for U.S. missile technology controls, providing guidance for licensing policy, procedures, review factors, and standard assurances on missile technology exports.

Approximately 120 entries on the CCL are subject to missile technology controls. License applications for Category I items are subject to a strong presumption of denial regardless of purpose, and license applications for the export, re-export or transfer (in-country) of production facilities for Category I items will be denied. The Department will approve the export of Category II items only after a case-by-case review consistent with U.S. law, policy, and regulations, as well as international nonproliferation commitments. The United States observes the multilateral commitment to honor the denial of licenses for MTCR Annex items by other MTCR members and to support such denials through a “no undercut” policy. This policy enhances efforts to prevent missile proliferation and helps to establish a level commercial playing field within the regime.

In summary, the licensing requirements and policy for missile technology controls described in Sections 742.5 and 744.3 of the Export Administration Regulations (EAR) are as follows:

- The U.S. Government requires a license for the export or re-export to all destinations except Canada of dual-use items specifically identified on the CCL as controlled for missile technology reasons.
- The U.S. Government also controls items subject to the EAR due to end-use or end-user concerns related to the proliferation of missiles, certain rocket systems and unmanned aerial vehicles (UAVs). The U.S. missile catch-all policy meets U.S. nonproliferation objectives and is consistent with the MTCR Guidelines. The Department of Commerce reviews applications for licenses on a case-by-case basis to determine whether the export would make a material contribution to the proliferation of missiles (Section 742.5(b)) or to the proliferation of certain rocket systems or UAVs (Section 744.3(d)). If the Department of Commerce determines that an export would make such a contribution and (in the case of Section 744.3) that there was knowledge of the end use, the application will be denied.

Summary of 2014 Changes

The annual Plenary of the MTCR was held in October 2014 in Oslo, Norway. During the Plenary, the MTCR adopted several changes to the list of controlled items that will necessitate modifications to the EAR including a clarification to the scope of control for liquid, slurry and gel propellant (including oxidisers) control systems in ECCN 9A106 to include gas turbines, for

liquid propellant turbopumps, with shaft speeds equal to or greater than 8,000 rpm at the maximum operating mode. Additionally, adopted MTCR Annex control changes will require amendments to the EAR to increase the scope of control in ECCNs 9B115 and 9B116 to include “production equipment” and “production facilities” “specially designed” for combustion chambers and nozzles for liquid propellant rocket engines usable in MT-controlled propulsion subsystems. The 2014 Plenary also highlighted the importance of effectively addressing Intangible Technology Transfer (ITT) control related issues.

A Technical Experts Meeting (TEM) was held in April 2014 in Prague, Czech Republic, to discuss proposed changes to the MTCR Equipment, Software, and Technology Annex. These changes were adopted on June 27, 2014 following a six week silence procedure instituted by the Reinforced Points of Contact (RPOC) meeting on May 15, 2014. Changes to the MTCR Annex that will necessitate modifications to the EAR include an update to the reference to the standard for aluminum powder in ECCN 1C111 and removal of the 8-bit quantization in ECCN 3A001 requirement for analog to digital converters usable in missiles and unmanned aerial vehicles.

Analysis of Controls as Required by Section 6(f) of the Export Administration Act

A. The Purpose of the Controls

These controls curtail the availability of goods and technology and other support that could contribute to missile proliferation. U.S. export controls on specific types of missile-related equipment and technology, in coordination with those of other supplier countries, limit the proliferation of missile systems and related technology. These controls complement U.S. and international nuclear, chemical, and biological nonproliferation efforts by blocking the development of unmanned delivery systems for WMD. Also, these controls provide U.S. support to the collective effort of the MTCR to address mounting international concern regarding missile proliferation.

B. Considerations and Determinations of the Secretary of Commerce

1. *Probability of Achieving the Intended Foreign Policy Purpose.* The Secretary has determined that these controls are likely to achieve the intended foreign policy purpose, in light of other factors, including the limited foreign availability of items controlled for Missile Technology (MT) reasons, and that the foreign policy purpose cannot fully be achieved through negotiations or other alternative means. The controls at issue have been in part achieved through international or multilateral negotiations. Although some controlled items are available from other countries, cooperation among the United States, its MTCR Partners, and other like-minded countries, many of which are major producers of the items under control, has hindered the efforts of proliferators to develop or acquire militarily effective missiles. The Secretary has determined that extending these controls is likely to limit the spread of missile delivery systems.

2. *Compatibility with Foreign Policy Objectives.* The Secretary has determined that these controls are compatible with U.S. foreign policy objectives and that the extension of these

controls will not have any significant adverse foreign policy consequences. Halting the spread of missiles and related equipment and technology worldwide is a key U.S. national security and nonproliferation objective. Missile technology export controls are consistent with, and contribute to, the achievement of this objective. U.S. membership in the MTCR complements existing nuclear, chemical, and biological nonproliferation policies by curbing the spread of missile technology and equipment for the delivery of WMD.

3. *Reaction of Other Countries.* The Secretary has determined that any adverse reaction to these controls is not likely to render the controls ineffective, nor will any adverse reaction by other countries be counterproductive to U.S. foreign policy interests. The United States is confident that other members of, and unilateral adherents to, the MTCR, many of which are also the leading suppliers of missile-related technology, will continue to support and strengthen U.S. control regime. MTCR Partners share information regarding denials of Annex items and are committed to a “no undercut” policy. MTCR Partners also share information about potential activities of missile technology proliferation concern and have cooperated to interdict specific shipments. The number of non-MTCR countries willing to cooperate with the regime has increased over the past several years. Finally, the United States and its MTCR Partners are actively engaged in an outreach program to encourage additional countries to adhere to the MTCR Guidelines and implement effective export controls on MTCR items.

4. *Economic Impact on U.S. Industry.* The Secretary has determined that any detrimental effect of these controls on the U.S. economy, including on the competitive position of the United States in the international economy, does not exceed the benefits to U.S. foreign policy objectives. Only a narrow list of items is subject to missile controls, and the effect on overall U.S. trade is limited. The commitment by MTCR to a “no undercut” policy helps ensure that no member obtains an unfair commercial advantage in the international marketplace.

In fiscal year 2014, the Department of Commerce approved 400 applications, valued at \$848 million dollars, for the export or re-export of missile technology-controlled items. In addition, the Department rejected 7 applications valued at \$5.6 million and returned without action 51 applications valued at \$151 million. Comparatively few licenses for missile technology items are denied because: (1) exporters do not generally pursue transactions they understand will be rejected (based on the applicable licensing policy); and (2) most of the applications involve exports to destinations, and for end uses, that do not pose missile proliferation concerns.

Under the Enhanced Proliferation Control Initiative (EPCI) control related to missile technology (15 C.F.R. § 744.3), the Department of Commerce approved 2 applications, valued at \$437,000, denied 4 licenses valued at \$83,145, and returned without action 10 applications, valued at \$1.34 million. In these applications, EPCI missile concerns were the basis for the license requirement.

5. *Effective Enforcement of Controls.* The Secretary has determined that the United States has the ability to enforce these controls effectively. Multilateral controls on missile technology provide a strong framework for cooperative enforcement efforts overseas. However, there are challenges for the enforcement of controls on dual-use goods related to missile development.

First, it is difficult to detect and investigate cases under the “knowledge” standard set forth in the EPCI “catch-all” provision. Second, some countries have different standards for “catch-all,” which complicates law enforcement cooperation. Third, identifying illegal exports and re-exports of missile-related goods requires significant investigative resources.

To enforce these controls effectively, the Department of Commerce continues to focus on preventive enforcement, including an outreach program to educate companies about export controls and to increase awareness of “red flags” that may indicate a risky transaction. This program is an important component of the Department of Commerce’s efforts to prevent illegal exports of dual-use products or equipment that could be used to make missiles.

BIS gathers leads on activities of concern and conducts end-use checks, primarily through its Export Control Officer and Sentinel programs, to verify the end use and end-users of U.S.-origin items. End-use checks involve the assessment of bona fides (i.e., legitimacy and reliability) of foreign end users that receive U.S.-origin items and prospective end users on pending license applications for diversion risk, as well as educational outreach to foreign trade groups.

