
2013 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 Department of Commerce is acting under the authority conferred by Executive Order 13222 of August 17, 2001 (Executive Order), as extended most recently by the Notice of August 15, 2012 (77 Fed. Reg. 49699 (Aug. 16, 2012)). In that Executive Order, the President, by reason of the expiration of the EAA, 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, insofar as appropriate, is following the provisions of Section 6 of the EAA with regard to extending foreign policy-based export controls.

The Bureau of Industry and Security (BIS) of the Department of Commerce extends with this report all foreign policy export controls described in this report for the period from January 21, 2013, to January 20, 2014. BIS 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 2012 calendar year, the statistical data presented in the report is based on fiscal year 2012 export licensing statistics, unless otherwise noted. BIS generates this data from the computer system it uses to process and track export license activity. The data included may overcount a small

¹ 50 U.S.C. app. §§ 2401-2420 (2000).

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

number of licenses because the computer 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 in the 2012 Report

Regional Stability

In FY 2012, two regulations were published that expanded Regional Stability (RS) controls. These new controls apply to new Export Control Classification Numbers (ECCNs) 3A982, 3D982 and 3E982 and to the newly created series of ECCNs, 0Y521. The ECCN 0Y521 series covers items that warrant control on the CCL based on their contribution to the military or intelligence advantage to the United States, but that are not yet identified in an existing ECCN. Specifically, pursuant to the new rules, regional stability export controls were imposed on certain high electron mobility transistors and monolithic microwave integrated circuits that are listed in the new ECCN 3A982, with related software and technology captured in ECCNs 3D982 and 3E982. Items in ECCN 0Y521 series are subject to RS Column 1 controls.

In addition, the Export Control Reform (ECR) initiative, currently in progress, has proposed a new regulatory construct for the transfer of items on the United States Munitions List (USML) to the Commerce Control List (CCL). On July 15, 2011, the Department of Commerce published a proposed rule in the *Federal Register* (76 FR 41958) implementing structural changes to the EAR for items that are moved from the USML to the CCL. These items will be subject to the EAR under new ECCNs controlled for RS and AT reasons.

The following is a list of proposed rules published by BIS during 2012 that would transfer various types of articles from the USML to the CCL. All of these rules propose RS controls on the items, in addition to other controls, as appropriate.

- On May 2, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 25932) “Revisions to the Export Administration Regulations (EAR): Control of Energetic Materials and Related Articles the President Determines No Longer Warrant Control Under the United States Munitions List (USML).”

- On May 18, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 29564) “Revisions to the Export Administration Regulations: Auxiliary and Miscellaneous Items that No Longer Warrant Control Under the United States Munitions List and Items on the Wassenaar Arrangement Munitions List.”
- On June 7, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 33688) “Revisions to the Export Administration Regulations (EAR): Control of Personal Protective Equipment, Shelters, and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML).”
- On June 13, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 35310) “Revisions to the Export Administration Regulations (EAR): Control of Military Training Equipment and Related Items the President Determines No Longer Warrants Control Under the United States Munitions List (USML).”
- On June 19, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 36409) “Specially Designed” Definition.”
- On June 21, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 37523) “Proposed Revisions to the Export Administration Regulations (EAR): Implementation of Export Control Reform; Revisions to License Exceptions After Retrospective Regulatory Review.”
- On November 28, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 70945) “Revisions to the Export Administration Regulations (EAR): Control of Military Electronic Equipment and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML).”
- On November 29, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 71214) “Revisions to the Export Administration Regulations (EAR) To Make the Commerce Control List (CCL) Clearer.”

In addition, a number of regulations were published in calendar year 2011 that proposed the transfer of various types of items presently controlled on the USML to the CCL and proposed imposing RS controls on these items. These rules have not yet been published in final form. The rules include proposed revisions to the EAR for the following items: (1) “Control of Aircraft and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML);” (2) “Control of Gas Turbine Engines and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML);” (3)

“Control of Military Vehicles and Related Items that the President Determines No Longer Warrant Control on the United States Munitions List;” (4) “Control of Vessels of War and Related Articles the President Determines No Longer Warrant Control Under the United States Munitions List (USML);” and (5) “Control of Submersible Vessels, Oceanographic Equipment and Related Articles that the President Determines No Longer Warrant Control under the United States Munitions List (USML).”

Embargoes, Sanctions, and Other Special Controls

On July 23, 2012, the Department of Commerce published a final rule in the *Federal Register* amending Part 746.1(b) of the EAR requiring a license for the export or reexport of items controlled for "UN" reasons to countries subject to the United Nations (UN) arms embargoes. This rule also removed Rwanda from Part 746, thus conforming to the UN Security Council's termination of prohibitions on the sale or supply of arms and arms-related materiel to Rwanda, pursuant to United Nations Security Council Resolution 1823.

On August 10, 2012, President Obama signed into law the Iran Threat Reduction and Syria Human Rights Act of 2012, P.L. 112-158 (Act). Like the Comprehensive Iran Sanctions and Divestment Act of 2010 (CISADA), the Act amended the Iran Sanctions Act (ISA), which requires the President to impose certain sanctions on persons involved directly or indirectly in specified activities with Iran. The Act broadened the number of activities under which the President must impose a sanction, including potentially the “export sanction.” The export sanction would require BIS to prohibit the issuance of licenses for export and reexport of items subject to the EAR to sanctioned persons, including non-U.S. persons. The activities prohibited by the ISA, as amended by the Act, include the provision of goods and services to Iran that assist the development and sale or export of Iran's petroleum resources, the mining and distribution of uranium, the enhancement of Iran's ability to restrict the free flow of information and commit human rights abuses and the provision of energy-related, insurance and reinsurance and shipping services. The Act also authorizes the imposition of sanctions pursuant to certain criteria on designated persons who participate in human rights abuses in Syria. The activities prohibited by the Act include the provision of goods and services to Syria that enhance Syria's ability to restrict the free flow of information and commit human rights abuses.

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

On June 15, 2012, the Australia Group (AG) published on its website participants' concerns regarding the ongoing violence in Syria. AG member countries noted that Syria continues to be a country of proliferation concern. Members agreed on the importance of increased vigilance with regard to dual-use exports to Syria and also agreed to subject exports to Syria to particular scrutiny. These agreements by the AG support existing United States sanctions against Syria.

On July 2, 2012, the Department of Commerce published a final rule in the Federal Register (77 FR 39162) to implement the understandings reached at the June 2011 plenary meeting of the AG. The rule amended ECCNs 1C351 and 1C353 to reflect the AG changes to the “List of Biological Agents for Export Control.” Significantly, *Bartonella Quintana* and *Rickettsia rickettsia* were removed from ECCN 1C351, as they are no longer included on the AG ‘List of Biological Agents.’ The rule also amended ECCN 1C353 (Genetic elements and genetically modified organisms) by revising Technical Note 1 to indicate that “genetic elements” also include chromosomes, genomes, plasmids, transposons, and vectors that have been “chemically synthesized in whole or in part;” and adding a new Technical Note 4 to clarify that this ECCN controls certain de novo chemically synthesized genetic material and artificially-produced organisms.

The final rule also amended ECCN 2B350 (chemical manufacturing facilities and equipment) by adding a new Technical Note 3, at the end of the entry, to clarify that materials used for gaskets, packing, seals, screws or washers, or other materials performing a sealing function, do not determine the control status of the items listed in ECCN 2B350, provided that such components are designed to be interchangeable. This final rule also amended ECCN 2B350 to clarify certain control parameters for pumps.

Missile Technology Controls

In October 2012, the annual Plenary for the Missile Technology Control Regime (MTCR) was held in Berlin, Germany. During the Plenary, the United States highlighted the need for regionally-focused nonproliferation efforts from MTCR Partners and the importance of effectively implementing catch-all controls to impede the flow of non-listed items to missile programs of concern. The Plenary reached consensus on implementing a U.S. proposal for improving catch-all controls and agreed to begin work to update the Regime’s handbook for licensing and enforcement officers.

The MTCR also held a Technical Experts meeting in conjunction with the Plenary to discuss changes to the MTCR control list. As a result of the Technical Experts meeting, several changes to the MTCR Annex were adopted that may necessitate modifications to the control text of certain ECCNs, such as 1C011, 9A101, and 9B105.

Entity List

BIS published a number of revisions to the Entity List in 2012. On April 18, 2012, BIS published a final rule in the *Federal Register* (77 FR 23114) that implemented the decision of the End-User Review Committee (ERC) to add three persons to the Entity List on the basis of Section 744.11 (license requirements that apply to entities acting contrary to the national security or foreign policy interests of the United States) of the EAR. The three entries added to the Entity List consisted of two persons in Canada and one person in Jordan. The ERC added the three

persons on the basis of evidence that they engaged in violation of the license requirements for exports and reexports to Syria and violation of the embargo against Iran.

On April 25, 2012, BIS published a final rule in the *Federal Register* (77 FR 24587) that implemented the decision of the ERC to add two persons located in France to the Entity List on the basis of Section 744.11 (license requirements that apply to entities acting contrary to the national security or foreign policy interests of the United States) of the EAR. The ERC added these two persons on the basis of evidence that a direct physical and corporate nexus existed between them and persons already on the Entity List and that such a nexus posed a high risk of violations of the EAR. This rule also implemented changes to the Entity List based on the ERC's annual review of listed entities in Armenia, Germany, Iran, Lebanon, South Korea, Syria, and the United Arab Emirates (U.A.E.). Specifically, pursuant to the ERC's annual review, this rule removed two entities from the Entity List consisting of one entity from Germany and one entity from South Korea. It also removed one person from the U.A.E. from the Entity List; however, this person's name was added as an alias for another person listed on the Entity List (also under the U.A.E.). On the basis of decisions made by the ERC during the annual review, this rule also amended sixteen entries on the Entity List consisting of one entry under Armenia, three entries under Germany, ten entries under Iran, one entry under Lebanon, and one entry under Syria, to provide alternate addresses, alternate spellings for the names of the listed persons, and/or aliases. Finally, on the basis of decisions made by the ERC during the annual review, this rule added four persons to the Entity List, consisting of one person in Canada, one person in Egypt, one person in France, and one person in the United Kingdom. The decision to add these four persons was based on Section 744.11 of the EAR and on the persons' affiliation with persons already on the Entity List.

On April 27, 2012, BIS published a final rule in the *Federal Register* (77 FR 25055) that amended the EAR by adding sixteen persons under eighteen entries to the Entity List. The persons who were added to the Entity List had been determined by the U.S. Government to be acting contrary to the national security or foreign policy interests of the United States pursuant to Section 744.11 of the EAR. These persons were listed on the Entity List under the countries of Afghanistan, Pakistan and the U.A.E. The ERC determined to add these persons on the basis of their provision of support to persons engaged against U.S. and Coalition forces in Afghanistan.

On May 14, 2012, BIS published a final rule in the *Federal Register* (77 FR 28250) that corrected three spelling errors and one typographical error in two previously published 2012 Entity List Federal Register Notices.

On September 19, 2012, BIS published a final rule in the *Federal Register* (77 FR 58006) that amended the EAR by adding six persons under eight entries to the Entity List. The persons who were added to the Entity List had been determined by the U.S. Government to be acting contrary to the national security or foreign policy interests of the United States pursuant to Section 744.11 of the EAR. These persons were listed on the Entity List under Iran and the U.A.E. The ERC

added two of the persons on the basis of evidence of violations of the embargo against Iran and of the prohibition against transactions with persons on the Denied Persons List. The ERC added the other four persons on the basis of evidence that they were unreliable recipients of U.S.-origin items. In addition, this rule removed one person from the Pakistan section of the Entity List, as the result of a request for removal submitted by the person, a review of information provided in the removal request in accordance with the EAR, and further review conducted by the ERC. Finally, this rule amended the Entity List on the basis of the annual review conducted by the ERC. This rule reflected the results of the annual review of entities located in Belarus, Canada, the People's Republic of China (China), Egypt, Germany, Hong Kong, Ireland, Israel, Kuwait, Lebanon, Malaysia, Pakistan, Singapore, South Africa, Taiwan, and the United Kingdom. On the basis of the annual review, this rule removed fourteen entries (one person located in China, three persons located in Egypt, eight persons located in Hong Kong, and two persons located in Kuwait); amended thirty-six other entries by providing alternate addresses, alternate spellings for the names of the listed persons, and/or aliases (three entries under Belarus, twelve entries under China, three entries under Malaysia, twelve entries under Pakistan, one entry under Singapore, and five entries under South Africa); and added three entries (two separate entries under China for two entities previously listed as aliases of an entity already on the Entity List and one entry under Uganda, on the basis of its affiliation with a person already on the Entity List).

On October 9, 2012, BIS published a final rule in the *Federal Register* (77 FR 61249) that added 164 persons under 165 entries to the Entity List. These additions to the Entity List consisted of one person under Belize; thirteen persons under Canada; two persons under Cyprus; one person under Estonia; eleven persons under Finland; five persons under Germany; one person under Greece; two persons under Hong Kong; one person under Kazakhstan; one hundred nineteen persons under Russia; two persons under Sweden; and seven persons under the United Kingdom, including six persons located in the British Virgin Islands. These persons were determined by the U.S. Government to have engaged in activities contrary to the national security or foreign policy interests of the United States. The ERC added these persons on the basis of evidence that they were active in a network of companies and individuals involved in the procurement and delivery of items subject to the EAR and the International Traffic in Arms Regulations (ITAR) to Russia in violation of the EAR and the ITAR.

On November 29, 2012, BIS published a final rule in the *Federal Register* (77 FR 71097) that added two persons to the Entity List in Pakistan and revised one existing entry in the U.A.E. The ERC added the two persons on the basis of their provision of support to persons engaged against U.S. and Coalition forces in Afghanistan. The revision to one existing entry in the U.A.E. was to clarify the scope of the entry by providing an additional alias and alternate address for this listed person.

