Vanderbilt University

Export Controls Overview
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OVERVIEW OF EXPORT CONTROLS

I. INTRODUCTION

The U.S. export control system generally requires export licensing for defense items, for items that have both commercial and military applications, and for exports to sanctioned persons and destinations. U.S. national security, economic interests and foreign policy shape the U.S. export control regime. The export laws and regulations aim at achieving various objectives, such as preventing the proliferation of weapons of mass destruction, advancing the U.S. economic interests at home and abroad, aiding regional stability, implementing anti-terrorism and crime controls, and protecting human rights.

These controls generally restrict the export of products and services based on the type of product and the destination of the export. In both the defense and high-technology sectors, the U.S. Government tightly regulates the export not only of equipment and components, but also of technology. Technology includes technical data, such as blueprints and manuals, as well as design services (including the transfer of “knowledge”) and training. U.S. laws assert jurisdiction over U.S.-origin equipment and technology even after it is exported (i.e., restricting the re-export or re-transfer to third parties). In addition to general export licensing, the United States maintains economic embargoes against a number of countries whose governments consistently violate human rights or act in support of global terrorism. Such embargoes bar most transactions by U.S. persons with these countries.

Three principal agencies regulate exports from the United States: the U.S. Department of State Directorate of Defense Trade Controls (“DDTC”) administers export control of defense exports; the U.S. Department of Commerce Bureau of Industry and Security (“BIS”) administers export control of so-called "dual-use" technology exports; and the U.S. Department of the Treasury Office of Foreign Assets Control (“OFAC”) administers exports to embargoed countries and designated entities.

II. EXPORT CONTROLS AND UNIVERSITY RESEARCH

U.S. national security and economic interests are heavily dependent on technological innovation and advantage. Many of the nation's leading-edge technologies, including defense-related technologies, are being discovered by U.S. and foreign national students and scholars in U.S. university research and university-affiliated laboratories. U.S. policymakers recognize that foreign students and researchers have made substantial contributions to U.S. research efforts, but the potential transfer of controlled defense or dual-use technologies to their home countries could have significant consequences for U.S. national interests. The U.S. export control agencies place the onus on universities to understand and comply with the regulations.1

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Export controls present unique challenges to universities and colleges because they require balancing concerns about national security and U.S. economic vitality with traditional concepts of unrestricted academic freedom, and publication and dissemination of research findings and results. University researchers and administrators need to be aware that these laws may apply to research, whether sponsored or not. However, it also is important to understand the extent to which the regulations do not affect normal university activities.

III. **EXPORT OF DEFENSE ARTICLES AND SERVICES – INTERNATIONAL TRAFFIC IN ARMS REGULATIONS**

Under the International Traffic in Arms Regulations (ITAR), 22 C.F.R. §§ 120-130, DDTC administers the export and re-export of defense articles, defense services and related technical data from the United States to any foreign destination, or to any foreign person, whether located in the United States or abroad. Section 121.1 of the ITAR contains the *United States Munitions List* (“USML”) and includes the commodities and related technical data and defense services controlled for export purposes. The ITAR controls not only end items, such as radar and communications systems, military encryption and associated equipment, but also the parts and components that are incorporated into the end item. Certain non-military items, such as commercial satellites, and certain chemical precursors, toxins, and biological agents, are also controlled.

A. **ITEMS CONTROLLED UNDER THE ITAR**

The ITAR uses three different terms to designate export controlled items – defense articles, technical data, and defense services. With rare exceptions, if an item contains any components that are controlled under the ITAR, the entire item is controlled under the ITAR. For example, a commercial radio that would normally not be controlled under the ITAR becomes a controlled defense article if it contains an ITAR-controlled microchip.

1. **Defense Article** means any item or technical data that is specifically designed, developed, configured, adapted, or modified for a military, missile, satellite, or other controlled use listed on the USML. Defense article also includes models, mock-ups, or other items that reveal technical data relating to items designated in the USML.

2. **Technical Data** means any information for the design, development, assembly, production, operation, repair, testing, maintenance, or modification of a defense article. Technical data may include drawings or assembly instructions, operations and maintenance manuals, and email or telephone exchanges where such information is discussed. However, technical data does not include general scientific, mathematical, or engineering principles.

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2 The ITAR are promulgated pursuant to Section 38 of the Arms Export Control Act, 22 U.S.C. §§ 2778 et seq.