C. Consultation with Industry

In a September 4, 2014 *Federal Register* notice (79 FR 52630), the Department of Commerce solicited comments from industry and the public on the effectiveness of U.S. foreign policy-based export controls. The comment period closed on October 6, 2014. A detailed review of all public comments received may be found in Appendix I. In addition, comments were solicited from the public via the BIS website.

The Department of Commerce holds discussions with industry representatives on issues related to the MTCR Annex through the Transportation Technical Advisory Committee and other relevant technical advisory committees (TACs) as appropriate. Comments from the Department’s seven TACs are solicited on an ongoing basis and are not specific to this report. The Department of Commerce also participates in interagency working groups that review proposed changes to the Annex, and engages in discussions of the proposals with companies that have relevant expertise.

D. Consultation with Other Countries

Consultation with other MTCR members is a fundamental element of U.S. missile technology control policy. Consultations with non-MTCR countries also are essential to U.S. missile nonproliferation policy. The U.S. Government exchanges information with other countries about activities of missile proliferation concern and seeks to cooperate with them to prevent or stop certain transactions. The United States also shares denial information with its MTCR Partners, who are committed to the Regime’s “no-undercut” policy.

MTCR member countries cooperate with non-member countries to limit the spread of WMD delivery systems by encouraging all countries to apply the MTCR Guidelines on a national basis. The MTCR's outreach efforts have included workshops and seminars, at which MTCR members and invited non-members share experiences in an effort to improve prevention of missile proliferation.

E. Alternative Means

The missile sanctions provisions in Section 73 of the Arms Export Control Act and Section 11B of the Export Administration Act of 1979, as amended (EAA), provide for the imposition of export, import, and procurement sanctions on foreign entities engaged in certain kinds of activities relating to the transfer of MTCR Annex items to non-MTCR adherent countries. In the past, the United States has imposed missile sanctions on entities in Egypt, India, Iran, Macedonia, Moldova, North Korea, Pakistan, China, Russia, South Africa, and Syria. Missile sanctions are used to encourage the governments of the sanctioned entities to adopt responsible nonproliferation behavior and to send a clear message about the United States' strong commitment to missile nonproliferation. Discretionary sanctions pursuant to the Iran, North Korea, and Syria Nonproliferation Act (Pub. L. 105-292, 112 Stat. 2787, 50 U.S.C. § 1701 note) may be applied to entities engaging in transfers of missile equipment and technologies.

The United States and its MTCR Partners are continuing their diplomatic efforts to encourage additional countries to adhere unilaterally to the MTCR Guidelines. Such efforts are aimed at encouraging non-MTCR members to implement and enforce effective missile technology export controls. Although the United States has an obligation to maintain and renew its export controls based on its membership in the MTCR, it also has pursued alternative means to achieve the purposes of the controls through its consultations with non-MTCR countries.

F. Foreign Availability

Possible suppliers of missile technology that are not MTCR Partners include, but are not limited to, China, North Korea, Egypt, India, Iran, Israel, and Taiwan. Some of these countries, such as India and Israel, adhere unilaterally to the MTCR Guidelines. The United States continues to approach other nations, including those that produce MTCR Annex-controlled items, to urge them to apply MTCR Guidelines to help prevent missile proliferation.

CHAPTER 9

Encryption Controls (Section 742.15)

Export Control Program Description and Licensing Policy

The U.S. maintains export controls on encryption items to protect and preserve national security and foreign policy interests. Encryption items may be used to maintain the secrecy of information, and therefore may be used by persons abroad to bring harm to U.S. national security and foreign policy interests. The U.S. Government has a critical interest in ensuring that the legitimate needs for protecting important and sensitive information of the public and private sectors are met, and that persons seeking to damage U.S. national security and foreign policy interests are not able to conceal hostile or criminal activities.

When dual-use encryption items were transferred from the United States Munitions List (USML) to the Commerce Control List (CCL) in 1996, foreign policy controls were imposed on these items. A license is required to export or re-export Encryption Items (EI) (classified under Export Control Classification Numbers (ECCNs) 5A002, 5D002, and 5E002 on the CCL) to all destinations except Canada. All items controlled for EI reasons are also controlled for National Security (NS) reasons.

License Requirements and Licensing Policy for Encryption Controls

Most EI-controlled items are eligible for export and re-export to non-government end users under the terms and conditions of License Exception Encryption Commodities, Software and Technology (ENC) after self-classification by the exporter or classification by the Bureau of Industry and Security (BIS) and the National Security Agency, and many items are also eligible for export and re-export to government end-users under this License Exception.

License applications to export or re-export EI-controlled items are subject to case-by-case review for consistency with U.S. national security and foreign policy interests. EI-controlled items are also eligible for Encryption Licensing Arrangements (ELAs), which authorize exports and re-exports of unlimited quantities of encryption commodities or software to state, provincial and local governments for civil use, in all destinations, except countries listed in Country Group E:1.

Analysis of Controls as Required by Section 6(f) of the Export Administration Act

A. The Purpose of the Controls

Encryption products can be used to conceal the communications of terrorists, drug smugglers, and others intent on harming U.S. interests. Cryptographic products and software also have military and intelligence applications that, in the hands of hostile nations, could pose a threat to

U.S. national security. The national security, foreign policy, and law enforcement interests of the United States are protected by export controls on encryption items.

B. Considerations and Determinations of the Secretary of Commerce

1. *Probability of Achieving the Intended Foreign Policy Purpose.* The Secretary has determined that U.S. export controls on encryption items restrict the export of encryption items in situations that would be contrary to U.S. national security or foreign policy interests. The Secretary has determined that these controls are likely to achieve the intended foreign policy purpose in light of other factors, including the availability of encryption items from other countries, and that the foreign policy purpose cannot be achieved solely through agreements with the participating states of the Wassenaar Arrangement or through alternative means. This determination with due consideration for the continuing growth of electronic commerce and Internet use, as the emergence of new security protocols for, among other things, short-range wireless communications, and the growth in the number of countries with the technology to produce highly sophisticated, dual-use encryption products.

2. *Compatibility with Foreign Policy Objectives.* The Secretary has determined that these controls are compatible with U.S. foreign policy objectives, and that the extension of these controls will not have significant adverse foreign policy consequences. The controls are consistent with the U.S. foreign policy goal of preventing U.S. exports (and subsequent re-exports) that might contribute to the capabilities of international terrorists or criminals.

3. *Reaction of Other Countries.* The Secretary has determined that the continued implementation of U.S. encryption export controls is generally accepted in the international community, and that any adverse reaction to these controls is not likely to render the controls ineffective, nor are they counterproductive to the foreign policy interests of the United States. Other countries, particularly the Wassenaar participating states, recognize the need to control exports of such items for national security reasons.

4. *Economic Impact on U.S. Industry.* The Secretary has determined that the continued implementation of encryption regulations that are periodically updated will allow U.S. industry to maintain a leadership position in the global market for encryption items and that the economic effect of encryption controls on U.S. exports does not exceed the benefit to U.S. foreign policy objectives.

In fiscal year 2014, approximately 1,350 companies filed encryption registrations. This activity continues to reflect the expanding trade in encryption items and the wide commercial applicability of such items. The Department of Commerce processed approximately 1,950 classification requests for controlled encryption items, components, toolkits, and source code items classified under ECCNs 5A002, 5B002, 5D002, 5E002, 5A992, 5D992, 5E992, and EAR99.

Additionally, during fiscal year 2014, the Department of Commerce approved approximately 2,420 license applications for encryption-related deemed exports and “restricted” encryption items, such as high-end routers and other network infrastructure equipment, and technology. In fiscal year 2014, there were 40 denied license applications, divided among deemed exports to Iranian and Syrian foreign nationals, exports to Russian military, intelligence or security agencies, and exports on the Entity List.

5. *Effective Enforcement of Controls.* The Secretary has determined that the United States has the ability to enforce these controls effectively. Detection of some encryption transactions is challenging because encryption components are often incorporated into other products and encryption software can be transferred over the Internet.