Effective Enforcement of Controls

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

The Parts Guys, LLC

Aircraft Parts to Iran

On October 26, 2011, Michael Edward Todd, owner of The Parts Guys, LLC, was sentenced to 46 months in prison, three years supervised release, and a forfeiture of \$160,362 shared with Hamid Seifi, an Iranian-born U.S. national and the owner of Galaxy Aviation Services, and The Parts Guys, LLC in connection with a conspiracy to export aircraft parts to Iran. On October 26, 2011, The Parts Guys LLC was sentenced to a \$400 special assessment and the shared \$160,362 forfeiture. On June 22, 2011, Galaxy Aviation Services was sentenced to a \$400 special assessment and the shared forfeiture. On July 5, 2011, Seifi was sentenced to 56 months in prison; three years supervised release, a \$12,500 criminal fine, a \$200 special assessment and a forfeiture of \$153,940 to be shared with Galaxy Aviation Services. In June 2011, BIS announced the addition of eight indicted defendants located in France, Iran and the United Arab Emirates (UAE) to the Entity List. Earlier in 2011, Todd, Seifi and Galaxy Aviation pled guilty to charges related to their roles in a conspiracy to violate the Arms Export and Control Act and International Emergency Economic Powers Act. Todd used his company to receive and fill orders for components from Seifi. Seifi and other entities in the UAE purchased components from Todd on the behalf of parties in Iran and conspired to export the components without obtaining the required export licenses from the U.S. Department of Commerce. The components included military 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 is a joint investigation with U.S. Immigration and Customs Enforcement and the Federal Bureau of Investigation.

Rudolf Cheung

Military Antennas to Singapore and Hong Kong

On January 20, 2012, Rudolf Cheung, a resident of Massachusetts, pled guilty in U.S. District Court in the District of Columbia to conspiracy to violate the Arms Export Control Act. Cheung serves as the department head for research and development at a private antenna manufacturer. The antennas have military applications and are used by defense contractors or in the U.S. space program. In 2006, Cheung disregarded warnings from his company's export compliance officer on exporting the antennas to Singapore and secretly conspired with others to sell the antennas for later export to Singapore. In 2007, Corezing International, a firm with offices in Singapore and Hong Kong, purchased 55 military antennae and Cheung exported the items. Cheung did not obtain a license from the U.S. Department of State for the exports. In 2011, Corezing was charged in a separate indictment in the District of Columbia in connection with the export of these military antennae to Singapore and Hong Kong. Corezing and its related individuals have also been charged with the export of 6,000 radio frequency modules through Singapore to Iran, some of which were later found in improvised explosive devices in Iraq. The United States has

sought extradition of the individuals from Singapore. This is a joint investigation with U.S. Immigration and Customs Enforcement and the Federal Bureau of Investigation. Substantial assistance was provided by the U.S. Department of Defense, U.S. Customs and Border Protection and the U.S. Department of State Directorate of Defense Trade Controls.

Sunrise Technologies and Trading Corporation/Jeng Shih

Computer Equipment to Iran

On October 7, 2011, Jeng Shih, owner of Sunrise Technology and Trading Company based in Flushing, NY, and Sunrise pled guilty in U.S. District Court in the District of Columbia to conspiracy to violate the International Emergency Economic Powers Act (IEEPA) and to defraud the United States. On October 11, 2011, BIS issued Final Orders denying the export privileges of Shih and Sunrise for 10 years (suspended) for their role in the illegal export of commodities to Iran. On February 17, 2012, Shih was sentenced to 18 months in prison; two years supervised release, forfeiture of \$1.25 million shared with the company, and a \$200 special assessment. Sunrise was sentenced to two years corporate probation, the shared forfeiture, and a \$200 special assessment. Beginning in 2007, Shih, a U.S. citizen, conspired with a company operating in the UAE and Iran to procure U.S.-origin computers through Sunrise and export them through the UAE to Iran without obtaining the required license authorization from the Department of Treasury's OFAC. In April 2010, the defendants caused the illegal export of 526 units of computer-related goods through the UAE to Iran. Later, the defendants caused an additional 185 units of computer-related goods to be illegally exported to Iran via the UAE. This is a joint investigation with U.S. Immigration and Customs Enforcement. U.S. Customs and Border Protection and the Office of Enforcement in the Treasury Department's OFAC also assisted in the investigation.

ING Bank, N.V.

Financial Transactions with Cuba and Iran

On June 11, 2012, ING Bank N.V., a financial institution headquartered in Amsterdam, agreed to forfeit \$619 million to the U.S. Department of Justice and the New York County District Attorney's Office as part of a deferred prosecution agreement. The charges related to illegally moving more than \$2 billion in more than 20,000 transactions through the U.S. financial system on behalf of sanctioned Cuban and Iranian entities. ING Bank pled guilty to criminal information charging one count of conspiracy to violate the International Emergency Economic Powers Act and the Trading with the Enemy Act. The bank also entered into a parallel settlement agreement with OFAC which requires the bank to review policies and procedures, take risk-based sampling of U.S. dollar payments, and ensure its OFAC compliance program is functioning effectively. According to court documents, financial transactions occurred from the early 1990s until 2007. ING Bank's criminal conduct included processing sanctioned country banking operations through third party countries without reference to the payments' origin, using misleading payment messages, misusing ING Bank's internal suspense account, and using shell companies. ING Bank also purged payment data illegally, advised sanctioned clients on concealing operations, fabricated materials, and threatened retribution if employees didn't

conceal the activity. The investigation was initiated, in part, by a BIS investigation. ING Bank processed payments on behalf of Aviation Services International B.V., a Dutch company involved in illegal exports to Iran and the subject of BIS investigation. The investigation was conducted by the Federal Bureau of Investigation and the Internal Revenue Service. BIS and OFAC assisted in the investigation.

Flowserve Corporation

Pumps, Valves and Related Components to Iran and Syria

On September 29, 2011, BIS issued Final Orders to Flowserve Corporation and ten of its foreign affiliates, who agreed to pay civil penalties totaling \$2.5 million to settle 288 charges of violating the Export Administration Regulations. Additional civil penalties include requirements to conduct external audits of their compliance programs and submit the results to BIS. Flowserve is headquartered in Irving, TX, and is a supplier of goods and services to the oil, gas, chemical, and other industries. Flowserve's voluntary disclosure of the violations and its cooperation with the investigation significantly reduced the penalty amount. Between 2002 and 2008, Flowserve and its foreign affiliates made unlicensed exports and re-exports of pumps, valves and related components to a variety of countries including China, Singapore, Malaysia, and Venezuela. Six of Flowserve's foreign affiliates caused the transshipment of controlled items to Iran and/or the re-export of controlled items to Syria without the required U.S. Government authorization. The items were controlled by the U.S. Department of Commerce for reasons of chemical and biological weapons proliferation and required licenses for export. In a related case, the Department of Treasury's Office of Foreign Assets Control (OFAC) settled charges with Flowserve alleging 58 violations of its Iranian, Cuban and Sudanese sanctions programs. Flowserve agreed to pay a \$502,408 civil penalty to resolve the OFAC charges.

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 2012. 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 overall U.S. policy toward 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.

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 political regimes, which may restrict imports of U.S. products more stringently than the United States restricts exports.

C. Consultation with Industry

This section discusses the results of consultations with industry leading to the extension or imposition of controls. In a September 7, 2012, *Federal Register* notice (77 FR 55183), 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 9, 2012, and three 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 human rights and AT reasons, or to export controls in support of the international obligations of the United States.

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 and 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 has a general policy of denial for license applications to export crime control items to a country in which the government engages in a consistent pattern of internationally recognized human rights violations. For other countries, the U.S. Government will consider applications for 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 and that the judicious use of export controls would help to minimize regional instability, deter the development of a consistent pattern of such violations, or demonstrate U.S. Government opposition to such violations.

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.

Crime Control/Implements of Torture

The U.S. Government has a policy of denial for any license application to export specially designed implements of torture such as thumbscrews.

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 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 parts, buckshot shells, 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 has a policy of denying 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, there is a policy of denial for 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 eight countries as Countries of Particular Concern: Burma, the PRC, Eritrea, Iran, North Korea, Saudi Arabia, Sudan, 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 equipment is 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, in light of factors such as the foreign availability of relevant items, 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 items by other producer nations limits the effectiveness of these controls in preventing human rights violations, though some countries – notably those of the European Union (EU) – control exports of implements of torture or of lethal items. However, U.S. unilateral controls restrict human rights violators' access to U.S.-origin goods 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 areas of civil unrest.

4. *Economic Impact on U.S. 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. In fiscal year 2012, the Department of Commerce approved 5,033 export license applications valued at \$1.1 billion for crime control items. Table 1 lists the total number and value (by ECCN) of export licenses that the U.S. Government issued for crime control items during fiscal year 2012. No totals are provided in Table 1 because some license applications contain more than one ECCN. A cumulative sum in the Table would reflect a double count of the applications that contain more than one ECCN.

Table 1: Crime Control Applications Approved, Fiscal Year 2012

ECCN	Items Controlled	Applications Approved	\$ Value
0A978	Law enforcement striking weapons	139	\$9,259,933
0A979	Police helmets and shields	151	\$39,313,827
0A982	Restraint devices, e.g., leg irons, shackles, handcuffs	379	\$64,835,741
0A984	Shotguns and buckshot shotgun shells	1,113	\$77,157,201
0A985	Discharge type arms (stun guns, shock batons, etc.)	342	\$102,286,051
0A987	Optical sighting devices for firearms	2,086	\$233,232,706
0E982	Technology for Restraint Devices	5	\$20,151
0E984	Technology for items under 0A984	4	\$41
1A984	Chemical agents including tear gas containing 1% or less of CS or CN	101	\$7,838,752
1A985	Fingerprinting powders, dyes, and inks	180	\$56,809,297
3A980	Voice print identification and analysis equipment	7	\$2,050,670

ECCN	Items Controlled	Applications Approved	\$ Value
3A981	Polygraphs, fingerprint analyzers, cameras, and equipment	593	\$367,403,202
3D980	Software for items under 3A980 and 3A981	449	\$123,197,204
3E980	Technology for items under 3A980 and 3A981	48	\$125,942
4A003*	Digital computers for computerized fingerprint equipment only	11	\$15,585,040
4A980	Computers for fingerprint equipment	7	\$5,013,328
4D001*	Software for items under 4A003 only	146	\$146
4D980	Software for items under 4A980	4	\$725,007
4E001*	Technology for items under 4A003 and 4D001 only	198	\$197
6A002.c*	Police-model Infrared Viewers	16	\$7,123,331
6E001*	Technology for Police-model Infrared Viewer Development	14	\$1,510
6E002*	Technology for Police-model Infrared Viewer Production	12	\$844
9A980	Non-military mobile crime science laboratories	2	\$1,115,724

NOTES: (1) ECCNs marked with an asterisk (*) denote items that are controlled for other reasons in addition to crime control. (2) BIS did not approve any applications during the relevant period for crime-controlled items under ECCNs 0A983 (specially designed implements of torture) and 4E980 (technology for computers for fingerprint equipment).

In fiscal year 2012, the Department of Commerce denied 25 applications for crime control items with a total value of \$15.9 million:

Table 2: Crime Control Applications Denied, Fiscal Year 2012

ECCN	Description	Applications Denied	\$ Value
0A978	Saps	3	\$150,000
0A982	Restraint devices, e.g., leg irons, shackles, handcuffs	3	\$56,000
0A984	Shotguns and buckshot shotgun shells	5	\$47,413
0A985	Discharge type arms (stun guns, shock batons, etc.)	2	\$14,501,800
0A987	Optical sighting devices for firearms	5	\$1,152,173
0E982	Technology for Restraint Devices	1	\$5,000
3A981	Polygraphs, fingerprint analyzers, cameras, and equipment	1	\$72,500
3D980	Software for items under 3A980 and 3A981	1	\$1
6E001*	Technology for Police-model Infrared Viewer Development	2	\$2
6E002*	Technology for Police-model Infrared Viewer Production	2	\$2

NOTES: (1) ECCNs marked with an asterisk (*) denote items that are controlled for other reasons in addition to crime control. (2) No total is provided as this would double count items on license applications that contain more than one ECCN.

In fiscal year 2012, the Department of Commerce approved 1,513 export license applications valued at \$177.1 million for items affected by the foreign policy controls on firearms and ammunition instituted in 1999 in support of the OAS Model Regulations:

Table 3: Applications for Firearms, Ammunition and Sights to OAS Countries Approved, Fiscal Year 2012

ECCN	Items Controlled	Applications Approved	\$ Value
0A984	Shotguns and buckshot shotgun shells	831	\$64,303,141
0A986	Other shotgun shells	258	\$26,280,232
0A987	Optical sighting devices for firearms	424	\$86,538,401
TOTAL⁵		1,513	\$177,121,774

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. The U.S. Government conducts post-shipment verifications to ensure that the listed end-user has received the exports and to confirm that the end-user is using the controlled items in a way consistent with the license conditions.

C. Consultation with Industry

In a September 7, 2012 *Federal Register* notice (77 FR 55183), 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 9, 2012. 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

⁵ Items in ECCN 0A986 are controlled only for Firearms Convention reasons. Items in ECCNs 0A984 and 0A987, however, are controlled both for Firearms Convention and Crime Control reasons. The statistics in this table for ECCNs 0A984 and 0A987 are a subset of the Crime Control statistics provided in Table 1 of this Chapter.

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 an authorization 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 equipment. 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.⁶ Congress has recognized the usefulness and symbolic value of these controls in supporting U.S. Government policy on human rights issues, foreign availability notwithstanding.

⁶ 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 (Section 742.6)

Export Control Program Description and Licensing Policy

Regional Stability (RS) controls ensure that exports and reexports of controlled items 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 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, to all destinations except Canada. These items are included in Export Control Classification Numbers (ECCNs) 0A919, 3A982, 3D982, 3E982, 6A008.j.1, 6A998.b, 6D001.j.1, 6D002, 6D003.c, 6D991, 6E001, 6E002, 6E991, 7A994, 7D001, 7E001, 7E002, and 7E101.

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.

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, 8A918, and 9A018.a and .b, 9D018, and 9E018. 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 reexported 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 reexport 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 reexport 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, the 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 reexport 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 reexport these cameras will be

considered favorably unless there is evidence the export or reexport 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 reexports of military commodities produced outside of 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. Reexports of these military commodities require a license to all destinations except Canada, unless the military commodities are being reexported 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 reexports 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).

Summary of 2012 Developments

In FY 2012, two regulations were published that expanded Regional Stability controls. These new controls apply to new ECCNs 3A982, 3D982 and 3E982 and to the newly created series of ECCNs, 0Y521 (Items Not Elsewhere Listed on the CCL).

Specifically, the Department of Commerce published on January 9, 2012, a final rule in the *Federal Register* (77 FR 1017) entitled “Export and Reexport License Requirements for Certain Microwave and Millimeter Wave Electronic Components.” This rule imposes regional stability export controls on certain high electron mobility transistors and monolithic microwave integrated circuits which are listed in new ECCN 3A982, with related software and technology captured in ECCNs 3D982 and 3E982.

