

# Louisiana State University A&M Campus Export Control Compliance Manual October 2013

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# INTRODUCTION

Export controls and trade sanctions are the United States laws and regulations that regulate and restrict the release of critical technologies, software, equipment, chemical, biological materials and other materials, and services to foreign nationals and foreign countries for reasons of foreign policy and national security.

These laws apply to virtually all fields of science and engineering and restrict the shipment, transmission or transfer of certain commodities, software, technology and services from the U.S. to foreign countries. Deemed exports, i.e. the release of controlled information to foreign nationals, even if located in the U.S., are also restricted under these laws and regulations. Export control laws apply to **all** activities – not just sponsored research projects.

An export is:

Shipment of a controlled commodity, equipment, material, or software outside of the U.S.

Disclosing controlled technology or technical data to a foreign national, whether in the U.S.  $\boldsymbol{x}$ 

- 9) Is a license required? If so, is enough time allowed to secure one?
- 10) Will the activity involve a sanctioned or embargoed country?

These guidelines outline processes for members of the LSU community to follow to ensure that LSU is in compliance with all export control laws and trade sanctions.

# FEDERAL LAWS, REGULATIONS, AND PENALTIES

Three U.S. Government agencies have primary export control regulatory responsibilities. The Department of Commerce through its Export Administration Regulations (EAR), the State Department through its International Traffic in Arms Regulations (ITAR) and the Arms Export Control Act (AECA), and the Treasury Department through the Office of Foreign Assets Control (OFAC) administer the export control laws and trade sanctions. The Commerce Department administers the Commerce Control List (CCL) and the State Department administers the U.S. Munitions List (USML).

The U.S. Government controls exports on a case-by-case basis, examining four factors: the destination, the good, software, technology or service, the end-user, and its end-use.

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The University will assist any member of the University community in complying with export control laws and trade sanctions, including securing licenses from U.S. Government agencies, where appropriate. However, the primary responsibility rests with the faculty member or researcher as the individual most informed about the contemplated project and the technical nature and properties of the goods, software and technology. Violation of export control laws and sanctions could result in individual criminal and civil penalties, therefore it is critical that faculty and researchers understand and adhere to export control laws and regulations.

Faculty and other researchers are responsible for:

Knowing classification of and export compliance requirements for the equipment, software, chemicals, materials and technology they intend to ship or carry outside of the United States;

Knowing whether the prop; e! inm iR i

Administration, and the Drug Enforcement Administration, and those laws and regulations must be consulted and complied with.

#### Penalties

There are severe civil and criminal penalties, including fines and imprisonment, for violating the export control laws and trade sanctions and both the organization and the individuals involved are subject to these penalties. The University and the individual(s) involved may also lose their ability to export. The University may be suspended or debarred from government contracting. The criminal and civil penalties for unlawful export and disclosure of information in violation of U.S. export control laws and trade sanctions include the following, depending on the items involved and the jurisdiction:

*EAR*: Criminal violations by the university can incur penalties up to \$1 million for each willful violation. For individuals, these penalties can reach up to \$1 million or 20 years imprisonment, or both, per violation. Civil penalties for both the university and individuals can reach up to \$250,000 per violation, or two times the value of the export, whichever is greater. These violations can also result in a denial of export privileges as well as other potential collateral penalties

*ITAR*: Criminal penalties can reach up to \$1 million per violation and 10 years imprisonment for individual willful violations. Civil penalties imposed upon departments, agencies, and officials can reach up to \$500,000 per violation. A person or university found to be in violation of ITAR (Arms Export Control Act) can be debarred from contracting with the government and could lose their export privileges.

*OFAC*: Penalties will range depending upon the sanction regime in question. Criminal violations by the university can reach up to \$1 million, and criminal penalties for individuals can reach \$1 million or 20 years in prison, or both. Civil penalties can be imposed up to \$250,000 per violation, or two times the transaction in question, whichever is greater.