BIS gathers leads on activities of concern and conducts end-use checks, primarily through its Export Control Officer and Sentinel programs, to verify the end use and end-users of U.S.-origin items. End-use checks involve the assessment of bona fides (i.e., legitimacy and reliability) of foreign end users that receive U.S.-origin items and prospective end-users on pending license applications for diversion risk, as well as educational outreach to foreign trade groups.

BIS conducted a number of enforcement actions regarding noncompliance with these controls, including:

Wind River Systems

Operating software products containing encryption to various end users

On October 7, 2014, Wind River Systems, Inc. (WRS) of Alameda, CA, settled an administrative case with BIS for a \$750,000 penalty. On 51 occasions between January 23, 2008, and September 27, 2011, WRS exported restricted ECCN 5D002 operating system software, controlled for National Security reasons and valued at nearly \$3 million, from the U.S. to various foreign "government end-users" (as defined for encryption purposes in the EAR) in the People's Republic of China, Hong Kong, Russia, Israel, South Africa, and South Korea, without the required licenses from BIS. On four occasions between September 29, 2008, and September 7, 2011, WRS exported ECCN 5D002 operating system software, controlled for National Security reasons and valued at nearly \$28,000, from the U.S. to various entities in the People's Republic of China identified on BIS's Entity List without the required licenses from BIS. This investigation was opened based on a Voluntary Self-Disclosure letter submitted by WRS.

C. Consultation with Industry

In a September 4, 2014 *Federal Register* notice (79 FR 52630), the Department of Commerce solicited comments from industry and the public on the effectiveness of U.S. foreign policy-based export controls. In addition, comments were solicited from the public via the BIS website. The comment period closed on October 6, 2014. A detailed review of all public comments received can be found in Appendix I.

The U.S. Government regularly consults with U.S. industry, including BIS's Information Systems Technical Advisory Committee and other technical advisory committees as appropriate, regarding encryption policy. The objective of these consultations is to develop policies that assist law enforcement, protect U.S. national security, ensure continued U.S. technological leadership, and promote the privacy and security of U.S. firms and citizens. Such consultations have proven successful, as evidenced by the increasing number of encryption items submitted for technical review and constructive industry input on matters of regulations and policy.

D. Consultation with Other Countries

The U.S. Government participates in global efforts to prevent international criminals, terrorists, and designated state sponsors of terrorism from acquiring sophisticated encryption products. One such effort is the Wassenaar Arrangement. The Wassenaar Arrangement was established to enhance regional and international security by developing standards and norms for conventional arms and dual-use goods and technology transfers. Participating states seek, through their national policies, to ensure that transfers of these items do not contribute to the development or enhancement of military capabilities which undermine these goals, and are not diverted to support such capabilities. Encryption items are included under the Wassenaar Arrangement's Basic List of dual-use goods and technologies, with controls based on the encryption strength (e.g., key length) and use of specified dual-use items. In addition, the Wassenaar Arrangement's Cryptography Note provides for release from national security controls of "mass market" encryption items otherwise covered by the Wassenaar control list. U.S. encryption policy reflects consultation with other participating states of the Wassenaar Arrangement. Also, the United States government encourages major industrial and trading partners to adopt and maintain export controls on encryption equipment and technology in bilateral meetings.

E. Alternative Means

EI foreign policy controls are coextensive with national security controls placed on encryption items. Therefore, if EI controls on encryption items were removed, national security controls would remain in place. National security controls are also maintained cooperatively with the other members of the Wassenaar Arrangement.

F. Foreign Availability

The United States recognizes the ongoing adoption and widespread use of encryption worldwide, and the continued development of foreign-made encryption hardware and software. The U.S. Government continues to monitor global IT marketplace and encryption policy developments so that updates to U.S. regulations will enable American companies to maintain their technological leadership in a manner that safeguards U.S. national security and public safety interests. The U.S. Government consults with other governments to secure cooperation in controlling the availability of encryption items.

CHAPTER 10

Significant Items: “Hot Section” Technology Controls (Section 742.14)

Export Control Program Description and Licensing Policy

Certain technology transferred from the USML to the CCL is subject to “enhanced control.” This technology is designated by the acronym “SI,” which stands for “Significant Items.” The technology controlled for SI reasons is “hot section” technology for the development, production, or overhaul of commercial aircraft engines, components, and systems. Technology controlled for SI reasons is classified under various paragraphs of Export Control Classification Number (ECCN) 9E003 (specifically ECCN 9E003.a.1 through a.8, and 9E003.h, .i, and .j). The SI controls supplement the national security controls that also apply to this technology.

License Requirements and Licensing Policy for Significant Items

The licensing policy for “hot section” technology is as follows:

- A license is required for exports and re-exports to all destinations, except Canada.
- The United States reviews license applications for “hot section” technology on a case-by-case basis to determine whether the proposed export or re-export is consistent with U.S. national security and foreign policy interests.

Analysis of Control as Required by Section 6(f) of the Export Administration Act

A. The Purpose of the Controls

This control provides a mechanism for the United States to monitor closely the export of this technology to prevent its use in a manner that would adversely affect U.S. nonproliferation goals or the military balance within a region.

B. Considerations and Determinations of the Secretary of Commerce

1. *Probability of Achieving the Intended Foreign Policy Purpose.* The Secretary has determined that this control is likely to achieve the intended foreign policy purpose, notwithstanding various factors, including the availability of these SI-controlled items from other countries, and that the foreign policy purpose has only been partially achieved through negotiations on export controls with the participating states of the Wassenaar Arrangement.

2. *Compatibility with Foreign Policy Objectives.* The Secretary has determined that this control is compatible with U.S. foreign policy objectives, and that the extension of this control will not have any significant adverse foreign policy consequences. The control is consistent with

U.S. foreign policy goals to promote peace and stability and to prevent U.S. exports that would contribute to inappropriate military capabilities abroad.

3. *Reaction of Other Countries.* The Secretary has determined that any adverse reaction to this control is not likely to render the control ineffective, nor will any adverse reaction by other countries be counterproductive to U.S. foreign policy interests. “Hot section” technology for commercial jet engines is subject to dual-use export controls by other allied countries through the Wassenaar Arrangement. These countries also recognize the desirability of restricting goods and technology that could compromise shared security and foreign policy interests.

4. *Economic Impact.* The Secretary has determined that any detrimental effect of this control on the economy of the United States, and on the competitive position of the United States in the international economy, does not exceed the benefit to U.S. foreign policy objectives.

In fiscal year 2014, the Department of Commerce approved 147 licenses for technology controlled under ECCN 9E003. Most of the 147 licenses approved involved the export of “hot section” technology. The total dollar value of the items subject to the licenses approved was \$15,262,787 in fiscal year 2014. No license applications involving engine “hot section” technology were rejected in fiscal year 2014. In addition, 27 applications involving items valued at a total of \$30,221 were returned without action.

5. *Effective Enforcement of Controls.* The Secretary has determined that the United States has the ability to enforce this control effectively. The U.S. Government does not experience any unusual problems in enforcing this control. Manufacturers and intermediary companies are familiar with U.S. controls on these products and technologies. With the exception of “hot section” technology (ECCN 9E003.j) currently used in civil derivatives of military engines controlled on the USML, all of these items also are subject to multilateral controls. Therefore, cooperation from foreign government enforcement agencies is useful in preventing and punishing violators.

BIS gathers leads on activities of concern and conducts end-use checks, primarily through its Export Control Officer and Sentinel programs, to verify the end use and end-users of U.S.-origin items. End-use checks involve the assessment of bona fides (i.e., legitimacy and reliability) of foreign end users that receive U.S.-origin items and prospective end users on pending license applications for diversion risk, as well as educational outreach to foreign trade groups.

C. Consultation with Industry

The United States leads international efforts to stem the proliferation of sensitive items, urging other supplier nations to adopt and apply export controls comparable to those of the United States. The major industrial partners of the United States maintain export controls on almost all of this technology and control them as dual-use technology. The participants in the Wassenaar Arrangement have agreed to control these items (with the exception of items controlled under ECCN 9E003.j noted above, which the United States has not sought to control in Wassenaar) as

part of their commitment to control conventional arms and sensitive dual-use goods and technologies, and to ensure that transfers of such items are carried out responsibly and in furtherance of international peace and security.

