

Compliance with U.S. Export Control Laws, Regulations and Policies



Guiding principles:

- DOE contractors are subject to applicable U.S. export control laws, regulations and policies when exporting materials and technical information resulting from the performance of their contracts.
- Technology is a critical part of the DOE mission and requires special consideration in identifying and protecting sensitive technologies including intellectual property and pending patents.

References

- a. Federal Acquisition Regulations (FAR) 17.6, Management and Operating Contracts
- b. Department of Energy Acquisition Regulations (DEAR) 917.6, Management and Operating Contracts
- c. Atomic Energy Act of 1954 (AEA), as amended, <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0980/v1/sr0980v1.pdf#page=13> (accessed 9/27/11)
- d. “Contractor Compliance with Deemed Export Controls,” DOE Inspector General (IG) Report DOE/IG-0645, April 2004
- e. “Review of Status of Prior Export Control Recommendations at the Department of Energy,” DOE IG Report INS-O-07-01, May 2007
- f. “Export Controls, Improvements Needed to Prevent Unauthorized Technology Releases to Foreign Nationals in the United States,” General Accounting Office (GAO) Report GAO-11-354, February 2011
- g. Export Administration Act of 1979 (EAE), as amended
- h. Export Administration Regulations (EAR), 15 Code of Federal Regulations (CFR) Parts 730-774, <http://www.access.gpo.gov/bis/index.html> (accessed 9/13/11)
- i. Arms Export Control Act (AECA) (22 U.S.C. 2778)

- j. International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120-130, <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div5&view=text&node=22:1.0.1.13.59&idno=22> (accessed 9/13/11)
- k. Assistance to Foreign Atomic Energy Activities, 10 CFR Part 810, <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div5&view=text&node=10:4.0.2.5.23&idno=10> (accessed 9/27/11)
- l. Export and Import of Nuclear Equipment and Material, 10 CFR Part 110, http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title10/10cfr110_main_02.tpl (accessed 9/27/11)
- m. Trading with the Enemy Act (TWEA) (50 U.S.C. App. 5(b) as amended by the Foreign Assistance Act of 1961), <http://www.treasury.gov/resource-center/sanctions/Documents/twea.pdf> (accessed 9/27/11)
- n. Foreign Assets Control Regulations, 31 CFR 500, http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title31/31cfr500_main_02.tpl (accessed 9/27/11)
- o. International Atomic Energy Agency (IAEA) Information Circular (INFCIRC) 254 Part 1, “Trigger List,” <http://www.iaea.org/Publications/Documents/Infcircs/2003/infcirc254r6p1.pdf> (accessed 9/13/11)
- p. IAEA INFCIRC 254 Part 2, “Dual-Use List,” <http://www.iaea.org/Publications/Documents/Infcircs/2003/infcirc254r5p2.pdf> (accessed 9/13/11)
- q. Executive Order (EO) 12981 Administration of Export Controls, December 5, 1995, as amended by EO 13020 October 12, 1996, and EO 13026 November 15, 1996, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=1995_register&docid=fr08de95-102.pdf (accessed 10/13/11)
- r. Nuclear Non-Proliferation Act of 1978 (NNPA), March 10, 1978, <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0980/v3/sr0980v3.pdf#page=19> (accessed 10/13/11)
- s. DOE Order 142.3A, Unclassified Foreign Visits and Assignments, October 14, 2010
- t. DOE Order 482.1, DOE Facilities Technology Partnering Program, January 12, 2001
- u. National Security Decision Directive (NSDD) 189, National Policy on the Transfer of Scientific, Technical and Engineering Information, September 21, 1985
- v. DOE Order 551.1C, Official Foreign Travel, June 24, 2008
- w. DOE Order 580.1, Chg 1, Department of Energy Personal Property Management Program, December 7, 2005
- x. DOE Form 580.1, U.S. Department of Energy End-Use Certificate (OMB Control Number 1910-5121), May 2003

Overview

This section provides guidance to DOE contracting officers on complying with United States (U.S.) export control laws and regulations and with assisting DOE contractors, including M&O contractors, who are required to either set up an Export Management and Compliance Program (EMCP) or improve upon an existing export compliance program. It is not intended to be comprehensive and encompass all aspects of export control requirements. Inconsistencies between this supplement and laws, regulations, or policies should be resolved in favor of the respective law, regulation or policy. Questions regarding export controls should be directed to legal counsel or the cognizant export licensing authority.

Background

An export is the transmission, shipping or carrying of equipment, materials, items, proprietary software, and/or protected technology/information abroad or to a foreign person. For export control purposes, foreign persons comprise foreign companies/corporations not incorporated in the U.S., foreign institutions/governments, and foreign persons who are not Legal Permanent Residents (LPRs). Exporting can occur as an export, “deemed export,” re-export or “temporary-export.” A “deemed export” is the transmission of protected technology/information to a non-LPR foreign person within U.S. boundaries. A “re-export” is transmission, shipping and carrying of equipment, materials, items, proprietary software, and/or protected technology/information from one foreign country/non-LPR foreign person to a second foreign country/non-LPR foreign person. A “temporary-export” involves a tangible item, material, or equipment which is under physical control in some manner that is returned to the U.S. or the country of origin after a specified period of time. U.S. export control policy is enforced through export control laws and regulations administered by the Departments of State (DOS), Commerce (DOC) and Energy (DOE), and by the Nuclear Regulatory Commission (NRC) and the U.S. Treasury Department (USTD). The identified Federal agencies administer export control laws, regulations and international treaties addressing unique areas of concern, although some overlapping responsibilities exist in the areas of weapons of mass destruction, delivery systems and dual-use applications.

