



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

**Annual Report to the Congress for Fiscal Year 2009**

## Bureau of Industry and Security Fiscal Year 2009 Annual Report

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# **Bureau of Industry and Security Fiscal Year 2009 Annual Report**

This report summarizes the activities of the Department of Commerce's Bureau of Industry and Security (BIS) during fiscal year (FY) 2009, from October 1, 2008, through September 30, 2009.

BIS advances U.S. national security, foreign policy, and economic objectives by ensuring an effective export control and treaty compliance system, and by promoting continued U.S. leadership in strategic technologies. BIS accomplishes this mission by maintaining and strengthening an adaptable, efficient, and effective export control and treaty compliance systems.

Items subject to BIS's regulatory jurisdiction have chiefly commercial uses, but also can be used in conventional arms or weapons of mass destruction applications, terrorist activities, or human rights abuses. These items are generally referred to as dual-use items. BIS has primary responsibility, in coordination with several other agencies, for implementing U.S. export control policy on dual-use commodities, software, and technology. To accomplish its objectives, BIS administers, and amends as necessary, the Export Administration Regulations (EAR). The EAR set forth license requirements and licensing policy for the exports of dual-use items.

A central area of focus is implementation of export controls agreed to in the four major multilateral export control regimes: the Australia Group (chemical and biological nonproliferation), the Missile Technology Control Regime, the Nuclear Suppliers

Group, and the Wassenaar Arrangement (conventional arms and related dual-use goods, software, and technologies). Other BIS regulations advance U.S. foreign policy and national security interests, including regulations that implement sanctions policies, execute legislation, specify licensing agency jurisdictional authority for a given item, and clarify the rights and obligations of U.S. exporters.

BIS consults closely with industry on the development of regulatory policy through its seven Technical Advisory Committees (TACs). The TACs provide valuable input regarding industry perspectives on trends in technology and the practicality and likely impact of export controls. In Fiscal Year 2009, the Technical Advisory Committees assisted BIS with implementation of agreements reached by the following multilateral regimes: the Wassenaar Arrangement, the Missile Technology Control Regime, and the Australia Group. The TACs also advised BIS on numerous other subjects, including encryption and thermal imaging cameras.

In addition, to ensure that the exporting community and other members of the public have a means to provide their views, BIS solicits public comments on new final or proposed rules that it publishes.

The enforcement of both the U.S. dual-use export control laws and regulations and the U.S. antiboycott regulations is a critical component of the BIS mission.

Enforcement efforts encourage compliance, prevent and deter violations, disrupt illicit activities, and bring violators to justice. BIS

achieves these important objectives through a law enforcement program focused on parties engaged in exports of sensitive commodities, software, and technology to end-uses, end-users, and destinations of concern.

## **Introduction**

FY 2009 marked the beginning of significant export control reform efforts.

On August 13, President Obama called for a broad-based interagency review of the U.S. export control system, including both the dual-use items that are designed for civilian purposes but often have military applications, as well as defense trade processes.

At BIS's annual Update Conference on Export Controls on October 1, Secretary of Commerce Gary Locke announced that BIS would begin working with its colleagues within Defense, Energy and State to support the president's initiative.

In addition to ongoing work with export control reforms, BIS continued its efforts to adapt policies to important geopolitical, security, technological, and market developments.

## **Export Control Policy and Regulations**

### **Foreign Policy-Based Controls**

Pursuant to the President's direction in a memorandum dated April 13, 2009, BIS published a new rule on September 8, 2009, amending the EAR to expand limited types of exports and reexports to Cuba by revising two existing License Exceptions and by creating a new License Exception for certain

exports and reexports to Cuba. The amendment also revised the scope of existing licensing policy regarding certain exports and reexports of telecommunications items to Cuba.

More specifically, the amendment revised the License Exception authorizing exports of gift parcels to Cuba by adding non-sensitive items such as clothing to the list of items eligible for inclusion in such parcels, and by removing requirements that the recipient of donated gift parcels be a member of the immediate family of the donor, and that only one gift parcel per month be sent to the same household. Now, the License Exception authorizes a donor to send one gift parcel per month to any individual (other than certain Cuban Government or Cuban Communist Party officials) or to a charitable, educational, or religious organization in Cuba that is not administered or controlled by the Cuban government. The amendment also increased the combined total domestic retail value of all non-food items included in authorized gift parcels from \$400 to \$800.

The revision to the License Exception for personal baggage removed the 44-pound weight limit for personal baggage that previously applied to most travelers from the United States to Cuba. The amendment also added a new License Exception for donated consumer communications devices that authorizes the export and reexport to Cuba without an individual validated license of certain computers and software, mobile phones, and satellite receivers.

The amendment also revised licensing policy to allow case-by-case review of applications to export or reexport items (including commodities, software and technology) 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 and satellite television service to Cuba.

The President directed these actions to enhance the free flow of information to and from Cuba and to promote contacts between Americans and their relatives who reside in Cuba as a means of encouraging positive change in Cuba. These changes are consistent with the ongoing support the United States has provided to individuals and nongovernmental organizations that support democracy-building efforts in Cuba and do not suspend or terminate the United States embargo of Cuba.

In response to the Government of Burma's continued repression of the democratic opposition in Burma, and consistent with Executive Order 13047 of May 20, 1997, Executive Order 13310 of July 28, 2003, Executive Order 13448 of October 18, 2007, and the Trade Sanctions Reform and Export Enhancement Act (Title IX of Pub. L. 106-387), the Bureau of Industry and Security (BIS) previously amended the Export Administration Regulations (EAR) on October 24, 2007 to impose a license requirement for most exports, reexports, or transfers of items subject to the EAR to persons whose property and interests in property are blocked pursuant to those Executive Orders. In light of the Government of Burma's continued repression of the democratic opposition in Burma and unwillingness to respond to the calls of the Burmese people for genuine dialogue that will lead to a democratic transition in Burma, a final rule published on January 8, 2009 amended the EAR to extend these existing licensing requirements to persons whose property and interests in

property are blocked pursuant to Executive Order 13464 of April 30, 2008.

On January 15, 2009, BIS created a new license requirements for certain reexports to Iran and for exports and reexports to parties designated by the Department of the Treasury, Office of Foreign Assets Control pursuant to Executive Order 13382 as proliferators of weapons of mass destruction or their supporters. The rule also made other changes to the EAR that clarify license requirements and prohibitions with respect to Iran.

### **Entity List-related Developments**

In September 2009, BIS published a final rule adding transfers (in-country) to the scope of license requirements for entities on BIS's Entity List (Supp. No. 4 to Part 744 of the EAR). Pursuant to Section 740.11, BIS may add entities for which there is reasonable cause, based on specific and articulable facts, that the entities have been involved, are involved, or pose a significant risk of being or becoming involved, in activities that are contrary to the national security or foreign policy interests of the United States. Entities acting on behalf of such entities may also be added to the Entity List.

The Expanded Entity List rule also provides a procedure for listed entities to request removal from or modification to the list and identified the End-User Review Committee (ERC), chaired by BIS, as the inter-agency group that will consider Entity List matters. In FY 2009, BIS processed sixteen requests for removal from the Entity List. Additionally, BIS removed three entities from the Entity List based on the annual ERC review requirement set forth in the EAR.

## **Regulation Developments**

### **Encryption**

Working with the National Security Agency (NSA) and its other interagency partners, BIS published a rule on October 3, 2008, to simplify and update the encryption provisions of the EAR. In coordination with NSA, BIS continues to review export controls on encryption products.

### **Short Supply Controls**

BIS implements short supply controls on Western Red Cedar, as required by section 7(i) of the EAA. Section 3(2)(c) of the EAA also authorizes the President to prohibit or curtail the export of goods “where necessary to protect the domestic economy from the excessive drain of scarce materials and to reduce the serious inflationary impact of foreign demand.” BIS does not currently maintain any export controls or monitor items under sections 7(a) or (b), which authorize the imposition of controls and monitoring, respectively, on any commodities in short supply. BIS administers export controls under the Energy Policy and Conservation Act, the Mineral Leasing Act, the Naval Petroleum Reserves Production Act, the Outer Continental Shelf Lands Act, and the Forest Resources Conservation and Shortage Relief Act, as amended.

## **Export Licensing**

### **Export License Processing**

In FY 2009, BIS processed 20,351 export license applications valued at approximately \$62.4 billion. This marked a decrease of four percent from the 21,293 applications processed in FY 2008. BIS approved 17,086 license applications (84 percent),

returned 3,134 applications without action (15 percent), and denied 131 applications (less than one percent). In FY 2009, BIS continued to ensure the timely review of all license applications, reducing BIS’s average processing time from 27 days to 26 days.

The license applications with the highest value—\$31.9 billion—were for the export of crude oil. The greatest number of license application approvals under one commodity classification was for chemical manufacturing facilities and equipment (Export Control Classification Number (ECCN) 2B350), with 2,101 approved applications for exports and reexports worth \$232.5 million.

China was the destination for the largest number of approved license applications. BIS approved 2,082 license applications for exports to China, valued at more than \$6.2 billion. Thirty-six percent of these were for deemed export licenses to release controlled technology or source code to Chinese nationals working in U.S. companies and universities. In FY 2009, the average processing time for all approved licenses to China was 33 days, which is the same average processing time in FY2008.

### **Licensing Impact**

BIS obtains data from the Bureau of the Census (Census) on exports subject to BIS licensing requirements to evaluate the economic impact that export controls are having on U.S. interests. For calendar year 2008 (the most recent data available to BIS for this report), U.S. companies exported \$3.1 billion of licensed items (of which 7.5 percent were exported under a special comprehensive license), and \$14.0 billion of items under a license exception, representing 0.2 percent and 1.1 percent, respectively, of overall U.S. trade. During the most recent

two-year validation period for licenses (2006-2008), companies utilized 47.8 percent of licenses (by count) for controlled exports (not including software and technology) approved by BIS.

BIS is working with Census and the Department of Homeland Security's U.S. Customs and Border Protection (CBP) to improve the Automated Export System (AES) and increase exporter compliance with the EAR.

### **Cases Escalated for Dispute Resolution**

Under Executive Order 12981, BIS's Operating Committee (OC) with membership from the Departments of Commerce, Defense, Energy, and State resolves license applications where there is disagreement among the relevant U.S. Government agencies regarding the appropriate licensing action. In FY 2009, 301 cases were escalated to the OC for dispute resolution. The average processing time for these cases was 24 days. Of these 301 cases, 33 were further escalated to the Assistant Secretary-level Advisory Committee on Export Policy (ACEP) for resolution.

### **Commodity Classifications**

In order to ascertain whether an export license is required from BIS, an exporter needs to classify the item to be exported by determining the ECCN and may request an official classification from BIS. In FY 2009, BIS processed 5,878 classification request applications in an average of 37 days.

### **Technical Reviews and Licensing of Encryption Items**

In FY 2009, BIS processed 2,441 technical review requests for a total of 3,937 encryption items. Most items submitted for review were eligible for export as "ENC Unrestricted" (2,319) or "mass market" (951) encryption commodities and software eligible for export and reexport under License Exception or "no license required" (NLR) to both government and non-government end-users in most countries.

BIS also approved approximately 1,960 license applications for the export or reexport of "restricted" encryption products (such as high-end routers and other network infrastructure equipment) and technology outside the U.S. and Canada, to non-sanctioned end-users outside Country Group E:1.

### **Immigration and Customs Enforcement and Customs and Border Protection Requests for License Determinations**

BIS analyzes cases received from Immigration and Customs Enforcement (ICE), and Customs and Border Protection (CBP). CBP and ICE inspect shipments prior to export. If there is a question regarding the export licensing documentation, ICE and CBP will detain the shipment and request a licensing determination (LD) from BIS.

The determination provided by BIS contributes to ICE and CBP's decision on the action to be taken. In FY 2009, BIS completed approximately 570 LDs for CBP and ICE in an average of 9 days.

### **Federal Bureau of Investigations (FBI) Requests for License Determinations**

BIS analyzes cases received from FBI and provides a licensing determination, which contributes to FBI's decision on the action

to be taken. In FY 2009, BIS completed approximately 101 LDs for the FBI.

### **Export Enforcement Licensing Determinations**

#### **Export Enforcement**

License Determinations (LDs) are used to support Customs and BIS enforcement actions connected with potential violations of the EAR. In FY 2009, BIS completed 505 enforcement LDs in an average of 27 days.

#### **Commodity Jurisdiction Determinations**

A commodity jurisdiction (CJ) request is used to determine whether an item or service is subject to the export licensing authority of the Department of Commerce or the Department of State, Directorate of Defense Trade Controls (DDTC). Exporters may request a CJ determination by submitting the request to DDTC, which has final jurisdiction determination authority. In FY 2009, BIS processed 674 CJ requests in an average of 42 days.

#### **Special Comprehensive Licenses, Internal Control Program Reviews, Export Compliance Programs, and the New Validated End-User (VEU) Program**

In an effort to streamline licensing procedures while protecting U.S. national security, BIS administers special license and authorization programs.

In FY09, BIS conducted nine reviews of Special Comprehensive Licenses (SCL) issued to qualified exporters and consignees in place of individual export licenses. BIS also conducted 13 Export Management and Compliance Program (EMCP) reviews of corporate written compliance programs and

conducted four two-day seminars on how to develop an EMCP in various U.S. cities.

BIS continued to implement the VEU authorization created in FY 2007. In FY 2009, BIS completed assessments of 5 end-user validation requests. Two additional companies were granted VEU status, one company in China and one company in India.

### **Export Enforcement**

#### **Penalties**

BIS investigations in FY 2009 resulted in the criminal conviction of 33 individuals and businesses for export violations, as compared to 40 convictions in FY 2008. The penalties for these convictions came to \$455,409 in criminal fines, more than \$1.5 million in forfeitures, and 886 months of imprisonment; compared to more than \$2.7 million in criminal fines, \$800,000 in forfeitures, and 218 months of imprisonment in FY 2008.

In FY 2009, BIS investigations resulted in the completion of 54 administrative cases against individuals and businesses and more than \$14.5 million in administrative penalties, as compared to 56 cases and more than \$3.6 million in administrative penalties in FY 2008. Of the 54 closed cases, three involved antiboycott violations that resulted in penalties of \$124,475, as compared to six antiboycott cases that involved \$162,450 in penalties in FY 2008.

#### **Antiboycott Activities**

During FY 2009, three entities agreed to pay civil penalties totaling \$124,475 to settle allegations that they violated the antiboycott provisions of the EAR.



In FY 2009, BIS responded to 1,287 requests from companies for guidance on compliance with the antiboycott regulations. BIS continued to reach out to exporters, manufacturers, freight forwarders, bankers, and attorneys involved in international trade, and to provide extensive counseling to individual companies with specific boycott problems. OAC provided export counseling to a U.S. company seeking to remove boycott-related language from a tender originating in Libya.

### **Preventive Enforcement**

In FY 2009, BIS continued to emphasize its preventive and compliance enforcement activity. Export Enforcement officials participate in the export licensing process by making recommendations on proposed export transactions, detaining shipments believed to have been undertaken in violation of the EAR, and in some significant cases seeking the issuance of Temporary Denial Orders to prevent imminent export violations.

End-use checks continue to play a valuable preventive enforcement role in confirming the bona fides of end-users, ensuring that items will be or have been properly used as authorized and that license conditions are adhered to. BIS end-use checks also have uncovered improper or unauthorized reexports or diversions of items subject to BIS jurisdiction.

In FY 2009, BIS completed 737 end-use checks in over 30 countries. Of these 737 checks, 101 were Pre-License Checks (PLC) and 636 were Post-Shipment Verifications (PSV). To conduct these checks, BIS maintains Export Control Officers (ECOs) in U.S. Embassies and Consulates in Moscow, Beijing, Hong Kong, New Delhi,

and Abu Dhabi. Approximately 55 percent of the checks were conducted by BIS ECOs. The remaining checks were conducted by Office of Export Enforcement Special Agents deployed from the United States to conduct end-use checks in certain countries and by Foreign Commercial Service Officers and support personnel stationed at various U.S. Embassies. BIS used the results of the negative checks to prevent future exports to unsuitable end-users and to take enforcement action where appropriate.

In situations where BIS cannot make a recommendation on an end-use check because the U.S. Government was unable to conduct the check or was otherwise unable to verify the existence or authenticity of the end-user, the end-user may be considered for inclusion on the Entity List or the Unverified List. The presence of an end-user on the Entity List provides notice to the public that certain exports, reexports, and transfers (in-country) to parties identified on the Entity List require a license from BIS and that availability of License Exceptions in such transactions is limited. Any transaction in which an end-user listed on the Unverified List is a party will be deemed by BIS to raise a Red Flag with respect to such transaction within the meaning of the guidance set forth in Supplement No. 3 to 15 C.F.R. Part 732.

BIS completed a significant number of additional preventive enforcement actions in FY 2009, including the issuance of 207 warning letters; 71 detentions; 16 seizures; Temporary Denial Orders against five companies; renewals of Temporary Denial Orders previously issued against 10 individuals and 17 companies; related-persons orders against six individuals; four denial orders under Section 11(h) of the EAA (which authorizes denial of export privileges of parties convicted under certain

Federal statutes); and 927 outreach contacts with industry.

For additional information related to significant BIS enforcement activities, see Appendixes C and D.

## **Industry Outreach Activities**

### **Seminars and Conferences**

In Fiscal Year 2009, BIS reached over 3,700 people through 42 domestic export control outreach seminars conducted in 18 states. These seminars provided guidance to new and experienced exporters regarding the EAR, changes in export policy, and licensing procedures. More than 93 percent of attendees rated the seminars either “good” or “excellent” in FY 2009. BIS held its 22nd annual Update Conference on Export Controls and Policy on September 30 - October 2, 2009, in Washington, D.C., which attracted over 1,000 participants. Video and slide presentations from the Update 2009 Conference on Export Controls and Policy were made available online to the public.

BIS has an online training room that provides an introductory series of easy-to-use training modules, including six modules that mirror content provided in the Essentials of Export Controls seminar that BIS currently offers around the United States. This service offers exporters and reexporters—particularly small and medium-sized enterprises—with a cost-saving mechanism to learn about U.S. export controls. The training modules were viewed almost 64,000 times and the accompanying transcripts were viewed over 26,000 times. BIS continues to offer a variety of online webinars which were viewed close to 20,000

times with the accompanying webinar slides downloaded over 10,000 times.

In addition to BIS seminars, Web seminars, and annual conferences, BIS worked with a number of public and private-sector organizations to introduce audiences in specific business and technology sectors to BIS’s mission and services. These partnerships also provide additional insight into technology and market developments in key sectors of the economy. BIS supported 38 such programs, which reached more than 2,100 people through formal conference presentations.

BIS supports the interagency Trade Promotion Coordinating Committee (TPCC) as part of its U.S. Export Pavilion and Trade Officer Training Conference. In FY 2009, BIS participated in three trade shows. BIS also supports the TPCC’s weeklong Trade Officer’s Training Conferences, held three times a year in Rosslyn, Virginia.

In addition, BIS continued to focus on the enforcement aspects of deemed export compliance and expanded outreach efforts involving individuals and companies not previously participating in the U.S. export control system through submission of applications for export licenses. In FY 2009, BIS conducted over 500 enforcement outreaches to such individuals and companies, including deemed export enforcement outreach contacts. BIS also initiated 27 leads and cases involving allegations of deemed export licensing violations.

BIS continued its focused outreach to the freight forwarding community in FY 2009 by conducting outreach presentations to freight forwarders and national forwarding associations.

## **Project Guardian**

BIS maintains a constructive and cooperative relationship with the business community through outreach programs sponsored by BIS's Export Enforcement arm. BIS's Project Guardian focuses on specific goods and technologies that illicit proliferation networks actively seek to acquire. BIS contacts U.S. manufacturers and exporters of these goods and technologies to apprise them of the acquisition threat and to solicit cooperation in identifying and responding to suspicious foreign purchase requests. In FY 2009, BIS conducted 26 Project Guardian outreach contacts.