3 22 C.F.R. § 120.6.
commonly taught in schools, information present in the public domain, general system
descriptions, or basic marketing information on function or purpose.4

3. Defense Service means providing assistance, including training, to a foreign person
in the United States or abroad in the design, manufacture, repair, or operation of a defense
article, as well as providing technical data to foreign persons. Defense services also include
informal collaboration, conversations, or interchanges concerning technical data.5

B. THE USML CATEGORIES

The USML designates particular categories and types of equipment as defense articles
and associated technical data and defense services.6 The USML divides defense items into 21
categories, listed below. An electronic version of the USML is available on the Department of

I Firearms, Close Assault Weapons and Combat Shotguns
II Guns and Armament
III Ammunition / Ordnance
IV Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs
and Mines
V Explosives, Propellants, Incendiary Agents, and their Constituents
VI Vessels of War and Special Naval Equipment
VII Tanks and Military Vehicles
VIII Aircraft and Associated Equipment
IX Military Training Equipment
X Protective Personnel Equipment
XI Military Electronics
XII Fire Control, Range Finder, Optical and Guidance and Control Equipment
XIII Auxiliary Military Equipment
XIV Toxicological Agents and Equipment and Radiological Equipment

4 22 C.F.R. § 120.10. Note that the ITAR uses the term "blueprints" to cover drawings and assembly instructions.
5 22 C.F.R. § 120.9.
6 See 22 C.F.R. § 121.1.
C. **CLASSIFICATION**

While DDTC has jurisdiction over deciding whether an item is ITAR- or EAR-controlled, it encourages exporters to self-classify the item. If doubt exists as to whether an article or service is covered by the USML, upon written request in the form of a Commodity Jurisdiction ("CJ") request, DDTC will provide advice as to whether a particular article is a defense article subject to the ITAR, or a dual-use item subject to Commerce Department licensing.\(^7\) Determinations are based on the origin of the technology (i.e., as a civil or military article), and whether it is predominantly used in civil or military applications.

D. **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 defines as an “export” the passing of information or technology to foreign nationals even in the United States.**\(^8\) The following are examples of exports:

1. **Exports of articles from the U.S. territory**

   - Shipping or taking a defense article out of the United States.
   
   - Transferring title or ownership of a defense article to a foreign person, in or outside the United States.

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\(^7\) See 22 C.F.R. § 120.4. Note that DDTC has jurisdiction over determining whether an item is ITAR- or EAR-controlled. While BIS at Commerce provides assistance with determining the specific ECCN of a dual-use item listed on the CCL, if doubt exists as to whether an item is ITAR- or EAR-controlled, BIS will stay its classification proceeding and forward the issue to DDTC for jurisdiction determination.

\(^8\) 22 C.F.R. § 120.17.
2. Extra-territorial transfers

 The re-export or re-transfer of defense articles from one foreign person to another, not previously authorized (i.e., transferring an article that has been exported to a foreign country from that country to a third country).

 Transferring the registration, control, or ownership to a foreign person of any aircraft, vessel, or satellite covered by the USML, whether the transfer occurs in the United States or abroad.

3. Export of intangibles

 Disclosing technical data to a foreign person, whether in the United States or abroad, through oral, visual, or other means.

 Performing a defense service for a foreign person, whether in the United States or abroad.

E. AUTHORIZATION TO EXPORT

Generally, any U.S. person or entity that manufactures, brokers, or exports defense articles or services must be registered with DDTC. Registration is required prior to applying for a license or taking advantage of some license exemption. Once the registration is complete, an exporter may apply for an export authorization by submitting a relatively simple license application for the export of defense articles or technical data; or a complex license application, usually in the form of a Technical Assistance Agreement ("TAA"), for complex transaction that will require the U.S. entity to provide defense services. Most types of applications also contain additional certifications / transmittal letters, supporting documentation, and in some cases, non-transfer and use certification from the licensee and / or the foreign government of the licensee.

However, university researchers are usually engaged only in the creation of unclassified technical data, or engaged only in the fabrication of articles for experimental or scientific purpose, including research and development. Therefore, the university is not usually required to register with DDTC.

However, if the university desires to involve foreign nationals in ITAR-controlled research, it must register with the DDTC to apply for a license or take advantage of certain license exemptions. License exemptions specific to universities, as well as licensing procedures, are described in detail in the Key Issues in University Research section, below.

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9 22 C.F.R. § 122.1.

10 22 C.F.R. §§ 120.1(c) and (d); 122.1(c).