For the control of most sensitive technology or its application, the primary method of protection is the security classification process. For DOE technology the classification system is augmented by the Unclassified Controlled Nuclear Information (UCNI) controls established by Section 148 of the Atomic Energy Act of 1954 (Reference c).

U.S. export control policy is consistent with international treaties/agreements. As a signatory of the Nuclear Nonproliferation Treaty (NPT), the U.S. is obligated to prevent non-nuclear weapons-states from acquiring nuclear explosive devices or related technology when facilitating the transfer of materials, equipment and technologies for the peaceful uses of nuclear energy to

NPT adherents. Other requirements regarding technology related to weapons of mass destruction (WMD) flow from U.S. membership in five multilateral export control regimes: the Nuclear Suppliers Group (NSG), the NPT Exporters (Zangger) Committee, the Missile Technology Control Regime (MTCR), the Australia Group (AG) and the Wassenaar Arrangement (WA).

Guidelines

A. Export Control Laws, Regulations and Policies

The following U.S. export control laws and regulations apply to DOE contracts when exporting materials and technical information resulting from the performance of their contracts:

- Department of Commerce - Export Administration Act (Reference g) and Export Administration Regulations (Reference h)
- Department of State - Arms Export Control Act (Reference i) and International Traffic in Arms Regulations (Reference j)
- Department of Energy – Atomic Energy Act of 1954 (Reference c) and Assistance to Foreign Atomic Energy Activities (Reference k)
- Nuclear Regulatory Commission – Atomic Energy Act of 1954 (Reference c) and Export and Import of Nuclear Equipment and Material (Reference l)
- Department of Treasury - Trading with the Enemy Act (Reference m) and the Foreign Asset Control Regulations (Reference n)

Questions regarding export controls should be directed to the cognizant licensing authority or general counsel.

B. What You Should Know

1. Export Control Policy and International Treaties/Agreements

U.S. export control policy is enforced through export control laws and regulations administered by the DOS, DOC, DOE, NRC and USTD. U.S. export control policy is consistent with international treaties/agreements between like-minded countries for the mutual protection of the treaty parties. Each of the identified Federal agencies has its own set of export control laws and regulations and international treaties addressing the specific areas of concern with some overlap responsibility in the areas of weapons of mass destruction, delivery systems, and dual-use applications.

As a signatory of the NPT, the U.S. is obligated to prevent non-nuclear weapons-states from acquiring nuclear explosive devices or related technology when facilitating the transfer of materials, equipment, and technologies for the peaceful uses of nuclear energy to NPT adherents.

Other requirements regarding technology related to WMD flow from U.S. membership in the following five multilateral export control regimes:

Nuclear Suppliers Group (NSG) at:

<http://www.iaea.org/Publications/Documents/Infcircs/Numbers/nr251-300.shtml> (accessed 9/13/11)

Trigger List

The NSG publishes the agreed guidance on equipment, materials and related technologies for processing, use or production of special fissionable materials into a Trigger List that is published by the IAEA. (Reference o) and

Dual-Use List

The NSG also publishes through the IAEA agreed guidance on the transfer of nuclear-related dual-use equipment, materials and related technologies. (Reference p);

Nuclear Non-Proliferation Treaty Exporters (Zangger) Committee at:

<http://www.zanggercommittee.org/Publications/Seiten/default.aspx> (accessed 9/13/11);

Missile Technology Control Regime (MTCR) at: <http://www.mtcr.info/english/annex.html> (accessed 9/13/11);

Australia Group (AG) at: <http://www.australiagroup.net/en/index.html> (accessed 9/13/11); and

Wassenaar Arrangement (WA) at: <http://www.wassenaar.org/controllists/index.html>. (accessed 9/13/11).

2. Definitions (Reference h)

Exporting can occur as an **Export, Deemed Export, Re-Export** and/or **Temporary-Export to Foreign Persons**.

Foreign Persons include foreign institutions/governments and foreign companies/corporations that were not incorporated in the United States. Foreign persons do not possess permanent legal residence within the United States.

Export is the transmission/shipping/carrying of equipment, materials, items, proprietary software, and/or protected technology/information abroad or to a foreign person.

Deemed Export is the transmission of protected technology/information to a foreign person within U.S. boundaries.

Re-Export is the transmission/shipping/carrying of equipment, materials, items, proprietary software, and/or protected technology/information from one foreign country/person to a second foreign country/person.

Temporary-Export involves a tangible item, material, or equipment which is under physical control in some manner that is returned to the U.S. or the country of origin after a specified period of time.