## **Counseling**

BIS regulatory specialists assisted approximately 54,000 business representatives in one-on-one counseling sessions through its telephone counseling program at BIS's Outreach and Educational Services Division in Washington, D.C., and at the Western Regional Office in California. Through this program, BIS provides guidance on regulations, policies, and practices and helps to increase compliance with U.S. export control regulations.

## **International Cooperation**

BIS conducted workshops in Washington, D.C., and Mexico City, Mexico, as part of the Security and Prosperity Partnership of North America (SPP). The SPP, which was established in March 2005, aids Canada, Mexico, and the United States in aligning their export control systems and to otherwise secure trade in the region.

## **International Regimes and Treaty Compliance**

BIS plays an important role in the U.S. Government's efforts to develop and refine the control lists and operational guidelines for the four major multilateral export control regimes: the Australia Group (chemical and biological weapons), the Missile Technology Control Regime, the Nuclear Suppliers Group, and the Wassenaar Arrangement (conventional arms and related dual-use items).

BIS also administers the industry compliance program for the Chemical Weapons Convention (CWC) and is a lead agency for implementation of the Additional Protocol (AP). The CWC bans the development, production, stockpiling, and use of chemical weapons and provides for an extensive verification regime to ensure adherence to its terms. BIS works actively with other CWC States Parties and the Technical Secretariat of the Organization for the Prohibition of Chemical Weapons to ensure that all 188 States Parties to the CWC are implementing the CWC's provisions in a rigorous, analytically sound, and equitable manner. In FY09, BIS began administering the compliance program for the AP with that portion of the private sector which is involved in nuclear fuel cycle activities, but not subject to the jurisdiction of the Nuclear Regulatory Commission. The AP is a bilateral treaty that supplements and amends verification arrangements under the existing "Agreement Between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States" of November 18, 1977, which entered into force on December 9, 1980. Its objective is to promote U.S. nonproliferation goals by demonstrating that implementing the AP does not place Non-nuclear Weapons States

Parties to the Nuclear Nonproliferation Treaty (NPT) at a commercial disadvantage.

### **Australia Group**

The Australia Group (AG) was formed in 1985 to help stem the proliferation of chemical and biological weapons through harmonized export controls. The AG now includes 40 countries and the European Union. In FY 2009, the AG participants reaffirmed the AG's commitment to assisting countries in meeting their United Nations Security Council Resolution (UNSCR) 1540 obligations to establish effective laws to prevent chemical, nuclear, and biological weapons (BW) proliferation. At the 2009 AG Plenary meeting held September 21-25, the United States successfully advocated for revision of the common control list to include definitions for alloys and nominal size. The Plenary also agreed to remove white pox from the list of biological agents as all agreed that this is the same as the variola virus which is also on the list.

### **Missile Technology Control Regime**

The United States has been a member of the Missile Technology Control Regime (MTCR) since the MTCR's inception in 1987. The MTCR currently includes 34 member countries that have agreed to coordinate their national export controls to prevent missile proliferation.

During the November 2009 annual Plenary, the MTCR partners discussed the direct relevance of UNSCRs 1718 (North Korea) and 1737 and 1747 (Iran) to MTCR export controls. The MTCR partners discussed the importance for all States to take all necessary steps at a national level to fully and effectively implement the missile-relevant provisions of these resolutions. The

growing interest by many states in cooperating with or possibly adhering to the MTCR was discussed and the Plenary supported the Chair's ongoing outreach efforts to non-members.

The MTCR also held a Technical Experts meeting in conjunction with the Plenary to discuss changes to the MTCR control list including adding controls for copper infiltrated tungsten, silver infiltrated tungsten, and tungsten alloys in solid form (including dimensional aspects) when these items are for fabrication of missile components; clarifying controls on high energy density materials usable in missile systems, excluding certain widely used fuels and biofuels; and deleting turbo-compound engines from the controls as this term is not used by the international community to refer to turbojet or turbofan engines.

### **Nuclear Suppliers Group**

The NSG is a multilateral export control regime that was formally established in 1992 and now includes 46 members. The regime seeks to impede the proliferation of nuclear weapons through the implementation of guidelines for the control of nuclear and nuclear-related exports. Members pursue the aims of the NSG through voluntary adherence to the NSG Guidelines, which are adopted by consensus, and through exchanges of information on development of nuclear proliferation concern.

The NSG Plenary and related meetings were held in June 2009 in Budapest, Hungary. The United States, working with key like-minded Participating Governments (PG), continued efforts to reach consensus on the proposal to strengthen controls on transfers of enrichment and reprocessing (ENR) technology. Considerable progress was made on the issue during the Budapest

meetings. A special Consultative Group (CG) meeting on the ENR issue was held in Vienna from September 30-October 1, 2009.

With respect to the NSG Annexes, an agreement to modify the controls on Dimensional Inspection Equipment is pending the final publication of the new ISO standard for this type equipment. Controls on Stable Isotope Separation Equipment continued to be reviewed.

### **Wassenaar Arrangement**

The Wassenaar Arrangement (Wassenaar) is a multilateral arrangement addressing export controls on conventional arms and sensitive dual-use goods and technologies.

Wassenaar was founded in 1996 to replace the East-West technology control program under the Coordinating Committee (COCOM) regime that ended in 1994. There are currently 40 countries participating in Wassenaar.

Members are also required to report approvals, transfers, and denials of certain controlled dual-use goods and technologies. Reporting denials helps to bring to the attention of member countries attempts to obtain strategic items that may undermine the objectives of Wassenaar.

The fifteenth Plenary Meeting of the Wassenaar Arrangement was held in Vienna, Austria on December 2-3, 2009. In 2009, Wassenaar members continued to focus on the Arrangement's overall functioning and its contribution to regional and international security and stability. The Wassenaar Plenary reaffirmed the importance of a focused "Regional Views" exercise based on substantive and useful information sharing among its members. National Papers and views addressing

proliferation situations and arms procurement activities in seven countries and three regions were discussed. Further discussions took place on the issue of destabilizing accumulations of conventional arms and sensitive dual-use goods and technologies in order to address current and future challenges to regional and international security and stability.

Wassenaar continues to keep pace with advances in technology, market trends and international security developments involving the spread to military and dual-use goods and technologies. Wassenaar members agreed to amend entries on the national control lists, including in technically complex and challenging areas, such as Information Security (encryption), low-light level and infrared sensors, and reception equipment for Global Navigation Satellite Systems (GNSS). Members also actively worked to make the existing control text more easily understood and "user-friendly" for exporters and licensing officials by removing unnecessary language and editing grammar and punctuation.

Finally, Members agreed at the Wassenaar Plenary to conduct a technical briefing on changes to the Wassenaar control lists for several non-member countries in 2010.

### **Treaty Compliance**

#### **Chemical Weapons Convention**

The United States ratified the Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and their Destruction (the Chemical Weapons Convention, or CWC) on April 25, 1997. There are 188 States Parties to the CWC.

The CWC requires certain commercial chemical facilities to submit data declarations that include information on chemical production, processing, consumption, and import/export activities. In the United States, BIS collects this information, compiles it, and forwards it to the Department of State for transmittal to the Organisation for the Prohibition of Chemical Weapons (OPCW) Technical Secretariat (TS), which is charged with carrying out verification functions under the CWC.

During FY 2009, BIS collected declarations and reports from 567 facilities and trading companies and submitted them to the OPCW in accordance with the CWC. BIS also provided advice and support to 21 chemical plant sites which were selected for inspection by the OPCW, hosted the inspections, and protected the sites' confidential business information, while demonstrating their compliance with the CWC. Most of these companies had never been inspected before and benefited from BIS's efforts to guide them through the process. BIS also responded to five requests from industry by providing Site Assistance Visits to companies with plant sites subject to inspection.

In 2009, BIS gathered the necessary data and prepared the Congressionally-mandated reports regarding the implementation of the Chemical Weapons Convention. These reports include: (1) an annual report on the cost of implementation to both industry and the government; and (2) an annual statement regarding the impact of the treaty on availability of Schedule 1 chemicals and toxins to industry.

BIS provided support to the U.S. Delegation to the OPCW for meetings of the Executive Council and the Conference of States

Parties, as well as other meetings of the policy-making organs of the OPCW.

### **U.S. Additional Protocol to the U.S.- International Atomic Energy Agency (IAEA) Safeguards Agreement**

The Additional Protocol augments the U.S.-IAEA Safeguards Agreement by requiring the United States to provide the IAEA with information on certain civil nuclear and nuclear-related items, materials, and activities not currently covered by the Safeguards Agreement.

The Additional Protocol entered into force in the United States on January 6, 2009. Under Executive Order 13458, BIS was designated as Lead Agency for all subject commercial activities and locations not licensed by the Nuclear Regulatory Commission (NRC) or an NRC Agreement State, and not located on certain other government locations. BIS published its final Additional Protocol Regulation (APR) on October 31, 2008.

BIS compiles the AP declaration on behalf of all U.S. Government agencies and prepared the initial declaration to the IAEA, which was submitted on July 5, 2009. This declaration contains 264 activities. During FY 2009, BIS also submitted two quarterly export reports for nuclear equipment; the first listed 47 exports, and the second listed 43 exports.

During FY 2009, BIS worked with the NRC to provide outreach and assistance to the industry affected by the Additional Protocol. These outreach vehicles included: the NEI International Uranium Fuel Seminar (October); Joint Commerce/NRC Informational Seminars (November); meeting of Organization of Agreement States (January); Conference of Radiation

Control Program Directors (January); 2009 Annual Nuclear Materials Management and Safeguards System Users Group (NMMSS Users Group) meeting (May); the 4th Annual Fuel Cycle Information Exchange (June); 2009 National Mining Association/NRC Uranium Recovery Workshop (July); and Institute of Nuclear Materials Management (INMM) 50th Annual Meeting (July).

BIS participated in interagency preparations for anticipated Complementary Access Visits under the Additional Protocol, including a mock exercise at a facility under joint responsibility of BIS, NRC, and the Department of Energy.

### **Biological Weapons Convention**

The Biological Weapons Convention (BWC) prohibits developing, producing, stockpiling, or otherwise acquiring or retaining biological agents or toxins for non-peaceful purposes. The BWC entered into force in 1975. In FY 2009, BIS supported U.S. efforts to reinvigorate the BWC without a verification protocol.

### **U.S. Defense Industrial and Technological Base Programs and Advocacy Activities**

BIS's mission includes supporting continued U.S. technology leadership in industries that are essential to U.S. national security. Activities in this regard include:

#### **Administering the Defense Priorities and Allocations System**

BIS's administration of the Defense Priorities and Allocations System (DPAS) continues to play an important role in supporting the deployment of U.S. and allied forces abroad, meeting critical national

defense and homeland security requirements, and facilitating recovery from natural disasters.

In FY 2009, in cooperation with the Department of Defense, BIS expedited the delivery of critical items in support of operations in Afghanistan and Iraq. In addition, in cooperation with the Department of Homeland Security, BIS expedited the delivery of equipment to support critical infrastructure preparedness and restoration programs, including uninterruptible power supplies and intrusion detection prevention equipment to protect the BIS network. BIS provided DPAS guidance in support of interagency efforts such as the biannual update of the National Infrastructure Protection Plan (NIPP) and with the Departments of Health and Human Services and Homeland Security with respect to protection equipment for the 2009 influenza season.

The Defense Production Act (DPA), the statutory authority for the DPAS, was reauthorized on September 30, 2009 for five years. The legislation that reauthorized the DPA also broadened the scope of DPAS to include assistance to foreign critical infrastructure. The 2009 legislation requires that all delegate agencies have consistent and unified rules for the use of their priorities and allocations authority. BIS is working with the relevant agencies to implement this requirement.

#### **Committee on Foreign Investment in the United States**

BIS's defense industrial base responsibilities extend to the evaluation of foreign investments in U.S. industries through participation in the Committee on Foreign Investment in the United States (CFIUS). In FY 2009, BIS worked closely with

Department of Commerce's International Trade Administration (ITA) and interagency CFIUS partners to implement the Foreign Investment and National Security Act of 2007, through regulations published by the Department of the Treasury on November 21, 2008. BIS, in coordination with ITA, reviewed 75 CFIUS filings to determine the effects of those transactions on the national security of the United States.

### **Monitoring the Strength of the U.S. Defense Industrial and Technological Base**

In FY 2009, BIS completed two assessments that were initiated in FY 2008:

- *U.S. Integrated Circuit Fabrication and Design Capabilities Assessment:* The purpose of this study was to assess the health of U.S. designers and manufacturers of integrated circuits for defense critical and essential circuit applications and the ability of U.S. designers and manufacturers to meet the needs of the DOD and its contractors.

Overall, companies reported broad capability in the United States to manufacture and design both conventional and radiation resistant Integrated Circuits (IC) across almost all technology nodes, materials, wafer sizes, and device types. Based on projections through 2011, this core capability reportedly will be maintained despite some increases in outsourcing to non-U.S. locations.

During the 2003-2006 period, U.S. manufacturing and design activity was supported by significant growth in corporate net sales, research and development (R&D) spending, and capital expenditures. The vast majority

of R&D and capital expenditures was allocated to activities within the United States, with a small but growing portion directed to overseas operations.

It is important to note that five large-size fabricators dominate most facets of the U.S. IC industry in terms of production, design, employment, and financial performance. However, small- and medium-size fabrication and fabless companies serving commercial and defense markets are important to the supply base. The bulk of the capability to manufacture radiation resistant ICs and ICs using non-standard materials, which are required for critical industrial and national security applications, resides with these companies.

- *Counterfeit Electronics:* This study provided statistics on the extent of the infiltration of counterfeits into U.S. defense and industrial supply chains, an understanding of industry and government practices that contribute to the problem, and best practices and recommendations for handling and preventing counterfeit electronics.

Office of Technology Evaluation (OTE) surveyed five segments of the U.S. supply chain – original component manufacturers (OCMs), distributors and brokers, circuit board assemblers, prime contractors and subcontractors, and Department of Defense (DOD) agencies. The objectives of the survey were to assess the volume of suspected or confirmed counterfeit parts; types of devices being counterfeited; practices employed in the procurement and management of electronic parts; recordkeeping and reporting practices; techniques used to detect counterfeit



parts; and best practices employed to control the infiltration of counterfeits.

This assessment focused on discrete electronic components, microcircuits, and circuit board products – key elements of electronic systems that support national security, industrial, and commercial missions and operations. A total of 387 companies and organizations, representing all five segments of the supply chain, participated in the study covering the 2005 to 2008 reporting period.

OIE data revealed that 39 percent of companies and organizations participating in the survey encountered counterfeit electronics during the four-year period. Moreover, information collected highlighted an increasing number of counterfeit incidents being detected, rising from 3,868 incidents in 2005 to 9,356 incidents in 2008. These counterfeit incidents included multiple versions of DOD qualified parts and components.

The rise of counterfeit parts in the supply chain is exacerbated by demonstrated weaknesses in inventory management, procurement procedures, recordkeeping, reporting practices, inspection and testing protocols, and communication within and across all industry and government organizations.

BIS also began the following three assessments in FY 2009.

- *NASA Industrial Base*, which will assess the health and competitiveness of NASA suppliers for Human Space Flight Missions and the impact of the Space Shuttle Program termination in 2010.

- *Telecommunications Sector*, which will look at current and future projected use of foreign information and communication technology in this critical domestic sector.
- *Healthcare and Public Health Sector*, which will determine foreign sourcing and critical dependencies that could limit the ability of this important sector to support U.S. economic and national security needs.

BIS expects to complete the assessment in FY 2010. BIS also completed its thirteenth congressionally mandated report on the impact of offsets in defense trade. On April 29, 2009, BIS published a proposed rule to update its offset reporting requirement regulation in order to enhance the assessment of the economic effects of offsets. BIS published a final version of this rule on December 23, 2009.

In FY 2009, BIS reviewed 47 proposed transfers of excess defense equipment to foreign governments through the Department of Defense's Excess Defense Articles program and provided the Department of Defense with determinations as to whether these transfers would interfere with the ongoing sales or marketing activities of U.S. industry. BIS also reviewed 105 proposed international armament cooperative agreements and provided the Department of Defense with comments on these agreements' commercial implications and potential effects on the international competitive position of the U.S. defense industrial and technological base.

During FY 2009, BIS continued to co-chair the interagency National Defense Stockpile Market Impact Committee (MIC) with the Department of State's Office of

International Energy and Commodity Policy. The MIC advises the Defense National Stockpile Center on whether its proposed plans to sell portions of the remaining material held in the stockpile, no longer needed to support national defense purposes, would cause an undue disruption of the usual markets of producers, processors, and consumers of such materials.

### **Supporting the U.S. Defense Industry's International Competitiveness**

As part of BIS's ongoing efforts to monitor policies of foreign partners affecting the U.S. defense industrial base, BIS participated in an interagency delegation to Brussels in March 2009 to meet with European Union and European Defense Agency (EDA) officials and to discuss the European Union's defense procurement directive and the EDA's "Code of Conduct" on offsets. These discussions helped to increase understanding of the directive and the Code, assess their impact on the U.S. defense industrial base, and continue a dialogue with European Union and EDA officials critical to the development of the directive and the Code. BIS also

participated in an interagency delegation to Rome in March 2009 to discuss the EU directive and the EDA Code with representatives of the Letter of Intent Six (LOI-6) nations (France, Germany, Italy, Spain, Sweden, and the United Kingdom). These countries represent the largest defense markets in Europe.

In September 2009, BIS hosted an interagency delegation for a meeting with the Director of the Industrial Regional and Benefits at Industry Canada, the Canadian offset authority. The discussions focused on changes to Canada's Industrial and Regional Benefits program and its implementation.

BIS continued to administer the Department of Commerce's North Atlantic Treaty Organization (NATO) Security Investment Program (NSIP), a certification requirement for U.S. companies interested in competing to supply goods and services in NSIP-funded procurements.

During FY09, BIS approved 445 U.S. firms that were interested in participating in NATO procurement competitions.

## **Appendix A: BIS Mission Statement and Guiding Principles**

### **Bureau of Industry and Security Mission:**

Advance U.S. national security, foreign policy, and economic objectives by ensuring an effective export control and treaty compliance system and promoting continued U.S. strategic technology leadership.

### **Key Bureau Priorities:**

Maintain and Strengthen an Adaptable and Effective U.S. Export Control and Treaty Compliance System.

Integrate Non-U.S. Actors to Create a More Effective Global Export Control and Treaty Compliance System.

Eliminate Illicit Export Activity Outside the Global Export Control and Treaty Compliance System.

Ensure Continued U.S. Technology Leadership in Industries that are Essential to National Security.

### **Guiding Principles of the Bureau of Industry and Security**

*This statement of principles represents the guiding philosophy of the Commerce Department's Bureau of Industry and Security in approaching its activities and fulfilling its responsibilities. This statement is not intended to dictate any particular regulatory action or enforcement action.*

The Bureau's paramount concern is the security of the United States. The Bureau's mission is to protect the security of the United States, which includes its national security, economic

security, cybersecurity, and homeland security.

The Bureau's credibility—within government, with industry, and with the American people—depends upon its fidelity to this principle.

For example, in the area of dual-use export controls, the Bureau will vigorously administer and enforce such controls to stem the proliferation of weapons of mass destruction and the means of delivering them, halt the spread of weapons to terrorists or countries of concern, and further important U.S. foreign policy objectives. Where there is credible evidence suggesting that the export of a dual-use item threatens U.S. security, the Bureau must act to combat that threat.

Protecting U.S. security includes not only supporting U.S. national defense, but also ensuring the health of the U.S. economy and the competitiveness of U.S. industry.

The Bureau seeks to promote a strong and vibrant defense industrial base that can develop and provide technologies that will enable the United States to maintain its military superiority.