11 See 22 C.F.R. §§ 122.1(b)(3) and (b)(4).
F. Embargoed Countries Under DDTC Regulations

**ITAR Prohibitions.** In general, no ITAR exports may be made either under license or license exemption to countries proscribed in 22 C.F.R. § 126.1, such as China, Cuba, Iran, North Korea, Sudan, and Syria. Additional restrictions apply to other countries; a complete list of U.S. arms embargoes is available online at: http://www.pmddtc.state.gov/regulations_laws/documents/official_itar/ITAR_Part_126.pdf.

IV. Export of Commercial Dual-Use Goods and Technology – Export Administration Regulations

The Department of Commerce Bureau of Industry and Security (“BIS”) regulates the export of commercial products and technology under the Export Administration Regulations, 15 C.F.R. §§ 730–774 (“EAR”). While there are some parallels to the ITAR, there also are some major differences in how the regulations and the relevant agencies function.

They are similar in that both agencies focus on “technology transfer” and have been increasingly focused on enforcement. They differ in that the EAR covers a wider range of products and technology, the product classification process is highly technical, and most importantly, the need for a license depends not only on the type of product but on its final destination.

A. Items Controlled Under the EAR

Generally, all items of U.S.-origin, or physically located in the United States, are subject to the EAR. Foreign manufactured goods are generally exempt from the EAR re-export requirements if they contain less than a *de minimis* level of U.S. content by value. Such *de minimis* levels are set in the regulations relative to the ultimate destination of the export or re-export.

The EAR requires a license for the exportation of a wide range of items with potential “dual” commercial and military use, or otherwise of strategic value to the United States (but not made to military specifications). However, only items listed on the *Commerce Control List* (“CCL”) require a license prior to exportation. Items not listed on the CCL are designated as EAR99 items and generally can be exported without a license, unless the export is to an

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12 The EAR are promulgated under the Export Administration Act of 1979, as amended (50 U.S.C. app. §§ 2401-2420). From August 21, 1994, through November 12, 2000, the Act was in lapse. During that period, the President, through Executive Order 12924, which had been extended by successive Presidential Notices, continued the EAR in effect under the International Emergency Economic Powers Act (50 U.S.C. §§ 1701-1706 (IEEPA)). On November 13, 2000, the Act was reauthorized by Pub. L. No. 106-508 (114 Stat. 2360 (2000)) and it remained in effect through August 20, 2001. Since August 21, 2001, the Act has been in lapse and the President, through Executive Order 13222 of August 17, 2001, which has been extended by successive Presidential Notices, has continued the EAR in effect under IEEPA.
embargoed country, or to a prohibited person or end-use.\textsuperscript{13} The following summarizes the types of items controlled under the EAR:

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

- **Manufacturing Equipment.** This includes equipment specifically for manufacturing or testing controlled commodities, as well as certain generic machines, such as computer numerically controlled (“CNC”) manufacturing and test equipment.

- **Materials.** This includes certain alloys and chemical compounds.

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

- **Technology.** Technology, as defined in the EAR, includes both technical data, and services. Unlike the ITAR, there is generally no distinction between the two. However, the EAR may apply different standards to technology for “use” of a product than for the technology for the “design” or “manufacture” of the product.

**B. THE COMMERCE CONTROL LIST CATEGORIES**

The CCL provides a list of very specific items that are controlled. The CCL is similar to the "dual–use" list adopted by other countries under the Wassenaar Arrangement,\textsuperscript{14} although the CCL has additional items. The CCL is divided into the nine categories below. The CCL is available online at \url{http://www.access.gpo.gov/bis/ear/ear_data.html}.

**CATEGORIES**

0. Nuclear related items & miscellaneous items

1. Chemical compounds, microorganisms and toxins

2. Materials processing

3. Electronics

4. Computers

5. pt–1 Telecommunications

5. pt–2 Information security (encryption)

\textsuperscript{13} 15 C.F.R. § 734.

\textsuperscript{14} Information on the Wassenaar Arrangement is available at: \url{http://www.bis.doc.gov/wassenaar/default.htm}. 
6. Sensors & lasers
7. Navigation and avionics
8. Marine (vessels, propulsion, and equipment)
9. Propulsion systems, space vehicles (includes aircraft & aircraft engines)

C. Classification

As discussed in Overview, Section III.C, DDTC has jurisdiction to decide whether an item is ITAR– or EAR–controlled. DDTC encourages exporters to self–classify the product. If doubt exists, a CJ request may be submitted to DDTC to determine whether an item is ITAR– or EAR–controlled.15

Once it is determined that an item is EAR–controlled, the exporter must determine its Export Control Classification Number (“ECCN”). BIS has two assistance procedures where the proper ECCN classification or licensing requirements are uncertain.16 To determine EAR’s applicability and the appropriate ECCN for a particular item, a party can submit a “Classification Request” to BIS. To determine whether a license is required or would be granted for a particular transaction, a party can request BIS provide a non–binding “advisory opinion.” While BIS provides assistance with determining the specific ECCN of a dual–use item listed on the CCL, if doubt exists as to whether an item is ITAR– or EAR–controlled, BIS will stay its classification proceeding and forward the issue to DDTC for jurisdiction determination.