3. Export Control Transfer Methods

Transfer can occur by the transmission of technology/items by physical or electronic means such as:

- Shipping (by land, sea, or air) of export controlled information (ECI); hand-carrying on foreign travel; or performing processes or services in a foreign country that convey expertise.
- Sales, loans, or donations to foreign persons, including associated technical manuals.
- Consulting with or training foreign persons.
- Publications, presentations, and participation in international exchange programs or conferences.
- Mail, faxes, emails, postings/data transfer on the Internet, or communication through telephone calls.
- Cooperative Research and Development Agreements (CRADA), Work-For-Others (WFO) agreements, patent applications, non-disclosure agreements, procurement specifications, Memoranda of Agreement/Understanding, and contracting instruments.
- Sharing export controlled technology/information with foreign persons in the U.S., including visits or assignments of foreign persons to DOE facilities.

4. Export Control Laws, Regulations and Jurisdiction

a. Agencies' Areas of Responsibility Under Export Control Laws, Regulations and Jurisdiction

U.S. Government agencies are responsible for specific areas of export control based on their historical administration and knowledge of particular fields. U.S. Government agencies work together in assigning specific areas of responsibility and item/technology definitions when commodities or technologies overlap or have dual-uses (Reference q).

- **Department of Energy: Atomic Energy Act**
The DOE has jurisdictional authority for exports of any item or service whose release would reveal a "specific nuclear weapon function." (References c and r)
- **Department of Energy: 10 CFR Part 810, "Assistance to Foreign Atomic Energy Activities"**
The DOE has jurisdictional authority for exports for peaceful nuclear purposes of nuclear reactor technology, nuclear enrichment and reprocessing technology, heavy water production technology, and related areas. (References k and r)

- **Nuclear Regulatory Commission: 10 CFR Part 110, “Export and Import of Nuclear Equipment and Material”**

The NRC has jurisdictional authority for exports for peaceful nuclear purposes of nuclear reactors, nuclear enrichment and reprocessing facilities, heavy water production facilities, related proprietary operation and maintenance manuals, and related equipment. (References l and r)
- **Department of Commerce: Export Administration Regulations**

DOC has jurisdictional authority over a broad range of commercial dual-use commodities that are grouped into ten categories. Within each of these categories are the following subcategories: equipment, assemblies, and components; test, inspection and production equipment; materials; software; and technology. Each of the subcategories is defined by items listed from highest level of control to lowest level of control. The EAR (Reference h) “deemed exports” rules regulate providing export controlled technical information to certain foreign persons in the U.S. through the provision of documents, software, training or employment, as set forth in the Bureau of Industry and Security (BIS) policies.
- **Department of State: International Traffic in Arms Regulations**

The Arms Export Control Act (Reference i) is implemented through the ITAR (Reference j). DOS has jurisdictional authority over munitions items, including military systems, equipment, components, and services, and space-related systems, equipment, components, services and items.
- **Treasury Department: Foreign Asset Control Regulations**

The Trading with the Enemy Act (Reference m) is implemented through the Foreign Asset Control Regulations (Reference n). The USTDA Office of Foreign Asset Control (OFAC) has jurisdictional authority over all financial and tangible items having a destination to embargoed and terrorist sponsoring states.

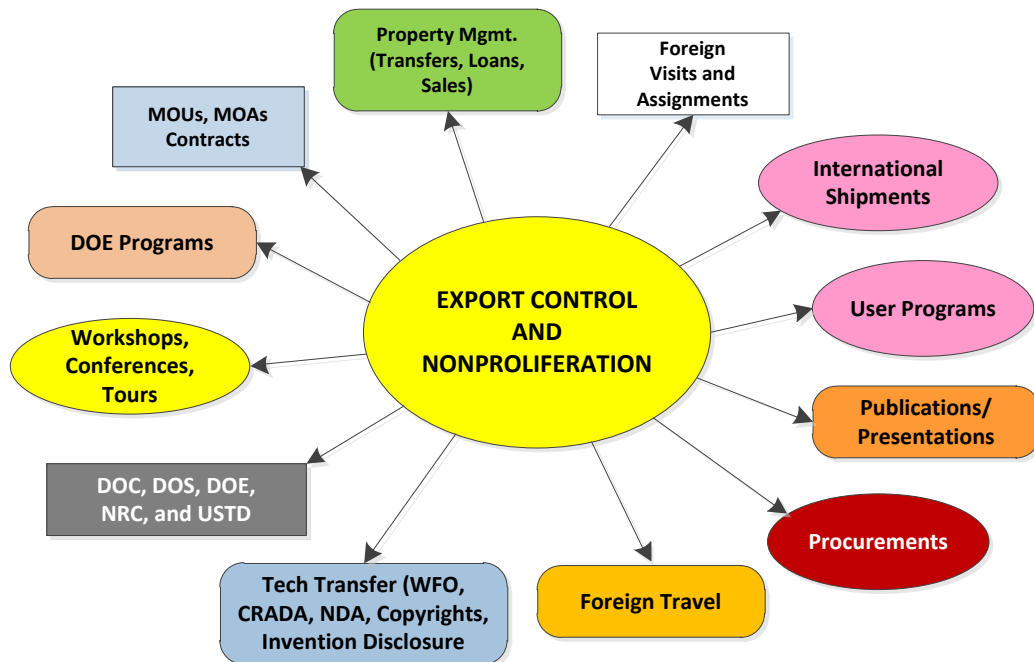
NOTE: Contact the Office of the General Counsel for the most up-to-date versions of the above listed statutes and regulations.