The Bureau must take great care to ensure that its regulations do not impose unreasonable restrictions on legitimate international commercial activity that is necessary for the health of U.S. industry. In protecting U.S. security, the Bureau must avoid actions that compromise the international competitiveness of U.S. industry without any appreciable national security benefits.

The Bureau strives to work in partnership with the private sector. The Bureau will seek to fulfill its mission, where possible, through public-private partnerships and market-based solutions.

U.S. security cannot be achieved without the active cooperation of the private sector, which today controls a greater share of critical U.S. resources than in the past. At the same time, the health of U.S. industry is dependent on U.S. security—of our borders, our critical infrastructures, and our computer networks.

The symbiotic relationship between industry and security should be reflected in the formulation, application, and enforcement of Bureau rules and policies.

The Bureau's activities and regulations need to be able to adapt to changing global conditions and challenges. The political, economic, technological, and security environment that exists today is substantially different than that of only a decade ago. Bureau activities and regulations can only be justified, and should only be maintained, to the extent that they reflect current global realities. Laws, regulations, or practices that do not take into account these realities—and that do not have sufficient flexibility to allow for adaptation in response to future changes—ultimately harm national security by imposing costs and burdens on U.S. industry without any corresponding benefit to U.S. security.

In the area of exports, these significant geopolitical changes suggest that the U.S. control regime—in the past, primarily list-based—must shift to a mix of list-based controls and controls that

target specific end-uses and end-users of concern.

The Bureau also should be creative in thinking about how new technologies can be utilized in designing better export controls and enforcing controls more effectively.

The Bureau's rules, policies, and decisions should be stated clearly, applied consistently, and followed faithfully. The Bureau's rules, policies, and decisions should be transparent and clearly stated. Once promulgated, Bureau rules and policies should be applied consistently, and Bureau action should be guided by precedent.

Uncertainty, and the delay it engenders, constitute a needless transaction cost on U.S. companies and citizens, hampering their ability to compete effectively. Voluntary compliance with Bureau rules and regulations should be encouraged and, to the extent appropriate, rewarded.

These precepts are particularly important with respect to the application and enforcement of export controls. An effective export control regime necessarily depends upon the private sector clearly understanding and seeking to implement Bureau rules and policies voluntarily.

Decision making should be fact-based, analytically sound, and consistent with governing laws and regulations. Bureau decisions should be made after careful review of all available and relevant facts and without any philosophical predisposition.

A "reasonable person" standard should be applied to all decisions: How would

a “reasonable person” decide this issue? The Bureau’s mission does not lend itself to “ideological” decision making, especially when it comes to its licensing and enforcement functions.

It is inappropriate to recommend outcomes based on an assumption that a position will be reviewed and “pared back” by another party, whether it be another office in the Bureau or another agency of the U.S. Government. Such an approach violates the public’s trust, undermines the Bureau’s credibility, and imposes substantial costs in terms of wasted time and effort.

The Bureau strives to work cooperatively with other parts of the U.S. Government and with state and local governments.

The Bureau shall seek to collaborate in a collegial and effective manner with other agencies and departments of the U.S. Government, including the National Security Council, the Department of Homeland Security, the State Department, the Defense Department, the Energy Department, and the intelligence community.

The Bureau shall consult with its oversight committees and other appropriate Members of Congress and congressional staff on matters of mutual interest.

The Bureau shall seek to enhance its relationships with state and local government officials and first responders to national emergencies.

International cooperation is critical to the Bureau’s activities. Fulfilling the Bureau’s mission of promoting security depends

heavily upon international cooperation with our principal trading partners and other countries of strategic importance, such as major transshipment hubs. Whether seeking to control the spread of dangerous goods and technologies, protect critical infrastructures, or ensure the existence of a strong defense industrial base, international cooperation is critical.

- With regard to export control laws in particular, effective enforcement is greatly enhanced by both international cooperation and an effort to harmonize the substance of U.S. laws with those of our principal trading partners.
- International cooperation, however, does not mean settling on the “lowest common denominator.” Where consensus cannot be broadly obtained, the Bureau will not abandon its principles, but should seek to achieve its goals through other means, including cooperation among smaller groups of like-minded partners.

*Nothing contained herein shall create any rights or benefits, substantive or procedural, enforceable by any party against BIS, its officers and employees, or any other person.*

## **Appendix B: Regulatory Changes in Fiscal Year 2009**

BIS published 26 *Federal Register* actions affecting the Export Administration Regulations. These actions included the following:

### **Export Control Initiatives**

To help ensure that the export control system adapts to address evolving economic and national security challenges, BIS pursued certain dual-use export control initiatives. On October 1, 2008, BIS published a rule streamlining and clarifying the determination of *de minimis* levels of U.S. content in foreign made items. On October 3, BIS published rules simplifying certain controls on encryption items and proposing establishment of a license exception for intra-company transfers.

### **Thermal Imaging**

BIS published a rule on May 22, 2009 that removed Commerce Control List based license requirements with respect to 36 destinations for certain thermal imaging cameras not incorporated into military commodities and not to be embedded in a civil product. The rule imposed a reporting requirement on such transactions; it also imposed a license requirement on certain foreign made military commodities that incorporate certain thermal imaging cameras.

### **Validated End-Users**

On April 29, 2009, BIS published a rule making additions and revisions to the list of approved end-users and eligible items for the People's Republic of China under the Authorization Validated End-User (VEU) program.

In a rule published on July 2, 2009, BIS listed an end-user in India approved to receive exports, reexports, and transfers of certain items under VEU.

### **Entity List**

During FY09, BIS published four rules revising the Entity List, some of which added entities that appear to be acting contrary to the national security or foreign policy interests of the United States, based on specific and articulable facts. Revisions also included removal or modification of entities, either in response to requests for removal or as part of the End-User Review Committee's Annual Review.

### **Systematic Review of the Commerce Control List**

BIS published a rule implementing changes as a result of a systematic review of the Commerce Control List. This rule, published on October 6, 2008, established more focused and rationalized controls in many entries.

### **Country Policy**

BIS published a rule on January 8, 2009, that revised license requirements for most exports, reexports, and transfers to Burma to persons listed in or designated pursuant to Executive Orders.

On January 15, 2009, BIS revised license requirements policy for Iran and for certain weapons of mass destruction proliferators.

A rule published on September 8, 2009, relaxed gift parcel and baggage restrictions to Cuba, created a new license exception for donated consumer communications devices,

and revised licensing policy regarding telecommunications.

### **End-Use and End-User Controls, Transfers**

BIS finalized certain changes and clarifications of policy regarding transfers and certain end-use and end-user controls. The rule, published on November 18, 2008, also finalized a new definition of “transfer.”

A subsequent rule, published on September 8, 2009, restricted transfers (in-country) to persons listed on the Entity List.

### **Wassenaar Arrangement**

On October 14, 2008, BIS published a rule amending the Commerce Control List to implement the agreement reached at the December 2007 plenary meeting of the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual Use Goods and Technologies. This rule revised control list entries in most categories and implemented controls on solar cells agreed to at the 2006 plenary.

### **Chemical and Biological Weapons**

On July 6, 2009, BIS implemented changes to the Commerce Control List resulting from 2008 Australia Group intersessional decisions and added to the list of states parties to the Chemical Weapons Convention. This (FY09 AG) rule also amended the list of countries which are States Parties to the CWC by adding four countries.

On October 27, 2008, BIS published a Notice of Inquiry: Impact of Implementation of the Chemical Weapons Convention on Commercial Activities Involving “Schedule 1” Chemicals through Calendar Year 2008,”

to collect information from industry to comply with Senate condition 9 to the articles of ratification of the Chemical Weapons Convention.

### **Additional Protocol**

On October 31, 2008, BIS published the Additional Protocol Regulations – Final Rule, to implement the provisions of the “Protocol Additional to the Agreement Between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in the United States of America.” The Additional Protocol is an agreement between the United States and the IAEA to allow monitoring and reporting of certain civil nuclear fuel cycle-related activities.

### **Aircraft**

On December 3, 2008, BIS published a rule clarifying export control jurisdiction for civil aircraft equipment under the Export Administration Regulations.

On May 6, 2009, BIS removed T 37 jet trainer aircraft and parts from the Commerce Control List.

### **Crime Control**

On August 11, 2009, BIS published a rule proposing revisions to the Commerce Control List to update and clarify crime control license requirements.

### **Offset Reporting Regulation**

On April 29, 2009, BIS published a proposed rule updating its Offset Reporting Regulation (15 CFR 701), which lists the information required for companies reporting under this section. The proposed amendments to the regulation clarify the

information BIS is seeking to receive from industry and would require more precise information on the industry sectors in which offset activity occurs.



## **Appendix C: Bureau of Industry and Security Organizational Structure and Administrative Information**

### **Performance Based Programs**

For budget and performance integration, BIS has continued to develop performance-based budgets based on OMB guidance. BIS budget submissions continue to be directly tied to the Bureau's performance goals and measures, and BIS will continue to develop performance-based budgets that display the cost of achieving its performance goals. As stated in OMB's Performance and Assessment Rating Tool (PART) findings, "Budget requests are integrated with performance goals and describe the anticipated effects of resource requirements on performance."

In the area of Strategic Management of Human Capital, leadership competencies were addressed with training sessions for BIS managers and supervisors covering three topics: prohibited harassment, managing performance and addressing misconduct. The training provided resources, guidance, and advice in understanding unlawful workplace harassment, improving poor performance and correcting improper employee conduct. To address feedback from an Organizational Assessment Survey, BIS launched two new award programs to reward outstanding employee accomplishment; the BIS Award for Innovation, and the Agent of the Year Award. BIS presented an individual and a team with the first BIS Awards for Innovation. BIS presented the first Agent of the Year award to a Special Agent from its Miami Field Office.

The major E-Gov initiative accomplishment for BIS in 2009 was continued success in its

program to replace the legacy export license processing system, while simultaneously meeting new information technology (IT) security challenges, including particularly stringent requirements for export control data.

The Export Control Automated Support System Redesign (ECASS-R) program is the multi-year effort to replace the legacy BIS export license processing system. The Export Control Automated Support System Redesign project has completed the first two Stages as planned and deployed three major components to production:

1. Simplified Network Application Process Redesign (SNAP-R) which allows for the electronic submission of license applications and supporting documentation,
2. Investigative Management System Redesign (IMS-R) a case management system used by the Export Enforcement Agents, and
3. BIS Export Control Cyber Infrastructure (BECCI-2) a secure application platform which meets NIST and FISMA IT security requirements for FIPS 199 "high impact" data systems.

The third stage of the Export Control Automated Support System Redesign is in development and when fully deployed will enable BIS to retire the legacy BIS export license processing system. The fully deployed system will provide BIS business users a modernized export licensing system while protecting mission critical export control system applications and data from foreign intrusions. The project is on schedule to replace the Legacy ECASS system by the end of fiscal year 2012.

Highlights of ECASS Redesign accomplishments in FY 2009 include:

1. The deployment of the Investigative Management System Redesign (IMS-R) to production in the first quarter of FY 2009, and
2. The deployment of the BIS Export Control Cyber Infrastructure (BECCI-2) to production in the first quarter of FY 2009.

In addition, BIS supported the President's Open Government Initiative by submitting two high value datasets for publication through Data.gov which is one of the Administration's flagship initiatives designed to increase public access to high value, machine readable datasets generated by the Executive Branch of the Federal Government. BIS also continued to meet its enterprise architecture, IT security, and Web public data dissemination requirements.

### **Administrative Initiatives**

BIS is in support of the Safety, Health, and Return to Employment (SHARE) initiatives to foster a safe and healthy work environment. During FY 2009, BIS successfully kept its injury and illness rate below two percent.

BIS also supports the Multi-Sector Workforce as part of the Obama Administration Initiative - Memorandum on Government Contracting. In support of this initiative BIS is involved in the Multi-Sector Workforce Working Group. BIS will continue to support the Fair Act Inventory as it relates to the Multi-Sector Workforce.

BIS participated in the implementation process for the new sPersonal Identity Verification 2 (PIV-2) badges under the Homeland Security Presidential Directive 12 (HSPD-12). Enrollment for the new badges

was conducted for Federal employees located at the Herbert C. Hoover Building (HCHB) beginning July 9, 2008. 246 of 249 employees were issued PIV-2 badges in FY 2009.

### **Cooperation with Auditing Agencies and Responses to Requests from the Public and the Courts**

#### *Auditing Agencies*

BIS continues to work with the Government Accountability Office (GAO) and the Department of Commerce's Office of Inspector General (OIG) on their studies of BIS programs and control systems, as well as to address all audit findings and recommendations. During FY 2009, BIS submitted periodic reports to the office of the Chief Financial Officer and Assistant Secretary for Administration on the status of BIS corrective actions relating to all open GAO and OIG recommendations. BIS management also monitored the progress of corrective actions undertaken on the basis of these reports.

Five GAO studies addressing BIS programs and activities were completed in FY 2009: (1) Review of the Committee on Foreign Investments in the United States (job code 120690); (2) The Makeup and Health of Selected Sectors of the Defense Supplier Base (job code 120693); (3) Chinese Semiconductor Manufacturing Capabilities (job code 320547); (4) Assessment of Progress on the Proliferation Security Initiative (PSI) (job code 320563); and (5) Review of Treasury's Office of Terrorism and Financial Intelligence (TFI) (job code 320608)

At the end of the fiscal year, seven GAO studies addressing BIS programs and activities were pending final reports: (1)

Export Controls Comparative Analysis (job code 120791); (2) Reliability of Defense Weapon System Components (job code 120802); (3) Review of the U.S. Embargo Against Cuba (job code 320648); (4) Iran Sanctions (job code 320673); (5) List of Sensitive Nuclear Facilities (job code 361100); (6) Nuclear Cooperation Agreements with Foreign Countries (“123 agreements”) (job code 361111); and (7) Current Deemed Exports Rule (job code 320704).

During FY 2009, the OIG did not complete any reviews addressing BIS programs and activities. However, the OIG has two open reviews pending final report, (1) FY 2009 FISMA Assessment of BIS IT Infrastructure (BI) (BIS002) OSE-19574, and (2) FY 2009 FISMA Assessment of Bureau of Export Control Cyber Infrastructure, Version 2 (BECCI-2), OSE-19575.

The various reviews and evaluations conducted during FY 2009 identified opportunities for improvement. In response and as a result of GAO’s and OIG’s efforts, BIS continues to improve its policies and internal controls in licensing and enforcement programs.

### **Public Requests for Information and Court-Ordered Searches**

BIS processed 91 Freedom of Information Act (FOIA) requests relating to export licensing and enforcement as well as other types of management information.

### **IT Security**

BIS strives toward full compliance with federal and Department of Commerce information technology security requirements. Two BIS systems, *BIS IT Infrastructure (BI) (BIS002)* and the *BIS*

*Export Control Cyberinfrastructure, Version 2 (BECCI-2) (BIS021)*, were the subject of the Department of Commerce Office of the Inspector General (OIG) reviews. The BIS information technology security workforce was also reviewed as part of the Department of Commerce OIG Information Technology Security Workforce Audit. The various reviews and evaluations conducted during FY 2009 identified opportunities for improvement. In response and as a result of the OIG’s efforts, BIS continues to improve its information technology security policies and internal controls.

Highlights for FY 2009 include: (1) Information technology security personnel participated in select commercial information technology security professional training courses; (2) The BIS IT Security Program Policy is currently being updated to include new requirements from the Department of Commerce, findings from the OIG review and new NIST Special Publication 800-53, Revision 3 requirements; (3) Compliance with annual information technology security awareness training requirements; (4) BIS has completed the transition of all its telecommunications circuits from the FTS2001 GSA contract to the Networx GSA contract. BIS will transition its data centers in FY 2010. As soon as the Networx Managed Internet Protocol Services (MTIPS) CLINs are made available BIS will provide fair opportunity, select a vendor, and transition its data centers; (5) BIS is a participant in the Department of Commerce Trusted Internet Connections (TIC) working group and has responded to all Department TIC data calls; and (6) BIS is on schedule to purchase Managed Internet Protocol Services (MTIPS) through the Networx contract.

## Appendix D: Summaries and Tables of Closed Export Enforcement Cases and Criminal Cases

**Table 1  
Criminal Case Convictions Fiscal Year 2009**

<b>Sentencing Date</b>	<b>Defendant</b>	<b>Criminal Charges</b>	<b>Criminal Sanctions</b>	<b>Case Details</b>
10/28/08	Behram Maghazehe	One count of making false statements in violation of 18 USC 1001	Five years probation, six months home confinement, and \$2,000 criminal fine	False statements related to the export of radiographic equipment to Iran via the United Arab Emirates
11/6/08	Robert Quinn	One count of making false statements in violation of 18 USC 1001	18 months probation	False statements related to the export of forklift truck parts to Iran
12/10/08	Nicholas Groos	Three counts of violating International Emergency Economic Powers Act in violation of 50 USC § 1705; and one count of making false statements in violation of 18 USC 1001	60 days prison, one year supervised release, and \$250,000 criminal fine	Export of firefighting equipment to Iran
12/12/08	Fawzi Mustapha Assi	One count of material support to a designated foreign terrorist organization in violation of 22 USC 2339	10 years prison and two years probation	Attempted export of night vision equipment to Hezbollah
1/30/09	James Gribbin	One count of conspiracy in violation of 18 USC 371	Three years probation	Export of laboratory equipment systems to Iran via the United Arab Emirates
3/25/09	Dawn Hanna	Five counts of violating International Emergency Economic Powers Act in violation of 50 USC § 1705; one count of making false statements in violation of 18 USC 1001; one count of conspiracy in violation of 18 USC 371; and one count of money laundering in violation of 18 USC 1956	72 months prison, 2 years supervised release, and \$1,141,557 criminal forfeiture	Export of computer communication and GPS equipment to Iraq

4/7/09	Shu Quan-Sheng	Two counts of violating the Arms Export Control Act in violation of 22 USC 2778; and one count of bribery of a foreign official in violation of 15 USC 7	51 months prison, two years supervised release, and \$386,740 criminal forfeiture	Export of technical data related to a Liquid Hydrogen Tank to the People's Republic of China
5/11/09	Sam Peng	Five counts of violating International Emergency Economic Powers Act in violation of 50 USC § 1705; and five counts of aiding and abetting in violation of 18 USC 2	Three years probation, five months home confinement, \$6,000 criminal fine, and 400 hours of community service	Export of electronic sensors and vibration test equipment to a listed entity in India
5/12/09	Rigel Optics	One count of violating the Arms Export Control Act in violation of 22 USC 2778	\$90,000 criminal fine	Export of night vision goggles to Belarus
5/12/09	Donald Hatch	One count of violating the Arms Export Control Act in violation of 22 USC 2778	\$5,000 criminal fine	Export of night vision goggles to Belarus
5/13/09	Kesh Air International	One count of conspiracy in violation of 18 USC 371	Three years probation	Export of aircraft parts to Iran
5/13/09	Hassan Saied Keshari	One count of conspiracy in violation of 18 USC 371	17 months prison, six months home confinement, and three years probation	Export of aircraft parts to Iran
5/14/09	Joseph Piquet	Two counts of violating International Emergency Economic Powers Act in violation of 50 USC § 1705; and two counts of conspiracy in violation of 18 USC 371	60 months in prison and two years probation	Export of electronics equipment to Hong Kong and the People's Republic of China
5/28/09	Andrew Peckham	One count of embezzlement of government property in violation of 18 USC 641	Six months home confinement, three years probation, \$16,908 criminal fine, and 120 hours of community service	Theft and export of night vision equipment to various countries