On April 13, 2012, the Department of Commerce published a final rule in the *Federal Register* (77 FR 22191) that established a new ECCN 0Y521 series on the Commerce Control List. These 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 re-classified under another ECCN within one year (with the possibility for extension while multilateral controls are

being sought). Items in ECCN 0Y521 are subject to Regional Stability Column 1 (RS1) controls.

In addition, the Export Control Reform (ECR) initiative, currently in progress, proposes a new regulatory construct for the transfer of items on the United States Munitions List (USML) to the Commerce Control List (CCL) that, in accordance with section 38(f) of the Arms Export Control Act (AECA) (22 U.S.C. 2778(f)(1)), the President determines no longer warrant control under the AECA. These items would be controlled under the EAR once the congressional notification requirements of section 38(f) and corresponding amendments to the International Traffic in Arms Regulations (ITAR) (22 CFR parts 120-130) and the EAR are completed. On July 15, 2011, the Department of Commerce published a proposed rule in the *Federal Register* (76 FR 41958) implementing these structural changes to the EAR for the items that are moved from the USML to the CCL and that will be subject to Department of Commerce licensing authority. The rule proposes that these items under new ECCNs will be controlled for Regional Stability (RS) and Anti-Terrorism (AT) reasons in addition to other control reasons that will be specified in subsequent rules.

The following is a list of proposed rules published by BIS during 2012 that would transfer certain categories of items from the USML to the CCL; all these rules propose Regional Stability controls on these items, in addition to other controls, as appropriate. These rules have not yet been published in final form.

- On May 2, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 25932) “Revisions to the Export Administration Regulations (EAR): Control of Energetic Materials and Related Articles the President Determines No Longer Warrant Control Under the United States Munitions List (USML).”
- On May 18, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 29564) “Revisions to the Export Administration Regulations: Auxiliary and Miscellaneous Items that No Longer Warrant Control Under the United States Munitions List and Items on the Wassenaar Arrangement Munitions List.”
- On June 7, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 33688) “Revisions to the Export Administration Regulations (EAR): Control of Personal Protective Equipment, Shelters, and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML).”

- On June 13, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 35310) “Revisions to the Export Administration Regulations (EAR): Control of Military Training Equipment and Related Items the President Determines No Longer Warrants Control Under the United States Munitions List (USML).”
- On June 19, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 36409) “Specially Designed” Definition.”
- On June 21, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 37523) “Proposed Revisions to the Export Administration Regulations (EAR): Implementation of Export Control Reform; Revisions to License Exceptions After Retrospective Regulatory Review.”
- On November 28, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 70945) ”Revisions to the Export Administration Regulations (EAR): Control of Military Electronic Equipment and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML).”
- On November 29, 2012, the Department of Commerce published a proposed rule in the *Federal Register* (77 FR 71214) “Revisions to the Export Administration Regulations (EAR) To Make the Commerce Control List (CCL) Clearer.”

In addition, several regulations were published in proposed form in calendar year 2011 that would transfer certain categories of items from the USML to the CCL. These rules also propose Regional Stability Controls on these items. These rules have not yet been published in final form.

- On November 7, 2011, the Department of Commerce published a proposed rule in the *Federal Register* (76 FR 68675) entitled “Revisions to the Export Administration Regulations (EAR): Control of Aircraft and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML).”
- On December 6, 2011, the Department of Commerce published a proposed rule in the *Federal Register* (76 FR 76072) entitled “Revisions to the Export Administration Regulations (EAR): Control of Gas Turbine Engines and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML).”

- On December 6, 2011, the Department of Commerce published a proposed rule in the *Federal Register* (76 FR 76085) entitled “Revisions to the Export Administration Regulations (EAR): Control of Military Vehicles and Related Items that the President Determines No Longer Warrant Control on the United States Munitions List (USML).”
- On December 23, 2011, the Department of Commerce published a proposed rule in the *Federal Register* (76 FR 80282) entitled “Revisions to the Export Administration Regulations (EAR): Control of Vessels of War and Related Articles the President Determines No Longer Warrant Control Under the United States Munitions List (USML).”
- On December 23, 2011, the Department of Commerce published a proposed rule in the *Federal Register* (76 FR 80291) entitled “Revisions to the Export Administration Regulations (EAR): Controls Applicable to Submersible Vessels, Oceanographic Equipment and Related Articles that the President Determines No Longer Warrant Control under the United States Munitions List (USML).”

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 those who could misuse the items to destabilize countries or regions.

4. *Economic Impact on U.S. Industry.* Although the Secretary has determined that the 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, 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. 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.

RS Column 1 Controls

In fiscal year 2012, the Department of Commerce approved 556 license applications for items controlled for RS1 reasons, with a total value of \$102.3 million. There were 7 license applications rejected for items controlled for RS1 reason, with a total value of \$323,365. These included denials for exports of items in ECCNs 0A919 (3 applications), 3A982 (1), and 6A003 (3).

Most of the licensing volume and value for RS1-controlled items is accounted for by exports of thermal imaging cameras in ECCN 6A003 (403 licenses valued at \$97.5 million). However, the licensing activity for this ECCN is significantly less than in past years. As recently as FY 2009, BIS approved over 1,000 licenses for 6A003 items. Last year, BIS approved 491 licenses for 6A003 items. This decrease in license volume is due at least in part to the revision of controls on certain thermal imaging cameras that took effect in May 2009 in recognition of the emerging availability of these cameras around the world and the export licensing practices of other governments.

The table that follows lists the total number and value by ECCN of export licenses that the Department of Commerce issued for regional stability (RS1) during fiscal year 2012:

Table 1a: Regional Stability Applications Approved, Fiscal Year 2012
RS Column 1 Controls

ECCN	Description	Number of Applications	Dollar Value
0A521	Commodities Not Subject to the E.A.R., which provide a significant military or intelligence advantage	3	\$15,000
0B521	Commodities Not Subject to the E.A.R., which provide a significant military or intelligence advantage	0	0
0C521	Materials Not Subject to the E.A.R., which provides a significant military or intelligence advantage	0	0
0D521	Software Not Subject to the E.A.R., which provides a significant military or intelligence advantage	0	0
0A919	Military commodities produced outside the U.S. incorporating 6A003b.4.b cameras	22	\$3,693,996
3A982	Micro or Millimeter Wave Components	3	\$255,050
3D982	Software for development or production of 3A982	0	0

ECCN	Description	Number of Applications	Dollar Value
3E982	Technology for development or production of 3A982	0	0
6A002.a.1, a.2., a.3, c, e	Optical detectors and direct view imaging equipment incorporating image intensifier tube or focal plane arrays	6	\$729,614
+6A003.b.3, b.4	Imaging cameras incorporating image intensifiers or focal plan arrays	403	\$97,532,131
6A008.j.1	Space-qualified LIDAR equipment	0	0
6A998.b	Space-qualified LIDAR equipment for meteorological observation	0	0
6D001	Software for development/ production of RS-controlled items in 6A002.a.1, a.2, a.3, c; 6A03.b.3 and 6A008.j	3	\$3
6D002	Software for the use of 6A002.a.1, a.2, a.3, c; 6A03.b.3 and 6A008.j	3	\$3
+6D003.c	Software for cameras with focal plane arrays	1	\$14,000
6D991	Software for development/ production/use of 6A002.e or 6A998.b	0	0
6D994	Software for cameras with focal plane arrays	0	0
+6E001	Technology for the development of RS-controlled items in 6A002, 6A003, and 6A008	14	\$1,510
+6E002	Technology for the production of RS-controlled items in 6A002, 6A003, and 6A008	12	\$844
6E991	Technology for development/production/ use of 6A998b	0	0
7A994	QRS-11 Sensors	0	0
+7D001	Software for the development or production inertial navigation systems	1	\$10,00

ECCN	Description	Number of Applications	Dollar Value
⁺7E001	Technology for the development of inertial navigation systems, inertial equipment and specially designed components for civil aircraft	54	\$71,579
⁺7E002	Technology for the production of inertial navigation systems, inertial equipment and specially designed components for civil aircraft	7	\$1,553
⁺7E101	Technology for the use of inertial navigation systems	23	\$27,062
TOTAL		556	\$102,352,345

NOTES: (1) For ECCNs marked with “+”, only a portion of the ECCN is subject to RS1 controls, but the total number of licenses and dollar value for the complete ECCN are given. In most cases, the subcategories under these ECCNs that are not controlled for regional stability reasons are minimal.

RS Column 2 Controls

Explosives detection equipment in ECCN 2A983 and military trainer aircraft and vehicles in ECCN 9A018 account for the bulk of licenses controlled for RS2 reasons. There were 854 total approved licenses for RS2 controlled items with a total value of \$1.2 billion. Five licenses were denied for RS2 controlled items in FY12 – all for ECCN 9A018 items with a total value of \$1,368,850.⁷

The table that follows lists the total number and value by ECCN of export licenses that the Department of Commerce issued for regional stability (RS2) applications during fiscal year 2012:

⁷Only a portion of the ECCN 9A018 is subject to RS2 controls, but the total number of licenses and dollar value for the complete ECCN are given. In most cases, the subcategories under these ECCNs that are not controlled for regional stability reasons are minimal.

Table 1b: Regional Stability Applications Approved, Fiscal Year 2012
RS Column 2 Controls

ECCN	Description	Number of Applications	Dollar Value
0A918	Military Equipment not on the Wassenaar Munitions List	51	\$31,347,047
0E918	Technology for the development, production or use of bayonets	0	0
*1A004.d	Explosives detection equipment	0	0
1B018.a	Equipment for production of military explosives	2	\$293,959
+1D003	Software for equipment for production of military explosives	41	\$815,335
*1E001	Technology for equipment for production of military explosives	0	0
2A983	Explosives detection equipment	126	\$118,995,174
2A984	Concealed object detection equipment	0	0
2B018	Equipment on the Wassenaar Munitions List	8	\$1,492,731
2D983	Software for equipment in 2A983	79	\$10,566,663
2D984	Software for equipment in 2A984	0	0
2E983	Technology for equipment in 2A983	60	\$808,268

ECCN	Description	Number of Applications	Dollar Value
2E984	Technology for equipment in 2A984	0	0
8A918	Marine boilers	0	0
+9A018.a, b	Military trainer aircraft and vehicles designed or modified for military use	445	\$1,053,301,891
+9D018	Software for the use of items in 9A018.a.,b	0	0
+9E018	Technology for the development or production of items in 9A018.a.,b	42	\$1,166,606
TOTAL		854	\$1,218,737,674

NOTES: (1) For ECCNs marked with “+”, only a portion of the ECCN is subject to RS2 controls, but the total number of licenses and dollar value for the complete ECCN are given. In most cases, the subcategories under these ECCNs that are not controlled for RS reasons are minimal. (2) For ECCNs marked with “*”, a majority of the licensing volume is accounted for by items not controlled for RS reasons; it is not possible to separate out the RS-controlled portion for statistical purposes.

With regard to the special regional stability controls in place for Iraq, BIS licensed a total of 33 applications valued at \$2,217 million. The majority of these applications (25 with a value of \$2,211 million) were for oil well perforators under ECCN 1C992. Other applications were for 1B999 (7 licenses) and 1C999 (1 license) items. There were no denials for RS controlled items for Iraq in FY 2012.

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, and 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, though in these instances the RS control is redundant.

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 the May 2009 regulatory change, 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 conducted a number of enforcement actions regarding noncompliance with these export controls, including the following:

Sanwave Electronics

Thermal Imaging Cameras to China

On April 23, 2012, Jason Liang, owner of Sanwave Electronics, was sentenced in U.S. District Court in the Central District of California to 46 months in prison, three years of supervised release and a \$700 special assessment. In February 2010, Liang was arrested and indicted following a surveillance and search warrant. Liang attempted to export IR300D infrared cameras to China without the required export licenses from the U.S. Department of Commerce. This was a joint investigation with the Federal Bureau of Investigation.

C. Consultation with Industry

On September 7, 2012, the Department of Commerce solicited public comment in the *Federal Register* (77 FR 55183) 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 9, 2012. 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 2012, 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. In particular, the U.S. sought multilateral controls on the items in newly created ECCNs 3A982, 3D982, and 3E982 (high electron mobility transistors and monolithic microwave integrated circuits and related software and technology) through the Wassenaar Arrangement and may revisit the effort next year.

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. In these cases, the RS controls are redundant. Therefore, controls imposed by multilateral regime members restrict foreign availability of these items.

Manufacturers of imaging cameras controlled in 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 to the decision to revise RS controls on certain thermal imaging cameras in the regulation published on May 22, 2009 (74 FR 23941). This regulation eliminated licensing requirements for certain cameras when exported to 37 countries and has reduced the licensing volume significantly.

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.⁸ 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 reexports 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 reexport 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).

Specifically, on December 28, 1993, the Acting Secretary of State determined that items in these categories, if exported or reexported 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

⁸Although the designation of North Korea was rescinded on October 11, 2008, the EAR have not been revised to remove the AT controls. Moreover, additional export control requirements under the EAR apply to exports and reexports to that country on the basis of other laws and regulations, and in accordance with United Nations Security Council Resolution 1718 (UNSCR 1718).

international terrorism. As a result, any export or reexport of an item in these categories is subject to a 30-day congressional notification period prior to approval.

The United States controls exports and reexports of such items to other, non-sensitive end users, as well as exports and reexports 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 on a case-by-case basis.

License Requirements and Licensing Policy

Pursuant to the 1993 determination of the Acting Secretary of State and subsequent action consistent with it, exports and reexports 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 reexport 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 reexports 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 reexport 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 reexport 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 reexports to Cuba, Iran, North Korea, Sudan, and Syria. As a result, the U.S.

Government reviews license applications for exports and reexports 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 or entities 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. With respect to exports and reexports 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, in light of other factors, principally 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 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 and other forms of material support to countries, individuals, or groups 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 reexport of sensitive items to governments that have repeatedly provided support for acts of international terrorism.

4. *Economic Impact on United States Industry.* The Secretary has determined that the 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 United States foreign policy objectives. While U.S. industry has reported that AT controls have had a negative impact, the Secretary has determined that the detrimental impact on U.S. industry has been modest, while stopping state sponsorship of terrorism remains a very high priority of the U.S. Government.

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 numerous procurement opportunities for brokers, agents, and front companies working for 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 and Sentinel visits to verify the end use and end-users of U.S.-origin licensed goods and technology. Sentinel teams assess the suitability of foreign end users to receive U.S.-origin licensed goods and technology, assess prospective end-users on pending license applications for diversion risk, and conduct educational outreach to foreign trade groups. The Department addresses procurement by or 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 lead agencies working on terrorism issues.