# KEY TERMS AND DEFINITIONS

Even common words have very specific meanings within the export control laws. Following are some commonly used terms:

**Defense Service** - Providing of assistance (including training) anywhere (inside the United States or abroad) to foreign persons in connection with the design, development, engineering, manufacture, production, or use of a defense article, and the furnishing of any related technical data. (ITAR 120.9) The *Bona Fide* 

International Traffic in Arms Regulations (ITAR)

# ROLES AND RESPONSIBILITIES

#### Office of Research and Economic Development

The Office of Research & Economic Development (ORED) is committed to assisting the University research community in complying with export control laws and regulations. The Director of Research Compliance will work directly with the ECCO, researchers and other University offices to ensure compliance with export control regulations. ORED will maintain up-to-date information on ORED's Policies & Compliance page.

#### Principal Investigators

Principal Investigators (PIs) have the best understanding of his or her research and play the primary role in developing and directing all research projects (funded internally and externally). Therefore, PIs have the best information as to whether the particular technology, data, or information involved in that research is or may be covered by expor #

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#### Defense Services means

(1) The furnishing of assistance (including training) to foreign persons, whether in the United States or abroad in the design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, processing or use of defense articles;

(2) The furnishing to foreign persons of any technical data controlled under this subchapter (see §120.10), whether in the United States or abroad; or

(3) Military training of foreign units and forces, regular and irregular, including formal or informal instruction of foreign persons in the United States or abroad or by correspondence courses, technical, educational, or information publications and media of all kinds, training aid, orientation, training exercise, and military advice.

#### Definition of Export Under the ITAR

The ITAR defines the term 'export' broadly. The term applies not only to exports of tangible items from the U.S. but also to transfers of intangibles, such as technology or information. The ITAR includes the release of controlled technical data to foreign nationals, even in the U.S.

#### Authorization to Export

Any U.S. person or entity that manufactures, brokers, or exports defense articles or defense services must register with the Directorate of Defense Trade Controls (DDTC) and secure a license prior to any export. Excluded from these regulations are activities limited to the creation of unclassified technical data, or the fabrication of defense articles for experimental or scientific purposes, including research and development. LSU does not engage in the manufacturing of defense articles.

#### Items Subject to the EAR

The Department of Commerce Bureau of Industry and Security regulates the export of commercial products, software and technology under the Export Administration Regulations (EAR), 15 CFR §§ 730-774. The EAR covers a wider range of products and technology, the product classification process is highly technical

Generally, most items of U.S. origin, or physically located in the U.S., are subject to the EAR. Foreign manufactured goods are generally exempt from the EAR re-export requirements if they contain less than a *de minimus* level of U.S. content by value. The EAR requires a license for the exportation of a wide range of items with potential 'dual' commercial and military uses, or which are otherwise of strategic value to the U.S. (but not made to military specifications). However, only items listed on the Commerce Control List (CCL) generally require a license prior to exportation. The items are designated by "ECCNs." Items not assigned an ECCN are designated as "EAR 99" and can generally be exported without a license, unless the export is to an embargoed country, or to a prohibited person or end-use. Items are further organized into 5 groups as follows:

*Commodities* means finished or unfinished goods ranging from high-end microprocessors, to airplanes, to ball bearings.

*Manufacturing Equipment* includes equipment specifically for manufacturing or testing controlled commodities, as well as certain generic machines, such as computer numerically controlled manufacturing and test equipment.

Materials includes certain alloys and chemical compounds.

*Software* includes software specifically associated with particular commodities or manufacturing equipment, as well as any software containing encryption and the applicable source code.

*Technology* means information required for the development, production, or use of a good, and takes the form of technical data and technical assistance. For some ECCNs, there may be a distinction between technology for the "use" of a product and the technology for the "design" or "manufacture" of the product.

#### Export Control Classification Number (ECCN)

Goods, software and technology on the CCL are primarily commercial in nature not military. (Items that have primarily military application are covered under ITAR.) The CCL categorizes the goods and related technology covered into ten topical categories. Items are further designated by Export Control Classification Numbers (ECCNs). Items not assigned a specific ECCN fall under a catch-all category called "EAR99."