6/3/09	David Lee	One count of violating International Emergency Economic Powers Act in violation of 50 USC § 1705	Six months home confinement, two years probation, \$3,000 criminal fine, and \$4,375 criminal forfeiture	Export of thermal imaging cameras to South Korea
6/11/09	Traian Bujduveanu	One count of conspiracy in violation of 18 USC 371	35 months prison and three years supervised release	Export of aircraft parts to Iran
6/17/09	Jeffery Weiss	One count of making false statements in violation of 18 USC 1001	Three years probation and \$20,000 criminal fine	False statements related to the export of radiographic equipment to Iran via the United Arab Emirates
7/1/09	J. Reese Roth	One count of conspiracy in violation of 18 USC 371; and one count of wire fraud in violation of 18 USC 1343	48 months prison and two years probation	Transfer of controlled technical data to foreign nationals from the People's Republic of China and Iran
7/6/09	Turner Cornell Mooneyham	Two counts of smuggling in violation of 19 USC 554	220 months prison, supervised release for life, and \$1,000 criminal fine	Export of firearms to Mexico
7/9/09	Jamie Garcia	One count of unlicensed money remitting in violation of 18 USC 1960	Five months prison, 5 months home confinement, three years probation, and 200 hours community service	Undervaluing on Shipper's Export Declarations
7/9/09	Luis Franco	One count of unlicensed money remitting in violation of 18 USC 1960	One year and one day prison, three years probation, \$3,000 criminal fine, and 200 hours community service	Undervaluing on Shipper's Export Declarations
7/9/09	J&M USA Trading	One count of unlicensed money remitting in violation of 18 USC 1960	Two years probation, \$40,000 criminal fine, and \$60,000 criminal forfeiture	Undervaluing on Shipper's Export Declarations

7/27/09	Zhi Yong Guo	Two counts of violating International Emergency Economic Powers Act in violation of 50 USC § 1705	60 months prison, three years supervised release, and \$12,500 criminal fine	Export of thermal imaging cameras to the People's Republic of China
7/31/09	Vanessa Chu	One count of smuggling in violation of 18 USC 554	One day prison, three months home confinement, 33 months probation, \$3,000 criminal fine, and 100 hours community service	Export of military components to Taiwan
8/3/09	Tah Wei Chao	One count of violating International Emergency Economic Powers Act in violation of 50 USC § 1705	20 months prison, three years probation, and \$3,000 criminal fine	Export of thermal imaging cameras to the People's Republic of China
8/3/09	William Tsu	Two counts of violating International Emergency Economic Powers Act in violation of 50 USC § 1705	40 months prison and three years supervised release	Export of semiconductors and amplifiers to the People's Republic of China
8/4/09	Uriel Hernandez	One count of conspiracy in violation of 18 USC 371	55 months prison	Export of firearms to Mexico
8/4/09	Benito Hernandez	One count of making false statements during a firearm acquisition in violation of 18 USC 922; and four counts of aiding and abetting in violation of 18 USC 2	55 months prison	Export of firearms to Mexico
8/12/09	Daniel Sherman	One count of conspiracy in violation of 18 USC 371	14 months prison	Transfer of controlled technical data to foreign nationals from the People's Republic of China and Iran
8/24/09	Farshid Gallardian	One count of making false statements in violation of 18 USC 1001	One year probation	False statements related to the export of IED components to Iraq
9/10/09	Midnight Music Management, Inc.	One count of making false statements in violation of 18 USC 1001	One year probation	False statements related to the export of aircraft equipment to Israel

9/10/09	Stuart Wax	One count of making false statements in violation of 18 USC 1001	One year probation	False statements related to the export of aircraft equipment to Israel
9/18/09	Aaron Henderson	One count of violating International Emergency Economic Powers Act in violation of 50 USC § 1705	Two years probation and six months home confinement	Export of optical sighting devices to Canada



**Table 2**  
**Department of Commerce Export Enforcement Cases Fiscal Year 2009**

<b>Order Date</b>	<b>Respondent</b>	<b>Charge</b>	<b>Sections Violated [Number of charges]</b>	<b>Result</b>
10/01/08	Aviation Services International B.V. Delta Logistics B.V. Robert Kraaiipoel Niels Kraaiipoel T.P.C. B.V. Mia Van Gemert Mojir Trading Reza Amidi Lavantia Ltd. Mita Zarek	TDO originally issued based on showing of imminent violation in matter involving the export and attempted export of U.S. origin items to Iran, with efforts to conceal their activities by transshipping the items through third countries; numerous false statements to U.S. suppliers and freight forwarders regarding the end-users and countries of ultimate destination, thereby causing false statements to be made on the Shipper's Export Declarations; false statements to OEE during the investigation.		TDO denying export privileges renewed for 180 days
10/03/08	Maxim Integrated Products, Inc.	Unlicensed export and reexport of integration circuits to end-users in the People's Republic of China, Ukraine, Russia, and Estonia. Deemed export of technology for the development of electronic components to the People's Republic of China without the required license and with knowledge that a violation would occur. Deemed export of technology for the development of telecommunication equipment to Iran without the required license.	764.2(a) [33] 764.2(e)[1]	Settlement Agreement - civil penalty of \$192,000

10/16/08	NEAZ Trading Corporation	Took actions with intent to evade the EAR involving licensing requirements for exports to Pakistan	764.2(h) [1]	Export privileges denied for seven years (Default Judgment)
10/16/08	Yasmin Ahmed	Caused the filing of a false statement on a Shipper's Export Declaration as to the ultimate destination; attempted to cause a violation of the EAR by submitting false end-user information to exporter; took actions with intent to evade the EAR relating to the unauthorized export of items to Pakistani Entity List organization	764.2(b) [1] 764.2(c) [1] 764.2(h) [2]	Export privileges denied for seven years (Default Judgment)
11/04/08	Peter Goldsmith	Aided and/or abetted the export the vessel Eu-Bett to Cuba without the required authorization	764.2(b) [1]	Civil penalty of \$11,000, plus suspended denial of export privileges three years. (Litigated case)
11/04/08	Michele Geslin	Aided and/or abetted the export the vessel Kailuana to Cuba without the required authorization	764.2(b) [1]	Civil penalty of \$11,000, plus suspended denial of export privileges three years. (Litigated case)
11/7/08	Cabela's Incorporated	Exported optical sighting devices to Argentina, Brazil, Canada, Chile, Finland, Ireland, Malaysia, Malta, Mexico, Pakistan, Philippines, South Africa, Sweden, and Taiwan without the required licenses	764.2(a) [152]	Settlement Agreement - civil penalty of \$680,000

12/03/08	Galaxy Aviation Trade Company, Ltd. Hooshang Seddigh Hamid Shakeri Hendi Hossein Jahan Peyma Iran Air Dunyaya Bakis Hava Tasimaciligi A.S. and Related Persons: Yavuz Cizmeci Sam David Mahjoobi Intelligent Aviation Services Ltd.	TDO originally issued based on showing of imminent violation in matter involving the intended re-export of U.S.-origin aircraft to Iran from Turkey without the required authorization.		TDO denying export privileges renewed for 180 days; added three additional related persons
12/04/08	PC Universe, Inc.	Sold, transported and forwarded digital audio tape drives to Iran with knowledge that a violation would occur	764.2(e) [1]	Settlement Agreement - civil penalty of \$37,500, all of which is suspended
12/12/08	Buehler Limited	Exported chemical mixture containing chemical precursor to Taiwan, Israel, Thailand and several other countries and reexported chemical mixture containing precursor from Germany to Iran without the required licenses	764.2(a) [81]	Settlement Agreement - civil penalty of \$200,000
12/15/08	Gunnar Petzel Medizintechnik	Caused the export of ten Station Micro Plate Processing Conveyor Systems (MPCS-10) to Cuba via Germany without the required licenses	764.2(b) [3]	Settlement Agreement - civil penalty of \$50,000

12/15/08	Engineering Physics Software, Inc., d/b/a COADE, Inc.	Exported engineering software programs to Iran via United Arab Emirates without the required authorization from the Office of Foreign Assets Control; exported engineering software programs to end-users in India and Pakistan that were listed on BIS's Entity List	764.2(a) [22]	Settlement Agreement - civil penalty of \$130,000
12/18/08	Interpoint Corporation	Exported DC-to-DC converters and/or electromagnetic interference filters to the 13th Institute in the Peoples' Republic of China, an end-user on BIS's Entity List and to the People's Republic of China without the required licenses and with knowledge that a violation would occur	764.2(a) [37] 764.2(e) [2]	Settlement Agreement - civil penalty of \$200,000
12/18/08	Electronics For Imaging, Inc.	Exported printer parts and components to Syria without the required export licenses	764.2(a) [4]	Settlement Agreement - civil penalty of \$32,000
12/23/08	Syrvet, Inc.	Exported electric cattle prods without the required licenses and with knowledge that violations would occur; made false statements on Shipper's Export Declarations	764.2(a)[16] 764.2(e)[16] 764.2(g) [6]	Settlement Agreement - civil penalty of \$250,000, \$150,000 suspended
01/07/09	Wayne LaFleur	Exported a vessel to Cuba without the required license	764.2(a) [1]	Civil penalty of \$8,000; plus suspended denial of export privileges three years (Litigated case)
01/22/09	Islamic Republic of Iran Shipping Lines Tadbir Sanaa Sharif Technology Development Center and Acorus Marine (Pty) Ltd.	TDO issued based on showing of imminent violation in matter involving the intended re-export of a U.S.-origin Bladerunner 51 powerboat to TSS for intended use by the Iranian Revolutionary Guard Corps Navy		TDO denying export privileges for 180 days

01/26/09	Well Being Enterprise Co., Ltd.	Conspired to export items from the United States to Taiwan without the required license; took action to evade the Regulations; commanded and/or induced an act prohibited by the Regulations	764.2(d) [1] 764.2(h) [1] 764.2(b) [23]	Settlement Agreement (after filing of charging letter) - civil penalty of \$250,000, \$220,000 of which was suspended; export privileges denied for 20 years limited to items on the Commerce Control List
01/26/09	Elecmat, Inc.	Conspired to export items from the United States to Taiwan without the required license; engaged in prohibited conduct by exporting certain chemicals, metals and electronic components without the required licenses and with knowledge that violations would occur	764.2(d) [1] 764.2(a) [19] 764.2(e) [19]	Settlement Agreement (after filing of charging letter) - export privileges denied for 20 years
01/26/09	Hui-Fen Chen, a.k.a. Angela Chen	Conspired to export items from the United States to Taiwan without the required license	764.2(d) [1]	Settlement Agreement (after filing of charging letter) - export privileges denied for 20 years limited to items on the Commerce Control List
01/28/09	Theresa Huei-Min Chang	Conspired to export items from the United States to Taiwan without the required license and with knowledge that a violation would occur; made a false or misleading statement to officials of the U.S. Government in the course of an investigation	764.2(d) [1] 764.2(e) [1] 764.2(g) [1]	Settlement Agreement - export privileges denied for two years limited to items on the Commerce Control List
02/06/09	Thomas J. Diener	Caused, aided, abetted, and permitted the making of a false representation or statement on a Shipper's Export Declaration	764.2(b) [1]	Settlement Agreement (after filing of charging letter) - civil penalty of \$11,500
02/06/09	Ameri-Source, Inc.	Caused, aided, abetted, and permitted the making of a false representation or statement on a Shipper's Export Declaration	764.2(b) [1]	Settlement Agreement (after filing of charging letter) - civil penalty of \$11,500
03/04/09	Uni-Arab Engineering and Oil Field Services	Caused the reexport of gas lift mandrels from the Netherlands to Libya without the required U.S. Government authorization	764.2(b) [1]	Settlement Agreement (after filing of charging letter) - suspended denial of export privileges for one year

03/04/09	Jamie Radi Mustafa	Caused the reexport of gas lift mandrels from the Netherlands to Libya without the required U.S. Government authorization	764.2(b) [1]	Settlement Agreement (after filing of charging letter) - suspended denial of export privileges for one year
03/04/09	Nureddin Shariff Sehweil	Caused the reexport of traveling screen water, liner shaft and bushing from the Netherlands to Libya without the required U.S. Government authorization	764.2(b) [1]	Settlement Agreement (after filing of charging letter) -civil penalty of \$11,000; suspended denial of export privileges for one year
03/11/09	Infineon Technologies Industrial Power, Inc.	Exported certain switching devices to Chile without the required export licenses	764.2(a) [3]	Settlement Agreement – civil penalty of \$70,000
03/16/09	Balli Group PLC Balli Aviation Balli Holdings Vahid Alaghband Hassan Alaghband Blue Sky One Ltd. Blue Sky Two Ltd. Blue Sky Three Ltd. Blue Airways Mahan Airways	TDO originally issued based on showing of imminent violations in matter involving the re-export of three U.S.-origin aircraft to Iran and the intended re-export of three additional U.S.-origin aircraft, false statements to BIS regarding the ultimate destination and end-user of the aircraft, and a failure to comply with a BIS order to return the three additional aircraft to the U.S.		TDO denying export privileges renewed for 180 days
3/31/09	William Dalton	Made false and misleading statements to BIS in an attempt to facilitate the unlicensed export of an underwater tracking system to the Chinese Navy	764.2(g) [1]	Settlement Agreement – civil penalty of \$25,000, of which \$15,000 is suspended
04/07/09	Falmouth Scientific, Inc.	Made false and misleading statements to BIS in an attempt to facilitate the unlicensed export of an underwater tracking system to the Chinese Navy	764.2(g) [1]	Settlement Agreement – civil penalty of \$50,000, of which \$25,000 is suspended

04/08/09	Islamic Republic of Iran Shipping Lines Tadbir Sanaa Sharif Technology Development Center Acorus Marine (Pty) Ltd. and Related Persons: Starry Shine International Limited Ghasem Nabipour Ahmad Sarkandi Shawn Hugo de Villiers Gunter Migeotte Icarus Design AS	TDO issued based on showing of imminent violation in matter involving the reexport of a Bladerunner 51 powerboat containing U.S.-origin engines and other U.S.-origin components to the Tadbir Sanaa Sharif Technology Development Center in Iran, for intended use by the Iranian Revolutionary Guard Corps Navy		Added six related persons to the January 23, 2009 TDO
04/17/09	Tariq Ahmed	Took actions with intent to evade the EAR licensing requirements for exports to Pakistan	764.2(h) [2]	Export privileges denied for seven years (Default Order)
4/22/09	BJ Services, Inc.	Exported valves and spare parts kit to various destinations without the required licenses and with knowledge that violations would occur	764.2(a) [33] 764.2(e) [34]	Settlement Agreement - civil penalty of \$800,000
05/07/09	Orion Air, S.L. Syrian Pearl Airlines	TDO issued based on showing of imminent violation in matter involving the reexport and attempted reexport to Syria of BAE 146-300 aircraft containing U.S.-origin engines and other U.S.-origin parts, without the U.S. Government authorization required by General Order No. 2		TDO denying export privileges for 180 days

05/14/09	Micei International	Caused, aided, abetted, induced and/or permitted violations of a denial order and acted with knowledge that violations would occur	764.2(b) [7] 764.2(e) [7]	Civil penalty of \$126,000; export privileges denied for five years (Litigated case; case now on appeal to the D.C. Circuit)
05/15/09	Matthew Ayadpoor	Solicited and attempted to export piston type differential pressure gauges to Iran without the required U.S. Government authorization and with know that a violation would occur; made a false and/or misleading statement to OEE special agents in the course of an investigation; failed to comply with the recordkeeping requirements	764.2(c) [1] 764.2(e) [1] 764.2(g) [1] 764.2(i) [1]	Settlement Agreement - civil of \$25,000, all of which is suspended; export privileges denied for one year
05/26/09	Philips Electronics North America Corporation	Exported an ultrasound medical device and a cardiology workstation medical device from the United States through the Netherlands to Cuba without the required licenses	764.2(a) [1] 764.2(a) [1]	Settlement Agreement - civil of \$9,000
06/04/09	Ghassan Tabbaa	Underlying criminal conviction for knowingly and willfully violating the embargo against Syria by attempting to export and reexport two Mercedes Benz automobiles from the United States to Syria via the Lebanese Republic without the required license	Section 1702 IEEPA	Export privileges denied under Section 766.25 of the EAR (see also Section 11(h) of the EAA) until January 3, 2013



06/10/09	TAK Components, Inc. and Related Person: Saied Shahsavarani	Underlying criminal conviction involving 16 counts of willfully exporting and transferring, and causing to be exported and transferred, from the United States to Iran, via the United Arab Emirates, replacement and service parts and equipment for agricultural machinery, without first having obtained the required authorization from the Department of Treasury's Office of Foreign Assets Control	Sections 1702 and 1705 IEEPA	Export privileges denied under Section 766.25 of the EAR (see also Section 11(h) of the EAA) until October 11, 2012
06/15/09	Delphi Corporation	Exported triethanolamine to South Africa and the People's Republic of China without the required licenses	764.2(a) [3]	Settlement Agreement – civil penalty of \$50,000, all of which is suspended
07/06/09	Firth Rixson, Inc. d/b/a Firth Rixson Monroe	Exported 1,055 pounds of titanium 6-2-4-2 to the People's Republic of China without the required licenses	764.2(a) [3]	Settlement Agreement - civil penalty of \$85,000
07/13/09	Bruker AXS, Inc.	Exported an analytical X-ray instrument from the United States through France to Karachi CBW Research Institute, University of Karachi's Husein Ebrahim Jamal Research Institute of Chemistry ("HEJRIC"), in Karachi, Pakistan, an organization on BIS's Entity List without the required license; made false statement on a Shipper's Export Declaration concerning authority to export	764.2(a) [1] 764.2(g) [1]	Settlement Agreement - civil penalty of \$7,500
07/24/09	Micei International	See Result column.		BIS Acting U/S issued an Order Staying Final Decision and Order Pending Appeal (Litigated case; case now on appeal to the D.C. Circuit)

08/06/09	DPWN Holdings (USA), Inc. Formerly known as DHL Holdings (USA), Inc. and DHL Express (USA), Inc.	Failed to comply with recordkeeping requirements; caused, aided and abetted the export of items subject to the EAR to Syria without the required licenses	764.2(i) [90] 764.2(b) [8]	Settlement Agreement - joint with BIS and OFAC- civil penalty of \$9,444,744; conduct external audits covering exports to Iran, Syria, and Sudan from March 31, 2007 through December 31, 2011
08/11/09	South wall Technologies, Inc.	Exported a Sputter Deposition Roll to Roll Coater to the People's Republic of China without the required license; made false statement on a Shipper's Export Declaration	764.2(a) [1] 764.2(g) [1]	Settlement Agreement - civil penalty of \$16,000; perform audit of its internal compliance program within 12 months
08/13/09	FMC Technologies, Inc.	Exported and reexported butterfly valves or check valves to various countries without the required licenses	764.2(a) [78]	Settlement Agreement - civil penalty of \$610,000
08/13/09	RF Micro Devices, Inc.	Exported spread-spectrum modems to the People's Republic of China without the required licenses and with knowledge that violations would occur; made false statements on Shipper's Export Declarations	764.2(a) [14] 764.2(e) [14] 764.2(g) [13]	Settlement Agreement - civil penalty of \$190,000
08/13/09	Carol Wilkins	Made false statement to BIS in the course of an investigation	764.2(g) [1]	Settlement Agreement - civil penalty of \$15,000
08/20/09	Eastways Shipping Corporation	Aided and abetted the export of scrap metal from the United States to Allied Trading Company, an entity in Pakistan that is listed on BIS's Entity List without the required licenses	764.2(b) [3]	Settlement Agreement - civil penalty of \$70,000; \$10,000 suspended
09/01/09	Derrick Corporation	Exported a Stack Sizer Screening Machine from the United States to Indian Rare Earths, Ltd., an entity in India that is listed on BIS's Entity List without the required license	764.2(a) [1]	Settlement Agreement - civil penalty of \$30,000