b. DOE Prime Contract Requirements (including, but not limited to)

- DOE O 142.3A Unclassified Foreign Visits and Assignments
- DOE O 205.1B Department of Energy Cyber Security Management Program
- DOE O 241.1B, Scientific and Technical Information Management
- DOE O 470.4B Safeguards and Security Program

- DOE O 471.1B Identification and Protection of Unclassified Controlled Nuclear Information
- DOE O 471.3 Change 1, Identifying and Protecting Official Use Only Information
- DOE O 481.1C Admin Chg 1 Work for Others (Non-Department of Energy Funded Work)
- DOE O 482.1 DOE Facilities Technology Partnering Programs (User Facilities)
- DOE O 483.1 DOE Cooperative Research and Development Agreements
- DOE O 483.1-1 DOE Cooperative Research and Development Agreement Manual
- DOE O 484.1 Admin Chg 1, Reimbursable Work for Department of Homeland Security
- DOE O 551.1C Official Foreign Travel
- DOE O 580.1A Department of Energy Personal Property Management Program

**DOE TECHNOLOGY TRANSFER SECURITY AREAS:
Oversight and Review Obligations**



5. DOE Technology Transfer Areas: Oversight and Review Obligations

- **Foreign Visits and Assignments**

The review and approval of all foreign national visits and assignments is required by DOE 142.3A (Reference s). Requests should be reviewed by a Subject Matter Expert (SME) in order to evaluate information, software, and physical areas to be accessed to ensure that no export controlled technology will be transferred. Release of technology or software subject to the Export Administration Act (Reference g) to a foreign person in the U.S. is considered to be a "deemed export" to the home country or countries of the foreign person, as described in EAR (Reference h) 734.2 (b). These transfers are the most critical issues to be addressed during any visit or assignment. Requests should also be vetted for DOC, DOS and USTD sanctioned and denied parties, including debarred persons, listed entities and USTD Specially Designated Nationals.

- **International Shipments**

Shipping reviews should include all international mailings, shipments and drop shipments. Embargoes and terrorist-sensitive restrictions must be considered when reviewing shipping requests. Consignees should be vetted for DOC, DOS and USTD sanctioned and denied parties, including debarred persons, listed entities and USTD Specially Designated Nationals.

- **User Programs**

User programs should be reviewed to establish boundaries for proposals that contain proprietary information. Users with proposals that do not contain proprietary information perform fundamental and applied research work with the intent to publish as established in DOE Order 482.1 (Reference t) and defined in NSDD-189 (Reference u). Proposals and research activities should be reviewed by SMEs to ensure that controlled technology, as described in EAR (Reference h) 734.2 (b) is not transferred from the user to foreign persons within the user facility.

- **Publications/Presentations**

Publication and presentation reviews by SMEs prior to public release should include review as required by NSDD-189, including classified information, ECI, and other national security content. This applies to web release as well. This function is often performed in conjunction with the technical information office and the classification office.

Markings for technical information determined to be ECI may vary depending on the needs and preferences of site or program managers. The following format is preferred for the distribution limitation statement on such documents:

EXPORT CONTROLLED INFORMATION

*Contains technical information whose export is restricted by * .
Violations may result in administrative, civil, and/or criminal penalties.
Limit dissemination to U.S. persons[†]. The cognizant program manager
must approve other dissemination. This notice shall not be separated
from the attached document.*

Reviewer (Signature)

Date

* Fill in the appropriate export control regulation, e.g., DOC Export Control Classification Number (ECCN) xxxx, DOS ITAR Category xx, NRC 10 CFR Part 110.xx, DOE 10 CFR Part 810.xx, or other jurisdiction classification as appropriate.

- **Procurement**

All procurements involving foreign countries, persons or companies should be reviewed by SMEs, including intellectual property counsel, for technology transfer and export control concerns. Specific language addressing export control laws and regulations should be part of the standard contractual terms and conditions. If special export conditions or restrictions are needed, they should be added to the contract language prior to the onset of work.

- **Foreign Travel**

The review and approval of all travel to a foreign country is required by DOE Order 551.1C (Reference v). Requests should be reviewed by SMEs in order to evaluate any technology to be discussed in foreign countries. Any presentations or demonstrations to be given outside the U.S. should be reviewed and approved by the local Export Control Department, as well as the Technical Information Office. Destinations should be vetted for DOC entity list and USTD sanctions list association, as travel to these destinations could require an export license or be prohibited. Laptops should be cleared for transport to a foreign destination.