D. Consultation with Other Countries

The United States leads international efforts to stem the proliferation of sensitive items, urging other supplier nations to adopt and apply export controls comparable to those of the United States. The major industrial partners of the United States maintain export controls on almost all of this equipment and technology and control them as dual-use commodities. Pursuant to their agreement to establish a regime for the control of conventional arms and sensitive dual-use goods and technologies, the participants in the Wassenaar Arrangement have agreed to control these items (with the exception of items controlled under ECCN 9E003.j noted above, which the United States has not sought to control in Wassenaar) and to ensure that transfers of such items are carried out responsibly and in furtherance of international peace and security.

E. Alternative Means

The U.S. Government has undertaken a wide range of diplomatic endeavors, both bilateral and multilateral, to encourage proper control over these items, and has been successful in reaching multilateral agreement in the Wassenaar Arrangement to control most of these items. The United States has specifically encouraged efforts to prevent the unauthorized use or diversion of these items to activities contrary to U.S. national security and foreign policy concerns. However, these efforts do not replace the continued need for the controls.

F. Foreign Availability

Although the United States has been the world leader in this technology, other countries produce “hot section” technology. Most countries that are producers of “hot section” technology are participants in the Wassenaar Arrangement and control these items (with the exception of items controlled under ECCN 9E003.j noted above) as dual-use items in accordance with their national licensing policies. The commitment of the U.S. Government and its Wassenaar partners to maintain controls reflects the cooperation among governments to reduce foreign availability.

CHAPTER 11

Nuclear Nonproliferation Controls (Sections 742.3 and 744.2)

Export Control Program Description and Licensing Policy

The U.S. Government maintains controls on exports of nuclear-related items under the authority of the Nuclear Nonproliferation Act of 1978 (NNPA) to further the United States' nuclear nonproliferation policy. Because these controls are primarily based on the NNPA and not the Export Administration Act (EAA), they are not subject to this report. However, BIS has included information on nuclear nonproliferation controls because they usually are grouped with other nonproliferation controls that are subject to this report. In addition, controls based on nuclear end uses and end users are maintained under the authority of Section 6 of the EAA as part of the Enhanced Proliferation Control Initiative (EPCI). EPCI controls for other proliferation end uses are described in detail in Chapters 6, 7, and 8 of this report. The Entity List, maintained in Supplement No. 4 to Part 744 of the Export Administration Regulations (EAR) and discussed in Chapter 13 of this report, also prohibits certain transactions involving end users and end uses involved in nuclear activities described in Section 744.2 of the EAR.

Nuclear Nonproliferation Regime Controls

The Nuclear Nonproliferation Regime controls support U.S. international nuclear nonproliferation obligations, particularly with relation to its membership in the Nuclear Suppliers Group (NSG) and the Zangger Committee (ZC). The United States is a member of the 48-member NSG, which sets forth guidelines for the export of items that are either specially designed or prepared for the processing, use, or production of special nuclear material or are nuclear-related dual-use items and technologies (see Appendix II for a complete list of regime members). These controls also reflect U.S. membership in the ZC, a multilateral nuclear export control group that was formed to interpret Article III, paragraph 2, of the Nuclear Nonproliferation Treaty. Like the NSG, the ZC establishes and maintains a list ("Trigger List") of nuclear-related equipment and materials subject to export controls along with guidelines concerning the export of nuclear equipment and material.

Licensing Requirements and Licensing Policy

The Department of Commerce requires a license for the export of the following items:

- commodities, related technology, and software that could be of significance for nuclear explosive purposes (i.e., the Nuclear Referral List (NRL) included in the CCL); and
- any commodity, related technology, or software that the exporter knows, or has reason to know, will be used directly or indirectly in any of the following activities:

- nuclear explosive activities including research on, or the development, design, manufacture, construction, testing, or maintenance of nuclear weapons or nuclear explosive devices;
- unsafeguarded nuclear activities, including research on, or the development, design, manufacture, construction, operation, or maintenance of any nuclear reactor, critical facility, facility for the fabrication of nuclear fuel, facility for the conversion of nuclear material from one chemical form to another, or separate storage installation where there is no obligation to accept International Atomic Energy Agency (IAEA) safeguards at the facility or installation, when it contains any source of special fissionable material, or where any such obligation is not met; or
- safeguarded and unsafeguarded nuclear activities, including research on, or the development, design, manufacture, construction, operation or maintenance of the following facilities, or components for such facilities: (i) facilities for the chemical processing of irradiated special nuclear or source materials; (ii) facilities for the production of heavy water; (iii) facilities for the separation of isotopes of source and special nuclear material; or (iv) facilities for the fabrication of nuclear reactor fuel containing plutonium.

The Department of Commerce may inform the exporter that a license is required for any item subject to the EAR when there is an unacceptable risk of use in, or diversion to, any of the activities described above.

Factors considered in reviewing applications for licenses include:

- the stated end use of the item;
- the significance for nuclear purposes of the particular item, including whether the item is to be used in research on or for the development, design, manufacture, construction, operation, or maintenance of any reprocessing or enrichment facility;
- the types of nuclear nonproliferation assurances or guarantees given in a particular case; and
- the nonproliferation credentials of the recipient country.

In a September 4, 2014 *Federal Register* notice (79 FR 52630), the Department of Commerce solicited comments from industry and the public on the effectiveness of U.S. foreign policy-based export controls, including controls on nuclear-related items. The comment period closed on October 6, 2014. A detailed review of all public comments received can be found in Appendix I. In addition, comments were solicited from the public via the BIS website. Moreover, comments from the Department's seven Technical Advisory Committees (TACs) are solicited on a regular basis, but are not detailed in this report.

Analysis of Controls as Required by Law¹⁸

Section 17(d) of the EAA and Section 309(c) of the NNPA provide that: (1) nuclear nonproliferation controls do not expire annually and determinations to extend them are thus not required; and (2) the criteria and other factors set forth in Sections 6(b) through 6(f) of the Act are not applicable to these controls. The Department of Commerce is, therefore, notifying Congress that these controls continue in effect. These controls further the nuclear nonproliferation policy of the United States and have made it more difficult for other nations to acquire sensitive nuclear technology or equipment.

The Departments of Commerce and Energy, in consultation with the Departments of State and Defense and the Nuclear Regulatory Commission, regularly review and revise the NRL pertaining to U.S. dual-use items controlled for nuclear nonproliferation reasons. The NRL is used to meet the United States' NSG commitments with respect to nuclear dual-use items.

The 2014 NSG Plenary Meeting, 34th Consultative Group (CG) Meeting, the Licensing and Enforcement Experts Meeting (LEEM), and the Information Exchange Meeting (IEM) were held in Buenos Aires, Argentina, from June 23-27, 2014. The Plenary endorsed 11 recommendations put forward by the CG Chair. Vigorous discussions took place in the CG and the Plenary on the issue of non-compliance with NSG Transparency and Confidentiality Guidelines. A number of participating governments (PGs) made interventions in favor of India's membership. The United States, Japan, and Ireland reiterated the request made at the 2013 Plenary for additional information on China's planned exports to Pakistan in support of the Chasma III & IV and Kanupp II & III reactors. A number of PGs made interventions on reported Iranian noncompliance with non-proliferation treaty (NPT) obligations and called on North Korea to halt development of its production facilities and return to full compliance with the NPT.

The 2nd Nuclear Suppliers Group (NSG) Outreach Meeting, 1st Technical Experts Group (TEG) Meeting, and 33rd Consultative Group Meeting were held in Vienna, Austria the week of April 7-11, 2014. Technical proposals and papers discussed at the TEG included changes to the controls on dual use machine tools, centrifugal multiplane balancing machines, the General Software Note, induction furnace power supplies, neutron detectors, nuclear reactor controls, and nuclear graphite. The 2nd Information Exchange Meeting (IEM) Outreach Seminar was held on April 7 and 8, 2014, and was chaired by Bill Domke of Lawrence Livermore National Laboratory. The IEM Seminar featured presentations by NSG Participating Governments Czech Republic and Germany on national export control systems; France and Czech Republic on licensing dual use goods and end use controls; France and Netherlands on problems in export control licensing and enforcement; and the Netherlands, United Kingdom and France on topics including brokering, fast parcel operators and proliferators' procurement strategies. Japan and the United Kingdom presented to the IEM on regulator and licensing authority outreach to

¹⁸ The analysis, required by law, differs for nuclear nonproliferation controls. It is governed by the Nuclear Nonproliferation Act of 1978 (NNPA). Therefore, the headings under this section differ from the rest of the report.

industry and industry best practices. The IEM also featured presentations by outreach partners India and Pakistan on their respective compliance with NSG Guidelines and on Government of India and Government of Pakistan nuclear, dual-use, and WMD –related strategic commodity export controls and licensing.