09/01/09	Andrew Ward Freyer	Underlying criminal conviction for exporting, reexporting, selling and supplying valves from the United States to Iran, through Australia without first obtaining the required authorization from the U.S. Department of Treasury, Office of Foreign Assets Controls	Sections 1701 - 1706 of IEEPA	Export privileges denied under Section 766.25 of the EAR (see also Section 11(h) of the EAA) until December 17, 2017
09/01/09	Bertrand Lalsingh	Underlying criminal conviction for knowingly and willfully exporting an EOTech 553 Holographic Weapon Sight, an item designated as a defense article in Category I of the United States Munitions List, from the United States to Germany, without having first obtained authorization from the Department of State	Section 38 of the AECA	Export privileges denied under Section 766.25 of the EAR (see also Section 11(h) of the EAA) until October 11, 2012
09/11/09	Mahan Airways	TDO originally issued based on showing of imminent violations in matter involving the re-export of three U.S.-origin aircraft to Iran and the intended re-export of three additional U.S. origin-aircraft, false statements to BIS regarding the ultimate destination and end-user of the aircraft, and a failure to comply with a BIS order to return the three additional aircraft to the U.S.		TDO denying export privileges renewed for 180 days for Mahan Airways
09/11/09	Foxsemicon Integrated Technologies, Inc.	Exported pressure transducers to the People's Republic of China without the required licenses and with knowledge that violations would occur; made false statement on Shipper's Export Declarations	764.2(a) [8] 764.2(e) [15] 764.2(g) [8]	Settlement Agreement - civil penalty of \$250,000; \$160,000 suspended

09/11/09	Foxsemicon LLC	Aided and abetted the procuring and exporting of pressure transducers to the People's Republic of China; aided and abetted in indirectly making false statements to the U.S. Government in connection with the submission of export control documents	764.2(b) [23]	Settlement Agreement - civil penalty of \$160,000
09/11/09	Thermon Far East Ltd.	Caused, aided, abetted and/or induced the reexport of U.S.-origin heat tracing equipment from the Netherlands to Libya without the required licenses	764.2(b) [3]	Settlement Agreement - civil penalty of \$13,500
09/11/09	Thermon Heat Tracers Pvt. Ltd.	Caused, aided, abetted and/or induced the export of U.S.-origin heat tracing equipment from the United States to end users in India that were listed on BIS's Entity List without the required licenses	764.2(b) [7]	Settlement Agreement - civil penalty of \$31,500
09/11/09	Thermon Korea, Ltd.	Caused, aided, abetted and/or induced the export of heat tracing equipment from the United States to Iran via South Korea without the required licenses and with knowledge that violations would occur	764.2(b) [5] 764.2(e) [3]	Settlement Agreement - civil penalty of \$58,500
09/11/09	Thermon (U.K.) Ltd.	Caused, aided, abetted and/or induced the export and reexport of heat tracing equipment from the United States to Iran via the United Kingdom and from the Netherlands to Libya without the required licenses and with knowledge that violations would occur	764.2(b) [4] 764.2(e) [2]	Settlement Agreement - civil penalty of \$29,000
09/11/09	Thermon Europe B.V.	Reexported U.S.-origin heat tracing equipment from the Netherlands to Libya without the required licenses and with knowledge that violations would occur	764.2(a) [6] 764.2(e) [3]	Settlement Agreement - civil penalty of \$43,500

09/25/09	Electronic Cable Specialists, Inc.	Exported accelerometers to Malaysia and Indonesia without the required licenses; failed to file the required Shipper's Export Declarations	764.2(a) [6]	Settlement Agreement - civil penalty of \$27,500
09/25/98	GE Homeland Protection, Inc.	Exported spare parts for explosive detection systems to South Korea without the required license and with knowledge that a violation would occur; reexported spare parts for explosive detection systems from France to South Africa without the required license and with knowledge that a violation would occur	764.2(a) [2] 764.2(e) [2]	Settlement Agreement - civil penalty of \$22,000
09/29/09	Griffin & Howe, Inc.	Exported optical sighting devices to Zambia and shotguns to Canada without the required licenses	764.2(a) [6]	Settlement Agreement - civil penalty of \$67,000

**Table 3  
Summary of Antiboycott Cases Closed in Fiscal Year 2009**

Company Name & Location	Date Order Signed	Alleged Violations	Settlement Amount
MI Production Chemicals (Voluntary Self Disclosure)	September 30, 2009	10 X 760.2(d) <i>Furnishing information about business relationships with or in a boycotted country</i> 5 X 760.2(a) <i>Agreement to refuse to do business with a boycotted country or blacklisted person</i> 5 X 760.5 <i>Failure to report receipt of a boycott request in a in a timely manner</i>	\$44,625
Gulf International Bank	May 7, 2009	10 X 760.2(d) <i>Furnishing information about business relationships with or in a boycotted country</i> 17 X 760.5 <i>Failure to report receipt of a boycott request in a in a timely manner</i> 1 X 760.5(b)(8) <i>Failure to maintain records</i>	\$49,850
American Rice	October 20, 2008	15 X 760.5 <i>Failure to report receipt of a boycott request in a in a timely manner</i>	\$30,000
<b>Total</b>			<b>\$124,475</b>

A trend in antiboycott violations

During FY 2009, OAC has become aware of an increase in the prohibited furnishing of business information that was not authored by the U.S company furnishing the information. Forwarding a statement that provides prohibited information about business relations in a boycotting country, regardless of the statement's authorship, may constitute a furnishing violation. This may pose a problem for U.S. companies involved in exporting goods manufactured outside the U.S. For instance, if a U.S. company forwards a negative certificate of origin written by an overseas manufacturer, the U.S. company will have violated the prohibition against furnishing prohibited information. Exporters, banks, and freight forwarders should closely examine shipping documents they forward regarding transactions in boycotting countries.

**Appendix E-1**  
**Number of Individual Firms, Transactions, Requesting Documents,**  
**and Restrictive Trade Practices by Firm Type**  
 October 2008 through September 2009

**ALL TRANSACTIONS (Summary Totals) (1)**  
 (Footnotes (\*) are located at the end of Appendix E-1(e))  
 (The column "Other" includes but is not limited to law  
 firms, consulting firms, and general contractors)

Item	Exporter	Bank	Forwarder	Carrier	Insurer	Other	Total
Individual Firms Reporting	171	36	7	0	0	96	310
Transactions Reported	481	197	8	0	0	291	977
Requesting Documents Involved	481	197	8	0	0	291	977
Restrictive Trade Practices Requests (3)	633	202	9	0	0	357	1201

**Number of Individual Firms, Transactions, Requesting Documents,  
and Restrictive Trade Practices by Firm Type  
October 2008 through September 2009  
Appendix E-1(a) All Transactions**

<b>Category</b>	<b>Take Action(3)</b>	<b>Refuse(4)</b>	<b>Undecided</b>	<b>Total (5)</b>
<b>Exporter</b>				
Number of Requests	50	430	1	481
Dollar Amount (\$000)	18151	34971413	0	34989564
<b>Bank</b>				
Number of Requests	118	79	0	197
Dollar Amount (\$000)	979886	920464	0	1900349
<b>Forwarder</b>				
Number of Requests	1	7	0	8
Dollar Amount (\$000)	99	1397	0	1496
<b>Carrier</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Insurer</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Other</b>				
Number of Requests	67	223	0	290
Dollar Amount (\$000)	1396567	170588357	0	171984924
<b>Total</b>				
Number of Requests	236	739	1	976
Dollar Amount (\$000)	2394703	206481631	0	208876334



**Number of Individual Firms, Transactions, Requesting Documents,  
and Restrictive Trade Practices by Firm Type  
October 2008 through September 2009  
Appendix E-1(b) Prohibited Transactions**

<b>Category</b>	<b>Take Action(3)</b>	<b>Refuse(4)</b>	<b>Undecided</b>	<b>Total(5)</b>
<b>Exporter</b>				
Number of Requests	6	167	1	174
Dollar Amount (\$000)	3285	34805216	0	34808501
<b>Bank</b>				
Number of Requests	2	3	0	5
Dollar Amount (\$000)	815	126	0	941
<b>Forwarder</b>				
Number of Requests	1	2	0	3
Dollar Amount (\$000)	99	930	0	1029
<b>Carrier</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Insurer</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Other</b>				
Number of Requests	3	133	0	136
Dollar Amount (\$000)	1300000	166168995	0	167468995
<b>Total</b>				
Number of Requests	12	305	0	318
Dollar Amount (\$000)	1304199	200975266	0	202279465

Number of Individual Firms, Transactions, Requesting Documents,  
and Restrictive Trade Practices by Firm Type  
October 2008 through September 2009  
Appendix E-1(c) Prohibited as First Received, But Amended

Category	Take Action(3)	Refuse(4)	Undecided	Total(5)
<b>Exporter</b>				
Number of Requests	0	30	0	30
Dollar Amount (\$000)	0	64621	0	64621
<b>Bank</b>				
Number of Requests	21	28	0	49
Dollar Amount (\$000)	906640	896021	0	1802661
<b>Forwarder</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	213	0	213
<b>Carrier</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Insurer</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Other</b>				
Number of Requests	0	6	0	6
Dollar Amount (\$000)	0	55635	0	55635
<b>Total</b>				
Number of Requests	21	65	0	86
Dollar Amount (\$000)	906640	1016489	0	1923129

**Number of Individual Firms, Transactions, Requesting Documents,  
and Restrictive Trade Practices by Firm Type  
October 2008 through September 2009  
Appendix E-1(d) Exceptions to Prohibited**

<b>Category</b>	<b>Take Action(3)</b>	<b>Refuse(4)</b>	<b>Undecided</b>	<b>Total(5)</b>
<b>Exporter</b>				
Number of Requests	41	200	0	241
Dollar Amount (\$000)	11359	75470	0	86829
<b>Bank</b>				
Number of Requests	18	5	0	23
Dollar Amount (\$000)	40746	246	0	40992
<b>Forwarder</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Carrier</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Insurer</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Other</b>				
Number of Requests	64	79	0	143
Dollar Amount (\$000)	96567	4361160	0	4457727
<b>Total</b>				
Number of Requests	123	284	0	407
Dollar Amount (\$000)	148672	4436877	0	4585549

**Number of Individual Firms, Transactions, Requesting Documents,  
and Restrictive Trade Practices by Firm Type  
October 2008 through September 2009  
Appendix E-1(e) Not Prohibited**

<b>Category</b>	<b>Take Action(3)</b>	<b>Refuse(4)</b>	<b>Undecided</b>	<b>Total(5)</b>
<b>Exporter</b>				
Number of Requests	3	33	0	36
Dollar Amount (\$000)	3507	26106	0	29613
<b>Bank</b>				
Number of Requests	77	43	0	120
Dollar Amount (\$000)	31685	24071	0	55756
<b>Forwarder</b>				
Number of Requests	0	4	0	4
Dollar Amount (\$000)	0	255	0	255
<b>Carrier</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Insurer</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Other</b>				
Number of Requests	0	5	0	5
Dollar Amount (\$000)	0	2567	0	2567
<b>Total</b>				
Number of Requests	80	85	0	165
Dollar Amount (\$000)	35192	52998	0	88190

**Footnotes:**

- (1) Includes but not limited to law firms, consulting firms, and general contractor
- (2) Two or more types of restrictive trade practices are often reported in connection with one
- (3) Transactions in this table are characterized as "take action" or "refuse" in terms of action taken on the original request, not on amended or deleted requests
- (4) "Refuse" does not necessarily mean that business was lost because a firm refused to comply with a prohibited boycott request. Rather, it indicates that firms refused to comply with the request to bid on contracts totaling the dollar amounts indicated. Prohibited boycott language is often amended or deleted to permit U.S. firms to comply with U.S. law. Amendments and deletions are not reflected in these statistics.
- (5) Dollar values may not add due to rounding.

**Appendix E-2**  
**Number of Restrictive Trade Practices by**  
**Firm Type and Type of Restrictive Trade Practice**  
 October 2008 through September 2009

**ALL TRANSACTIONS**

<b>Restrictive Trade Practice</b>	<b>Exporter</b>	<b>Bank</b>	<b>Forwarder</b>	<b>Carrier</b>	<b>Insurer</b>	<b>Other</b>	<b>Total</b>
Carrier	38	154	6	0	0	8	206
Manufacturer/Vendor/Buyer	74	2	1	0	0	34	111
Insurance	0	0	0	0	0	0	0
Finance	3	4	0	0	0	1	8
Origin of Goods	365	40	1	0	0	99	505
Marked Goods/Packages	0	0	0	0	0	0	0
War Reparations	0	0	0	0	0	0	0
Observe Boycott Laws	56	1	1	0	0	94	152
Race/Religion/Sex/Origin	0	0	0	0	0	0	0
Relations with Boycotted Country	70	1	0	0	0	16	87
Risk of Loss	0	0	0	0	0	0	0
Destination of Goods	10	0	0	0	1	103	113
Other Restrictive Trade Practices	17	0	0	0	0	2	19
<b>Totals</b>	<b>633</b>	<b>202</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>357</b>	<b>1201</b>

**OTHER:** Includes but are not limited to law firms, consulting firms, and general contractors.

**TOTALS:** Enhanced to the extent that an exporter and one or more other organizations report on the same transaction.

**Appendix E-3**  
**Number <sup>(1)</sup> of Restrictive Trade Practices**  
**by Originating Country and Type of Practice**  
 October 2008 through September 2009

Country	Carrier	Manufacturer/Vendor/Buyer	Insurance	Finance	Origin of Goods	Marked Goods/Packaging	War Reparations	Observe Boycott Laws	Race/Religion/Sex/Origin	Relations w/Boycotted Country	Risk of Loss	Destination of Goods	Other Restrictive Practices	Total
Bahrain	4	0	0	0	3	0	0	2	0	0	0	0	0	9
Egypt	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Iraq	2	3	0	0	3	0	0	0	0	1	0	0	0	9
Jordan	0	1	0	0	0	0	0	0	0	1	0	0	0	2
Kuwait	3	1	0	0	47	0	0	2	0	0	0	0	0	53
Lebanon	23	2	0	0	2	0	0	0	0	0	0	0	0	27
Libya	10	60	0	0	76	0	0	19	0	72	0	0	0	237
Qatar	19	2	0	0	10	0	0	13	0	1	0	49	13	107
Saudi Arabia	2	3	0	1	29	0	0	8	0	2	0	0	6	51
Syria	1	2	0	0	17	0	0	1	0	5	0	0	0	26
UAE	119	28	0	5	124	0	0	99	0	2	0	23	0	400
Other (2)	23	9	0	3	193	0	0	8	0	3	0	41	0	280
<b>Total</b>	<b>206</b>	<b>111</b>	<b>0</b>	<b>9</b>	<b>506</b>	<b>0</b>	<b>0</b>	<b>152</b>	<b>0</b>	<b>87</b>	<b>0</b>	<b>113</b>	<b>19</b>	<b>1203</b>
<b>Percent (3)</b>	<b>17</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>9</b>	<b>2</b>	<b>100</b>

1) All figures are enhanced to the extent that an exporter and one or more other organization report on the same transaction.

2) Includes Algeria, Iran, Malaysia, Nigeria, Oman, Pakistan, Tunisia, and Yemen.

3) Percentages may not add due to rounding.

**Table E-4**  
**Number <sup>(1)</sup> of Restrictive Trade Practices**  
**by Originating Country and Type of Document**  
 October 2008 through September 2009

Country	Bid or Tender Proposal	Carrier Blacklist	Letter of Credit	Questionnaire	Requisition/ Purchase Order	Unwritten	Other Written	Total
Bahrain	2	0	3	0	3	0	0	8
Egypt	1	0	1	0	0	0	0	2
Iraq	1	0	1	0	6	0	0	8
Jordan	0	0	1	0	0	0	1	2
Kuwait	9	0	20	0	23	0	0	52
Lebanon	0	0	23	0	2	0	2	27
Libya	76	0	10	1	14	2	7	110
Qatar	49	0	16	0	27	0	13	105
Saudi Arabia	14	0	5	0	18	2	1	40
Syria	2	0	2	1	4	11	1	21
UAE(2)	124	0	132	2	28	0	50	336
Other (3)	164	0	45	0	50	1	8	268
Total	442	0	259	4	175	16	83	979
Percentage (4)	45	0	26	0	18	2	86	99

(1) All figures are enhanced to the extent that an exporter and one or more other service organizations reports on the same transaction.

(2) Includes Abu Dhabi, Sharjah, Ajman, Umm Al-Qaiwan, RA's Al-Khaimah and Fujairah.

(3) Includes Algeria, Djibouti, India, Iran, Malaysia, Nigeria, Oman, Pakistan, Somalia, Sudan, Tunisia, Yemen Arab Republic, and the People's Democratic Republic of Yemen.

(4) Percentages may not add due to rounding.

**Appendix E-5**  
**Number and Value of Exporter Transactions by Originating Country**  
**and Decision on the Request**

October 2008 through September 2009

Footnotes (\*) are located at the end of Appendix E-5(a)

**All Transactions(1)**

<b>Country</b>	<b>Take Action(2)</b>	<b>Refuse(3)</b>	<b>Undecided</b>	<b>Total(4)</b>
<b>Bahrain</b>				
Number of Requests	0	4	0	4
Dollar Amount (\$000)	0	1542	0	1542
<b>Egypt</b>				
Number of Requests	1	0	0	1
Dollar Amount (\$000)	0	0	0	0
<b>Iraq</b>				
Number of Requests	0	8	0	8
Dollar Amount (\$000)	0	41149	0	41149
<b>Jordan</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	0	0	0
<b>Kuwait</b>				
Number of Requests	0	30	0	30
Dollar Amount (\$000)	0	835	0	835
<b>Lebanon</b>				
Number of Requests	0	7	0	7
Dollar Amount (\$000)	0	266	0	266
<b>Libya</b>				
Number of Requests	2	80	0	82
Dollar Amount (\$000)	2016	46028	0	48044
<b>Qatar</b>				
Number of Requests	2	38	0	40
Dollar Amount (\$000)	2464	30757	0	33221
<b>Saudi Arabia</b>				
Number of Requests	6	18	0	24
Dollar Amount (\$000)	6	51490	0	51496



**Appendix E-5**  
**Number and Value of Exporter Transactions by Originating Country**  
**and Decision on the Request**

October 2008 through September 2009

Footnotes (\*) are located at the end of Appendix E-5(a)

**All Transactions(1)**

<b>Syria</b>				
Number of Requests	0	11	0	11
Dollar Amount (\$000)	0	4899	0	4899
<b>UAE</b>				
Number of Requests	15	72	0	87
Dollar Amount (\$000)	9965	34772136	0	34782101
<b>Other(5)</b>				
Number of Requests	24	161	1	186
Dollar Amount (\$000)	3701	22310	0	26011
<b>Total (4)</b>				
Number of Requests	50	430	1	481
Dollar Amount (\$000)	18151	34971413	0	34989564

**Number and Value of Exporter Transactions by Originating Country  
and Decision on the Request  
October 2008 through September 2009  
Appendix E-5(b) Prohibited Transactions**

<b>Country</b>	<b>Take Action(2)</b>	<b>Refuse(3)</b>	<b>Undecided</b>	<b>Total(4)</b>
<b>Bahrain</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	1539	0	1539
<b>Egypt</b>				
Number of Requests	1	0	0	1
Dollar Amount (\$000)	0	0	0	0
<b>Iraq</b>				
Number of Requests	0	6	0	6
Dollar Amount (\$000)	0	28307	0	28307
<b>Jordan</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	0	0	0
<b>Kuwait</b>				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	338	0	338
<b>Lebanon</b>				
Number of Requests	0	3	0	3
Dollar Amount (\$000)	0	170	0	170
<b>Libya</b>				
Number of Requests	2	71	0	73
Dollar Amount (\$000)	2016	43450	0	45465
<b>Qatar</b>				
Number of Requests	1	16	0	17
Dollar Amount (\$000)	1269	20524	0	21793
<b>Saudi Arabia</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	0	0	0
<b>Syria</b>				
Number of Requests	0	9	0	9
Dollar Amount (\$000)	0	644	0	644

**Number and Value of Exporter Transactions by Originating Country  
and Decision on the Request  
October 2008 through September 2009  
Appendix E-5(b) Prohibited Transactions**