The fundamental difference between the EAR and ITAR is that the EAR is concerned with "dual use" items (items designed for potential commercial purposes that can have military applications) and the ITAR with those that are inherently military in nature. Another difference is the treatment of fundamental research. In the ITAR, is it subsumed under "public domain" and in the EAR it is a separate and distinct category. In general, the EAR is clearer and more specific in its coverage than the ITAR.

In order to know whether you may export a dual use item, first you have to know how it is designated under the Commerce Control List (CCL) by determining the item's ECCN and check for license exceptions. For commercially available goods, software, or technology, contacting the manufacturer for the item's export control classification is recommended. Second, you have to check the Country Chart. Third, you have to check the proposed end-use. Fourth, you have to check the proposed end-user. The flow chart that follows shows the steps to determining whether or not a license is required under the EAR.

In determining the classification of an entire system, you generally consider the nature of the entire assembled system rather than the classification of individual components (with the exception of included information technology or encryption software). There are some helpful interpretations to assist you. See Interpretations 2 and 13 at 15 CFR 770.2. (By comparison, under the ITAR, a component that contains one single ITAR-controlled item would make the entire assembled system controlled.)



# KEY ISSUES IN UNIVERSITY ACTIVITIES

Export regulations require attention to several considerations in a University setting. Considerations and subsequent actions depend on evaluation of the recipient, the destination, involvement of controlled technology, and governmental jurisdiction to determine how the regulations apply and whether a license must be obtained. Most activities conducted at LSU are likely to qualify for license exclusions for information that is Publicly Available or in the Public Domain, such as the Educational Information Exclusion and the Fundamental Research Exclusion. Otherwise an export license may be required to allow for participation by foreign nationals or for foreign research collaborations.

#### Fundamental Research Exclusion (FRE)

The term "fundamental research" means basic or applied research in science and engineering, the results of which are ordinarily published and shared broadly within the scientific community. Fundamental research is distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reasons. Both the ITAR and EAR provide that information resulting from fundamental research is not subject to export controls. This is referred to as the Fundamental Research Exclusion (FRE).

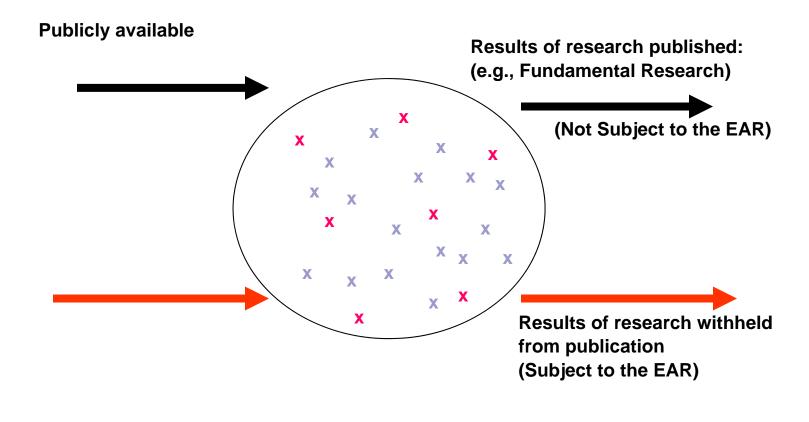
Specifically, the EAR provides that the fundamental research exclusion applies so long as the university and its researchers do not accept restrictions on publication of scientific and technical information resulting from the project or activity, or personnel access restrictions. The EAR specifically permits customary prepublication reviews by research sponsors to prevent inadvertent divulging of proprietary information provided to the researcher by the sponsor or to insure that publication will not compromise any patent rights. The EAR citation is 15 CFR § 734.8.Access and dissemination controls in government contracts with national security agencies normally do not trigger a license requirement as long as the university otherwise follows any national security controls imposed in the contract (15 CFR 734.11(a)).