- **Tech Transfer**

The technology transfer area includes activities such as WFOs, CRADAs, non-disclosure agreements, User Facility Agreements (UFA), and licenses for invention disclosures, copyrights, and patents. These contractual vehicles must be reviewed by an SME for controlled technology both coming into the facility and leaving the facility. All parties involved must be authorized for the receipt of specific technology, as well as protecting proprietary information. Sponsor approval should always be received before involving a foreign person in these types of activities.

- **Departments of Homeland Security, Defense and State**

Most often work for these agencies will come to a facility through a WFO mechanism. However, special care should be noted when dealing with these work scopes. In addition to technology and equipment controlled by DOC under the EAR (Reference h), these areas are often subject to ITAR (Reference j) controls by the DOS and some data is considered critical infrastructure data. It is vital to determine if any technology to be transferred is subject to ITAR controls, and if so, either obtain a DOS license or insure that none of the information is transferred to a foreign person.

- **Workshops, Conferences and Tours**

Workshops and conferences should be reviewed by SMEs of the host organization for foreign national attendance. If information to be available at the event is assumed to be publicly available, all internal presentations and demonstrations should be reviewed to ensure compliance. Outside presenters and demonstrators should provide signed assurances that their information has been reviewed by their respective organizations and is declared publicly releasable. All tours should be reviewed for content and access. Special care should be noted when tours are given to individuals from a facility on the DOC Entity List, as these may require positive escort to ensure compliance. Before an export-controlled technical disclosure is made, a DOS license, DOC license, NRC license, USTD authorization or DOE 10 CFR Part 810 authorization must be obtained.

- **DOE Programs**

Foreign persons (including foreign national employees) participating in DOE programs should be cleared through the sponsoring DOE Headquarters program office, which must obtain concurrence from the contractor's Export Control Department. If there is the possibility of transfer of nuclear technology to a foreign entity, the sponsoring Headquarters program office should consult with the Office of Nonproliferation and International Security (NA-24) to determine whether the activity is subject to DOE 10 CFR 810 authorization before foreign participation can take place including the sharing or transfer of nuclear software codes. Care should also be taken to determine if a DOS,

DOC, or NRC license is needed before the transfer of any materials, equipment, technology or software to a foreign entity.

- **Contracts**

Contractual documents should be reviewed to assure that export control requirements are provided for both work coming into the facility and work being outsourced from the facility. This can often be handled in a standard terms and conditions clause (A clause covering the contractor's responsibility to comply with U.S. export control laws and regulations is available in STRIPES).

- **Property Management**

Per DOE Order 580.1A (Reference w), the property management organization should ensure that export control concerns of High Risk Personal Property (HRPP) are addressed when property is loaned, transferred or dispositioned.

HRPP includes:

- (1) Property especially designed or prepared (EDP) for use in the nuclear fuel cycle illustrative list in 10 CFR 110 (Reference l), including items listed in the NSG Trigger List (Reference o).
- (2) Property listed on the EAR (Reference h) Control List (15 CFR 774) because of dual-use applications in the design, development, production or use of weapons of mass destruction, and conventional weapons, including property as listed in the NSG Dual-Use List (Reference p), and the International Control Lists of the Australia Group, the Missile Technology Control Regime and the Wassenaar Arrangement.
- (3) Property listed on the ITAR (Reference j) U.S. Munitions List (22 CFR 121), and the Atomic Energy Act (Reference c) including nuclear weapon components or weapon-like components.

HRPP must be controlled from acquisition through disposal. HRPP must be identified at acquisition and marked as such. All the requirements of DOE Order 580.1, including marking, recording, inventory, utilization, and disposal apply to HRPP. DOE Form 580.1 (Reference x) must be completed by the recipient of HRPP and signed by the appropriate approving official. The completed certificate becomes part of the transfer records.

Nuclear weapons components, nuclear weapons-like components and NSG Trigger List items that are not sanitized or destroyed must be approved for alternative disposition. The following two documents must be provided for approval of alternative disposition:

- (1) Written request for alternative disposition made through the cognizant Head of Departmental Element and then through NA-24 for disposition approval by the Deputy Administrator for Defense Nuclear Nonproliferation (NA-20); and
- (2) DOE Form 580.1 forwarded through NA-24 for export control approval by NA-20.

For all other HRPP, the export control review on the DOE Form 580.1 will be completed by the local export control SME.

6. Export Control “Carve Out”

The following discussion applies to information only. It does not include any tangible products, services, items, equipment, software, and systems which are export controlled. Information falls into the following three categories: 1) openly releasable, 2) controlled for reasons other than export controls, such as proprietary business strategies and personal information, and 3) export controlled technology/information. The U. S. Government has recognized and acknowledged these differences and has reflected the openly releasable portion of information.

- **Publicly Available Information**

Publicly available information is information that is generally accessible to the interested public in any form and therefore not subject to export control laws and regulations. The following information which is published and which is generally accessible or available to the public without restriction:

- through sales at news stands and bookstores;
- through subscriptions which are available without restriction to any individual who desires to obtain or purchase the published information;
- through second class mailing privileges granted by the U.S. Government;
- at libraries open to the public or from which the public can obtain documents;
- through patents available at any patent office;
- through unlimited distribution at a conference, meeting, seminar, trade show or exhibition, generally accessible to the public, in the U.S.;
- through public release (i.e., unlimited distribution) in any form (e.g., not necessarily in published form) after approval by the cognizant U.S. Government department or agency; and
- through federally-funded fundamental research in science and engineering at colleges, universities and laboratories (DOE contractors) in the U.S.

where the resulting information is ordinarily published and shared broadly in the scientific community.