BIS conducted a number of enforcement actions regarding noncompliance with these export controls. For example:

Davoud Baniameri/Syed Majid Mousavi/Andro Telemi*Missile/Radio Components to Iran*

On July 26, 2012, Andro Telemi pled guilty in U.S. District Court in the Northern District of Illinois in connection with his role in the conspiracy to export connector adaptors for missile systems to Iran. On November 30, 2012, Telemi was sentenced to five years of probation, a \$10,000 fine, \$100 special assessment, and 500 hours of community service. Co-defendant Davoud Baniameri previously pled guilty and was sentenced to 51 months in prison, three years supervised release, and a \$200 special assessment for his part in the scheme. In addition, the Assistant Secretary for Export Enforcement imposed a 10-year Denial Order against Baniameri. In 2008 and 2009, Baniameri was contacted by a third co-conspirator, Syed Majid Mousavi, who requested the purchase and export of radio test sets and missile components for the TOW and TOW2 missile systems through the United Arab Emirates (UAE) to Iran. Baniameri purchased three Marconi radio test sets and 10 connector adapters from a company controlled by law enforcement in Illinois. In 2008, Baniameri shipped the radio test sets from California to the UAE for ultimate transshipment to Iran, without the required export license from the U.S. Department of Commerce. In September 2009, Baniameri paid \$9,450 to the company in Illinois for missile components and directed Telemi to take possession of the equipment. Baniameri arranged to fly from the United States to Iran through the UAE carrying the equipment. He did not obtain a license for the export of the connector adaptors and was arrested before leaving the United States. This is a joint investigation with the U.S. Immigration and Customs Enforcement, Defense Criminal Investigative Service, and the Internal Revenue Service-Criminal Investigation Division. The Chicago Police Department also assisted in the investigation.

C. Consultation with Industry

In a September 7, 2012 *Federal Register* notice (77 FR 55183), 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 9, 2012. 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 encourage the designated terrorism-supporting countries to act against terrorist elements within their jurisdiction or control. See also Chapter 13 for a discussion of the Entity List, a list set forth in the EAR of 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.⁹ 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 continued 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.

⁹ 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, 744.22, 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, 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 persons, including those engaged in 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 reexport 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 reexports. 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 reexports 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 reexports 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 applications. 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 reexports 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, reexports, 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 applications. 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, reexports, 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.

Cuba

The Department of Commerce requires a license for export or reexport 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, including food, medicine, clothing, and certain consumer communications devices, provided that the value of non-food items does not exceed \$800.¹⁰

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

¹⁰ 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.)

- 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 reexports 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 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) would 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 reexported;
- 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 reexports 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.

Iran

On July 1, 2010, the President signed into law the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010 (CISADA). CISADA Title I expands sanctions on Iran predominantly through amendments to the Iran Sanctions Act of 1996 (ISA). Title I does not require changes to BIS regulations or practice because BIS does not currently process license applications for exports and reexports to Iran other than for deemed exports and reexports (see below). Title III requires the President to designate countries as Destinations of Diversion Concern if he determines that the government of the country allows “substantial diversion” of certain goods, services, or technologies through the country to Iranian end-users or Iranian intermediaries. Further, the President must impose a license requirement under the International Traffic in Arms Regulations (ITAR) or under the EAR, as applicable, pertaining to those goods, services, or technologies within 45 days of submitting to Congress a report notifying it of the designation of a country as a Destination of Diversion Concern.

On August 10, 2012, President Obama signed into law the Iran Threat Reduction and Syria Human Rights Act of 2012 (Act). Like CISADA, the Act amended the ISA, which requires the President to impose certain sanctions on persons involved directly or indirectly in specified activities with Iran. The Act broadened the number of activities under which the President must impose a sanction, including potentially the “export sanction.” The export sanction would require BIS to prohibit the issuance of licenses for export and reexport of items subject to the EAR to sanctioned persons, including non-U.S. persons. The activities prohibited by the ISA as amended by the Act include the provision of goods and services to Iran that assist the development and sale or export of Iran’s petroleum resources, the mining and distribution of uranium, the enhancement of Iran’s ability to restrict the free flow of information and commit human rights abuses and the provision of energy-related, insurance and reinsurance and shipping services.

OFAC administers the U.S. Government’s comprehensive trade and investment sanctions against Iran. No person may export or reexport items subject to the EAR if such transaction is prohibited by OFAC’s Iranian Transactions and Sanctions Regulations 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 reexports, are also prohibited by OFAC under these regulations.

The Department of Commerce imposes license requirements for exports and reexports 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 reexports 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 reexports 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 subject to the EAR to Iranian nationals in the United States or of the release (deemed reexport) of such technology or source code to Iranian nationals located abroad; or (2) the license is for the export or reexport of 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).

BIS takes enforcement action against violations of the Iran-related provisions of the EAR. It is a violation of the EAR to export or reexport 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 reexport 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, reexport 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, reexports, 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, reexport, 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 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 reexport to North Korea of all items subject to the EAR, except food and medicines 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 reexport to North Korea are subject to case-by-case review, except as follows:

- Applications to export or reexport luxury goods are subject to a general policy of denial.
- Applications to export or reexport 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 reexport items controlled for NP and MT reasons (except ECCN 7A103 items) are subject to a general policy of denial.
- Applications to export or reexport items controlled for chemical and biological weapons and NS reasons, as well as applications to export or reexport many items only controlled for AT reasons, are subject to a general policy of denial.
- Applications to export or reexport 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 device items 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.

Persons Sanctioned by the State Department

Pursuant to Section 744.20 of the EAR, the Department of Commerce may impose, as foreign policy controls, export and reexport license requirements and set licensing policy with respect to certain entities that have been sanctioned by the State Department. State Department-sanctioned entities upon which export and reexport license requirements have been imposed under Section 744.20 of the EAR are included on the Entity List, Supplement No. 4 to Section 744 of the EAR. Not all entities sanctioned by the State Department are incorporated into the Entity List.

¹¹ 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 has not been amended to reflect the rescission.

Sudan

The U.S. Government requires a license for the export and reexport 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 reexport 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.

Syria

On May 11, 2004, the President issued Executive Order 13338 to implement Sections 5(a)(1) and 5(a)(2)(A) of the Syria Accountability and Lebanese Sovereignty Restoration Act of 2003 (SAA). In compliance with the President's action, the Department of Commerce revised its license requirements and licensing policy for Syria to restrict all exports or reexports to Syria of items subject to the EAR (with the limited exceptions described below), as specified in General Order No. 2, which was published in the *Federal Register* on May 14, 2004 (69 FR 26766).

On December 12, 2011, BIS amended the EAR by moving the substantive provisions of the comprehensive sanctions on Syria from General Order No. 2 (Supp. No. 1 to Part 736) to a revised Section 746.9, along with conforming changes to the EAR. This move was made to enhance public awareness and understanding of comprehensive U.S. sanctions against Syria because Part 746 of the EAR addresses comprehensive sanctions and other special controls and is consequently the appropriate place to include Syria sanctions provisions. Existing licensing requirements and policies remain unchanged.

Signed into law on August 10, 2012, the Iran Threat Reduction and Syria Human Rights Act of 2012 (Act) authorized the imposition of sanctions pursuant to certain criteria on designated persons who participate in human rights abuses in Syria. The activities prohibited by the Act include the provision of goods and services to Syria that enhance Syria's ability to restrict the free flow of information and commit human rights abuses.

The Department of Commerce requires a license for the export or reexport to Syria of all commodities, technology, and software subject to the EAR, except food and medicine designated as EAR99, and "deemed exports" or "deemed reexports" to Syrian nationals of technology or

source code designated as EAR99. Additionally, certain categories of items are authorized for export or reexport 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 reexported to Syria.

The Department of Commerce generally denies license applications for exports or reexports to Syria. However, pursuant to the President's exercise of national security waiver authority in Executive Order 13338, 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; and
- Items in support of UN operations in Syria.

United Nations Security Council Arms Embargoes

The UN Security Council maintains partial embargoes on the export of certain arms and related materiel to several countries, geographic regions, or persons within certain countries. UN Security Council embargoes of this kind are currently in place for the Democratic Republic of the Congo, Côte d'Ivoire, Eritrea, Iran, Iraq, Lebanon, Liberia, Libya, North Korea, Somalia, and Sudan. On July 23, 2012, the Department of Commerce published a final rule in the Federal Register amending Part 746.1(b) of the EAR to require a license for the export or reexport of items controlled for "UN" reasons to countries subject to UN Security Council arms embargoes. This rule also removed Rwanda from Part 746, thus conforming to the UN Security Council's termination of prohibitions on the sale or supply of arms and arms-related materiel to Rwanda, pursuant to United Nations Security Council Resolutions 1823.

Summary of 2012 Changes

On July 23, 2012, the Department of Commerce published a final rule in the Federal Register amending Part 746.1(b) of the EAR to require a license for the export or reexport of items controlled for "UN" reasons to countries subject to UN Security Council arms embargoes. This rule also removed Rwanda from Part 746, thus conforming to the United Nations Security Council's termination of prohibitions on the sale or supply of arms and arms-related materiel to Rwanda, pursuant to United Nations Security Council Resolutions 1823.

On August 10, 2012, President Obama signed into law the Iran Threat Reduction and Syria Human Rights Act of 2012, P.L. 112-158 (Act). Like the Comprehensive Iran Sanctions and Divestment Act of 2010 (CISADA), the Act amended the Iran Sanctions Act (ISA), which requires the President to impose certain sanctions on persons involved directly or indirectly in specified activities with Iran, including potentially the "export sanction." The export sanction would require BIS to prohibit the issuance of licenses for export and reexport of items subject to the EAR to sanctioned persons, including non-U.S. persons. The activities prohibited by the ISA as amended by the Act include the provision of goods and services to Iran that assist the development and sale or export of Iran's petroleum resources, the mining and distribution of uranium, the enhanced ability of Iran to restrict the free flow of information and commit human rights abuses and the provision of energy-related, insurance and reinsurance and shipping services. The Act also authorizes the imposition of sanctions pursuant to certain criteria on designated persons who participate in human rights abuses in Syria. The activities prohibited by the Act include the provision of goods and services to Syria that enhance Syria's ability to restrict the free flow of information and commit human rights abuses.

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.

Burma

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.

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 packs," 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 United States' support for exports and reexports 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 to insurgents within Iraq and other inappropriate military end users in Iraq, including the former Iraqi leadership, thereby limiting their ability to enhance or expand their activities.

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.

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 consistent with other applicable laws.

Syria

The Syrian Government continues to host Palestinian terrorist organizations and to provide political and material support to Hezbollah and other terrorist organizations in Lebanon. Moreover, the Syrian Government allows Iran to re-supply Hezbollah through Syrian territory. The U.S. Government also remains concerned about Syria's interference in Lebanon's internal affairs, the flow of foreign fighters through Syria destined for Iraq, and Syrian nuclear, missile, and chemical/biological programs. Additionally, the Government of Syria engages in widespread and routine abuses of human rights, including the use of violence and torture, arbitrary arrests, and detention of peaceful protesters. 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 and the encouragement of regional stability.

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. He 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.

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 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 nuclear weapons and other WMDs.

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.

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 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. reexport controls. However, in certain areas, such as the nuclear threat posed by Iran and North Korea, the Government of Syria’s egregious abuses of human rights, 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 reexports 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 are considering 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.

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). In general, however, U.S. controls on commercial goods to Iran are more stringent than most other countries' controls.

Iraq

The United States continues to impose an arms embargo on military end users and end uses that are not affiliated with multinational training missions in Iraq or the Iraqi Government in accordance with its obligations as a member of the United Nations. Many other member states also comply with these obligations and impose an arms embargo on Iraq. Other nations also share U.S. concerns about insurgent activities in Iraq.

North Korea

The United States maintained a comprehensive trade embargo against North Korea for over 50 years, until 2000. In general, during that time period, U.S. allies largely acted in concert with the United States to deny North Korea strategic equipment and technology. Similarly, the easing of U.S. sanctions toward North Korea and the removal of some U.S. controls 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 UN Security Council Resolutions 1718 and 1874 imposing additional sanctions on North Korea and demonstrating international disapproval of North Korea's nuclear and ballistic missile-related activities. 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.

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 the population of the country. Sanctions against Sudan have not been modified because Sudan has not taken sufficient steps to resolve the conflict in Darfur. 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 lack of concrete steps to end its support for terrorist groups, interdict the flow of foreign fighters destined for Iraq, refrain from interfering in Lebanon's internal affairs, and stop abusing 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. The European Union, for example, has implemented prohibitions on the provision of certain goods and services to Syria¹².

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.

¹² EU Council Decision 2011/782/CFSP (OJ L 319, 2.12.2011, p. 56), December 1, 2011 as amended.

Certain Designated Persons

The Department of Commerce did not review any license applications for the particular persons designated by the Treasury Department in fiscal year 2012. The economic impact of these controls is presumably minimal. The Department of the Treasury maintains restrictions on activities of U.S. persons involving designated terrorist entities, proliferators, and those involved in civil unrest and suppression of basic rights and freedoms in Burma, which the Department of Commerce's controls augment.

Cuba

The U.S. Government requires authorization in the form of either a license or an Agricultural License Exception notice 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 notices that the Department of Commerce issued for exports or reexports to Cuba increased significantly from 1998 through 2002, due to changes in U.S. export policies made during the late 1990s. There has been a general decline in the number of licenses and notices issued since that time. U.S. export sanctions on Cuba have had some impact on U.S. industry. However, the authorized export of large volumes of agricultural commodities has somewhat reduced this impact.

In fiscal year 2012, the Department of Commerce approved 285 license applications, valued at over \$1.4 billion, for Cuba. There was a decrease in the number and a decrease in the value of license applications approved in fiscal year 2012 in comparison to fiscal year 2011. Also during fiscal year 2012, the Department issued 94 notices of authorization valued at approximately \$2.9 billion under License Exception AGR. The Department of Commerce and reviewing agencies had no objections to these notices. The number of approved licenses and notices totaled 379, valued at over \$4.3 billion.

In fiscal year 2012, the Department returned without action 106 license applications, valued at \$843 million, and rejected one license application, valued at over \$52,000. Errors and deficiencies were the primary reasons for the number of returned applications. The Department did not revoke any previously validated licenses during this period.