Unlike the ITAR, for classification purposes BIS generally looks at the classification of the complete product being exported rather than at the classification of each subcomponent of the item (i.e., "black box" treatment), as opposed to the "see through" treatment under the ITAR.

D. Definition of Export and Re–export Under the EAR

1. Export. Export is defined as the actual shipment or transmission of items subject to the EAR out of the United States. The EAR is similar to the ITAR in that it covers intangible exports of “technology,” including source code, as well as physical exports of items.

2. Deemed Export. Under the EAR the release of technology to a foreign national in the United States is "deemed" to be an export, even though the release took place within the United States. Deemed exports may occur through such means as a demonstration, oral briefing, or plant visit, as well as the electronic transmission of non–public data that will be received abroad.

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15 For a complete discussion, see Overview of Export Controls, Section III.C above.

16 See 15 C.F.R. § 748.3.
3. **Re-export.** Similarly to the ITAR, the EAR attempts to impose restrictions on the re-export of U.S. goods, *i.e.*, the shipment or transfer to a third country of goods or technology originally exported from the United States.

4. **Deemed Re-export.** Finally, the EAR defines "deemed" re-exports as the release of technology by a foreign national who has been licensed to receive it to the national of another foreign country who has not been licensed to receive the technology. For example, ECCN 5E001 technology may be exported to a university in Ireland under the license exception for technology and software, but might require a deemed re-export license authorization before being released to a Russian foreign national student or employee of that university in Ireland.

E. **Authorization to Export**

Once determined that a license is required, an exporter can apply for export authorization from BIS. Unlike the ITAR, there is no requirement for formal registration prior to applying for export authorization. Additionally, the EAR has no equivalent to the TAA used in ITAR exports.

The EAR contains a number of exceptions. Determining whether a particular exception applies requires review of the specific application as detailed in 15 C.F.R. § 740, as well as review of the notes on applicable license exceptions following the ECCN entry on the CCL.\(^\text{17}\)

Each category of the CCL contains ECCNs for specific items divided into five categories, A through E: "A" refers to specific systems or equipment (and components); "B" refers to test, inspection and production equipment; "C" refers to materials; "D" refers to software; and "E" refers to the technology related to that specific equipment. For example, most civil computers would be classified under ECCN 4A994. The "4" refers to Category 4, *Computers*, and the "A" refers to the subcategory, *i.e.*, equipment. Generally, if the last three digits begin with a 'zero' or 'one' (*e.g.*, 4A001), the product is subject to stringent controls, whereas if the last three digits are a "9XX" (*e.g.*, 4A994), then generally there are fewer restrictions on export.

Once an item has been classified under a particular ECCN, a person can determine whether a license is required for export to a particular country. The starting place is the information following the ECCN heading. The "List of Items Controlled" describes the specific items covered or not covered by the ECCN.

(1) **Determine Reason for Controls.** The "License Requirements" section provides notations as to the reasons for control. These reasons include:

\(^{17}\) 15 C.F.R. § 740.
The most commonly used controls are Anti-Terrorism and National Security, while other controls only apply to limited types of articles. For example, ECCN 4A994 lists “License Requirements: Reason for Control: AT” (i.e., anti-terrorism) and the following:

<table>
<thead>
<tr>
<th>Control(s)</th>
<th>Country Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT applies to entire entry</td>
<td>AT Column 1</td>
</tr>
</tbody>
</table>

(2) **Apply Country Chart.** Once an item is identified as meeting the criteria for a particular ECCN, the user can refer to the chart found at 15 C.F.R. § 738, Supp. 1. If the particular control applies to that country, a license is required. For example, Syria has an “X” under AT Column 1, therefore a license would be required unless an exception applied.