<b>UAE</b>				
Number of Requests	2	38	0	40
Dollar Amount (\$000)	0	34698008	0	34698008
<b>Other (5)</b>				
Number of Requests	0	19	1	20
Dollar Amount (\$000)	0	12237	0	12237
<b>Total (4)</b>				
Number of Requests	6	167	1	174
Dollar Amount (\$000)	3285	34805216	0	34808501

**Number and Value of Exporter Transactions by Originating Country  
and Decision on the Request  
October 2008 through September 2009  
Appendix E-5(c) Prohibited as First Received, but Amended**

<b>Country</b>	<b>Take Action(2)</b>	<b>Refuse(3)</b>	<b>Undecided</b>	<b>Total(4)</b>
<b>Bahrain</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Egypt</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Iraq</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Jordan</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Kuwait</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Lebanon</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	12	0	12
<b>Libya</b>				
Number of Requests	0	4	0	4
Dollar Amount (\$000)	0	727	0	727
<b>Qatar</b>				
Number of Requests	0	4	0	4
Dollar Amount (\$000)	0	8650	0	8650
<b>Saudi Arabia</b>				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	10000	0	10000
<b>Syria</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	193	0	193

**Number and Value of Exporter Transactions by Originating Country  
and Decision on the Request  
October 2008 through September 2009  
Appendix E-5(c) Prohibited as First Received, but Amended**

<b>UAE</b>				
Number of Requests	0	6	0	6
Dollar Amount (\$000)	0	42721	0	42721
<b>Other (5)</b>				
Number of Requests	0	12	0	12
Dollar Amount (\$000)	0	2318	0	2318
<b>Total (4)</b>				
Number of Requests	0	30	0	30
Dollar Amount (\$000)	0	64621	0	64621

**Number and Value of Exporter Transactions by Originating Country  
and Decision on the Request**

October 2008 through September 2009

**Appendix E-5(d) Exceptions to Prohibited Transactions**

<b>Country</b>	<b>Take Action(2)</b>	<b>Refuse(3)</b>	<b>Undecided</b>	<b>Total(4)</b>
<b>Bahrain</b>				
Number of Requests	0	3	0	3
Dollar Amount (\$000)	0	3	0	3
<b>Egypt</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Iraq</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	0	0	0
<b>Jordan</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Kuwait</b>				
Number of Requests	0	28	0	28
Dollar Amount (\$000)	0	498	0	498
<b>Lebanon</b>				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	17	0	17
<b>Libya</b>				
Number of Requests	0	5	0	5
Dollar Amount (\$000)	0	1852	0	1852
<b>Qatar</b>				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	43	0	43
<b>Saudi Arabia</b>				
Number of Requests	6	10	0	16
Dollar Amount (\$000)	6	41486	0	41492
<b>Syria</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0

**Number and Value of Exporter Transactions by Originating Country  
and Decision on the Request  
October 2008 through September 2009  
Appendix E-5(d) Exceptions to Prohibited Transactions**

<b>UAE</b>				
Number of Requests	11	23	0	34
Dollar Amount (\$000)	7653	24814	0	32466
<b>Other (5)</b>				
Number of Requests	24	126	0	150
Dollar Amount (\$000)	3701	6759	0	10460
<b>Total (4)</b>				
Number of Requests	41	200	0	241
Dollar Amount (\$000)	11359	75470	0	86829

**Number and Value of Exporter Transactions by Originating Country  
and Decision on the Request  
October 2008 through September 2009  
Appendix E-5(e) Prohibited as First Received, but Amended**

Country	Take Action(2)	Refuse(3)	Undecided	Total(4)
<b>Bahrain</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Egypt</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Iraq</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	12841	0	12841
<b>Jordan</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Kuwait</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Lebanon</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	67	0	67
<b>Libya</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Qatar</b>				
Number of Requests	1	16	0	17
Dollar Amount (\$000)	1195	1541	0	2736
<b>Saudi Arabia</b>				
Number of Requests	0	5	0	5
Dollar Amount (\$000)	0	4	0	4
<b>Syria</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	4063	0	4063



**Number and Value of Exporter Transactions by Originating Country  
and Decision on the Request  
October 2008 through September 2009  
Appendix E-5(e) Prohibited as First Received, but Amended**

<b>UAE</b>				
Number of Requests	2	5	0	7
Dollar Amount (\$000)	2312	6594	0	8906
<b>Other (5)</b>				
Number of Requests	0	4	0	4
Dollar Amount (\$000)	0	996	0	996
<b>Total (4)</b>				
Number of Requests	3	33	0	36
Dollar Amount (\$000)	3507	26106	0	29613

**Footnotes:**

(1) Transactions figures and dollar values include bids, tenders and trade opportunities. Such figures may be duplicated and include dollar values for potential transactions that never resulted in a sale.

(2) Dollar values may not add due to rounding

(3) Includes Abu Dhabi, Sharjah, Ajman, Umm Al-Qaiwan, RA's Al-Khaimah and Fujairah.

(4) Includes Algeria, India, Iran, Malaysia, Nigeria, Oman, Pakistan, Tunisia, and Yemen.

(5) This figure does not represent business lost due to refusals with Boycott Requests. It indicates that U.S. companies refused to comply with the boycott request in bidding on contracts totaling this amount. The boycott language is often revised or eliminated to allow U.S. companies to bid consistent with U.S. law. Such revisions are not reflected in these statistics.

(7) Transactions in this table are characterized as "take action" or "refuse" in terms of action taken on the original request, not on amended or deleted requests in bidding on contracts totaling the dollar amounts indicated. Prohibited boycott language is often amended or deleted to permit U.S. firms to comply with U.S. law.

**Appendix E-6**  
**Number of Individual Firms, Transactions, Requesting Documents**  
**and Restrictive Trade Practices Received by**  
**(“Controlled-in-Fact”) Foreign Subsidiaries**  
**October 2008 through September 2009**  
**(Footnotes are located at the end of Appendix E-6(e))**

ALL TRANSACTIONS (Summary Totals)

<b>Country</b>	<b>Individual Firms Reporting</b>	<b>Transactions Reported</b>	<b>Requesting Documents Involved</b>	<b>Restrictive Trade Practices Requests</b>
<b>United Kingdom</b>	17	47	47	52
<b>France</b>	1	1	1	4
<b>Germany</b>	1	1	1	1
<b>Netherlands</b>	9	23	23	28
<b>Belgium</b>	5	10	10	13
<b>Switzerland</b>	5	20	20	29
<b>Canada</b>	6	9	9	12
<b>Italy</b>	4	4	4	6
<b>Other (European Nations)</b>	6	8	8	9
<b>Other (Arab Nations)</b>	42	146	146	192
<b>All Other Nations</b>	22	41	41	43
<b>Total</b>	118	310	310	389

**Number of Individual Firms, Transactions, Requesting Documents  
and Restrictive Trade Practices Received by  
("Controlled-in-Fact") Foreign Subsidiaries  
October 2008 through September 2009  
ALL TRANSACTIONS (Summary Totals)  
Appendix E-6(a) All Transactions**

<b>Country</b>	<b>Take Action</b>	<b>Refuse</b>	<b>Undecided</b>	<b>Total</b>
<b>United Kingdom</b>				
Number of Requests	2	45	0	47
Dollar Amount (\$000)	10	69106	0	69116
<b>France</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	4063	0	4063
<b>Germany</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	0	0	0
<b>Netherlands</b>				
Number of Requests	2	21	0	23
Dollar Amount (\$000)	1284	10466	0	11750
<b>Belgium</b>				
Number of Requests	0	10	0	10
Dollar Amount (\$000)	0	589	0	589
<b>Switzerland</b>				
Number of Requests	0	20	0	20
Dollar Amount (\$000)	0	30114	0	30114
<b>Canada</b>				
Number of Requests	2	7	0	9
Dollar Amount (\$000)	2986	43911	0	46897
<b>Italy</b>				
Number of Requests	0	4	0	4

**Number of Individual Firms, Transactions, Requesting Documents  
and Restrictive Trade Practices Received by  
("Controlled-in-Fact") Foreign Subsidiaries  
October 2008 through September 2009  
ALL TRANSACTIONS (Summary Totals)  
Appendix E-6(a) All Transactions**

Dollar Amount (\$000)	0	18001	0	18001
<b>Other European Nations</b>				
Number of Requests	0	8	0	8
Dollar Amount (\$000)	0	5228	0	5228
<b>Other Arab Nations (1)</b>				
Number of Requests	6	139	0	145
Dollar Amount (\$000)	50018	25789461	0	25839479
<b>All Other Nations</b>				
Number of Requests	15	26	0	41
Dollar Amount (\$000)	1525	96062	0	97587
<b>Total</b>				
Number of Requests	27	282	0	309
Dollar Amount (\$000)	55822	26067002	0	26122824

**Number of Requests of Individual Firms, Transactions, Requesting Documents  
and Restrictive Trade Practices Received by  
("Controlled-in-Fact") Foreign Subsidiaries  
October 2008 through September 2009  
Appendix E-6(b) Prohibited Transactions**

<b>Country</b>	<b>Take Action</b>	<b>Refuse</b>	<b>Undecided</b>	<b>Total</b>
<b>United Kingdom</b>				
Number of Requests	0	29	0	29
Dollar Amount (\$000)	0	25456	0	25456
<b>France</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0

**Number of Requests of Individual Firms, Transactions, Requesting Documents  
and Restrictive Trade Practices Received by  
("Controlled-in-Fact") Foreign Subsidiaries  
October 2008 through September 2009  
Appendix E-6(b) Prohibited Transactions**

<b>Germany</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Netherlands</b>				
Number of Requests	1	18	0	19
Dollar Amount (\$000)	1269	8055	0	9324
<b>Belgium</b>				
Number of Requests	0	5	0	5
Dollar Amount (\$000)	0	82	0	82
<b>Switzerland</b>				
Number of Requests	0	8	0	8
Dollar Amount (\$000)	0	28127	0	28127
<b>Canada</b>				
Number of Requests	0	4	0	4
Dollar Amount (\$000)	0	42623	0	42623
<b>Italy</b>				
Number of Requests	0	4	0	4
Dollar Amount (\$000)	0	18001	0	18001
<b>Other European Nations</b>				
Number of Requests	0	6	0	6
Dollar Amount (\$000)	0	535	0	535
<b>Other Arab Nations (1)</b>				
Number of Requests	1	90	0	91
Dollar Amount (\$000)	0	21459808	0	21459808
<b>All Other Nations</b>				

**Number of Requests of Individual Firms, Transactions, Requesting Documents  
and Restrictive Trade Practices Received by  
("Controlled-in-Fact") Foreign Subsidiaries  
October 2008 through September 2009  
Appendix E-6(b) Prohibited Transactions**

Number of Requests	1	6	0	7
Dollar Amount (\$000)	1525	2195	0	3719
<b>Total</b>				
Number of Requests	3	170	0	173
Dollar Amount (\$000)	2794	21584883	0	21587676

**Number of Requests of Individual Firms, Transactions, Requesting Documents  
and Restrictive Trade Practices Received by  
("Controlled-in-Fact") Foreign Subsidiaries  
October 2008 through September 2009  
Appendix E-6(c) Prohibited as First Received, but Amended**

<b>Country</b>	<b>Take Action</b>	<b>Refuse</b>	<b>Undecided</b>	<b>Total</b>
<b>United Kingdom</b>				
Number of Requests	0	3	0	3
Dollar Amount (\$000)	0	40000	0	40000
<b>France</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Germany</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Netherlands</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Belgium</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	236	0	236
<b>Switzerland</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	0	0	0
<b>Canada</b>				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	2986	0	0	2986
<b>Italy</b>				
Number of Requests	0	0	0	0

**Number of Requests of Individual Firms, Transactions, Requesting Documents  
and Restrictive Trade Practices Received by  
("Controlled-in-Fact") Foreign Subsidiaries  
October 2008 through September 2009  
Appendix E-6(c) Prohibited as First Received, but Amended**

Dollar Amount (\$000)	0	0	0	0
<b>Other European Nations</b>				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	4693	0	4693
<b>Other Arab Nations (1)</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>All Other Nations</b>				
Number of Requests	0	3	0	3
Dollar Amount (\$000)	0	48786	0	48786
<b>Total</b>				
Number of Requests	2	10	0	12
Dollar Amount (\$000)	2986	93714	0	96700



**Number of Requests of Individual Firms, Transactions, Requesting Documents  
and Restrictive Trade Practices Received by  
("Controlled-in-Fact") Foreign Subsidiaries  
October 2008 through September 2009  
Appendix E-6(d) Exceptions to Prohibitions**

<b>Country</b>	<b>Take Action</b>	<b>Refuse</b>	<b>Undecided</b>	<b>Total</b>
<b>United Kingdom</b>				
Number of Requests	2	12	0	14
Dollar Amount (\$000)	10	3582	0	3592
<b>France</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Germany</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	0	0	0
<b>Netherlands</b>				
Number of Requests	1	1	0	2
Dollar Amount (\$000)	15	197	0	212
<b>Belgium</b>				
Number of Requests	0	4	0	4
Dollar Amount (\$000)	0	271	0	271
<b>Switzerland</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	1276	0	1276
<b>Canada</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Italy</b>				
Number of Requests	0	0	0	0

**Number of Requests of Individual Firms, Transactions, Requesting Documents  
and Restrictive Trade Practices Received by  
("Controlled-in-Fact") Foreign Subsidiaries  
October 2008 through September 2009  
Appendix E-6(d) Exceptions to Prohibitions**

Dollar Amount (\$000)	0	0	0	0
<b>Other European Nations</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Other Arab Nations (1)</b>				
Number of Requests	5	46	0	51
Dollar Amount (\$000)	50018	4327935	0	4377953
<b>All Other Nations</b>				
Number of Requests	14	15	0	29
Dollar Amount (\$000)	0	45025	0	45025
<b>Total</b>				
Number of Requests	22	80	0	102
Dollar Amount (\$000)	50042	4378286	0	4428328

**Number of Requests of Individual Firms, Transactions, Requesting Documents  
and Restrictive Trade Practices Received by  
("Controlled-in-Fact") Foreign Subsidiaries  
October 2008 through September 2009  
Appendix E-6(c) Not Prohibited**

<b>Country</b>	<b>Take Action</b>	<b>Refuse</b>	<b>Undecided</b>	<b>Total</b>
<b>United Kingdom</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	68	0	68
<b>France</b>				
Number of Requests	0	1	0	1
Dollar Amount (\$000)	0	4063	0	4063
<b>Germany</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Netherlands</b>				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	2214	0	2214
<b>Belgium</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Switzerland</b>				
Number of Requests	0	10	0	10
Dollar Amount (\$000)	0	711	0	711
<b>Canada</b>				
Number of Requests	0	3	0	3
Dollar Amount (\$000)	0	1288	0	1288
<b>Italy</b>				
Number of Requests	0	0	0	0

**Number of Requests of Individual Firms, Transactions, Requesting Documents  
and Restrictive Trade Practices Received by  
("Controlled-in-Fact") Foreign Subsidiaries  
October 2008 through September 2009  
Appendix E-6(e) Not Prohibited**

Dollar Amount (\$000)	0	0	0	0
<b>Other European Nations</b>				
Number of Requests	0	0	0	0
Dollar Amount (\$000)	0	0	0	0
<b>Other Arab Nations (1)</b>				
Number of Requests	0	3	0	3
Dollar Amount (\$000)	0	1718	0	1718
<b>All Other Nations</b>				
Number of Requests	0	2	0	2
Dollar Amount (\$000)	0	57	0	57
<b>Total</b>				
Number of Requests	0	22	0	22
Dollar Amount (\$000)	0	10119	0	10119

**Footnotes:**

(1) Includes Austria, Cyprus, Czechoslovakia, Denmark, Finland, Greece, Hungary, Ireland, Liechtenstein, Malta, Norway, Poland, Portugal, Spain, and Sweden.

(2) Includes Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Saudi Arabia, UAE, Qatar, and Yemen.

## Appendix F: Approved Applications for Country Group D:1 and Cuba

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
<b>ALBANIA</b>			
0A984	SHOTGUNS, BUCKSHOT, SHOTGUN SHELLS	2	\$8,400,000
0A985	DISCHARGE TYPE ARMS	3	\$625,500
0A986	SHOTGUN SHELLS (EXCEPT BUCKSHOT SHELLS) AND PARTS	2	\$600,000
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	2	\$700,000
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	1	\$950,400
3A232	DETONATORS/MULTIPOINT INITIATION SYSTEMS	1	\$488,400
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	\$1,853
5D002	SOFTWARE FOR INFORMATION SECURITY	1	\$1
6D003	OTHER SOFTWARE	1	\$92,296
TOTAL APPLICATIONS: 7			
TOTAL CCL'S: 9			
TOTAL DOLLAR VALUE: \$11,858,450			
<b>ARMENIA</b>			
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	\$13,140
0A984	SHOTGUNS, BUCKSHOT, SHOTGUN SHELLS	1	\$13,520
3A001	ELECTRONIC DEVICES/COMPONENTS	2	\$1,680
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	2	\$2
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	1	\$0
6E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT/MATERIALS/	1	\$1
6E201	TECHNOLOGY FOR EQUIPMENT CONTROLLED BY 6A003, 6A005	1	\$1
TOTAL APPLICATIONS: 7			
TOTAL CCL'S: 7			
TOTAL DOLLAR VALUE: \$28,344			
<b>AZERBAIJAN</b>			
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	3	\$4,090,000
1C350	CHEMICALS, PRECURSORS FOR TOXIC CHEMICAL AGENTS	1	\$9,600,000
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	\$8,136,256
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	1	\$78,000
2E002	TECHNOLOGY SUPPORTING EQUIPMENT/PRODUCTION IN 2A/2	1	\$500
3A229	FIRING SETS AND HIGH CURRENT PULSE GENERATORS	1	\$1,840,000
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	1	\$1,080,000
3A232	DETONATORS/MULTIPOINT INITIATION SYSTEMS	2	\$1,138,500
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	1	\$267,840
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	4	\$495,178
5D002	SOFTWARE FOR INFORMATION SECURITY	1	\$108
6A001	ACOUSTICS	1	\$1,520,000
6A003	CAMERAS	1	\$27,430
8A001	SUBMERSIBLE VEHICLES OR SURFACE VESSELS	2	\$14,000,000
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	\$5,340,500
TOTAL APPLICATIONS: 20			
TOTAL CCL'S: 15			
TOTAL DOLLAR VALUE: \$47,614,312			

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
BELARUS			
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	5	\$42,022
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	2	\$60,762
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	1	\$7,756
3A001	ELECTRONIC DEVICES/COMPONENTS	1	\$0
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	2	\$2
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	2	\$2
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	2	\$2
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	2	\$2
4D003	SPECIFIC SOFTWARE, AS DESCRIBED IN THIS ENTRY	2	\$2
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	2	\$2
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	\$17,940
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	2	\$2
5D002	SOFTWARE FOR INFORMATION SECURITY	1	\$3
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	3	\$5
TOTAL APPLICATIONS: 13			
TOTAL CCL'S: 14			
TOTAL DOLLAR VALUE: \$128,502			
BULGARIA			
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	\$563
0A985	DISCHARGE TYPE ARMS	1	\$8,000
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	\$424
1C111	PROPELLANTS AND CONSTITUENT CHEMICALS	1	\$80,000
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	1	\$31,775
2E003	OTHER TECHNOLOGY	1	\$2
3A229	FIRING SETS AND HIGH CURRENT PULSE GENERATORS	1	\$68,400
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	\$43,285
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	1	\$161,280
5D002	SOFTWARE FOR INFORMATION SECURITY	1	\$16,205
6A003	CAMERAS	3	\$99,464
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	2	\$119,980
9B106	ENVIRONMENTAL CHAMBERS AND ANECHOIC CHAMBERS	1	\$240,000
9E003	OTHER TECHNOLOGY	2	\$2
TOTAL APPLICATIONS: 15			
TOTAL CCL'S: 14			
TOTAL DOLLAR VALUE: \$869,380			
CAMBODIA			
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	\$60
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	\$310,000
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	3	\$869,895
TOTAL APPLICATIONS: 5			
TOTAL CCL'S: 3			
TOTAL DOLLAR VALUE: \$1,179,955			
CHINA			
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	11	\$424,564
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	8	\$574,242
0E018	TECHNICAL DATA FOR USE OF ITEMS CONTROLLED BY 0A01	1	\$10,000
1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	6	\$171,210
1A004	PROTECTIVE AND DETECTION EQUIPMENT	17	\$1,072,733
1B001	EQUIPMENT FOR PRODUCTION OF FIBERS, PREFORMS OR CO	5	\$13,895,898
1B117	PRODUCTION EQUIPMENT FOR TESTING OF PROPELLANTS	1	\$1,117,869
1B118	CONTINUOUS MIXERS	1	\$305,221
1B119	FLUID ENERGY MILLS	3	\$97,614
1B201	FILAMENT WINDING MACHINES	1	\$136,398