BIS gathers leads on activities of concern and conducts end-use checks, primarily through its Export Control Officer and Sentinel programs, to verify the end use and end users of U.S.-origin items. End use checks involve the assessment of bona fides (i.e., legitimacy and reliability) of foreign end users that receive U.S.-origin items and prospective end users on pending license applications for diversion risk, as well as educational outreach to foreign trade groups.

BIS conducted a number of enforcement actions regarding noncompliance with these controls, including:

Ming Suan Zhang/Frances Chen/Mark Lin

Carbon fiber to China

On December 10, 2013, Ming Suan Zhang was sentenced in U.S. District Court for the Eastern District of New York to 57 months in prison, a \$1,000 forfeiture, and a \$100 assessment for violating the International Emergency Economic Powers Act in connection with the attempted illegal export of thousands of pounds of aerospace-grade carbon fiber from the United States to China via Taiwan. On December 13, 2013, Mark Lin was sentenced in U.S. District Court for the Eastern District of New York to time served (16 months incarceration) and ordered removed from the United States for his part in the scheme. On March 29, 2013, Yen Ling “Frances” Chen, a Taiwanese national, was sentenced in the U.S. District Court for the Eastern District of New York to time served (nine months incarceration) in connection with the attempted unlawful export. Zhang, a citizen of the People’s Republic of China, came to the attention of federal authorities after accomplices Lin and Chen attempted to locate large quantities of aerospace-grade carbon fiber via remote Internet contacts. Zhang told an undercover law enforcement agent that he had an urgent need for the carbon fiber in connection with the scheduled test flight of a Chinese fighter plane. Zhang then arranged a meeting in the United States with an undercover agent to take possession of a carbon fiber sample, which was to be shipped to China and analyzed to verify its authenticity. Zhang was placed under arrest after he arrived for the meeting. The scheme was aimed at obtaining thousands of pounds of the aerospace-grade carbon fiber. This case was a joint investigation with U.S. Immigration and Customs Enforcement.

CHAPTER 12

Surreptitious Listening Controls (Section 742.13)

Export Control Program Description and Licensing Policy

The United States maintains controls on surreptitious listening items to prevent the unlawful interception of oral, wire, or electronic communications by terrorists and others who may use the information for unlawful purposes or in ways contrary to the national security and foreign policy of the United States. Surreptitious Listening (SL) items are devices used for the surreptitious interception of wire, oral, or electronic communications and are controlled under Export Control Classification Numbers (ECCN) 5A980 and 5A001.f.1. Export controls extend to related software and technology through ECCNs 5D980 and 5D001 (software), as well as 5E980 and 5E001 (technology). On June 20, 2013, the Department of Commerce published a rule revising the Commerce Control List (CCL) to reflect changes made to the Wassenaar Arrangement List of Dual-Use Goods and Technologies agreed to by the Wassenaar Arrangement in December 2012, including the addition of a control on interception equipment and software designed for the extraction of voice or data transmitted over the air interface to Category 5 part 1 (Telecommunications). The Department of Commerce has imposed SL controls on these items as well as national security controls.

License Requirements and Licensing Policy

A license is required for the export or re-export to any destination of any electronic, mechanical, or other device primarily useful for surreptitious interception of wire, oral, or electronic communications. The Department of Commerce will generally approve applications for the export and re-export of items controlled for SL reasons other than to destinations for which a license is also required for AT reasons, and where the end users are providers of wire or electronic communication service acting in the normal course of business; or to officers, agents, or employees of, or persons under contract with, the United States, a State, or a political subdivision thereof, when engaged in the normal course of government activities. License applications from other parties will generally be denied.

The license requirements set forth in the EAR are independent of the requirements of section 802 of the Omnibus Crime Control and Safe Streets Act of 1968, as amended (18 U.S.C. Section 2512). These controls do not supersede, nor do they implement, construe, or limit the scope of any of the statutory restrictions of 18 U.S.C. Section 2512 that are enforced by the U.S. Department of Justice.

Analysis of Control as Required by Section 6(f) of the Export Administration Act

A. The Purpose of the Controls

The purpose of surreptitious listening controls is to: prevent the unlawful interception of oral, wire, or electronic communications by terrorists and others who may put the information gained through intercepted communications to an unlawful use; promote the protection of privacy of oral, wire, or electronic communications; and protect against threats of terrorism around the world. The controls also distance the United States from nations that have repeatedly supported acts of terrorism and from individuals and organizations that commit terrorist acts.

B. Considerations and Determinations of the Secretary of Commerce

1. *Probability of Achieving the Intended Foreign Policy Purpose.* The Secretary has determined that the surreptitious listening controls are likely to achieve the intended foreign policy purpose, notwithstanding the availability of these controlled items from other countries, and that the foreign policy purpose cannot be achieved through negotiations or other alternative means.

Sending or carrying the devices in foreign commerce is subject to independent criminal sanction.¹⁹ Nevertheless, the imposition of foreign policy-based controls on these devices and related software and technology enhances the probability of achieving the intended foreign policy purposes.

Although the availability of comparable goods from foreign sources limits the effectiveness of the surreptitious listening controls, these controls restrict access to U.S.-origin commodities, technology, and software and demonstrate U.S. determination to prevent the unlawful interception of communications, promote privacy protection, and oppose and distance the country from international terrorism.

2. *Compatibility with Foreign Policy Objectives.* The Secretary has determined that the imposition of these controls is consistent with the foreign policy objectives of the United States and will not have any significant adverse foreign policy consequences. The imposition of surreptitious listening controls will enhance the U.S. Government's ability to stop the supply of U.S.-origin items to persons engaged in, or supportive of, unlawful uses of intercepted communications and deter privacy violations and acts of terrorism. The imposition of these controls is also compatible with overall U.S. policy toward Cuba, Iran, North Korea, Sudan, and Syria. The U.S. Government intends to promote privacy protection and aid in deterring criminal activities, including terrorism, through these foreign policy-based controls.

¹⁹ Omnibus Crime Control and Safe Streets Act of 1968, as amended (18 U.S.C. 2512).

3. Reaction of Other Countries. The Secretary has determined that any adverse reaction to the imposition of surreptitious listening controls is not likely to render the controls ineffective, nor will any adverse reaction by other countries be counterproductive to U.S. foreign policy interests. Most countries are generally supportive of U.S. efforts to prevent unlawful uses of intercepted communications, including uses of intercepted communications by terrorists or states that support international terrorism.

4. Economic Impact on U.S. Industry. The Secretary has determined that any detrimental effect of these controls on the economy of the United States, including the competitive position of the United States in the international economy, does not exceed the benefit to U.S. foreign policy objectives. Because sending or carrying the devices in foreign commerce is already subject to independent criminal sanction, the imposition of foreign policy-based controls on the devices and related software and technology will not have a discernible economic impact.

In fiscal year 2014, the Department of Commerce approved nine applications for the export or re-export of SL controlled items. In addition, the Department returned without action ten applications. No applications were rejected.

5. Effective Enforcement of Controls. The Secretary has determined that the United States has the ability to enforce these controls effectively. The U.S. Government can effectively enforce these controls by focusing on preventive enforcement, using regular outreach efforts to keep industry informed of the license requirements and prevent inadvertent exports, and gathering leads on activities of concern.

BIS gathers leads on activities of concern and conducts end-use checks, primarily through its Export Control Officer and Sentinel programs, to verify the end use and end users of U.S.-origin items. End-use checks involve the assessment of bona fides (i.e., legitimacy and reliability) of foreign end users that receive U.S.-origin items and prospective end users on pending license applications for diversion risk, as well as educational outreach to foreign trade groups.