- **Fundamental Research**

Fundamental research is basic and applied research in science and engineering, where the resulting information is ordinarily published and shared broadly within the scientific community. Conversely, proprietary research and industrial development, design, production, and product utilization are under the U.S. Government jurisdiction and therefore subject to U.S. export control laws and regulations. It should be understood that these terms have strict definitions in addition to the prohibitions and end user restrictions discussed in the next section.

- **Limitations on Fundamental Research and Publicly Available Information**

Although openly publishable literature is not subject to export control, DOE's policy is to oppose interaction with terrorist and embargoed countries unless there is specific U.S. Government policy support for sponsorship for such interactions. All DOE funded/ sponsored interactions should be reviewed by an SME to assure NSDD-189 compliance.

College, University and DOE Laboratory research will not be considered "fundamental research" if:

- u the researchers accept other restrictions on publication of scientific and technical information resulting from the project or activity, or
- u the research is funded by the U.S. Government and specific access and dissemination controls protecting information resulting from the research are applicable.

The U.S. Government has chosen to prohibit certain types of equipment, materials, software and technology (reasons for control include nuclear nonproliferation, chemical and biological weapons nonproliferation, national security, missile delivery systems, encryption), certain end uses (military, weapons of mass destruction, missile technology) for export, re-export, and deemed export by U.S. persons including U.S. organizations. Under regulation 15 CFR Part 736 (Reference h) "Prohibitions" are detailed highlighting the above areas and override NSDD-189.

NSDD-189 does not take precedence over statutes. NSDD-189 does not exempt any research, whether basic, fundamental, or applied, from statutes that apply to export controls such as the Arms Export Control Act (Reference i), the Export Administration Act (Reference g), or the U.S. International Emergency Economic Powers Act, or the regulations that implement those statutes (the ITAR (Reference j) and the EAR

(Reference h)). Thus, if export-controlled items are used to conduct research or are generated as part of the research efforts, the export control laws and regulations apply to the controlled items.

7. Export Control Violations and Penalties

Violations of export control laws and regulations can have serious consequences for the United States, DOE, and the DOE Laboratory involved. The U.S. can have its national security threatened or compromised, if certain highly-sensitive information would fall into the wrong hands. DOE could suffer programmatic consequences, if there was a significant failure.

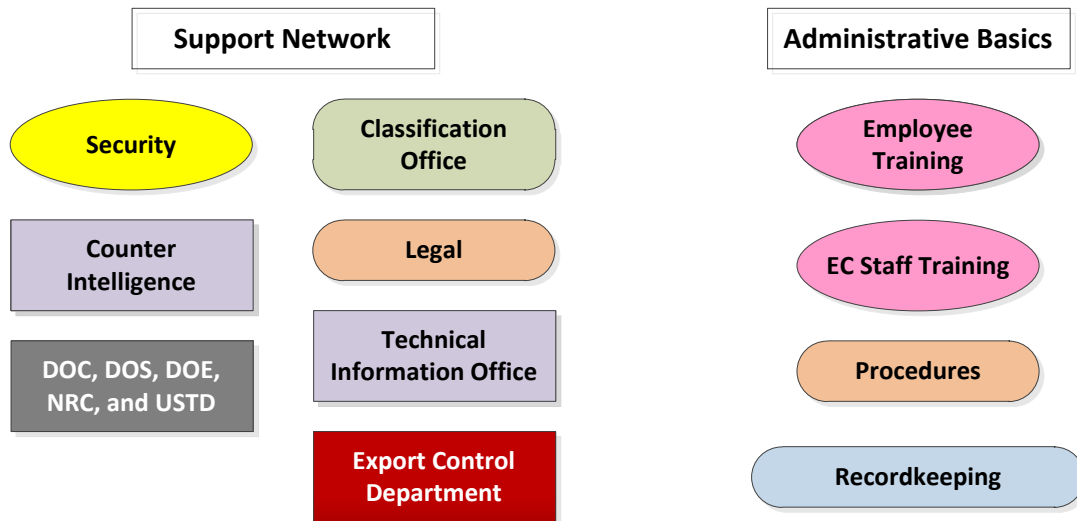
Contractors and their employees can face severe financial and operational restrictions as a result of a violation. The regulations for each export control licensing authority (DOS, DOC, NRC, DOE, and USTD) have a specific set of criminal and civil penalties.

If a violation occurs or one is thought to have occurred, self disclosure is not only recommended, it is required. Each export control jurisdictional authority has its own disclosure process. Each agency and/or contractor has or should have an escalation process for such matters.