(3) **Exceptions.** The EAR contains a number of exceptions. Determining whether a particular exception applies requires review of the specific application as detailed in 15 C.F.R. § 740, as well as review of the notes on applicable license exceptions following the ECCN entry. These exceptions include:

- **LVS** Items of limited value (value is set under each ECCN).
- **GBS** Items controlled for national security reasons to Group B countries.
- **CIV** Items controlled for national security reasons to particular countries where end-user is civilian.
- **TSR** Certain technology and software to certain countries.
- **APP** Computer exports to certain countries.
- **KMI** Encryption exemption for key management.
TMP Certain temporary exports, re-exports, or imports, including items moving through the U.S. in transit.

RPL Certain repair and replacement parts for items already exported.

GFT Certain gifts and humanitarian donations.

GOV Exports to certain government entities.

TSU Certain mass-market technology and software.

BAG Baggage exception.

AVS Aircraft and vessels stopping in the U.S. and most exports of spare parts associated with aircraft and vessels.

APR Allows re-export from certain countries.

ENC Certain encryption devices and software.

AGR Agricultural commodities.

CCD Authorization of certain consumer communication devices to Cuba.

License exceptions specific to universities, as well as licensing procedures, are described in detail in Key Issues in University Research below.

V. OFAC SANCTIONS PROGRAM AND BARRED ENTITIES LISTS

A. SANCTIONED COUNTRIES

U.S. economic sanctions broadly prohibit most transactions between a U.S. person and persons or entities in an embargoed country, including Cuba, Iran, North Korea, Syria, and Sudan. This prohibition includes importation and exportation of goods and services, whether direct or indirect, as well as "facilitation" by a U.S. person of transactions between foreign parties and a sanctioned country. For example, sending a check to an individual in Iran could require an OFAC license or be prohibited. More limited sanctions may block particular transactions or require licenses under certain circumstances for exports to a number of

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18 With the exception of the sanctions on Cuba and North Korea, OFAC sanctions are promulgated under the International Emergency Economic Powers Act of 1977, 50 U.S.C. §§ 1701-1706 (IEEPA). The embargoes on Cuba and North Korea are promulgated under the Trading with the Enemy Act of 1917, 12 U.S.C. § 95a (TWEA).
countries, including but not limited to Burma, Liberia, and Zimbabwe.\textsuperscript{19} Because this list is not complete and subject to change, please visit http://www.treas.gov/offices/enforcement/ofac/.

While most sanctions are administered by OFAC, BIS has jurisdiction over certain exports prohibitions (via “embargo” regulations), as is the case with exports to Syria.\textsuperscript{20} In other words, a license from BIS would be required to ship most items to Syria and other OFAC sanctioned countries or could be prohibited. Economic sanctions and embargo programs are country-specific and very detailed in the specific prohibitions.

B. TERRORIST AND OTHER BARRED ENTITY LISTS

Various U.S. Government agencies maintain a number of lists of individuals or entities barred or otherwise restricted from entering into certain types of transactions with U.S. persons. Particularly since 9/11, U.S. companies are beginning to become more assertive in attempting to place contractual terms with foreign companies related to these lists. Such lists must be screened to ensure that the university does not engage in a transaction with a barred entity. Vanderbilt University uses ListVUe to expedite screening of these and other lists.

- **Specially Designated Nationals and Blocked Persons List (“SDN List”).** Maintained by OFAC, this is a list of barred terrorists, narcotics traffickers, and persons and entities associated with embargoed regimes. Generally, all transactions with such persons are barred. The SDN List is available at: http://www.treas.gov/offices/enforcement/ofac/sdn/index.shtml.


- **List of Debarred Parties.** The Department of State bars certain persons and entities from engaging in the export or re-export of items subject to the USML (available at: http://www.pmddtc.state.gov/compliance/debar.html). Note that the number of countries subject to a U.S. arms embargo is much broader than those subject to OFAC embargoes. See http://www.pmddtc.state.gov/embargoed_countries/index.html.

- **Denied Persons List.** These are individuals and entities that have had their export privileges revoked or suspended by BIS. The Denied Persons List is available at: http://www.bis.doc.gov/dpl/Default.shtm.

\textsuperscript{19} See http://www.treas.gov/offices/enforcement/ofac/ for a full list of U.S. sanction programs.

\textsuperscript{20} See 15 C.F.R. § 746.
• **Entity List.** These are entities identified as being involved in proliferation of missile technology, weapons of mass destruction, and related technologies. The *Entity List* is available at: [http://www.bis.doc.gov/Entities/Default.htm](http://www.bis.doc.gov/Entities/Default.htm).