C. Consultation with Industry

In a September 4, 2014 *Federal Register* notice (79 FR 52630), the Department of Commerce solicited comments from industry and the public on the effectiveness of U.S. foreign policy-based export controls. In addition, comments were solicited from the public via the BIS website. The comment period closed on October 6, 2014. A detailed review of all public comments received can be found in Appendix I.

The Department of Commerce consults with the Regulations and Procedures Technical Advisory Committee (RPTAC), one of seven such committees that advise the Bureau of Industry and Security (BIS), in preparation for publication of major regulatory changes affecting foreign policy controls.

D. Consultation with Other Countries

The United States continues to consult with a number of countries, both on a bilateral and a multilateral basis. In general, most countries are supportive of measures designed to prevent the unlawful use of intercepted communications, protect privacy, and combat terrorism but do not implement strict export controls on these items similar to those imposed by the United States. The United States will consult with other countries as necessary regarding these changes in order to ensure compliance and encourage other countries' efforts to deter terrorism and other criminal activity through controlling surreptitious listening devices.

E. Alternative Means

The U.S. Government continually reviews the means by which it can curtail privacy violations and terrorism and has taken a wide range of diplomatic, political, and security-related steps to support this effort. Imposing these foreign policy-based controls enhances these efforts by preventing terrorist-supporting countries from acquiring items subject to U.S. export control jurisdiction. In addition, these controls underscore the United States' commitment to prevent criminal activity worldwide.

F. Foreign Availability

The commodities subject to these controls are likely available from foreign suppliers. The Department of Commerce is aware that these controls will not prevent the shipment of such foreign-origin items from other countries, but the regulation minimizes the risk of diversion of U.S.-origin devices and related software and technology primarily useful for surreptitious interception of wire, oral, or electronic communications to end users without a legitimate commercial need for such devices.

CHAPTER 13

Entity List (Supplement No. 4 to Part 744)

Export Control Program Description and Licensing Policy

To protect and advance the national security and foreign policy interests of the United States, the Bureau of Industry and Security (BIS) has adopted foreign policy-based end use and end user controls that focus on entities that pose or could pose a threat to U.S. national security or foreign policy interests, and BIS has taken steps to provide additional information to the public about these entities of concern. The Entity List (Supplement No. 4 to Part 744 of the Export Administration Regulations (EAR)) provides notice to the public that certain exports, re-exports, and transfers (in-country) of items subject to the EAR to the entities (foreign persons) identified on the Entity List (including businesses, research institutions, government and private organizations, individuals, and other types of legal persons) require a license from BIS and that the availability of License Exceptions for such transactions is limited.

Established in 1997, the Entity List was created to help inform the public of entities that have engaged in activities that could result in an increased risk of the diversion of exported, re-exported and transferred (in-country) items to weapons of mass destruction (WMD) programs, such as nuclear, missile, chemical and biological weapons activities (*see* Sections 744.2, 744.3, and 744.4 of the EAR). Among other things, the Entity List prohibits unlicensed exports, re-exports, and transfers (in-country) of items subject to the EAR to certain persons acting contrary to the national security or foreign policy interests of the United States and persons sanctioned by the Departments of State and Treasury (*see* Sections 744.10, 744.11 and 744.20 of the EAR). Entity List entries specify the license requirement and license review policy imposed on each listed entity. These license requirements are supplemental to any license requirements imposed elsewhere in the EAR.

The End-User Review Committee (ERC) implements revisions to the Entity List; entities are added to the List by majority vote, while removals or other changes to the List are implemented by unanimous vote. The ERC conducts an annual review of all persons on the Entity List and revises and updates the List as necessary. Persons on the Entity List may request removal from the List or a modification of their status on the List pursuant to Section 744.16 of the EAR. The ERC is chaired by the Department of Commerce and is composed of representatives of the Departments of Commerce, State, Defense, Energy, and – where appropriate – the Treasury.

Summary of 2014 Changes

On September 18, 2014, BIS published a final rule in the *Federal Register* (79 FR 55998) amending the EAR by adding twenty-eight persons to the Entity List located in Afghanistan, Armenia, Australia, China, Greece, Hong Kong, India, Ireland, Pakistan, Singapore, the U.A.E., and the United Kingdom (U.K.). The ERC determined that they were engaged in activities

contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. Specifically, BIS added one person in Australia (*i.e.*, to the Entity List under “Australia”), one person in China (with an additional address in Hong Kong), six persons in Pakistan, and one person in Singapore, for a total of nine persons, for their involvement in procuring sensitive U.S. technology to support the development of Pakistan’s missile and unmanned aerial vehicle programs; four persons in Hong Kong for their activities to receive U.S.-origin items and to evade BIS licensing requirements; one person in Afghanistan for engaging in activities in support of persons designated by the Secretary of State as a Foreign Terrorist Organization; one in the U.A.E. for involvement in the attempted unauthorized export to Iran of a lathe machine used in the production of high grade steel or “bright steel,” an item used in the manufacture of automobile and aircraft parts, in violation of OFAC’s Iran regulations and the EAR. BIS also added eleven persons in Armenia, Greece, India, Ireland, the U.A.E., and the U.K. for engaging in activities in support of the Syrian regime and individuals and companies named on the U.S. Treasury Department’s SDN List, and for weapons trafficking; and two persons in Pakistan for procuring items, including U.S.-origin items, for, or on behalf of, Pakistan’s Atomic Energy Commission (PAEC), an entity on the Entity List.

This final rule also modified two existing entries on the Entity List, one by adding additional addresses to a person listed under Hong Kong, and another by adding a subordinate entity to an existing person on the Entity List under Pakistan. Finally, the rule removed three persons located in Hong Kong from the Entity List because they were determined to no longer meet the criteria for inclusion on the Entity List.

On September 17, 2014, BIS published a final rule in the *Federal Register* (79 FR 55608) amending the EAR by adding ten persons to the Entity List located in Russia. The ERC determined that these persons were engaged in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. BIS added five persons to the Entity List in conjunction with OFAC’s designation of them as Specially Designated Nationals pursuant to Executive Order 13661. BIS added the other five persons to the Entity List consistent with Executive Order 13662 (79 FR 16169), *Blocking Property of Additional Persons Contributing to the Situation in Ukraine*, issued by the President on March 20, 2014. Pursuant to Executive Order 13662, OFAC designated these five persons as operating in Russia’s energy sector.

On August 6, 2014, BIS published a final rule in the *Federal Register* (79 FR 45675) amending the EAR by adding one person to the Entity List in Russia. The ERC determined that this person engaged in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. The addition was made in conjunction with OFAC’s designation of the person as a Specially Designated National pursuant to Executive Order 13661.

On August 1, 2014, BIS published a final rule in the *Federal Register* (79 FR 44680) amending the EAR by adding sixteen persons to the Entity List located in Afghanistan, China, Hong Kong, Iran, and the U.A.E. The ERC determined that these persons were engaged in activities contrary

to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. Specifically, BIS added five persons located in Afghanistan for engaging in activities in support of persons designated by the Secretary of State as a foreign terrorist organization; five persons located in China for the illicit procurement of commodities and technologies for unauthorized military end-use in China; two persons located in China and Hong Kong for the unauthorized exploitation of computer systems of U.S. companies and cleared defense contractors to obtain information, including technology related to military projects; and four persons located in Iran and the U.A.E. for attempting to reexport U.S.-origin items to Iran without U.S. Government authorization.

On July 22, 2014, BIS published a final rule in the *Federal Register* (79 FR 42452) amending the EAR by adding eleven persons in Crimea (Occupied), Russia, and Ukraine. The ERC determined that these persons were engaged in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. Specifically, BIS added three persons, two persons located in the eastern Ukraine operated by separatist organizations and one person in Crimea (Occupied), in conjunction with OFAC's designation of them as Specially Designated Nationals pursuant to Executive Order 13660. BIS added eight persons located in Russia in conjunction with OFAC's designation of them as Specially Designated Nationals pursuant to Executive Order 13661.