Depending on circumstances and the significance of the violation, penalties can include:

- Fines for the individual and/or legal entity contractor
- Denial of export privileges for a specified period of time or indefinitely
- Loss of Programs/Projects
- Loss of reputation
- Debarment, seizure, and/or forfeiture
- Imprisonment

**DOE TECHNOLOGY TRANSFER SECURITY AREAS:
Internal Control Framework**



8. Export Management and Compliance Program (EMCP)

The following discussion provides guidance for DOE contracting officers on determining whether DOE contractors should be required to either set up an EMCP or improve an existing export compliance program. The DOC BIS offers guidance on how to set up an EMCP for dual-use items by providing the elements of such a program with examples and discussions for doing so at the following URL (click on Compliance Guidelines):

<http://www.bis.doc.gov/complianceand enforcement/emcp.htm> (accessed 9/13/11).

The DOS Directorate of Defense Trade Controls offers guidance on an export compliance program for munitions items at the following URL (click on Compliance Program Guidelines):

<http://pmdtc.state.gov/compliance> (accessed 9/13/11).

The key elements of a DOC ECMP or a DOS Export Compliance Program as applied to DOE contractor activity can be summarized as follows:

- **Management Commitment and Policy**

The first steps in setting up an EMCP are to establish written export compliance standards for the organization, commit resources for the export compliance program and designate senior officials to manage the program. This results in an Export Policy Statement from company management issued to all company organizations and employees. The statement will clearly state that the company and its employees will comply with all U.S. Government laws and regulations and that every employee will be

aware of and understand any export control requirements related to his or her work. This policy statement identifies the export control organization and contacts for additional information and support. It also identifies the potential risks to the individual and the business entity of incurring violations.

- **Registration**

Exports that fall under the DOS require the exporter to register prior to submitting temporary, deemed, other exports and/or re-exports. This registration process generally includes organization officers asserting commitments to comply with the law and regulation which includes having an EMCP in place.

- **Risk Assessment of the Export Program**

DOE Laboratories have a variety of mission objectives from National Nuclear Security Administration (NNSA) defense and nonproliferation initiatives to the Office of Science (fundamental and applied research) to Office of Nuclear Energy (nuclear research) which support sensitive and non-sensitive programs/projects of varying degrees. The greater the level of sensitivity the greater the level of scrutiny is required during review and authorization (graded approach).

A second factor is the number of foreign persons that are visitors, assignees, and employees at DOE facilities. A greater number of foreign persons on-site will mean a greater opportunity for an unintended transfer (deemed export) to occur. Another factor is the citizenship of the foreign person. If they are from a country of proliferation concern and/or work for a sensitive foreign facility, a greater level of scrutiny is required during review and authorization (graded approach).

A third factor is the number of foreign or international agreements each DOE Laboratory has in place. The number of these agreements has increased and this increase is expected to continue into the future. Therefore, a greater level of scrutiny of exports, re-exports, and deemed exports is required (graded approach).

DOE Laboratories have different missions. Therefore the workflow through-put will be very different from lab to lab. Additionally the organizational structure for handling export control activities can vary as well. Some organizations use different organizations to oversee classified work, tangible exports, technology exports, property management, and imports.

Examples of inflows include, among others, DOE Work Authorizations/Programs/Projects, WFOs, CRADAs, contracts, international agreements, memoranda of understanding (MOU)/memoranda of agreement (MOA), non-disclosure agreements, purchase orders, foreign visits and assignments. An analysis of these flows through the

work flow process will help identify the nexus (interaction) between the work and foreign employees/consultants who might be involved in export-controlled work (deemed export).

Example of outflows include, among others, procurement, foreign travel, shipping, and electronic transfers, which provide opportunities for export-controlled activities (exports, re-exports, and deemed exports). Analysis of the points of release will identify areas where an export-control process is needed to address the release requirements for controlled items and technology.

- **Export Compliance Staffing and Training**

Once the inflows and outflows are identified, the process of risk analysis determination leads to the process of risk mitigation by providing SMEs (staffing) to manage export compliance for the transfer of items and technology. The amount of coverage depends on many factors from Laboratory mission (types and amount of sensitive work) to the amount of interaction with foreign persons and facilities. To cover all these transactions, laboratories should have a multi-level training program. Examples include training of hosts for foreign national visitors, awareness training for technical staff, program/project specific training, licensing training for deemed exports and technical assistance agreements, which tend to be more complicated with provisos and conditions. This process will provide the range of resources necessary for meeting export-control requirements. As export-control laws and regulations change and/or the configuration of the programs and project change in sensitivity, the appropriated resource level must be modified to reflect these conditions.

- **Recordkeeping Regulatory Requirements**

Most U.S. export control authorities require a minimum of records retention for a period of five years after the completion of the work. Depending on the license provisos and conditions, the retention time may be longer.

- **Internal and External Compliance Monitoring and Periodic Audits**

Any EMCP should include an organizational review of the legal entity itself and an export control self-assessment to assure an effective compliance program. On a periodic basis, review of the functional and program areas is important to assure compliance validation and identify areas requiring improvement.

An internal review on a regular basis is highly recommended to assure that new requirements are implemented, quality is being maintained, and the organizational focus properly reflects changing internal and external conditions.