According to the Central Intelligence Agency's (CIA) *World Factbook 2012*, Cuba imported an estimated \$13.26 billion in commodities in 2011 (the most recent year for which statistics are available), up from \$10.65 billion the year before. Leading Cuban imports included petroleum, food, machinery and equipment, and chemicals. Cuba's leading suppliers were Venezuela (37.6 percent), the People's Republic of China (9.9 percent), Spain (8.5 percent), Brazil (5.2 percent) and Canada (4.4 percent). Imports from the United States decreased from 4.1 percent in 2010 to 2.7 percent in 2011.

Iran

The U.S. Government maintains a policy of denial for license applications for exports and reexports 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 of 1995.

Consistent with the Trade Sanctions Reform and Export Enhancement Act of 2000 (TSRA), the U.S. Government authorizes exports and reexports 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 \$229 million in calendar year 2011, an increase from \$208 million in 2010. The top U.S. commodities exported to Iran in 2011 were agricultural commodities, medical equipment, and pharmaceutical preparations.

Since 1997, the Department of the Treasury has had primary jurisdiction for the export and reexport of items subject to the EAR to Iran, and the Department of Commerce has sole jurisdiction for deemed exports or deemed reexports (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 125 deemed export licenses for Iranian nationals during fiscal year 2012. Deemed export and reexport licenses reflect a nominal value of technology and source code released to Iranian national employees or students.

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 2012*, Iran imported an estimated \$76.1 billion worth of industrial supplies, capital goods, foodstuffs and other consumer goods, and technical services in 2011. Iran's leading suppliers were the United Arab Emirates (UAE) (30.6 percent), People's Republic of China (17.2 percent), South Korea (8.4 percent), Germany (4.8 percent) and Turkey (4.2 percent).

The U.S. sanctions on Iran, while necessary to add pressure for Iran to comply with its nuclear nonproliferation obligations, have adversely affected U.S. industry. Immediately prior to the sanctions, U.S. exports to Iran totaled close to \$2.2 billion. However, the sanctions resulted in a substantial decline in U.S. exports to the country.

Iraq

Although the security situation and the presence of foreign fighters supporting the insurgency in Iraq, among other issues, continue 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. In 2011, according to the most recent U.S. Census Bureau statistics available, U.S. exports to Iraq were worth \$2.4 billion. In addition to agricultural commodities, other strong categories of U.S. exports to Iraq included military-related items, industrial engines and machines, vehicles and parts, and telecommunications equipment. 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 reconstruction of Iraq and training activities for its police and military.

In fiscal year 2012, the Department approved 107 license applications for Iraq, valued at over \$3.8 million. While the number of approvals decreased significantly from 125, the value of the approvals in 2012 increased significantly from \$620 million in 2011, likely due to additional reconstruction activities. The Department returned 20 license applications without action in 2012, valued at nearly \$11 million, primarily due to exporters submitting applications for transactions that did not require licenses. In 2012, the Department did not deny any license applications for Iraq.

According to the CIA *World Factbook 2012*, Iraq imported an estimated \$53.93 billion in commodities in 2011 (the most recent year for which statistics are available), up from an estimated \$43.9 billion in 2010. Leading Iraqi imports included food, medicine, and manufactured goods. Iraq's leading suppliers were Turkey (25 percent), Syria (18.1 percent), the People's Republic of China (11.5 percent), the United States (7.3 percent) and South Korea (4.6 percent).

North Korea

Consistent with United Nations Security Council Resolution 1718, 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 2012, the Department approved 22 license applications, valued at \$10.9 million. The total license value in 2012 was much lower than in 2011 (\$38.4 million), reflecting a drop in the average dollar value of humanitarian export licenses, while the number of licenses approved remained relatively steady (23 in 2011). The Department of Commerce returned without action 20 license applications in 2012, valued at \$8.8 million. Applications were returned without action most often because the applicants accidentally selected North Korea instead of South

Korea in the application system. The Department did not deny any license applications or revoke any previously validated licenses for North Korea.

The *CIA World Factbook 2012* estimates that North Korean imports totaled \$3.5 billion in 2010 (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 2010 were the People's Republic of China (46.5 percent), South Korea (24.6 percent), and Russia (2.4 percent).

Persons Sanctioned by the State Department

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

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 the prevalence of human rights violations. Both the Departments of Commerce and the Treasury maintain license requirements for certain exports and reexports to Sudan of items subject to the EAR. 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 Trade Sanctions Reform and Export Enhancement Act and is also responsible for licensing other items not listed on the CCL (items designated as EAR99).

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 2012, the Department of Commerce approved 55 license applications for Sudan, valued at \$2.0 million.

U.S. Census Bureau statistics show that in 2011, U.S. exports to Sudan were valued at \$115.6 million. The *CIA World Factbook 2012* estimates that Sudan's total imports from all sources were valued at \$8.1 billion in 2011. Leading suppliers to Sudan were the People's Republic of China (20.2 percent), Saudi Arabia (9.1 percent), the UAE (6.7 percent), Egypt (6.6 percent), India (6.3 percent), and Germany (4.3 percent). Leading imports were foodstuffs, manufactured goods, refinery and transport equipment, medicines and chemicals.

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. Certain categories of items, particularly medical devices, telecommunications equipment, and parts and components intended to ensure the safety of civil aviation and the safe operation of commercial passenger aircraft are subject to case-by-case review based on the presidential waiver exercised when the SAA was implemented. U.S. export sanctions on Syria have had a minimal impact on U.S. industry.

Fiscal year 2012 licensing volume declined to 349 approved licenses compared to 432 in 2011, while dollar values dropped substantially to \$420.8 million compared to \$1.55 billion in 2011. Also during fiscal year 2012, the Department returned without action 57 license applications, valued at \$56.9 million, and denied 3 license applications valued at \$21.0 million. The three denied applications include a deemed export application, commercial equine artificial insemination equipment, and commercial satellite equipment.

The overall decline in licensing volume and dollar values reflects a decline in exports across the three traditionally largest categories of exports—medical devices, commercial telecommunications equipment, and commodities related to the safety of commercial aviation—largely due to the civil unrest which began in 2011. Of note, licensing related to the safety of civil aviation in Syria dropped from 5 licenses valued at \$115.4 million in 2011 to a single license in 2012 valued at \$2.3 million. Licensing for telecommunications rose to approximately \$54.6 million. However, a substantial portion of telecommunications licensing is included within the 31 licenses valued at \$45.7 million issued in support of the promotion of democracy and humanitarian relief related to the unrest in Syria, the overwhelming majority of which was funded by the United States Department of State.

According to the CIA *World Factbook 2012*, Syria imported an estimated \$12.9 billion in commodities in 2011. 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 were Saudi Arabia (14.5 percent), the People's Republic of China (10.1 percent), the UAE (7.1 percent), Turkey (6.7 percent), Iran (5.3 percent), Italy (5.0 percent), Russia (4.5 percent), and Iraq (4.3 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. The Department of Commerce implemented these arms embargoes by amending Part 746 of the EAR in a final rule published in the *Federal Register* on July 23, 2012. The amendment also reflects the United Nations Security

Council's termination of prohibitions on the sale or supply of arms and arms-related materiel to Rwanda and Sierra Leone, pursuant to United Nations Security Council Resolutions 1823 and 1940 respectively.

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 reexport 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. The Department conducted a number of enforcement actions regarding noncompliance with these export controls during fiscal year 2012. For example:

Blue Coat

Computer Equipment to Syria

On December 16, 2011, BIS added Waseem Jawad of Syria and his company, Infotec, located in the United Arab Emirates, to the Entity List based on evidence that Jawad used Infotec to purchase and export U.S.-origin internet filtering devices to Syria without the required export license from the U.S. Department of Commerce. In December 2010, Jawad ordered the equipment from an authorized distributor of Blue Coat equipment in the United Arab Emirates (UAE). The false end-user information received by Blue Coat, a U.S. company, was for a government telecommunications entity in Iraq. Jawad received the devices and transshipped them through the UAE to Syria. The Blue Coat SG9000-20 Proxy devices have been the subject of press reporting related to their potential use by the Syrian government to block pro-democracy websites and identify pro-democracy activists. Several of the devices have been identified by serial numbers as being used by the Syrian Telecommunications Establishment in Damascus, Syria.

The Parts Guys, LLC

Aircraft Parts to Iran

On October 26, 2011, Michael Edward Todd, owner of The Parts Guys, LLC, was sentenced to 46 months in prison, three years supervised release, and a forfeiture of \$160,362 shared with Hamid Seifi, an Iranian-born U.S. national and the owner of Galaxy Aviation Services, and The Parts Guys, LLC, in connection with a conspiracy to export aircraft parts to Iran. On October 26, 2011, The Parts Guys LLC was sentenced to a \$400 special assessment and the shared \$160,362 forfeiture. On June 22, 2011, Galaxy Aviation Services was sentenced to a \$400 special assessment and the shared forfeiture. On July 5, 2011, Seifi was sentenced to 56 months in prison, three years supervised release, a \$12,500 criminal fine, a \$200 special assessment and a

forfeiture of \$153,940 to be shared with Galaxy Aviation Services. In June 2011, BIS announced the addition of eight indicted defendants located in France, Iran and the United Arab Emirates (UAE) to the Entity List. Earlier in 2011, Todd, Seifi and Galaxy Aviation pled guilty to charges related to their roles in a conspiracy to violate the Arms Export and Control Act and International Emergency Economic Powers Act. Todd used his company to receive and fill orders for components from Seifi. Seifi and other entities in the UAE purchased components from Todd on the behalf of parties in Iran and conspired to export the components without obtaining the required export licenses from the U.S. Department of Commerce. The components included military 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 is a joint investigation with U.S. Immigration and Customs Enforcement and the Federal Bureau of Investigation.

Sunrise Technologies and Trading Corporation/Jeng Shih

Computer Equipment to Iran

On October 7, 2011, Jeng Shih, owner of Sunrise Technology and Trading Company based in Flushing, NY, and Sunrise pled guilty in U.S. District Court in the District of Columbia to conspiracy to violate the International Emergency Economic Powers Act (IEEPA) and to defraud the United States. On October 11, 2011, BIS issued Final Orders denying the export privileges of Shih and Sunrise for 10 years (suspended) for their role in the illegal export of commodities to Iran. On February 17, 2012, Shih was sentenced to 18 months in prison, two years supervised release, forfeiture of \$1.25 million shared with the company, and a \$200 special assessment. Sunrise was sentenced to two years corporate probation, the shared forfeiture, and a \$200 special assessment. Beginning in 2007, Shih, a U.S. citizen, conspired with a company operating in the UAE and Iran to procure U.S.-origin computers through Sunrise and export them through the UAE to Iran without obtaining the required license authorization from the Department of Treasury's OFAC. In April 2010, the defendants caused the illegal export of 526 units of computer-related goods through the UAE to Iran. Later, the defendants caused an additional 185 units of computer-related goods to be illegally exported to Iran via the UAE. This is a joint investigation with U.S. Immigration and Customs Enforcement. U.S. Customs and Border Protection and the Office of Enforcement in the Treasury Department's OFAC also assisted in the investigation.

Massoud Habibion/Mohsen Motamedian/Online Micro LLC

Computer Equipment to Iran

On May 16, 2012, Massoud Habibion and Mohsen Motamedian were sentenced in U.S. District Court in the District of Columbia on charges related to a scheme to illegally export computer-related goods worth millions of dollars through the United Arab Emirates (UAE) to Iran. Habibion and Motamedian are U.S. citizens who operate Online Micro LLC in Costa Mesa, CA. Habibion was sentenced to 13 months in prison, two years supervised release, and a \$100 special assessment for conspiracy to violate the International Emergency Economic Powers Act and to

defraud the United States. Motamedian was sentenced to time served in prison, three years of supervised release, \$5,000 criminal fine, and a \$100 special assessment for obstruction of justice. On February 16, 2012, both individuals pled guilty to the charges. In a related civil settlement with BIS and OFAC, Habibion and Online Micro LLC agreed to forfeit \$1.9 million seized during the investigation by U.S. Immigration and Customs Enforcement (ICE). Habibion and his company also accepted a 10-year denial of export privileges which is suspended unless they violate export laws or terms of criminal and civil penalties. Motamedian separately agreed to a \$50,000 monetary penalty to settle a civil charge that he provided false statements to federal law enforcement. In April 2011, Habibion and Motamedian were arrested in California and all three defendants were indicted. From November 2009 to December 2010, Habibion and Online Micro willfully conspired with a company operating in Dubai, UAE, and Tehran, Iran, to procure U.S.-origin computers for Iran through Dubai without obtaining license authorizations from OFAC. The total value of the shipments during the conspiracy was more than \$4.9 million. Online Micro also falsely identified the ultimate destination of the goods as the UAE. During the course of the investigation, Habibion and Motamedian told a government cooperator to lie to law enforcement officials about Iran being the true ultimate destination and counseled him to say the computer-related goods remained in Dubai. In 2007, Online Micro purchased 1,000 computer units from Dell Inc. for approximately \$500,000. Later that year, Dell began receiving service calls concerning Dell computer units from individuals in Iran, and after conducting an internal investigation, suspended Online Micro from placing further orders with Dell. BIS assisted in the joint investigation with ICE and the U.S. Customs and Border Protection.

Ericsson de Panama S.A.***Telecommunications Equipment to Cuba***

On May 25, 2012, Ericsson de Panama S.A. of Panama City, Panama, entered into a settlement agreement with BIS in which the company agreed to pay a civil penalty of \$1.753 million to settle 262 violations of the EAR. The settlement also requires a company-wide export audit conducted by an independent third party of all transactions connected with Cuban customers. Between 2004 and 2007, Ericsson de Panama knowingly implemented a scheme to evade the Regulations by routing items from Cuba through Panama to the United States, and then back to Cuba. The scheme included repackaging items to conceal their Cuban markings, forwarding the items to the United States for repair and replacement, and then facilitating the return of the items back to Cuba. The items were classified as 5A002, 4A994, 5A991, 5B991 or designated EAR99, and were controlled for national security, antiterrorism, encryption and sanctions reasons. Ericsson de Panama avoided possible criminal prosecution and heavier fines by voluntarily disclosing the violations to BIS and cooperating with the investigation.