On June 26, 2014, BIS published a final rule in the *Federal Register* (79 FR 36199) amending the EAR by adding four persons to the Entity List located in China and Hong Kong. The ERC determined that these persons were engaged in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 of the EAR. Specifically, the ERC determined that the four persons attempted to supply items to the Chinese Peoples' Liberation Army and/or to export items to other destinations sanctioned by the United States.

On June 5, 2014, BIS published a final rule in the *Federal Register* (79 FR 32441) amending the EAR by adding twenty six persons to the Entity List located in China, Hong Kong, Lebanon, and the United Arab Emirates (U.A.E.). The ERC determined these persons were engaging in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744 of the EAR. Specifically, the ERC added two persons located in Hong Kong because they had prevented the Department of Commerce from accomplishing an end-use check and because they were involved in reexports of sensitive U.S.-origin items to unauthorized end users. Five persons located in China and Hong Kong were added because they had engaged in activities that could enhance the military capabilities or capabilities to support terrorism of the Syrian government, and nineteen persons located in Lebanon and the U.A.E. were added because they were involved in procuring U.S.-origin items for a person designated by the Secretary of State as a foreign terrorist organization without the required U.S. Government authorizations.

On May 1, 2014, BIS published a final rule in the *Federal Register* (79 FR 24558) amending the EAR by adding thirteen persons to the Entity List under Cyprus, Luxembourg and Russia. The ERC determined these persons were engaged in activities contrary to the national security or

foreign policy interests of the United States on the basis of Section 744.11. The additions were made in conjunction with OFAC's designation of these thirteen persons as Specially Designated Nationals pursuant to Executive Order 13660 and Executive Order 13661 (79 FR 15533) *Blocking Property of Additional Persons Contributing to the Situation in Ukraine* issued by the President on March 16, 2014.

On May 1, 2014, BIS published a final rule in the *Federal Register* (79 FR 24563) amending the EAR by adding nine persons to the Entity List located in China. The ERC determined these persons were engaging in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 (license requirements that apply to entities acting contrary to the national security and foreign policy interests of the United State) of the EAR. Specifically, the ERC determined that it has reasonable cause to believe that the nine persons have provided support to Iran's ballistic missile program.

On April 16, 2014, BIS published a final rule in the *Federal Register* (79 FR 21394) amending the EAR by adding one person to the Entity List under Crimea (Occupied) with a cross reference to Ukraine. The ERC determined that this person, a regional oil and gas company in Crimea, was involved in activities contrary to the national security or foreign policy interests of the United States on the basis of Section 744.11 (license requirements that apply to entities acting contrary to the national security and foreign policy interests of the United States) of the EAR. The additions were made in conjunction with the Department of the Treasury's Office of Foreign Assets Control (OFAC)'s designation of the person as a Specially Designated Person pursuant to Executive Order 13660 (79 FR 13491), *Blocking Property of Certain Persons Contributing to the Situation in Ukraine*, issued by the President on March 6, 2014.

Licensing Policy

For each person placed on the Entity List, the ERC specifies a license requirement and a license review policy. The requirement and review policy vary from person to person and are described within each person's listing on the Entity List.

Analysis of Controls as Required by Section 6(f) of the Export Administration Act

A. The Purpose of the Controls

The purpose of the Entity List and its related controls is to protect and advance the United States' national security and foreign policy interests by demonstrating U.S. resolve to restrict trade with persons that fail to comply with U.S. export control laws and regulations or fail to adhere to acceptable norms of international behavior, or whose conduct threatens U.S. interests. The Entity List informs the public of entities that have engaged in activities that could result in an increased risk of diversion of items for use in weapons of mass destruction programs or in other activities contrary to U.S. national security and foreign policy interests. Addition of an entity to the Entity List prevents diversion of items subject to the EAR by imposing additional license requirements, often with a presumption of denial, to ensure U.S. government review of proposed

exports, re-exports, and transfers of items to listed entities. The majority of additions to the Entity List in recent years have consisted of persons engaging in activities contrary to U.S. national security and foreign policy interests.

B. Considerations and/or Determinations of the Secretary of Commerce

1. *Probability of Achieving the Intended Foreign Policy Purpose.* The Secretary has determined that imposing foreign policy-based controls as part of the licensing requirements that apply to persons added to the Entity List is likely to achieve the intended foreign policy (and national security) purposes.

Although the United States regularly negotiates with other countries on how best to achieve export control goals, these negotiations may not achieve those U.S. export control objectives that are focused on the conduct of specific persons. In cases where U.S. interests are at stake, the United States retains the authority to impose controls in connection with such persons that reflect unilateral foreign policy objectives.

The United States seeks to prevent the use of U.S.-origin items in connection with actions that are detrimental to U.S. foreign policy goals. To that end, the license requirements that apply to entities placed on the Entity List are intended to prevent the acquisition of certain items by persons who might engage in activities contrary to U.S. interests. The Entity List enables BIS to target specific persons with export license requirements, thereby avoiding the imposition of broad license requirements on numerous items destined for many destinations.

2. *Compatibility with Foreign Policy Objectives.* The Secretary has determined that imposing these controls is compatible and consistent with the national security and foreign policy objectives of the United States. Specifically, these controls are consistent with the U.S. policy of prohibiting exports, re-exports, and transfers (in-country) when specific and articulable facts provide reasonable cause to believe that the persons to whom the items will be provided are involved in activities contrary to the national security or foreign policy interests of the United States, or pose a significant risk of becoming involved in such activities. Additionally, the Department of State's representation on the ERC assures that the decisions based on this rule will be compatible with U.S. foreign policy interests. The Secretary has further determined that these controls will not have significant adverse foreign policy consequences.

3. *Reaction of Other Countries.* The Secretary has determined that although other countries may raise objections to the Entity List, any adverse reaction to the expansion of the Entity List is not likely to render the Entity List ineffective, nor will any adverse reaction by other countries be counterproductive to U.S. foreign policy interests. Further, the Department of Commerce coordinates with the Department of State to consult with countries affected by changes to the Entity List. These consultations are completed in advance of any proposed changes to the List. In addition, some countries use the Entity List as a screening tool for their exports.

4. *Economic Impact on United States Industry.* The Secretary has determined that the cost to industry resulting from the maintenance of these controls does not exceed the benefit to U.S. foreign policy. These controls provide an effective alternative to imposing additional and overly broad end use or destination-based export control requirements. The identification of persons through publication in the Entity List also reduces uncertainty for U.S. industry. Thus, these controls minimize the economic impact on industry while allowing BIS to achieve U.S. foreign policy objectives through strengthened U.S. export controls. Additionally, interagency representation on the ERC provides reasonable assurance that additions to the Entity List will reflect significant U.S. foreign policy concerns.

5. *Effective Enforcement of Controls.* The Secretary has determined that the United States has the ability to enforce these controls effectively. By imposing license requirements on clearly-identified persons via the Entity List, the U.S. Government facilitates the identification of actual and potential violations of the EAR. Publication of the Entity List helps U.S. industry and foreign companies to identify restricted persons, thereby reducing inadvertent violations of the EAR and increasing compliance with the export controls.

The Entity List is a formidable administrative enforcement tool that prohibits listed foreign persons from receiving some or all items subject to the EAR unless the exporter, reexporter, or transferor receives a license. During fiscal year 2014, the ERC added 97 entities to the Entity List.

C. Consultation with Industry

In a September 4, 2014 *Federal Register* notice (79 FR 52630), the Department of Commerce solicited comments from industry and the public on the effectiveness of U.S. foreign policy-based export controls. The comment period closed on October 6, 2014. A detailed review of all public comments received can be found in Appendix I. In addition, comments were solicited from the public via the BIS website. Comments from the Department's seven technical advisory committees are solicited on an ongoing basis and are not specific to this report.

D. Consultation with Other Countries

The United States continues to consult with a number of countries, on both a bilateral and multilateral basis, regarding the persons on the Entity List. These consultations provide a forum for the United States to gather specific and articulable facts to support additions to the Entity List based on reasonable cause that the parties pose a significant risk of becoming involved in activities contrary to the national security or foreign policy interests of the United States and other countries. Most countries are supportive of U.S. export and re-export controls and enforcement, including Entity List licensing requirements.