- **Export Violations**

Finally, an EMCP must address reporting and documentation procedures for handling compliance problems. These include procedures for 1) investigating potential errors, failures or export violations, 2) reporting violations through internal management and to external authorities, if required, and 3) taking corrective actions to quickly identify failures or weaknesses in the program, to take short-term and long-term actions to prevent further problems, to modify procedures to prevent future problems, and to mitigate the consequences of past failures.

Conclusion on EMCP

The export-control compliance business requires broad knowledge in program/project management, technical aspects of the work/product, multi-agency laws and regulations, and foreign policy considerations in a constantly changing environment. Technology is a critical part of the DOE Laboratory mission and requires special consideration in identifying and protecting sensitive technologies including intellectual property and pending patents. The implementation of an EMCP requires a corporate policy, external and internal business analysis, established procedures and training. The EMCP helps protect sensitive technologies and minimizes the risk of compromising U.S. national security and compliance obligations with multilateral export control regime partners and United Nations resolutions. In addition, an effective EMCP minimizes the risk of negative publicity to DOE and its contractors that would come from the exposure of export violations, as well as the risk of potential fines and penalties for DOE contractors.

9. Export Control Review Process

- **Identification of Technology (Controlled)/Items/Materials Process**

The initial step in the identification of technology, items or materials process is to properly classify the technology, item or materials in the context of its intended purpose under the appropriate jurisdiction (discussed in the next bullet).

In order to support this identification process working with external suppliers, vendors, and sponsors, and internally with technical and/or program staff members, can be very helpful. If these resources do not provide a reliable classification, an advisory opinion or commodity classification request to the U.S. Government agency having export control jurisdiction is needed. This will protect the exporter in a compliance review.

- **Identification of Jurisdictional Authority**

In conjunction with identifying the technology, items and/or materials, determining which U.S. Government agency has jurisdictional authority is critical for proper export

control compliance. Points of jurisdictional authority can intersect between the DOS, DOC, DOE, USTD, and the NRC. When the appropriate jurisdiction is **not clear**, submission of a Commodity Classification (CCATS) to the DOC or Commodity Jurisdiction (CJ) request to the DOS is required.

- **Specific Classification of Technology/Item/Materials**

Within the regulation for each of the U.S. export control jurisdictions (DOS/ DOC/NRC/ DOE/USTD) is a list of definitions and categories. Within these definitions and categories are specific export requirements. Additionally, under certain jurisdictions, a graded approach is utilized to determine whether a license or exemption/exception can be employed for a specific export transaction.

- **Screening of Foreign Individuals/Facilities**

Once the technology, item and/or materials are defined and the appropriate jurisdiction is asserted, the next requirement is to “Screen” the foreign person or facility. The U.S. Government in cooperation with foreign governments has developed lists of persons, facilities and countries that will either be denied an export or require an export license with provisos and conditions. Each U.S. Government agency has lists that can be accessed on their web sites (http://export.gov/ecr/eg_main_023148.asp (accessed 9/13/11)), or a commercial service can be purchased to facilitate this review.

- **License/No License/Exemption/Exception**

Once the above steps of the export control review process have been completed, as applicable, the next step is to determine if an export license, no export license, deemed export license, re-export license, an exemption or exception notification is required and to identify other reporting requirements. If an export, deemed export and/or re-export license is required, documentation (license application with attachments) must be submitted to the appropriate agency. The application package will include technology/item/materials description, classification/category number, description of involved parties, end user, end use, purpose, method of transfer, and other requirements based on the U.S. Government agency’s regulatory requirements to. It should be noted that the timeframe for obtaining a license can take many months.

- **Exporting, Deemed Exporting and Re-exporting**

Once the license has been received, depending on the complexity of the specific license situation (deemed export, technical assistance agreement) proper implementation is critical to maintaining compliance. This action is generally referred to as “License Administration.” Prior to license implementation consideration of the following may be helpful to support the license administration.

- A) Have the involved parties been informed and trained (as appropriate)?
 - B) If a tangible item is being shipped abroad, has the item classification been identified with other relevant information and been input into the Automated Export System (AES)?
 - C) Has the Freight Forwarder been provided the appropriate information, e.g., license conditions?
 - D) If a technology transfer, have the export parties entered into an agreement referencing the conditions of the license or other export requirements with partners, consignees, or others?
 - E) Has required follow up documentation been provided to the appropriate U.S. Government agency?
 - F) Has the technology, item, and/or material been marked (paperwork) with the appropriate end-use and/or end-user restrictions?
- **Documentation and Records Management**

Documentation is required by all U.S. Government agencies in varying levels of detail and generally for a period of five years. Documentation may be needed to confirm the technology/item/materials definition, program/project definition, analysis of jurisdiction, classification, requirements/reasons for control or other. Additionally, documentation can be used in a database to serve as a historical reference for present and future export control transactions. Lastly documentation can support answering an inquiry relating to an enforcement action.

The storage, handling and disposal of contract files are governed by FAR 4.805 and DEAR Subpart 904.8. Generally, contracts and related records or documents exceeding the simplified acquisition threshold must be retained for 6 years and 3 months after final payment.