Saamen Company LLC***Medical Supplies, Computers and Laboratory Equipment to Iran***

On June 6, 2012, BIS issued a Denial Order for a 10-year denial of export privileges against Mohammad Vaghari and his related company, Saamen Company LLC, for their role in the illegal export of commodities to Iran. On June 14, 2011, Mir Ghaemi, Vaghari's associate, was sentenced to time served in prison, six months supervised release, a \$25 special assessment, and \$680.90 restitution to be paid to the infringed companies. On June 3, 2011, Vaghari was sentenced to 33 months in prison, three years supervised release, and a \$400 special assessment. On February 24, 2011, Vaghari was convicted by a jury in U.S. District Court in the Eastern District of Pennsylvania on charges of violating the International Emergency Economic Powers Act, conspiracy, and possession of immigration documents by fraud. On November 24, 2010, Mir Ghaemi pled guilty to charges of copyright infringement and aiding and abetting. The export control charges against Vaghari and Ghaemi are related to the export of medical supplies, computers and laboratory equipment through the United Arab Emirates to Iran without the required export license.

ING Bank, N.V.***Financial Transactions with Cuba and Iran***

On June 11, 2012, ING Bank N.V., a financial institution headquartered in Amsterdam, agreed to forfeit \$619 million to the U.S. Department of Justice and the New York County District Attorney's Office as part of a deferred prosecution agreement. The charges related to illegally moving more than \$2 billion in more than 20,000 transactions through the U.S. financial system on behalf of sanctioned Cuban and Iranian entities. ING Bank pled guilty to criminal information charging one count of conspiracy to violate the International Emergency Economic Powers Act and the Trading with the Enemy Act. The bank also entered into a parallel settlement agreement with OFAC which requires the bank to review policies and procedures, take risk-based sampling of U.S. dollar payments, and ensure its OFAC compliance program is functioning effectively. According to court documents, financial transactions occurred from the early 1990s until 2007. ING Bank's criminal conduct included processing sanctioned country banking operations through third party countries without reference to the payments' origin, using misleading payment messages, misusing ING Bank's internal suspense account, and using shell companies. ING Bank also purged payment data illegally, advised sanctioned clients on concealing operations, fabricated materials, and threatened retribution if employees didn't conceal the activity. The investigation was initiated, in part, by a BIS investigation. ING Bank processed payments on behalf of Aviation Services International B.V., a Dutch company involved in illegal exports to Iran and the subject of BIS investigation. The investigation was conducted by the Federal Bureau of Investigation and the Internal Revenue Service. BIS and OFAC assisted in the investigation.

Aviation Services International/Delta Logistics/Neils Kraaiipoel/Robert Kraaiipoel
Aircraft Components to Iran

On June 12, 2012, Robert Kraaiipoel, Neils Kraaiipoel and Aviation Services International (ASI), their aircraft parts supply company in the Netherlands, were sentenced in U.S. District Court in the District of Columbia. The Kraaiipoels were sentenced to five years of probation and a \$100 special assessment each, and ASI was sentenced to five years of corporate probation, \$100,000 criminal fine and a \$400 special assessment. On March 2, 2010, the Kraaiipoels and ASI entered into settlement agreements with BIS and received suspended \$250,000 civil penalties. Robert Kraaiipoel and ASI received an export denial order for seven years, and Neils Kraaiipoel received a three-year suspended export denial order. On September 24, 2009, the three defendants and Delta Logistics pled guilty in U.S. District Court in the District of Columbia to conspiracy to violate the Export Administration Regulations. Between 2005, and 2007, the Kraaiipoels used ASI to purchase various electronic communications equipment from a U.S. company and falsely certified the equipment would be used by the Polish Border Control Agency. The equipment had potential applications in Unmanned Aerial Vehicles and the defendants exported the equipment through the Netherlands to a customer in Iran. The defendants also used the United Arab Emirates and Cyprus as intermediate countries for illegal exports of aluminum sheets, rods, polyimide film, and other equipment. This was a joint investigation with U.S. Immigration and Customs Enforcement, Defense Criminal Investigative Service and the Federal Bureau of Investigation.

Saeed Talebi***Industrial goods to Iran***

On September 26, 2012, Saeed Talebi, an Iranian national, pled guilty in Manhattan federal court to conspiring to illegally export from the U.S. to Iran parts and goods designed for use in industrial operations. On numerous occasions throughout 2010 and 2011, Talebi worked with others to ship industrial parts and goods through a company located in Dubai to various petrochemical companies in Iran. In the course of his scheme, Talebi also caused money to be wired to the United States, including over \$300,000 that was sent to a bank account in Manhattan. At the request of Talebi's attorney, sentencing has been postponed until February 7, 2013 in order to allow time for the conduct of a psychiatric evaluation. This is an OEE investigation that was developed during a routine review of Shippers Export Declarations in the Automated Tracking System.

C. Consultation with Industry

In a September 7, 2012 *Federal Register* notice (77 FR 55183), 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 9, 2012. 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 country 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.

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. The IAEA Director General released a very detailed report on the possible military dimensions (PMD) of Iranian nuclear program in November 2011, which prompted the IAEA Board of Governors to overwhelmingly adopt a resolution expressing deep concern over the PMD issue and Iran's lack of cooperation with the IAEA and failure to comply with its international nuclear obligations.

Iraq

Prior to Operation Iraqi Freedom and the lifting of the embargo on Iraq, the United States maintained an ongoing dialogue on Iraq with other United Nations member states, as well as separately, with its allies and partners. Since the lifting of the embargo, the United States has continued discussions with many other countries on both a bilateral and multilateral basis.

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 1718 and 1874, 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.

Sudan

The United States continues to consult with the United Nations, in addition to other countries and entities in both bilateral and multilateral forums, regarding the internal conflict in Sudan and to address the humanitarian needs of the population.

Syria

The United States is in constant communication with other countries regarding the Syrian Government's interference in Lebanon and its support for terrorism, the flow of foreign fighters through Syria destined for Iraq, Syrian nuclear, missile, and chemical/biological programs, and its abuse of its own citizens. Additionally, the United States has communicated its concerns to the Government of Syria directly and forcefully through the U.S. Embassy in Syria and the Syrian Ambassador in Washington.

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 (Sections 742.2, 742.18, 744.4, 744.6, and 745)¹³

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 40 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.¹⁴

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

¹³ Chapter 7 of this report addresses U.S. biological controls.

¹⁴ 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.

plants 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.

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 or biological 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 reexporter 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, reexport, or in-country transfer without a license. “Support” is defined as any action, including financing, transportation, or freight forwarding that facilitates the export, reexport, 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. For licenses to export AG-controlled items to the People's Republic of China (PRC), Section 742.2 of the EAR imposes an additional review standard – whether the items will make a direct and significant contribution to China's military capabilities. When the Department of Commerce determines, after interagency review, that an export will make a contribution meeting these criteria, 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 reexported 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 reexport 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 unless the exporter obtains from the consignee an End-Use Certificate (issued by the government of the importing country) prior to exporting the Schedule 3 chemicals and submits it to BIS. Reexports of Schedule 3 chemicals require a license when they are reexported 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 reexports 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 2012 Developments

On June 15, 2012, the AG published on its website participants' concerns regarding the ongoing violence in Syria. AG participants noted that Syria continues to be a country of proliferation concern. AG participants agreed on the importance of increased vigilance with regard to dual-use exports to Syria and also agreed to subject exports to Syria to particular scrutiny. These agreements by the Australia Group participants support existing United States sanctions against Syria.

On July 2, 2012, the Department of Commerce published a final rule in the *Federal Register* (77 FR 39162) to implement the understandings reached at the June 2011 plenary meeting of the AG. This final rule amended Export Control Classification Numbers (ECCNs) 2B350 (Chemical manufacturing facilities and equipment) by adding a new Technical Note 3, at the end of the entry, to clarify that materials used for gaskets, packing, seals, screws or washers, or other materials performing a sealing function, do not determine the control status of the items listed in ECCN 2B350, provided that such components are designed to be interchangeable. This final rule also amended ECCN 2B350 to clarify certain control parameters for pumps.

Analysis of Control 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 reexport 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 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.

In Fiscal Year 2012, the Department of Commerce approved 3,247 license applications, valued at \$11,704,983,743, for the export or reexport of chemical precursors, equipment, and related technology. The majority of the value of these approvals (97 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 (3 percent) was for chemical processing equipment controlled under ECCN 2B350 and monitoring equipment controlled under ECCN 2B351, which covers equipment with many commercial uses. The Department denied 5 license applications valued at \$172,162, and returned without action 235 license applications valued at \$111,158,002. 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 reexports 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.

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

Ulrich Davis

Aircraft Parts/Chemicals to Iran

On May 15, 2012, Ulrich Davis, a Dutch citizen and former manager of a freight forwarder based in the Netherlands, was sentenced to six months in prison, a \$2,000 criminal fine, and a \$100 special assessment. On February 6, 2012, Davis pled guilty in U.S. District Court in the District of New Jersey to one count of conspiracy to violate the International Emergency Economic Powers Act and the Iranian Transactions Regulations. The charges related to Davis conspiring with others to export aircraft parts and chemicals through the Netherlands to Iran and violating a Temporary Denial Order (TDO). In 2007 and 2008, Davis was the Sales and Business Development Manager for a freight forwarder in the Netherlands which was affiliated with a New York-based freight-forwarding company. On August 6, 2011, Special Agents of OEE and U.S. Immigration and Customs Enforcement arrested Davis as he was boarding an aircraft destined for the Netherlands at Newark Liberty International Airport, NJ. In October 2007, BIS issued a TDO which denied export privileges to Davis and a co-conspirator’s firm. The co-conspirator, who was located in another country, purchased chemicals, lubricants, sealants and other aircraft-industry items. Davis facilitated their export to Iran by arranging for transport to New York and completing air waybills for shipment to Iran after the issuance of the TDO. Davis and his employer also caused several illegal reexports to Iran by disguising the nature of shipments through falsely listing the Netherlands as the ultimate destination and

removing invoices and item lists. Commodities included attitude direction indicators for aircraft, a fuel control unit for use on a Boeing 747 aircraft, and C-130 aircraft parts. This was a joint investigation with U.S. Immigration and Customs Enforcement and the Defense Criminal Investigative Service.

Flowserve Corporation

Pumps, Valves and Related Components to Iran and Syria

On September 29, 2011, BIS issued Final Orders to Flowserve Corporation and ten of its foreign affiliates, who agreed to pay civil penalties totaling \$2.5 million to settle 288 charges of violating the Export Administration Regulations. Additional civil penalties include requirements to conduct external audits of their compliance programs and submit the results to BIS. Flowserve is headquartered in Irving, TX, and is a supplier of goods and services to the oil, gas, chemical, and other industries. Flowserve's voluntary disclosure of the violations and its cooperation with the investigation significantly reduced the penalty amount. Between 2002 and 2008, Flowserve and its foreign affiliates made unlicensed exports and reexports of pumps, valves and related components to a variety of countries including China, Singapore, Malaysia and Venezuela. Six of Flowserve's foreign affiliates caused the transshipment of controlled items to Iran or the reexport of controlled items to Syria without the required U.S. Government authorization. The items were controlled by the Department of Commerce for reasons of chemical and biological weapons proliferation and required licenses for export. In a related case, the Department of the Treasury's Office of Foreign Assets Control (OFAC) settled charges with Flowserve alleging 58 violations of OFAC's Iranian, Cuban, and Sudanese sanctions programs. Flowserve agreed to pay a \$502,408 civil penalty to resolve the OFAC charges.

Violations of the Chemical Weapons Convention Regulations (CWCR)

There are no CWCR violations to report for Fiscal Year 2012.

C. Consultation with Industry

In a September 7, 2012 *Federal Register* notice (77 FR 55183), the Department of Commerce solicited comments from the public on the effectiveness of U.S. foreign policy-based export controls. The comment period closed on October 9, 2012. A detailed review of all public comments received may be found in Appendix I.

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, Mexico, China, South Africa, countries of the former Soviet Union, Taiwan, and Thailand. However, almost all non-AG suppliers have become States Parties to the CWC and will 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 (Sections 742.2, 744.4 and 744.6)¹⁵

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), a forum of 40 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).¹⁶

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

¹⁵ Chapter 6 of this report addresses U.S. chemical controls.

¹⁶ 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.

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.

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 reexporter 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, reexport, or in-country transfer without a license. “Support” is defined as any action, including financing, transportation, or freight forwarding, that facilitates the export, reexport, 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 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 will make such a contribution, it will deny the application. For licenses to export AG-controlled items to the People’s Republic of China (PRC), Section 742.2 of the EAR imposes an additional review standard – whether the items will make a direct and significant contribution to China’s military capabilities. When the Department of Commerce determines, after interagency review, that an export will make a contribution meeting these criteria, the Department will deny the license.

Summary of 2012 Developments

On June 15, 2012, the AG published on its website participants’ concerns regarding the ongoing violence in Syria. AG participants noted that Syria continues to be a country of proliferation concern. AG participants agreed on the importance of increased vigilance with regard to dual-use exports to Syria and also agreed to subject exports to Syria to particular scrutiny. These agreements by the Australia Group participants support existing United States sanctions against Syria.

On July 2, 2012, the Department of Commerce published a final rule in the *Federal Register* (77 FR 39162) amending the EAR to implement the understandings reached at the June 2011 plenary meeting of the AG. This rule amended ECCNs 1C351 and 1C353 to reflect the AG changes to the “List of Biological Agents for Export Control.” Significantly, *Bartonella Quintana* and *Rickettsia rickettsia* were removed from ECCN 1C351, as they are no longer included on the AG “List of Biological Agents.” This rule also amended ECCN 1C353 (Genetic elements and genetically modified organisms) by revising Technical Note 1 to indicate that “genetic elements” also includes chromosomes, genomes, plasmids, transposons, and vectors that have been “chemically synthesized in whole or in part”; and adding a new Technical Note 4 to clarify that

this ECCN controls certain de novo chemically synthesized genetic material and artificially produced organisms.

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 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 United States foreign policy objectives.

In fiscal year 2012, the Department of Commerce approved 1,220 license applications valued at \$219,263,547 for the export or reexport of biological agents, vaccines and equipment. The majority of the value of these approvals (85 percent) was for biological processing and handling equipment controlled under ECCN 2B352. The bulk of the remaining value of these approvals (13 percent) was for human pathogens, zoonoses, and toxins controlled under ECCN 1C351. The Department denied five license applications valued at \$859,166 and returned without action 73 license applications valued at \$5,737,643. The primary basis for returning applications was insufficient information about the transactions.

5. *Effective Enforcement of Controls.* The Secretary has determined 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.