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
1C002	METAL ALLOYS, POWDER OR ALLOYED MATERIALS	1	\$55,850
1C006	FLUIDS AND LUBRICATING MATERIALS	4	\$1,134
1C008	NON-FLUORINATED POLYMERIC SUBSTANCES	61	\$103,543,166
1C010	FIBROUS/FILAMENTARY MATERIALS USED IN MATRIX STRUC	29	\$26,917,491
1C011	METALS AND COMPOUNDS	2	\$1,787,584
1C107	GRAPHITE AND CERAMIC MATERIALS	2	\$7,625,000
1C202	ALUMINUM AND TITANIUM ALLOYS IN THE FORM OF TUBES/	31	\$7,423,463
1C210	FIBROUS/FILAMENTARY MATERIALS NOT CONTROLLED BY 1C	7	\$4,150,222
1C216	MARAGING STEEL NOT CONTROLLED BY 1C116	1	\$1,507
1C228	MAGNESIUM CONTAINING IMPURITIES OTHER THAN CALCIUM	1	\$2,400
1C230	BERYLLIUM	1	\$2
1C231	HAFNIUM	11	\$465,221
1C232	HELIUM-3 OR HELIUM ISOTOPICALLY ENRICHED IN THE HE	1	\$2,500,000
1C233	LITHIUM	1	\$5,000
1C234	ZIRCONIUM, WITH A HAFNIUM CONTENT	5	\$3,013,908
1C240	NICKEL POWDER OR POROUS NICKEL METAL	2	\$6,062,030
1C350	CHEMICALS, PRECURSORS FOR TOXIC CHEMICAL AGENTS	25	\$74,182,505
1C351	HUMAN PATHOGENS, ZOOSES, AND TOXINS	80	\$72,935
1C352	ANIMAL PATHOGENS	4	\$57,000
1C991	VACCINES, IMMUNOTOXINS AND MEDICAL PRODUCTS	10	\$5,254
1D001	SOFTWARE UTILIZED FOR DEVELOPMENT/USE OF EQUIPMENT	1	\$1
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	15	\$41,500,208
1E201	TECHNOLOGY FOR USE OF 1A002,1A202,1A225 TO 1B225	4	\$4
1E350	TECHNOLOGY FOR USE OF 1C350 CHEMICALS	1	\$0
1E351	TECHNOLOGY FOR USE OF MICROBIOLOGICAL MATERIALS	3	\$1
2A292	PIPING/FITTINGS/VALVES MADE/LINED WITH NAMED ALLOY	1	\$77,816
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	41	\$58,952,338
2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	37	\$29,100,468
2B006	DIMENSIONAL INSPECTION/MEASURING SYSTEMS OR EQUIPM	20	\$1,319,764
2B008	ASSEMBLIES/UNITS/INSERTS FOR MACHINE TOOLS IN 2B00	9	\$279,714
2B009	PRINTED CIRCUIT BOARDS/ROTARY TABLES FOR TOOLS IN	7	\$11,582,500
2B201	MACHINE TOOLS FOR REMOVING OR CUTTING METALS	1	\$65,000
2B204	ISOSTATIC PRESSES NOT CONTROLLED BY 2B004 OR 2B104	3	\$476,500
2B226	VACUUM AND CONTROLLED ENVIRONMENT INDUCTION FURNAC	1	\$250,000
2B227	VACUUM AND CONTROLLED ATMOSPHERE MELTING/CASTING F	1	\$732,058
2B230	PRESSURE TRANSDUCERS	83	\$11,619,325
2B231	VACUUM PUMPS	13	\$551,097
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	320	\$48,412,063
2B351	TOXIC GAS MONITORING SYSTEMS & DEDICATED DETECTORS	2	\$95,250
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	108	\$5,794,306
2B997	"ROBOTS" NOT CONTROLLED BY 2B007 OR 2B207	1	\$93,000
2D001	SOFTWARE FOR EQUIPMENT IN CATEGORY 2A/2B	1	\$1
2D002	ADAPTIVE CONTROL/ELECTRONIC DEVICE SOFTWARE	12	\$3
2D983	EQUIPMENT CONTROLLED BY 2A983	2	\$201,059
2E001	TECHNOLOGY SUPPORTING EQUIPMENT/SOFTWARE IN 2A/2B/	6	\$5
2E002	TECHNOLOGY SUPPORTING EQUIPMENT/PRODUCTION IN 2A/2	5	\$100,003
2E003	OTHER TECHNOLOGY	9	\$9
2E201	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2A	2	\$1
2E290	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2A	1	\$1
2E301	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2B	2	\$1
2E983	SOFTWARE CONTROLLED BY 2D983	5	\$112,125
3A001	ELECTRONIC DEVICES/COMPONENTS	85	\$2,180,905,705
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	23	\$4,031,753
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	1	\$105,000
3A225	INVERTERS/CONVERTERS/FREQUENCY CHANGERS/GENERATORS	2	\$33,994
3A230	HIGH SPEED PULSE GENERATORS	2	\$59,140
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	3	\$20,937,775
3A232	DETONATORS/MULTIPOINT INITIATION SYSTEMS	1	\$1,095,000
3A233	MASS SPECTROMETERS	156	\$21,788,904
3A991	ELECTRONIC DEVICES AND COMPONENTS	2	\$1
3A992	GENERAL PURPOSE ELECTRONIC EQUIPMENT	2	\$18,243
3B001	EPITAXIAL EQUIPMENT FOR SEMICONDUCTORS	65	\$1,683,895,932
3B991	OTHER MFG/TEST EQUIPMENT NOT CONTROLLED BY 3B	1	\$0
3B992	EQUIPMENT FOR THE INSPECTION/TESTING OF COMPONENTS	1	\$300,000
3C001	HETERO-EPITAXIAL MATERIALS	3	\$6,634,310
3C002	RESIST MATERIALS	5	\$3,412,813

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
3C003	ORGANO-INORGANIC COMPOUNDS DESCRIBED IN THIS ENTRY	6	\$30,285,400
3C004	HYDRIDES OF PHOSPHORUS, ARSENIC, OR ANTIMONY	28	\$30,953,113
3C005	SILICON CARBIDE WAFERS	9	\$820,260
3D001	SOFTWARE FOR DEV OR PROD OF EQUIP CERTAIN ITEMS IN	3	\$43,503
3D002	SOFTWARE FOR USE OF CERTAIN EQUIPMENT CONTROLLED B	32	\$12,031
3D003	CAD SOFTWARE FOR SEMICONDUCTOR DEVICES/INTEGRATED	38	\$149,617
3D991	GENERAL PURPOSE ELECTRONIC EQUIPMENT FOR 3A992	1	\$10,814
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	275	\$261
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	238	\$1,555,733,130
3E003	OTHER "TECHNOLOGY"	31	\$29
3E980	TECHNOLOGY FOR ITEMS CONTROLLED BY 3A980 AND 3A981	1	\$1
4A003	DIGITAL COMPUTERS/ASSEMBLIES AND RELATED EQUIPMENT	3	\$202
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	181	\$181
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	167	\$167
4D003	SPECIFIC SOFTWARE, AS DESCRIBED IN THIS ENTRY	168	\$168
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	191	\$192
5A001	TELECOMMUNICATIONS/TRANSMISSION EQUIPMENT	1	\$600
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	61	\$141,935,673
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	4	\$93,562
5B002	TEST/INSPECTION/PRODUCTION EQUIP FOR INFORMATION S	2	\$3
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	175	\$187,673
5D002	SOFTWARE FOR INFORMATION SECURITY	36	\$555,532
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	378	\$188,503
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	33	\$232,533
6A001	ACOUSTICS	10	\$30,604,976
6A003	CAMERAS	31	\$1,249,808
6A005	OPTICAL EQUIPMENT (LASERS)	6	\$2,486,000
6A007	GRAVITY METERS (GRAVIMETERS)/GRAVITY GRADIOMETERS	1	\$353,430
6A203	CAMERAS/COMPONENTS NOT CONTROLLED BY ECCN 6A003	6	\$269,772
6A205	LASERS, OTHER THAN THOSE SPECIFIED IN 6A005	1	\$121,775
6E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT/MATERIALS/	7	\$7
6E002	TECHNOLOGY FOR PRODUCTION OF EQUIPMENT/MATERIALS I	6	\$6
6E201	TECHNOLOGY FOR EQUIPMENT CONTROLLED BY 6A003,6A005	1	\$1
7A101	ACCELEROMETERS, OTHER THAN THOSE IN 7A001	1	\$14,000
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	17	\$11,950,566
7D003	OTHER SOFTWARE	2	\$200
7D101	SOFTWARE FOR COMMODITIES CONTROLLED BY 7A001/004,	1	\$500
7E004	OTHER TECHNOLOGY	3	\$300
7E101	TECHNOLOGY FOR EQUIPMENT/SOFTWARE CONTROLLED BY 7A	4	\$5,625
8A001	SUBMERSIBLE VEHICLES OR SURFACE VESSELS	1	\$3,698,580
9A001	AERO GAS TURBINE ENGINES	1	\$24,000,000
9A003	GAS TURBINE ENGINE PROPULSION SYSTEMS	1	\$1,000,000
9B106	ENVIRONMENTAL CHAMBERS AND ANECHOIC CHAMBERS	1	\$286,310
9E003	OTHER TECHNOLOGY	6	\$6

TOTAL APPLICATIONS: 2080  
TOTAL CCL'S: 120  
TOTAL DOLLAR VALUE: \$6,227,455,622

#### CUBA

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	411	\$4,284,955,951
0A988	CONVENTIONAL MILITARY STEEL HELMETS AND MACHETES	1	\$39,000
1C991	VACCINES, IMMUNOTOXINS AND MEDICAL PRODUCTS	4	\$3,290,593
1C995	MIXTURES CONTAINING PRECURSOR & INTERMEDIATE CHEM	1	\$1,380
2A994	PORTABLE ELECTRIC GENERATORS AND SPECIALLY DESIGNE	4	\$11,598,915
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	1	\$639,526
3A992	GENERAL PURPOSE ELECTRONIC EQUIPMENT	2	\$2,340
4A994	ITEMS NOT CONTROLLED BY 4A001/4A002/4A003	5	\$872,475
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	\$3,495
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	29	\$48,801,444
5A992	INFORMATION SECURITY EQUIPMENT	42	\$44,334,099
5D002	SOFTWARE FOR INFORMATION SECURITY	5	\$425,000
5D991	SOFTWARE FOR DEV/PROD/USE WITH 5B994 TEST EQUIPMEN	1	\$0
5D992	SOFTWARE NOT CONTROLLED BY 5D002	43	\$21,462,503



CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
7A994	OTHER NAVIGATION/AIRBORNE COMMUNICATION EQUIPMENT	21	\$14,669
8A992	UNDERWATER SYSTEMS OR EQUIPMENT	42	\$46,500
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	\$1,050,000
9A991	AIRCRAFT AND CERTAIN GAS TURBINE ENGINES N.E.S.	28	\$0
9B991	SPECIALY DESIGNED EQUIPMENT, TOOLING OR FIXTURES	1	\$0
9E991	TECHNOLOGY FOR THE DEV/PROD/USE WITH ITEMS IN 9A99	18	\$0
TOTAL APPLICATIONS: 464			
TOTAL CCL'S: 20			
TOTAL DOLLAR VALUE: \$4,417,537,890			

#### ESTONIA

0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	\$1,200,000
0A985	DISCHARGE TYPE ARMS	2	\$79,500
3A001	ELECTRONIC DEVICES/COMPONENTS	4	\$143,010
3A229	FIRING SETS AND HIGH CURRENT PULSE GENERATORS	1	\$68,400
6A003	CAMERAS	2	\$20,000
TOTAL APPLICATIONS: 10			
TOTAL CCL'S: 5			
TOTAL DOLLAR VALUE: \$1,510,910			

#### GEORGIA

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	\$102,150
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	2	\$1,500
1A004	PROTECTIVE AND DETECTION EQUIPMENT	2	\$351,000
1A005	BODY ARMOR	1	\$400
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	3	\$997,500
1C350	CHEMICALS, PRECURSORS FOR TOXIC CHEMICAL AGENTS	1	\$10,000,000
1C351	HUMAN PATHOGENS, ZOONOSES, AND TOXINS	1	\$1
1C353	GENETICALLY MODIFIED MICROORGANISMS	2	\$36,850
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	1	\$53,439
3A229	FIRING SETS AND HIGH CURRENT PULSE GENERATORS	2	\$1,906,000
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	1	\$1,584,000
3A232	DETONATORS/MULTIPOINT INITIATION SYSTEMS	1	\$132,000
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	1	\$1
TOTAL APPLICATIONS: 17			
TOTAL CCL'S: 13			
TOTAL DOLLAR VALUE: \$15,164,841			

#### KAZAKHSTAN

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	\$260
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	37	\$266,396
1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	1	\$60,000
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	1	\$5,130,000
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	\$20,930
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	3	\$45,484
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	1	\$102,829
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	2	\$7,680,000
3D101	SOFTWARE FOR THE USE OF CERTAIN ITEMS IN 3A101.B	2	\$40,000
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	1	\$1
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	1	\$1
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	2	\$40,000
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	1	\$1
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	1	\$1
4D003	SPECIFIC SOFTWARE, AS DESCRIBED IN THIS ENTRY	1	\$1
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	\$1
5A001	TELECOMMUNICATIONS/TRANSMISSION EQUIPMENT	1	\$1
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	4	\$71,672

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
5B001	EQUIPMENT FOR DEV/PROD OR USE OF ITEMS IN 5A001	1	\$1
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	2	\$2
5D002	SOFTWARE FOR INFORMATION SECURITY	3	\$2,546
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	2	\$2
6A003	CAMERAS	1	\$171,660
6A006	MAGNETOMETERS/MAGNETIC GRADIOMETERS/COMPENSATION S	1	\$60,000
9A004	SPACECRAFT	1	\$1,764
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	2	\$514,000
TOTAL APPLICATIONS: 58			
TOTAL CCL'S: 26			
TOTAL DOLLAR VALUE: \$14,207,553			

KOREA DEMOCRATIC PEOPLES REPUBLIC

EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	18	\$18,864,129
2A994	PORTABLE ELECTRIC GENERATORS AND SPECIALLY DESIGNE	3	\$45,750
4A994	ITEMS NOT CONTROLLED BY 4A001/4A002/4A003	2	\$57,706
4D994	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 4A994/4B994/	1	\$1,000
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	5	\$1,136,415
5D992	SOFTWARE NOT CONTROLLED BY 5D002	4	\$18,077
8A992	UNDERWATER SYSTEMS OR EQUIPMENT	1	\$0
TOTAL APPLICATIONS: 22			
TOTAL CCL'S: 7			
TOTAL DOLLAR VALUE: \$20,123,077			

KYRGYZSTAN

0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	\$429
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	2	\$175,000
TOTAL APPLICATIONS: 3			
TOTAL CCL'S: 2			
TOTAL DOLLAR VALUE: \$175,429			

LAOS

0A986	SHOTGUN SHELLS (EXCEPT BUCKSHOT SHELLS) AND PARTS	1	\$1,700
1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	1	\$40,000
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	1	\$28,245
TOTAL APPLICATIONS: 3			
TOTAL CCL'S: 3			
TOTAL DOLLAR VALUE: \$69,945			

LATVIA

0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	2	\$48
0A985	DISCHARGE TYPE ARMS	1	\$61,000
TOTAL APPLICATIONS: 3			
TOTAL CCL'S: 2			
TOTAL DOLLAR VALUE: \$61,048			

LITHUANIA

0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	\$510
0A985	DISCHARGE TYPE ARMS	1	\$100,000
1C010	FIBROUS/FILAMENTARY MATERIALS USED IN MATRIX STRUC	1	\$172,500
6A003	CAMERAS	1	\$10,000

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
9A012	UNMANNED AIR VEHICLE SYSTEMS	1	\$650
	TOTAL APPLICATIONS: 5		
	TOTAL CCL'S: 5		
	TOTAL DOLLAR VALUE: \$283,660		
MOLDOVA			
1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	1	\$50,000
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	1	\$210,000
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	\$8,634
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	1	\$5,996
5D002	SOFTWARE FOR INFORMATION SECURITY	2	\$3
	TOTAL APPLICATIONS: 4		
	TOTAL CCL'S: 5		
	TOTAL DOLLAR VALUE: \$274,633		
MONGOLIA			
1A004	PROTECTIVE AND DETECTION EQUIPMENT	2	\$26,743
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	1	\$1
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	1	\$1
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	1	\$1
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	1	\$1
4D003	SPECIFIC SOFTWARE, AS DESCRIBED IN THIS ENTRY	1	\$1
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	\$1
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	1	\$1
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	1	\$1
	TOTAL APPLICATIONS: 3		
	TOTAL CCL'S: 9		
	TOTAL DOLLAR VALUE: \$26,751		
ROMANIA			
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	3	\$38,733
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	2	\$186,800
0A985	DISCHARGE TYPE ARMS	2	\$50,000
1A984	CHEMICAL AGENTS, INCLUDING TEAR GAS	1	\$4,075
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	1	\$174,000
6A003	CAMERAS	2	\$79,868
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	\$2,508
9E003	OTHER TECHNOLOGY	1	\$200
	TOTAL APPLICATIONS: 12		
	TOTAL CCL'S: 8		
	TOTAL DOLLAR VALUE: \$536,184		
RUSSIA FEDERATION			
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	25	\$716,493
0A979	POLICE HELMETS, SHIELDS AND PARTS	2	\$83,183
0A982	THUMBCUFFS, LEG IRONS AND SHACKLES	1	\$13,200
0A984	SHOTGUNS, BUCKSHOT, SHOTGUN SHELLS	7	\$1,350,932
0A985	DISCHARGE TYPE ARMS	1	\$7,560
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	232	\$19,905,460
1A003	MANUFACTURES OF NON-FLUORINATED POLYMERIC SUBSTANC	1	\$10,680
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	\$500
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	1	\$555,000
1A995	PROTECTIVE AND DETECTION EQUIPMENT	1	\$150,000
1A999	SPECIFIC PROCESSING EQUIPMENT, N.E.S	7	\$135,304
1B001	EQUIPMENT FOR PRODUCTION OF FIBERS, PREFORMS OR CO	1	\$495,348