By comparison, the ITAR states that university research will not be deemed to qualify as fundamental research if: (1) the university or its researchers **a** $\mathbf{c}$ cept any restrictions of io**M** is  $\cdot$ s

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# **Universe of Research**

Adapted from Alex Lopes, Department of Commerce



**OUTPUT** 

shipment of items subject to the EAR, you must check whether General Prohibitions 4-10 apply. EAR Part 736. If any 'red flags' are indicated, the concerns must be addressed satisfactorily or the shipment should be aborted. In some instances, license exceptions may apply. The ECCO can help make these determinations. The process may include completing a Request to Ship Materials Out of the U.S., submitting an End User Certification Form to the ECCO that has been completed by the end user, and engaging a reputable freight forwarder to complete the shipment and file all appropriate documentation.

For exports requiring a license and all shipments of goods having a value greater than \$2500, an AES filing with the U.S. Census Bureau must be filed. The filing must indicate the applicable ECCN and the license number or license exception that applies. Contact the ECCO for assistance with this process.

#### **Deemed Exports**

While exports are commonly associated with the physical shipment of materials across a U.S. border, export controls are much broader. They also include the transfer of technology or software, technical data, or performance of defense services to foreign nationals even when the transfer takes place within the U.S. This transfer is "deemed" to be an export. The issue of deemed exports is particularly relevant for university environments where students and faculty from every corner of the globe engage in teaching and research activities together. In many instances, the requirements of the export control laws can be appropriately satisfied through reliance on available exclusions from export controls, such as exclusions for educational information, and exclusions for information that is publicly available or in the public domain, including the fundamental research exclusion. LSU is committed to ensuring these exclusions are relied upon and satisfied. For example, with respect to fundamental research, it is the policy of LSU that research shall be conducted openly and without prohibitions on the publication and dissemination of the results, unless specifically authorized by the LSU ECCO after evaluation and implementation of a suitable TCP.

A "deemed export" under the ITAR involves the export within the United States to a foreign person of technical data, in other words information or software, required for the development, production or use of defense articles included in the USML. Technical data does not include information or software concerning general scientific, mathematical, or engineering principles commonl fm dev b intm

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export: operation, installation, maintenance (checking), repair, overhaul **and** refurbishing. EAR Part 772. If the foreign national has access only to the technology that is necessary to operate the export controlled equipment, a release of "use" technology has not occurred. Further, the deemed export rule does not regulate the mere operation of controlled equipment. Deemed exports could occur through such means as a demonstration, oral briefing, or plant visit, as well as the electronic transmission of non-public information or software. Specific reference must be made to the relevant ECCN because what constitutes "technology" can vary. For example, in the case of select agents, "technology" includes information about disposal of the materials under ECCN 1E351. Technology and software that are not subject to the EAR would be excluded from export regulation, such as publicly available technology.

#### **Supercomputers**

A common deemed export question relates to access by persons in the LSU community to supercomputers (designated by their adjusted peak performance or APP under Category 4 of the CCL). This is an example where mere access to or operation of a supercomputer does not constitute a deemed export.

## Encryption Software and Technology

Faculty and students who work with encryption software and technology have a particularly complex compliance framework to maneuver within. As referenced above, encryption software (as well as associated technology) with symmetric key length exceeding 64 bits generally do not satisfy the exclusions on which universities ordinarily rely, including the educational information exclusion or m a

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Syria or Sudan. 15 CFR 740.13. However, determining the applicability of the TSU exception is complex and you should contact LSU ECCO for help with the analysis.

Special exemptions apply to teaching encryption techniques. Encryption technology that is publicly available (in other words, published in books or sold on the retail market), including technology covered by ECCNs 5E002 and 5E992, are not subject to the EAR. Therefore, publicly known encryption techniques and schemes may be shared and taught to non-U.S. persons within the U.S. (sharing of encryption software is a separate analysis). However, providing encryption technology controlled under 5E002 to students may require a license if it is provided with the specific intent to aid in the development of commodities or software controlled under 5A002 or 5D002. See License Requirement Note to ECCN 5E002.