C. Consultation with Industry

In a September 7, 2012 *Federal Register* notice (77 FR 55183), the Department of Commerce solicited comments from the public on the effectiveness of U.S. foreign policy-based export controls. The comment period closed on October 9, 2012. A detailed review of all public comments received may be found in Appendix I.

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.

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, several other countries, including India, Israel, Macedonia, Romania, and Slovakia, unilaterally adhere to the MTCR Guidelines.

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)). Decisions regarding whether the criteria for such certifications is met, however, 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, and production equipment 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 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, reexport 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 reexport 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 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 certain rocket systems or UAVs. If the Department of Commerce determines that an export will make such a contribution, the application will be denied.

Summary of 2012 Changes

The annual Plenary for the MTCR was held in October 2012 in Berlin, Germany. During the Plenary, the United States highlighted the need for regionally-focused nonproliferation efforts from MTCR Partners and the importance of effectively implementing catch-all controls to impede the flow of non-listed items to missile programs of concern. The Plenary reached consensus on implementing a U.S. proposal for improving catch-all controls and agreed to begin work to update the Regime's handbook for licensing and enforcement officers.

The MTCR also held a Technical Experts meeting in conjunction with the Plenary to discuss changes to the MTCR control list. As a result of the Technical Experts meeting, several changes to the MTCR Annex were adopted. These changes may necessitate modifications to the control text of certain ECCNs, such as 1C011, 9A101, and 9B105.

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, achieving 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 this 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 Guidelines and implement effective export controls on MTCR items.

4. *Economic Impact on U.S. Industry.* The Secretary has determined that any adverse 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 2012, the Department of Commerce approved 1,064 applications, valued at \$2.2 billion dollars, for the export or reexport of missile technology-controlled items. In addition, the Department rejected 11 applications valued at \$15.8 million and returned without action 51 applications valued at \$149.6 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 11 applications, valued at \$2.8 million, denied 2 licenses valued at \$27,520, and returned without action 6 applications, valued at \$200,894. 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 reexports 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 conducted a number of recent enforcement actions regarding noncompliance with these export controls. For example:

Davoud Baniameri/Syed Majid Mousavi/Andro Telemi
Missile/Radio Components to Iran

On July 26, 2012, Andro Telemi pled guilty in U.S. District Court in the Northern District of Illinois in connection with his role in the conspiracy to export connector adaptors for missile systems to Iran. On November 30, 2012, Telemi was sentenced to five years of probation, a \$10,000 fine, \$100 special assessment, and 500 hours of community service. Co-defendant Davoud Baniameri previously pled guilty and was sentenced to 51 months in prison, three years supervised release, and a \$200 special assessment for his part in the scheme. In addition, the Assistant Secretary for Export Enforcement imposed a 10-year Denial Order against Baniameri. In 2008 and 2009, Baniameri was contacted by a third co-conspirator, Syed Majid Mousavi, who requested the purchase and export of radio test sets and missile components for the TOW and TOW2 missile systems through the United Arab Emirates (UAE) to Iran. Baniameri purchased three Marconi radio test sets and 10 connector adapters from a company controlled by law enforcement in Illinois. In 2008, Baniameri shipped the radio test sets from California to the UAE for ultimate transshipment to Iran, without the required export license from the U.S.

Department of Commerce. In September 2009, Baniameri paid \$9,450 to the company in Illinois for missile components and directed Telemi to take possession of the equipment. Baniameri arranged to fly from the United States to Iran through the UAE carrying the equipment. He did not obtain a license for the export of the connector adaptors and was arrested before leaving the United States. This was a joint investigation with U.S. Immigration and Customs Enforcement, Defense Criminal Investigative Service, and the Internal Revenue Service-Criminal Investigation Division. The Chicago Police Department also assisted in the investigation.

C. Consultation with Industry

In a September 7, 2012 *Federal Register* notice (77 FR 55183), 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 9, 2012. 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 their vigilance in applying MTCR Guidelines to help prevent missile proliferation.

CHAPTER 9

Encryption (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 reexport 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 reexport 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 reexport to government end-users under this License Exception.

License applications to export or reexport 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 reexports 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 reexports) 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 products 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 products and that the effect

of encryption controls on export performance do not exceed the benefit to U.S. foreign policy objectives.

In fiscal year 2012, 1,273 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 1,332 classification requests for controlled encryption products, components, toolkits, and source code items classified under ECCNs 5A002, 5B002, 5D002, 5E002, 5A992, 5D992, and 5E992. Of these classification requests, 325 were for mass market encryption items. Mass market encryption items typically include handheld devices, commodities and software for home networking use, and software applications for smartphones, tablets, and personal computers classified under ECCNs 5A992.c, 5D992.c and 5E992.b.

Additionally, during fiscal year 2012, the Department of Commerce approved 1,920 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 2012, there were no denials of encryption items based on issues specific to encryption-related licensing policy.

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 conducted a number of recent enforcement actions regarding these controls. For example:

Blue Coat

Computer Equipment to Syria

On December 16, 2011, BIS added Waseem Jawad of Syria and his company, Infotec, located in the United Arab Emirates, to the Entity List based on evidence that Jawad used Infotec to purchase and export U.S.-origin internet filtering devices to Syria without the required export license from the U.S. Department of Commerce. In December 2010, Jawad ordered the equipment from an authorized distributor of Blue Coat equipment in the United Arab Emirates (UAE). The false end-user information received by Blue Coat, a U.S. company, was for a government telecommunications entity in Iraq. Jawad received the devices and transshipped them through the UAE to Syria. The Blue Coat SG9000-20 Proxy devices have been the subject of press reporting related to their potential use by the Syrian government to block pro-democracy websites and identify pro-democracy activists. Several of the devices have been identified by serial numbers as being used by the Syrian Telecommunications Establishment in Damascus, Syria.

Ericsson de Panama S.A.***Telecommunications Equipment to Cuba***

On May 25, 2012, Ericsson de Panama S.A. of Panama City, Panama, entered into a settlement agreement with BIS in which the company agreed to pay a civil penalty of \$1.753 million to settle 262 violations of the EAR. The settlement also requires a company-wide export audit conducted by an independent third party of all transactions connected with Cuban customers. Between 2004 and 2007, Ericsson de Panama knowingly implemented a scheme to evade the Regulations by routing items from Cuba through Panama to the United States, and then back to Cuba. The scheme included repackaging items to conceal their Cuban markings, forwarding the items to the United States for repair and replacement, and then facilitating the return of the items back to Cuba. The items were classified as 5A002, 4A994, 5A991, 5B991 or designated EAR99, and were controlled for national security, antiterrorism, encryption and sanctions reasons. Ericsson de Panama avoided possible criminal prosecution and heavier fines by voluntarily disclosing the violations to BIS and cooperating with the investigation.

C. Consultation with Industry

In a September 7, 2012 *Federal Register* notice (77 FR 55183), 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 9, 2012. 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 this 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 updated 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 (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, 9E003.a.10, and 9E003.h and i). 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 reexports 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 reexport 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 Control

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 that could compromise shared security and foreign policy interests.

4. *Economic Impact.* The Secretary has determined that any adverse 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 2012, the Department of Commerce approved 134 licenses for technology controlled under ECCN 9E003. Most of the 134 licenses approved involved the export of “hot section” technology, of which 7 involved deemed exports (i.e., the transfer of “hot section” technology to a foreign national in the United States). The total dollar value of the items subject to the licenses approved was \$12,100,366 in fiscal year 2012. No license applications involving engine “hot section” technology were rejected in fiscal year 2012. In addition, 26 applications involving items valued at a total of \$24,347,775 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 currently used in civil derivatives of military engines controlled on the USML (ECCN 9E003.i), all of these items also are subject to multilateral controls. Therefore, cooperation from foreign government enforcement agencies is useful in preventing and punishing violators.

C. Consultation with Industry

In a September 7, 2012 *Federal Register* notice (77 FR 55183), 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 9, 2012. A detailed review of all public comments received may be found in Appendix I.

The Department of Commerce consults with the Transportation Technical Advisory Committee (TransTAC) about SI controls. Although there are no major changes anticipated regarding this control on the CCL, 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

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 subject to ECCN 9E003.i 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 additional control.

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.i 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 (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 46-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 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 7, 2012 *Federal Register* notice (77 FR 55183), 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 9, 2012. 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 Law¹⁷

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 2012 Nuclear Suppliers Group (NSG) Plenary, Consultative Group (CG), Information Exchange (IEM) and Licensing and Enforcement Experts (LEEM) meetings were held in Seattle, Washington, during the week of June 18-22, 2012. Deputy Secretary of Energy Daniel Poneman chaired the Plenary for the United States. The CG reached consensus, confirmed by the Plenary, on approval of the U.S. proposal to include under the Supporting Activities section of the Part 1 Guidelines a new paragraph 12 entitled "Support for Access to Nuclear Material for Peaceful Purposes." The Plenary approved 26 proposals from the Dedicated Meeting of Technical Experts (DMTE) for amendment of the NSG Trigger and Dual-Use Lists, as well as procedural implementation proposals recommended by the CG Chair.

¹⁷ 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.

BIS conducted a number of recent enforcement actions regarding these controls. For example:

Jian Wei Ding/Kok Tong Lim/Ping Cheng

Toray Carbon Fiber to China

On March 19, 2012, Assistant Secretary for EE David Mills signed Final Orders against Prime Technology Corporation and its owner Ping Cheng. The Final Orders included requirements to pay a \$125,000 civil penalty (with \$75,000 suspended for two years), a two-year (suspended) denial of export privileges, a requirement to conduct two external audits, and to obtain Export Control Classification Numbers on exported products and attend export compliance training. On February 2, 2012, BIS signed a Section 11(h) order for a 10-year denial of export privileges for Kok Tong Lim, located in Singapore. On July 27, 2011, BIS issued a Final Order against Jian Wei Ding, who agreed to an administrative penalty of \$100,000 and a 25-year denial of export privileges while serving his prison sentence. On October 8, 2009, Ding was sentenced to 46 months in prison, a \$100 special assessment and forfeiture of 315 kilograms of carbon fiber materials. On the same day, Lim was sentenced to one year probation and Ping Cheng was sentenced to two years' probation. On February 13, 2009, Cheng pled guilty in U.S. District Court in the District of Minnesota to violating the International Emergency Economic Powers Act (IEEPA). On March 10 and March 20, 2009, respectively, Lim and Ding pled guilty to conspiracy to violate the IEEPA. Cheng, Lim, and Ding conspired and attempted to export high-modulus carbon-fiber material without an export license issued by the U.S. Commerce Department. The U.S. government requires a license to export these materials for national security, nuclear proliferation, and antiterrorism reasons. The carbon-fiber material the defendants sought to export has applications in rockets, satellites, spacecraft, and uranium enrichment. One of Ding's customers was the China Academy of Space Technology, which oversees research institutes working on spacecraft systems for China. Ding's role in the conspiracy was to manage Firmospace, Far Easton, and Jowa Globaltech (his companies in Singapore), maintain a relationship with the Chinese end-users, and provide the money required for purchases. Cheng's role was to act as the U.S. agent for Ding's companies, and Lim's role was to reach out to U.S. suppliers of high-technology items to be purchased. One of the U.S. suppliers was an undercover U.S. Government company. This was a joint investigation with U.S. Immigration and Customs Enforcement.

Nadeem Akhtar

Nuclear Materials to Pakistan

On January 6, 2012, Nadeem Akhtar, owner and operator of Computer Communication USA (CC-USA) in Silver Spring, MD, was sentenced to 37 months in prison, two years supervised release, and a \$100 special assessment. On September 9, 2011, Akhtar pled guilty in U.S. District Court in the District of Maryland to conspiring to violate the International Emergency Economic Powers Act and to defraud the United States. Akhtar is a Pakistani national and lawful permanent resident of the United States. From October 2005 through March 11, 2010,

Akhtar and his conspirators used CC-USA to obtain or attempt to obtain radiation detection devices, resins for coolant water purification, calibration and switching equipment, attenuators and surface refinishing abrasives, mechanical and electrical valves, cranes, and scissor lifts for export to restricted entities in Pakistan. The items were worth over \$400,000 and required export licenses issued by the U.S. Department of Commerce. Akhtar attempted to evade export regulations and licensing requirements by providing false information, using third parties to procure items for him under false pretenses, misrepresenting CC-USA as the purchaser/end-user of the items, and transshipping the items through the United Arab Emirates. Akhtar took direction and received commissions from the owner of a trading company located in Karachi, Pakistan, regarding what materials were needed and methods to conceal the transactions. Akhtar's co-conspirators included individuals in Pakistan, Dubai, UAE and New York associated with the owner of the Pakistani trading company. The restricted entities were involved in nuclear and energy research and development, nuclear power plants, and applied science. Exports of items to these organizations were prohibited without an export license. This was a joint investigation with the Federal Bureau of Investigation.

CHAPTER 12

Surreptitious Listening (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 Number (ECCN) 5A980. Export controls extend to related software and technology through ECCNs 5D980 (software) and 5E980 (technology).

License Requirements and Licensing Policy

A license is required for the export or reexport 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 reexport 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. 2512). These controls do not supersede, nor do they implement, construe, or limit the scope of any of the statutory restrictions of section 18 U.S.C. 2512 (section 802 of the Omnibus Crime Control and Safe Streets Act of 1968, as amended) 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 Control

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 already subject to independent criminal sanction.¹⁸ Nevertheless, the imposition of foreign policy-based controls on these devices and related software and technology will enhance 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, to promote privacy protection, and to oppose and distance itself 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, privacy violations, and acts of terrorism. The imposition of these controls is also compatible with overall U.S. policy towards 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.

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

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

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 adverse 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 2012, the Department of Commerce approved seven applications for the export or reexport of SL controlled items valued at a total of \$605,004. In addition, the Department returned without action seven applications for items valued at \$1.2 million. No applications were rejected. During the same time period, the Department completed three commodity classification determinations classifying items under ECCNs 5A980, 5D980, or 5E980.

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.

C. Consultation with Industry

In a September 7, 2012 *Federal Register* notice (77 FR 55183), 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 9, 2012. 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 in order to prevent 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 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, reexports, and transfers (in-country) to the 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 prohibits unlicensed exports, reexports, and transfers (in-country) of items subject to the EAR for use in or by a party involved in defined nuclear, missile, chemical and biological weapons activities (*see* Sections 744.2, 744.3, and 744.4 of the EAR). The Entity List also prohibits unlicensed exports, reexports, and transfers (in-country) of items subject to the EAR to certain persons in Russia, persons acting contrary to the national security or foreign policy interests of the United States, and persons sanctioned by the Department of State (*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 on the transaction 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 under 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 2012 Changes

On April 18, 2012, BIS published a final rule in the *Federal Register* (77 FR 23114) that implemented the decision of the ERC to add three persons to the Entity List on the basis of Section 744.11 (License requirements that apply to entities acting contrary to the national security or foreign policy interests of the United States) of the EAR. The three entries added to the Entity List consisted of two persons in Canada and one person in Jordan. The ERC added the three persons on the basis of evidence that they engaged in violation of the license requirements for exports and reexports to Syria and violation of the embargo against Iran.