E. Alternative Means

The United States continually reviews its means to curtail activities that are contrary to U.S. interests. The United States has taken a wide range of diplomatic, political, and security-related steps to support this effort.

F. Foreign Availability

The Department of Commerce is aware that these controls will not necessarily prevent the acquisition of sensitive commodities, software, or technologies not subject to the EAR by persons listed on the Entity List. However, by publishing the Entity List and imposing penalties for violations of the licensing requirements on the Entity List, the United States is sending a strong message that may deter suppliers from participating in transactions with persons known or suspected of violating the EAR or acting contrary to U.S. interests. Additionally, the United States cooperates with other governments to curtail transactions by other (third-country) suppliers.

APPENDIX I

Summary of Public Comments On Foreign Policy-Based Export Controls

The Department of Commerce's Bureau of Industry and Security (BIS) requested public comments on existing foreign policy-based export controls maintained under Section 6 of the Export Administration Act of 1979, as amended (EAA), and on the Entity List (Supplement No. 4 to Part 744 of the Export Administration Regulations (EAR)) through a *Federal Register* notice published September 4, 2014 (79 FR 52630). In addition, comments were solicited from the public through the BIS web page. Comments from the Department's seven Technical Advisory Committees are solicited on an ongoing basis and are not specific to this report.

BIS requested comments on how existing foreign policy controls have affected exporters and the overall public. The notice invited public comments about issues such as: the effectiveness of controls when foreign availability exists; whether the goals of the controls can be achieved through other means such as negotiations; the compatibility of the controls with the overall U.S. policy toward a country in question; the effect of controls on U.S. economic performance; and the ability to enforce the controls.

The comment period closed on October 6, 2014. BIS received three comments, two from a company and one from an academic institution. BIS has made these comments available for review in the BIS Freedom of Information Act Reading Room available on the BIS web page. BIS also makes comments available for public review upon request. This Appendix summarizes the comments received.

Industry Comments

BIS reviewed and considered the comments received from (1) Cross Match Technologies, a U.S. company; and (2) Dartmouth College, a U.S. academic institution that submitted an academic journal compiled by various authors that participate in the security community, civil society, and academia.

Cross Match Technologies submitted two comments about foreign policy-based controls on the export of crime control detection instruments and related equipment to China. The company asserted that Section 902 (a) (4) of the Foreign Relations Act for Fiscal Year 1990-1991 continues to have an adverse economic impact on U.S. industries that are interested in exporting or reexporting biometric devices and related equipment identified under ECCNs 3A981 and 3D980 to China. In addition, the company asserted, "the lack of a clear connection between human rights abuses in China and the use of biometric technology for crime control points to the fact that this policy has outlived its original intent and purpose." Furthermore, Cross Match Technologies expressed its willingness to provide recommendations to the Department of Commerce regarding a proposed rule that would make amendments affecting crime control and related items.

A Dartmouth College representative submitted one comment which included an academic journal about foreign policy-based controls entitled, “Why the Wassenaar Arrangement’s Definition of Intrusion Software and Controlled Items Put Security Research and Defense At Risk- And How to Fix It”. The article argued that the current Wassenaar Arrangement will have a negative impact on computer security research and defensive software. In this detailed journal, the authors provided a comprehensive analysis of the Wassenaar Arrangement and made policy recommendations to the Department of Commerce for consideration.

APPENDIX II

Multilateral Export Control Regimes in 2014

WASSENAAR	AG	MTCR	NSG
Argentina	Argentina	Argentina	Argentina
Australia	Australia	Australia	Australia
Austria	Austria	Austria	Austria
			Belarus
Belgium	Belgium	Belgium	Belgium
		Brazil	Brazil
Bulgaria	Bulgaria	Bulgaria	Bulgaria
Canada	Canada	Canada	Canada
Croatia	Croatia		Croatia
	Cyprus		Cyprus
Czech Republic	Czech Republic	Czech Republic	Czech Republic
Denmark	Denmark	Denmark	Denmark
Estonia	Estonia		Estonia
	European Commission		European Union (Observer)
Finland	Finland	Finland	Finland
France	France	France	France
Germany	Germany	Germany	Germany
Greece	Greece	Greece	Greece
Hungary	Hungary	Hungary	Hungary
	Iceland	Iceland	Iceland
Ireland	Ireland	Ireland	Ireland
Italy	Italy	Italy	Italy
Japan	Japan	Japan	Japan
			Kazakhstan
Latvia	Latvia		Latvia
Lithuania	Lithuania		Lithuania
Luxembourg	Luxembourg	Luxembourg	Luxembourg
Malta	Malta		Malta
Mexico	Mexico		Mexico
Netherlands	Netherlands	Netherlands	Netherlands
New Zealand	New Zealand	New Zealand	New Zealand
Norway	Norway	Norway	Norway
			People's Republic of China
Poland	Poland	Poland	Poland
Portugal	Portugal	Portugal	Portugal

WASSENAAR	AG	MTCR	NSG
Rep. of Korea (South Korea)			
Romania	Romania		Romania
Russian Federation		Russia Federation	Russian Federation
			Serbia
Slovak Republic	Slovak Republic		Slovak Republic
Slovenia	Slovenia		Slovenia
South Africa		South Africa	South Africa
Spain	Spain	Spain	Spain
Sweden	Sweden	Sweden	Sweden
Switzerland	Switzerland	Switzerland	Switzerland
Turkey	Turkey	Turkey	Turkey
Ukraine	Ukraine	Ukraine	Ukraine
United Kingdom	United Kingdom	United Kingdom	United Kingdom
United States	United States	United States	United States

AG: Australia Group; **MTCR:** Missile Technology Control Regime; **NSG:** Nuclear Suppliers Group

APPENDIX III

Selected Rules Published by the Department of Commerce in 2014

Publication Date	Federal Register Citation	Rule
12/23/2014	79 FR 76874	Revision to the Export Administration Regulations: Controls on Electronic Commodities; Export and Reexports to Hong Kong
12/17/2014	79 FR 75044	Expansion of the Microprocessor Military End Use and End-User Control
11/7/2014	79 FR 66288	Venezuela: Implementation of Certain Military End Uses and End Users License Requirement under the Export Administration Regulations
9/18/2014	79 FR 55998	Addition and Modification of Certain Persons on the Entity List; and Removal of Certain Persons from the Entity List
9/17/2014	79 FR 55608	Russian Sanctions: Addition of Persons to the Entity List and Restrictions on Certain Military End Uses and Military End Users
9/5/2014	79 FR 52958	Implementation of Understandings Reached at the 2005, 2012, and 2013 Nuclear Suppliers Group (NSG) Plenary Meetings and a 2009 NSG Intersessional Decision; Additions to the List of NSG Participating Countries; Correction.
9/7/2014	79 FR 46316	Implementation of Understandings Reached at the 2005, 2012, and 2013 Nuclear Suppliers Group (NSG) Plenary Meetings and a 2009 NSG Intersessional Decision; Additions to the List of NSG Participating Countries
8/6/2014	79 FR 45675	Russian Oil Industry Sanctions and Addition of Person to the Entity List
8/1/2014	79 FR 44680	Addition of Certain Persons to the Entity List
7/22/2014	79 FR 42452	Addition of Certain Persons to the Entity List
6/26/2014	79 FR 36199	Addition of Certain Persons to the Entity List; and Removal of Person from the Entity List Based on Removal Request
6/5/2014	79 FR 32441	Addition of Certain Persons to the Entity List
5/13/2014	79 FR 30021	Revisions to the Export Administration Regulations Based on the 2013 Missile Technology Control Regime Plenary Agreements
5/1/2014	79 FR 24563	Addition of Person to the Entity List
5/1/2014	79 FR 24558	Addition of Person to the Entity List
4/16/2014	79 FR 21394	Addition of Person to the Entity List

Appendix III Selected Rules Published by the Department of Commerce in 2014

3/26/2014	79 FR 16664	Implementation of the Understandings Reached at the June 2013 Australia Group (AG) Plenary Meeting and the December 2012 AG Intersessional Decisions.
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