Exclusions that are relevant for researchers when traveling include:

Published Information and Software - inform

export of a commodity or good outside of the U.S. attending a conference where registration is limited to U.S. citizens attending a conference outside of the United States activities where export control exceptions do not apply transfer of technical data about a controlled technology to a foreign national in or outside of the U.S.

providing anything of value to someone from a sanctioned country, on the entity list, denied persons list, debarred (or excluded) parties list or any other restricted list.

When exclusions or exceptions do **not** apply (or if the transaction involves dealings with a sanctioned entity or country), then a license must be obtained for any deemed export, export, or re-export **prior** to the transfer of any information.

The following information is then needed to determine whether the U.S. origin product requires a license:

*1. Export Control Classification Number (ECCN).* Certain items, notably those controlled by multilateral export control regimes, are on the Commerce Control List (CCL) (part 774 of the EAR) and are included under a specific ECCN. The ECCN in the CCL will also tell you the reason(s) for control. An item can be 'self-classified' with justification or BIS can also assist

prohibited. An end-user certification form may need to be completed by the end user to assist in the determination process.

## **RECORD KEEPING**

LSU must comply with the various record keeping requirements of the EAR and ITAR and related laws and regulations. This is generally (and preferably) done by providing documents to the ECCO in cases where an export control determination is to be made, but in most cases, the documents shall be retained by the affected unit or individual having specific responsibilities outlined in this manual. The export control records that are retained and secured include any licenses, license applications, policies, manuals, forms and guidelines, memoranda, not

# DETECTING AND REPORTING VIOLATIONS

## Commitment to Reporting

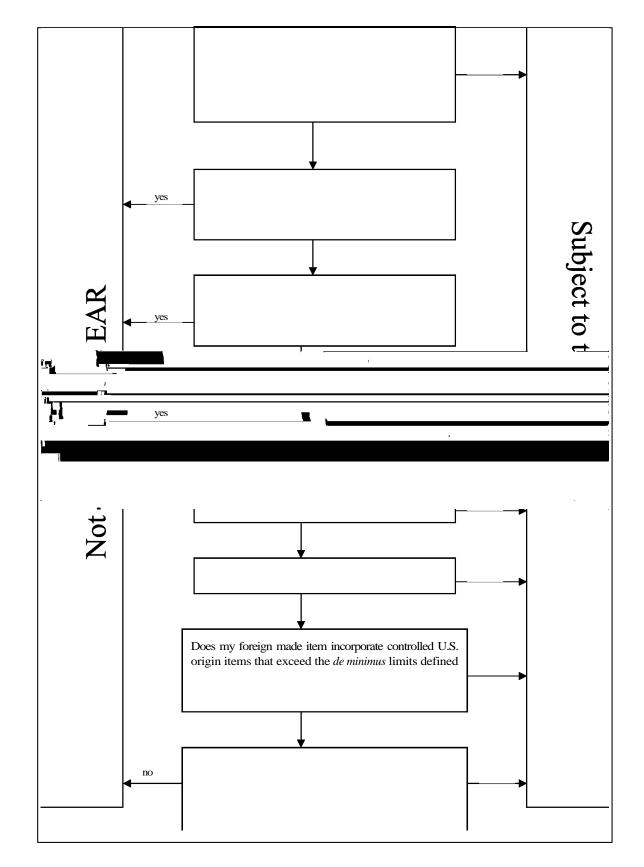
An integral part of export compliance is that employees report suspected violations of export laws and these suspected violations are thoroughly investigated. LSU is committed to voluntarily self-disclose violations in accordance with federal regulations. Members of the LSU community are expected to contact the ECCO should they have any questions about the application of the export control laws to their research or other activities. LSU faculty, administrators, staff and students should report any potential violations to the ECCO. No employee shall be punished on the basis that he or she reported what was reasonably believed to be an act of wrongdoing or a violation of the export control laws.

#### Investigation

Once an alleged violation has been reported, an investigation will be initiated to determine the validity of the allegation and an appropriate response.

#### **Government Subpoenas**

In the event any subpoena or other request for documents is received from any Federal agency, immediately constact the Office #f te  $MQ#h'_h$  is m Mt



Am I subject to Export Administration Regulations? (Supplement No. 2 to Part 732)