On April 25, 2012, BIS published a final rule in the *Federal Register* (77 FR 24587) that implemented the decision of the ERC to add two persons located in France to the Entity List on the basis of Section 744.11 of the EAR (license requirements that apply to entities acting contrary to the national security or foreign policy interests of the United States). The ERC added these two persons on the basis of evidence that a direct physical and corporate nexus existed between them and persons already on the Entity List and that such a nexus posed a high risk of violations of the EAR. This rule also implemented changes to the Entity List based on the ERC's annual review of listed entities in Armenia, Germany, Iran, Lebanon, South Korea, Syria, and the United Arab Emirates (U.A.E.). Specifically, pursuant to the ERC's annual review, this rule removed two entities from the Entity List consisting of one entity from Germany and one entity from South Korea. It also removed one person from the U.A.E. from the Entity List; however, this person's name was added as an alias for another person listed on the Entity List (also under the U.A.E.). On the basis of decisions made by the ERC during the annual review, this rule also amended sixteen entries on the Entity List, consisting of one entry under Armenia, three entries under Germany, ten entries under Iran, one entry under Lebanon, and one entry under Syria, to provide alternate addresses, alternate spellings for the names of the listed persons, and/or aliases. Finally, on the basis of decisions made by the ERC during the annual review, this rule added four persons to the Entity List, consisting of one person in Canada, one person in Egypt, one person in France, and one person in the United Kingdom. The decision to add these four persons was based on Section 744.11 of the EAR and on the persons' affiliation with persons already on the Entity List.

On April 27, 2012, BIS published a final rule in the *Federal Register* (77 FR 25055) that amended the EAR by adding sixteen persons under eighteen entries to the Entity List. The persons who were added to the Entity List had been determined by the U.S. Government to be acting contrary to the national security or foreign policy interests of the United States pursuant to Section 744.11 of the EAR. These persons were listed on the Entity List under the countries of Afghanistan, Pakistan and the U.A.E. The ERC determined to add these persons on the basis of their provision of support to persons engaged against U.S. and Coalition forces in Afghanistan.

On May 14, 2012, BIS published a final rule in the *Federal Register* (77 FR 28250) that corrected two spelling errors: one error in the name and one error in the address of a person who was added to the Entity List in the April 18, 2012 final rule under the destination of Jordan. Furthermore, this amendment corrected the spelling of the city of Sharjah, which was incorrectly spelled in the addresses for three of the persons added to the Entity List under the destination of U.A.E in a final rule published on April 27, 2012. Finally, this rule removed a hyphen from the address of a person who was added in a final rule published on April 27, 2012 under the destination of Pakistan to clarify the text is the address of this person and not an alias.

On September 19, 2012, BIS published a final rule in the *Federal Register* (77 FR 58006) that amended the EAR by adding six persons under eight entries to the Entity List. The persons who were added to the Entity List had been determined by the U.S. Government to be acting contrary to the national security or foreign policy interests of the United States pursuant to Section 744.11 of the EAR. These persons were listed on the Entity List under Iran and the U.A.E. The ERC added two of the persons on the basis of evidence of violations of the embargo against Iran and of the prohibition against transactions with persons on the Denied Persons List. The ERC added the other four persons on the basis of evidence that they were unreliable recipients of U.S.-origin items. In addition, this rule removed one person from the Pakistan section of the Entity List, as the result of a request for removal submitted by the person, a review of information provided in the removal request in accordance with the EAR, and further review conducted by the ERC. Finally, this rule amended the Entity List on the basis of the annual review conducted by the ERC. This rule reflected the results of the annual review of entities located in Belarus, Canada, the People's Republic of China (China), Egypt, Germany, Hong Kong, Ireland, Israel, Kuwait, Lebanon, Malaysia, Pakistan, Singapore, South Africa, Taiwan, and the United Kingdom. On the basis of the annual review, this rule removed fourteen entries (one person located in China, three persons located in Egypt, eight persons located in Hong Kong, and two persons located in Kuwait); amended thirty-six other entries by providing alternate addresses, alternate spellings for the names of the listed persons, and/or aliases (three entries under Belarus, twelve entries under China, three entries under Malaysia, twelve entries under Pakistan, one entry under Singapore, and five entries under South Africa); and added three entries (two separate entries under China for two entities previously listed as aliases of an entity already on the Entity List and one entry under Uganda, on the basis of its affiliation with a person already on the Entity List).

On October 9, 2012, BIS published a final rule in the *Federal Register* (77 FR 61249) that added 164 persons under 165 entries to the Entity List. These additions to the Entity List consisted of one person under Belize; thirteen persons under Canada; two persons under Cyprus; one person under Estonia; eleven persons under Finland; five persons under Germany; one person under Greece; two persons under Hong Kong; one person under Kazakhstan; 119 persons under Russia; two persons under Sweden; and seven persons under the United Kingdom, including six persons located in the

British Virgin Islands. These persons were determined by the U.S. Government to have engaged in activities contrary to the national security or foreign policy interests of the United States pursuant to Section 744.11 of the EAR. The ERC added these persons on the basis of evidence that they were active in a network of companies and individuals involved in the procurement and delivery of items subject to the EAR and the International Traffic in Arms Regulations (ITAR) to Russia in violation of the EAR and the ITAR.

On November 29, 2012, BIS published a final rule in the *Federal Register* (77 FR 71097) that added two persons to the Entity List in Pakistan and revised one existing entry in the U.A.E. The ERC added the two persons on the basis of their provision of support to persons engaged against U.S. and Coalition forces in Afghanistan. The revision to one existing entry in the U.A.E. was to clarify the scope of the entry by providing an additional alias and alternate address for this listed person.

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, fail to adhere to acceptable norms of international behavior, or whose conduct threatens U.S. interests. The purpose of the Entity List is to inform 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 and to prevent 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, reexports, 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.

A. 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 imposed on persons added to the Entity List is likely to achieve the intended national security and foreign policy 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 individual persons. In cases where U.S. interests are at stake, the United States retains the authority to impose controls 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 overly 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, reexports, and transfers (in-country) when specific and articulable facts provide reasonable cause to believe that the parties 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 expanded 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 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 geographic license 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 parties, thereby reducing inadvertent violations of the EAR and increasing compliance with the export controls.

C. Consultation with Industry

In a September 7, 2012 *Federal Register* notice (77 FR 55183), 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 9, 2012. 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 are based on specific and articulable facts that provide reasonable cause to believe 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 reexport controls and enforcement.

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 7, 2012 (77 FR 55183). 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 9, 2012. BIS received three comments, one from a trade association, one from a law firm, and one from a company. 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 three comments received from (1) the National Shooting Sports Foundation, a trade association for the firearms industry; (2) Stanley J. Marcuss and George F. Murphy of Bryan Cave LLP; and (3) the Boeing Company.

The National Shooting Sports Foundation submitted comments on foreign policy-based firearm controls (ECCNs 0A984, 0A986, and 0A987) based on Firearms Convention control reasons and the Organization of American States Model Regulations for the Control of the International Movement of Firearms, their Parts and Components and Munitions included within the Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials. The National Shooting Sports Foundation asserted that these controls are burdensome and overly restrictive for U.S. exporters

of firearms and related items. The National Shooting Sports Foundation claimed that ECCN 0A987 for Optical Sighting Devices is particularly burdensome because the type of sporting and hunting scopes, red-dot sights, and laser grips controlled are widely available throughout the world. It stated that processing times of four to six weeks for receiving licenses can delay shipments, resulting in the potential loss of business for U.S. exporters. The National Shooting Sports Foundation also noted that no license exceptions are allowed for these ECCNs. The National Shooting Sports Foundation suggested that allowing firearm-related ECCNs to be eligible for exceptions such as Low Value Shipment (LVS) or GBS Group B Countries would allow exporters to be more responsive to foreign customers in friendly countries.

Stanley J. Marcuss and George F. Murphy of Bryan Cave LLP commented on the way foreign policy controls are located in various parts of the EAR instead of being in one place. This results in exporters having to review and analyze a wide variety of provisions beyond those needed to classify an item or determine license requirements. They asserted that this complexity can make it difficult for exporters to discern which provisions must be considered in analyzing the requirements for an export. In addition, they noted that Supplement No. 1 to Part 732 of the Regulations, the Export Control Decision Tree, does not lead the exporter to all the provisions that should be considered. They assert (and provide what they characterize as examples) that the language in many of the provisions is overly complex with references to Commerce Control List numbers and sections of the EAR that creates text which is difficult to understand. Mr. Marcuss and Mr. Murphy also claim that there is an often confusing overlap between Commerce and Treasury regulations dealing with similar subjects that results in unclear and often differing interpretations of what is and is not prohibited activity.

Mr. Marcuss and Mr. Murphy recommend that to make U.S. foreign policy controls more effective, the government should consider (1) consolidating the controls in one section of the Regulations; (2) revising the “virtually incomprehensible” language in provisions that employ overly complex references to Commerce Control List numbers and sections of the EAR; and (3) eliminating duplicative and inconsistent requirements of the Treasury sanctions and Commerce regulations.

The Boeing Company commented on foreign policy-based export controls related to safety of flight exports. Boeing noted that its commitment to flight safety has led it to assist non-sanctioned airlines that encounter unanticipated repairs in a sanctioned country. In such cases, Boeing has had to seek licenses from both Commerce and Treasury, which can take months. Boeing also claims that U.S. export controls on foreign-available items that do not pose a threat to U.S. national security can result in “fostering gray markets or counterfeit airplane parts, spurring foreign competition which may not be subject to the same export restrictions, and exacerbating the ‘design-out’ of U.S. parts and components.”

APPENDIX II

Multilateral Export Control Regimes in 2012

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			
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
Rep. of Korea (South Korea)	Rep. of Korea (South Korea)	Rep. of Korea (South Korea)	Rep. of Korea (South Korea)
Romania	Romania		Romania
Russian Federation		Russian Federation	Russian Federation
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

WASSENAAR	AG	MTCR	NSG
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 2012

Publication Date	<i>Federal Register</i> Citation	Rule
11/29/12	77 FR 71213	Revisions to the Export Administration Regulations (EAR) To Make the Commerce Control List (CCL) Clearer
11/29/12	77 FR 71097	Addition of Certain Persons to the Entity List
11/28/12	77 FR 70945	Revisions to the Export Administration Regulations (EAR): Control of Military Electronic Equipment and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML)
10/09/12	77 FR 61249	Addition of Certain Persons to the Entity List
09/19/12	77 FR 58006	Addition of Certain Persons to the Entity List; Removal of Person from the Entity List Based on Removal Request; and Implementation of Entity List Annual Review Changes
09/14/12	77 FR 56766	Updated Statements of Legal Authority for the Export Administration Regulations
07/23/12	77 FR 42973	Export and Reexport Controls to Rwanda and United Nations Sanctions Under the Export Administration Regulations
07/09/12	77 FR 40258	Amendment to Existing Validated End-User Authorizations: Hynix Semiconductor China Ltd., Hynix Semiconductor (Wuxi) Ltd., and Boeing Tianjin Composites Co. Ltd. in the People's Republic of China
07/02/12	77 FR 39353	Wassenaar Arrangement 2011 Plenary Agreements Implementation: Commerce Control List, Definitions, New Participating State (Mexico) and Reports
07/02/12	77 FR 39162	Implementation of the Understandings Reached at the 2011 Australia Group (AG) Plenary Meeting and Other AG-Related Clarifications to the EAR
06/13/12	77 FR 35310	Revisions to the Export Administration Regulations (EAR): Control of Military Training Equipment and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML)
06/19/12	77 FR 37523	Proposed Revisions to the Export Administration Regulations: Implementation of Export Control Reform; Revisions to License Exceptions After Retrospective Regulatory Review
06/19/12	77 FR 36419	"Specially Designed" Definition
06/07/12	77 FR 33688	Revisions to the Export Administration Regulations (EAR): Control of Personal Protective Equipment, Shelters, and Related Items the President Determines No Longer Warrant Control Under the United States Munitions List (USML)
05/18/12	77 FR 29564	Revisions to the Export Administration Regulations: Auxiliary and Miscellaneous Items That No Longer Warrant Control Under the United States Munitions List and Items on the Wassenaar Arrangement Munitions List
05/14/12	77 FR 28250	Entity List Additions; Corrections

Publication Date	<i>Federal Register</i> Citation	Rule
05/02/12	77 FR 25932	Revisions to the Export Administration Regulations (EAR): Control of Energetic Materials and Related Articles That the President Determines No Longer Warrant Control Under the United States Munitions List (USML)
04/27/12	77 FR 25055	Addition of Certain Persons to the Entity List
04/25/12	77 FR 24587	Addition of Certain Persons to the Entity List; and Implementation of Entity List Annual Review Changes
04/18/12	77 FR 23114	Addition of Certain Persons on the Entity List: Addition of Persons Acting Contrary to the National Security or Foreign Policy Interests of the United States
04/13/12	77 FR 22191	Revisions to the Export Administration Regulations (EAR): Export Control Classification Number 0Y521 Series, Items Not Elsewhere Listed on the Commerce Control List (CCL)
02/24/12	77 FR 10953	Amendment to Existing Validated End-User Authorizations for Applied Materials (China), Inc., Boeing Tianjin Composites Co. Ltd., CSMC Technologies Corporation, Lam Research Corporation, and Semiconductor Manufacturing International Corporation in the People's Republic of China, and for GE India Industrial Pvt. Ltd. in India
02/22/12	77 FR 10357	Updated Statements of Legal Authority To Reflect Continuation of Emergency Declared in Executive Orders 12947 and 13224
02/03/12	77 FR 5387	Amendment to the Export Administration Regulations: Addition of a Reference to a Provision of the Iran Sanctions Act of 1996 (ISA) and Statement of the Licensing Policy for Transactions Involving Persons Sanctioned Under the ISA
01/09/12	77 FR 1017	Export and Reexport License Requirements for Certain Microwave and Millimeter Wave Electronic Components