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
1C006	FLUIDS AND LUBRICATING MATERIALS	1	\$12,660
1C008	NON-FLUORINATED POLYMERIC SUBSTANCES	8	\$17,576,000
1C011	METALS AND COMPOUNDS	1	\$150,000
1C350	CHEMICALS, PRECURSORS FOR TOXIC CHEMICAL AGENTS	3	\$7,635,680
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	5	\$101
1E101	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A10	5	\$101
1E103	TECHNOLOGY TO REGULATE TEMPERATURE OF COMPOSITES	5	\$101
1E201	TECHNOLOGY FOR USE OF 1A002,1A202,1A225 TO 1B225	1	\$0
1E202	TECHNOLOGY FOR DEVELOPMENT OR PRODUCTION OF 1A202,	1	\$0
2A291	NUCLEAR REACTOR AND NUCLEAR POWER PLANT RELATED EQ	2	\$244,960
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	13	\$9,961,648
2A991	BEARINGS AND BEARING SYSTEMS	1	\$424
2B001	NUMERICAL CONTROL UNITS/MOTION CONTROL BOARDS	4	\$38,586,000
2B204	ISOSTATIC PRESSES NOT CONTROLLED BY 2B004 OR 2B104	1	\$48,900
2B226	VACUUM AND CONTROLLED ENVIRONMENT INDUCTION FURNAC	1	\$224,583
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	15	\$2,710,416
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	4	\$220,095
2D002	ADAPTIVE CONTROL/ELECTRONIC DEVICE SOFTWARE	3	\$3,775
2D983	EQUIPMENT CONTROLLED BY 2A983	2	\$26,000
2E001	TECHNOLOGY SUPPORTING EQUIPMENT/SOFTWARE IN 2A/2B/	1	\$0
2E003	OTHER TECHNOLOGY	2	\$100
2E201	TECHNOLOGY FOR USE OF COMMODITIES CONTROLLED BY 2A	2	\$0
3A001	ELECTRONIC DEVICES/COMPONENTS	47	\$3,344,522
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	15	\$1,490,004
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	2	\$3,850,000
3A992	GENERAL PURPOSE ELECTRONIC EQUIPMENT	9	\$255,825
3A999	SPECIFIC PROCESSING EQUIPMENT, N.E.S.	4	\$164,506
3B001	EPITAXIAL EQUIPMENT FOR SEMICONDUCTORS	1	\$860,000
3C004	HYDRIDES OF PHOSPHORUS, ARSENIC, OR ANTIMONY	1	\$117,928
3C005	SILICON CARBIDE WAFERS	1	\$98,750
3D002	SOFTWARE FOR USE OF CERTAIN EQUIPMENT CONTROLLED B	2	\$2
3D003	CAD SOFTWARE FOR SEMICONDUCTOR DEVICES/INTEGRATED	2	\$2
3D991	GENERAL PURPOSE ELECTRONIC EQUIPMENT FOR 3A992	1	\$18
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	23	\$22
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	23	\$23
4A003	DIGITAL COMPUTERS/ASSEMBLIES AND RELATED EQUIPMENT	1	\$189
4A994	ITEMS NOT CONTROLLED BY 4A001/4A002/4A003	1	\$24,000
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	24	\$24
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	20	\$20
4D003	SPECIFIC SOFTWARE, AS DESCRIBED IN THIS ENTRY	20	\$20
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	24	\$24
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	11	\$105,926,962
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	2	\$399,101
5A992	INFORMATION SECURITY EQUIPMENT	1	\$107,100
5B001	EQUIPMENT FOR DEV/PROD OR USE OF ITEMS IN 5A001	1	\$1
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	20	\$20
5D002	SOFTWARE FOR INFORMATION SECURITY	13	\$641,505
5D992	SOFTWARE NOT CONTROLLED BY 5D002	1	\$5,600
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	23	\$26
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	2	\$1
6A001	ACOUSTICS	6	\$3,911,281
6A002	OPTICAL SENSORS	2	\$432,640
6A003	CAMERAS	44	\$2,419,740
6B004	OPTICS	1	\$41,750
6E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT/MATERIALS/	1	\$1
6E201	TECHNOLOGY FOR EQUIPMENT CONTROLLED BY 6A003,6A005	1	\$1
7A008	UNDERWATER SONAR NAVIGATION SYSTEMS	2	\$49,950
7A103	INSTRUMENTATION, NAVIGATION EQUIPMENT/SYSTEMS NOT	8	\$9,856,044
7D003	OTHER SOFTWARE	1	\$1
7E004	OTHER TECHNOLOGY	1	\$2
9A004	SPACECRAFT	28	\$16,022,017
9A012	UNMANNED AIR VEHICLE SYSTEMS	2	\$1,350
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	2	\$244,200
9B990	VIBRATION TEST EQUIPMENT	1	\$114,056
9E001	TECHNOLOGY FOR DEV OF EQUIPMENT OR SOFTWARE IN 9A/	2	\$2

TOTAL APPLICATIONS: 540

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
TOTAL CCL'S: 77			
TOTAL DOLLAR VALUE: \$251,204,434			
TAJKIKISTAN			
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	1	\$253,000
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	\$1,069,100
1A995	PROTECTIVE AND DETECTION EQUIPMENT	1	\$26,500
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	1	\$3,840,000
3D101	SOFTWARE FOR THE USE OF CERTAIN ITEMS IN 3A101.B	1	\$20,000
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	1	\$20,000
6A003	CAMERAS	1	\$16,705
TOTAL APPLICATIONS: 3			
TOTAL CCL'S: 7			
TOTAL DOLLAR VALUE: \$5,245,305			
TURKMENISTAN			
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	\$37,730
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	1	\$3,840,000
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	1	\$1,620,000
3D101	SOFTWARE FOR THE USE OF CERTAIN ITEMS IN 3A101.B	1	\$20,000
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	1	\$20,000
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	\$2,028
9E018	TECHNOLOGY FOR DEV/PROD/USE OF ITEMS IN 9A018	1	\$10,000
TOTAL APPLICATIONS: 5			
TOTAL CCL'S: 7			
TOTAL DOLLAR VALUE: \$5,549,758			
UKRAINE			
0A984	SHOTGUNS, BUCKSHOT, SHOTGUN SHELLS	8	\$555,625
0A985	DISCHARGE TYPE ARMS	1	\$25,500
0A986	SHOTGUN SHELLS (EXCEPT BUCKSHOT SHELLS) AND PARTS	1	\$41,494
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	66	\$5,498,533
1A004	PROTECTIVE AND DETECTION EQUIPMENT	1	\$55,984
1A007	DEVICES DESIGNED TO INITIATE ENERGETIC CHARGES	2	\$3,340,000
1C353	GENETICALLY MODIFIED MICROORGANISMS	2	\$68,278
1E001	TECHNOLOGY FOR DEVELOPMENT OF EQUIPMENT UNDER 1A00	1	\$5,000
2A293	PUMPS DESIGNED TO MOVE MOLTEN METALS BY ELECTROMAG	1	\$26,700
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	2	\$1,742,370
2E983	SOFTWARE CONTROLLED BY 2D983	2	\$20,100
3A001	ELECTRONIC DEVICES/COMPONENTS	2	\$4,810
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	4	\$26,631,350
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	2	\$19,800
3B001	EPITAXIAL EQUIPMENT FOR SEMICONDUCTORS	2	\$5,040,000
3D101	SOFTWARE FOR THE USE OF CERTAIN ITEMS IN 3A101.B	4	\$120,000
3D980	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 3A980 AND 3A	2	\$0
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	1	\$0
3E101	TECHNOLOGY FOR THE USE OF CERTAIN ITEMS IN 3A001 &	4	\$430,000
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	2	\$10,380,750
5D002	SOFTWARE FOR INFORMATION SECURITY	1	\$8,692
6A003	CAMERAS	4	\$43,619
9E003	OTHER TECHNOLOGY	1	\$100
9E018	TECHNOLOGY FOR DEV/PROD/USE OF ITEMS IN 9A018	1	\$5,000
TOTAL APPLICATIONS: 103			
TOTAL CCL'S: 24			
TOTAL DOLLAR VALUE: \$54,063,705			

CCL	DESCRIPTION	APPLICATIONS	DOLLAR VALUE
UZBEKISTAN			
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	\$299
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	\$1,500,000
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	1	\$21,880
TOTAL APPLICATIONS: 3			
TOTAL CCL'S: 3			
TOTAL DOLLAR VALUE: \$1,522,179			
VIETNAM			
EAR99	ITEMS SUBJECT TO THE EAR N.E.S.	2	\$54,751
0A987	OPTICAL SIGHTING DEVICES FOR FIREARMS	1	\$90,250
1A001	COMPONENTS MADE FROM FLUORINATED COMPOUNDS	2	\$110,000
1A003	MANUFACTURES OF NON-FLUORINATED POLYMERIC SUBSTANC	1	\$1,350,000
1A004	PROTECTIVE AND DETECTION EQUIPMENT	2	\$59,780
1A985	FINGERPRINTING POWDERS, DYES, AND INKS	1	\$202,500
1A999	SPECIFIC PROCESSING EQUIPMENT, N.E.S	1	\$16,565
1C008	NON-FLUORINATED POLYMERIC SUBSTANCES	6	\$484,811
1C350	CHEMICALS, PRECURSORS FOR TOXIC CHEMICAL AGENTS	1	\$4,500
1C351	HUMAN PATHOGENS, ZOONOSES, AND TOXINS	1	\$20,000
2A983	EXPLOSIVES OR DETONATOR DETECTION EQUIPMENT	1	\$200,000
2B120	MOTION SIMULATORS OR RATE TABLES	1	\$254,300
2B350	CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT	9	\$1,120,634
2B352	EQUIPMENT FOR HANDLING BIOLOGICAL MATERIALS	3	\$80,614
3A001	ELECTRONIC DEVICES/COMPONENTS	3	\$377,564
3A002	GENERAL PURPOSE ELECTRONIC EQUIPMENT	2	\$119,256
3A101	ELECTRONIC EQUIPMENT/DEVICES NOT CONTROLLED BY 3A0	1	\$7,308,000
3A231	NEUTRON GENERATOR SYSTEMS INCLUDING TUBES	2	\$4,800,000
3A233	MASS SPECTROMETERS	2	\$177,203
3A981	POLYGRAPHS/FINGERPRINT ANALYZERS/CAMERAS/EQUIPMENT	2	\$3,222,000
3A992	GENERAL PURPOSE ELECTRONIC EQUIPMENT	1	\$1,968
3E001	TECHNOLOGY FOR DEV OR PROD OF CERTAIN ITEMS IN 3A/	5	\$3
3E002	OTHER TECHNOLOGY FOR ITEMS IN CATEGORY 3	3	\$5
4D001	SOFTWARE FOR CERTAIN EQUIPMENT/SOFTWARE IN 4A-4D	1	\$1
4D002	SOFTWARE TO SUPPORT TECHNOLOGY CONTROLLED BY 4E	1	\$1
4D003	SPECIFIC SOFTWARE, AS DESCRIBED IN THIS ENTRY	1	\$1
4D980	SOFTWARE FOR DEV/PROD/USE WITH 4A980 ITEMS	2	\$23,700,000
4E001	TECHNOLOGY FOR DEV/PROD/USE OF CERTAIN EQUIP/SOFTW	1	\$1
5A002	SYSTEMS/EQUIPMENT/INTEGRATED CIRCUITS FOR INFO SEC	14	\$99,648,920
5A991	TRANSMISSION ITEMS NOT W/I PARAMETERS IN 5A001	1	\$40,533
5D001	SOFTWARE FOR DEV/PROD/USE OF ITEMS IN 5A001/5B001/	1	\$1
5D002	SOFTWARE FOR INFORMATION SECURITY	10	\$1,050,735
5E001	TECHNOLOGY FOR DEV/PROD/USE, ETC, OF EQUIP. IN 5A0	11	\$331
5E002	TECHNOLOGY FOR DEV/PROD/USE OF INFORMATION SECURIT	8	\$61
6A001	ACOUSTICS	1	\$16,815
6A003	CAMERAS	6	\$474,950
9A018	COMMODITIES ON THE INTERNATIONAL MUNITIONS LIST	1	\$540,000
TOTAL APPLICATIONS: 87			
TOTAL CCL'S: 37			
TOTAL DOLLAR VALUE: \$145,527,054			

## **Appendix G: Report on Domestic Impact of U.S. Exports to Controlled Countries**

In accordance with Section 14(e) of the Export Administration Act of 1979 (EAA), as amended, the Bureau of Industry and Security (BIS) continues to assess the impact on U.S. industry and employment of output from “controlled countries” resulting, in particular, from the use of U.S. exports of turnkey plants and manufacturing facilities.

Section 14(e), which was added as an amendment to the Act in 1985, requires the following:

*“... a detailed description of the extent of injury to U.S. industry and the extent of job displacement caused by U.S. exports of goods and technology to controlled countries.”*  
*“... a full analysis of the consequences of exports of turnkey plants and manufacturing facilities to controlled countries... to produce goods for export to the United States or compete with U.S. products in export markets.”*

### **Goods and Technology Exports**

Historically, the dollar value of trade with controlled destinations, other than China, has been low. In calendar year 2008, U.S. exports to these countries totaled \$89.8 billion, which represents a 12 percent increase of \$9.6 billion from 2007 levels, and about 6.9% of total U.S. exports. China is the largest single export market among the controlled country group, with roughly 78 percent of the total. Russia ranks second with roughly 10 percent of the total. An analysis of exports by commodity category indicates that computer and electronic products, transportation equipment, machinery, chemicals, and waste and scrap represented over half of the total U.S. exports to controlled countries, especially China. Given the small share of U.S. exports to controlled countries relative to total U.S. exports (6.9%), the overall adverse impact through injury to U.S. industry and job displacement is probably minimal.

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<sup>1</sup> For the purpose of this section, “controlled countries” are: Albania; Armenia; Azerbaijan; Belarus; Cambodia; China (PRC); Cuba; Georgia; Iraq; Kazakhstan; Kyrgyzstan; Laos; Macao; Moldova; Mongolia; North Korea; Russia; Tajikistan; Turkmenistan; Ukraine; Uzbekistan; and Vietnam.

<b>Controlled Destinations</b>	<b>Calendar Year 2008 U.S. Exports (in millions)</b>
Albania	\$40
Armenia	\$151
Azerbaijan	\$239
Belarus	\$135
Cambodia	\$154
China	\$69,733
Cuba	\$712
Georgia	\$587
Iraq	\$2,070
Kazakhstan	\$986
Kyrgyzstan	\$44
Laos	\$18
Macao	\$307
Moldova	\$66
Mongolia	\$57
North Korea	\$52
Russia	\$9,335
Tajikistan	\$51
Turkmenistan	\$60
Ukraine	\$1,868
Uzbekistan	\$301
Vietnam	\$2,789
Total Exports to Controlled Destinations	\$89,755
Total Exports to All Countries	\$1,300,500
U.S. Exports to Controlled Destinations as a Percent of Overall U.S. Exports	6.9%
Percent of U.S. Exports to Controlled Destinations Requiring a BIS License	0.5%
Percent of U.S. Exports to Controlled Destinations Subject to a BIS License Requirement	2.0%

Although the bases for our export controls are national security, foreign policy, and short supply, BIS—as part of its defense industrial base monitoring responsibilities—reviews on an ongoing basis the potential impact of U.S. technology transfers. U.S. and other Western firms choose to establish production facilities in China for a variety of reasons, including: technology transfer requirements imposed by China; a desire to take



advantage of China's large pool of labor; the desire for proximity to the market for their products; and a desire to take advantage of business incentives created by Chinese local and national governments. The United States runs a trade deficit with China (\$266.3 billion in 2008), and more than 50 percent of China's exports originate from foreign-invested enterprises. Thus, these practices and trends raise concerns with regard to their impact on the competitiveness of U.S. industry and employment over the long term.

A review of licenses applied for exports to China in the past fiscal year shows that a significant number involve manufacturing equipment and facilities, electronics, and/or components for use in foreign-invested production facilities. Among the top-valued manufacturing equipment exported in 2008 were chemical manufacturing facilities, equipment for handling biological materials and equipment for semiconductors. Examples of the top-valued components are mass spectrometers and pressure transducers. Many other types of products, such as aircraft and waste and scrap, are doubtless exported without the need for an export license (i.e., because they are not controlled for national security reasons or are eligible for shipment under a license exception).

BIS also monitors certain forms of technology transfer as part of its overall responsibilities for the defense industrial base. These responsibilities include reviewing the impact of offsets on defense trade, participating in the Treasury Department-chaired Committee on Foreign Investment in the United States, and assessing the health and competitiveness of strategic industry sectors. Further information on these activities, including copies of the industrial sector assessments, is available from BIS's website at [www.bis.doc.gov](http://www.bis.doc.gov).

### **Critical Technology Assessments**

BIS conducts critical technology assessments to examine the impact of export controls on key existing or emerging technologies subject to the Export Administration Regulations (EAR). These technologies are dual-use, meaning they have both civilian and military applications. For a given technology, BIS evaluates the scope and impact of current U.S. export controls, foreign export control practices, the sector's economic status, and the foreign availability (i.e., availability-in-fact, non-U.S. source, sufficient quantity, and comparable quality) of product substitutes.

BIS published one assessment in FY 2009, *Critical Technology Assessment: Five Axis Simultaneous Control Machine Tools*, which concludes that foreign availability of certain five axis simultaneous control machine tools controlled by Export Control Classification Numbers (ECCNs) 2B001.b.2 and 2B001.c.2 exists to China and Taiwan. Additionally, BIS found that U.S. export license processing times, especially to China, are longer than those of other Wassenaar Arrangement members, placing U.S. exporters at a competitive disadvantage.

In FY 2009, BIS initiated the following four assessments, whose completion it anticipates in FY 2010:

*Vibration Test Systems and Equipment*, which examines the impact of export controls on and the foreign availability of vibration test systems and equipment controlled for missile technology, nuclear nonproliferation, and anti-terrorism reasons under ECCNs 2B116 and 9B990.

*Impact of U.S. Export Controls on Green Technology Items*, which examines the impact of export controls on items controlled under 88 different ECCNs that are considered to be or can be used to produce green technology products.

*Impact of U.S. Export Controls on Encryption Items*, which examines the impact of export controls and reporting requirements on encryption items controlled under several ECCNs in Part II of Category 5 of the Commerce Control List.

*Fine Grain Graphite*, which examines the impact of export controls on and the foreign availability of fine grain graphite controlled for missile technology and anti-terrorism reasons under ECCN 1C107.a.

### **Turnkey Plants and Facilities Exports**

The Export Administration Regulations (EAR) require a license to export certain items for turnkey plants and facilities to controlled destinations. As a result of several revisions to the EAR in recent years, an increasing number of items for turnkey plants and facilities have become eligible for export to controlled destinations either without a license or under a license exception. For example, a license is generally not required for exports to controlled destinations (except Cuba, Sudan, Syria, and Iran) of items for turnkey plants and facilities that are classified as EAR99 (the designation for items that are subject to the EAR but not specifically listed on the Commerce Control List). In addition, certain items for turnkey plants and facilities may be listed in a Commerce Control List entry where the applicable reason for control does not require a license to one or more controlled destinations, as indicated in the appropriate Reason for Control column of the Commerce Country Chart. Other items for turnkey plants and facilities may be eligible for export to controlled destinations under a license exception, such as License Exception CIV (Civilian), which authorizes exports of certain national security controlled items to civil end-users, for civil end-uses, in most controlled countries, except Cuba and North Korea; or License Exception TSU (Technology and Software, Unrestricted), which authorizes exports of operation technology and software, sales technology, and software updates, subject to certain conditions.

U.S. export data that are available from the Bureau of the Census do not provide the level of specificity needed to identify exports of turnkey plants or items for turnkey plants and facilities. This precludes a thorough assessment of the impact of U.S. exports of items for turnkey plants and facilities to controlled countries. However, the small number of such exports in the past, coupled with the low percentage of U.S. exports destined for controlled countries and items subject to a license requirement, make it reasonable to conclude that the ultimate impact on U.S. production is insignificant.

## **Appendix H: Agricultural Supply Tables and Information**

*The U.S. Department of Agriculture (USDA) regularly updates the World Agricultural Supply and Demand Estimates (WASDE) report. That information may be accessed in three ways:*

<http://www.usda.gov/oce/commodity/wasde>

PDF file: <http://www.usda.gov/oce/commodity/wasde/latest.pdf>

Text file: <http://www.usda.gov/oce/commodity/wasde/latest.txt>