• **Unverified List.** These are foreign persons and entities for which BIS has been unable to verify the nature of their operations. While transactions with these entities are not barred, special due diligence is required. The *Unverified List* is available at: [http://www.bis.doc.gov/Enforcement/UnverifiedList/unverified_parties.html](http://www.bis.doc.gov/Enforcement/UnverifiedList/unverified_parties.html).

• **Excluded Parties List.** These are entities that have been barred from contracting with U.S. Government agencies. In general, companies cannot contract with such parties in fulfilling a U.S. Government contract, either as prime or sub-contractor. The *EPLS* is available at: [http://www.epls.gov/](http://www.epls.gov/).

• **Nonproliferation Sanctions** maintained by the Department of State. These lists are available at: [http://www.state.gov/t/isn/c15231.htm](http://www.state.gov/t/isn/c15231.htm).

**VI. ANTI-BOYCOTT RESTRICTIONS**

The anti-boycott rules were implemented to prevent U.S. business from participating directly or indirectly in the Arab League’s boycott of Israel. The laws prevent U.S. persons from doing business under terms that would restrict that person’s ability to do business with other countries under a boycott not recognized by the U.S. The Arab League’s boycott has lessened over the years, but still remains in effect in some countries. These restrictions are enforced by BIS. The applicable regulations are at 15 C.F.R. § 760.

Anti-boycott restrictions are most likely to appear in dealings with entities in certain Arab League countries. As of this writing, Kuwait, Lebanon, Libya, Qatar, Saudi Arabia, Syria, the United Arab Emirates, and Yemen continue to impose boycott restrictions on Israel and companies that do business with Israel. Iraq is not included in this list, but its status with respect to the future lists remains under review by the Department of Treasury.21 Egypt and Jordan have ceased participating in the boycott.

Note that there are strict reporting requirements even where the U.S. person refuses to participate in a requested boycott action.

**A. JURISDICTION**

These laws generally apply to any person or entity in the U.S., and to U.S. persons or entities abroad. As examples, the laws apply to:

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- A foreign company’s affiliate or permanent office in the U.S.
- A U.S. company’s foreign affiliate’s transaction with a third-party if that affiliate is controlled by the U.S. company and involves shipment of goods to or from the U.S.

B. RED FLAGS

The Commerce Department has set forth the following red-flags to look for as signs of anti-boycott restrictions:

- Agreements to refuse or actual refusals to do business with Israel or with blacklisted companies.
- Agreements to discriminate or actual discrimination against other persons based on race, religion, sex, national origin, or nationality.
- Furnishing information about business relationships with Israel or with blacklisted companies.
- Furnishing information about the race, religion, sex, or national origin of another person.
- Paying or otherwise implementing letters of credit that include requirements to take boycott-related actions prohibited by the anti-boycott regulations.

These restrictions may appear on pre-printed portions of agreements.

C. EXCEPTION

A major exception to the anti-boycott rules is the provision that permits compliance with the import requirements of a boycotting country. This exception permits firms to comply with import restrictions that prohibit imports from Israel or Israeli firms. The exception does not permit compliance with a boycott of blacklisted firms outside of Israel, nor does it allow for the issuance of a negative certificate-of-origin of any type. Other exceptions allow firms to provide country-of-origin information on the shipping documents, or information required for immigration or employment purposes. The exceptions can be found at 15 C.F.R. § 760.3.

D. REPORTING

Any U.S. person or entity who is asked to enter into an agreement or provide information that would violate anti-boycott laws must report this to BIS using a form BIS–621–P in accordance with 15 C.F.R. § 760.5. Information regarding the reporting of suspected anti-boycott activities can be found at http://www.bis.doc.gov/ComplianceAndEnforcement/index.htm. In addition, the U.S. Internal Revenue Service (IRS) requires U.S. taxpayers to report operations in or relating to boycotting
countries and nationals and request to cooperate with boycott activities. See IRS Form 5713, located online at: \texttt{http://www.irs.gov/pub/irs-pdf/f5713.pdf}.

These reporting requirements apply even where the U.S. person or entity refuses to participate. Crossing out the boycott language in a proposed contract does not end the matter. The duty to report remains even where the requesting foreign entity accepts the redaction of the boycott language.

For more information on anti–boycott rules see: \texttt{http://www.bis.doc.gov/complianceandenforcement/antiboycottcompliance.htm}. The Office of Boycott Compliance has also set up an advice line for questions about the anti–boycott rules, which can be reached at (202) 482–2381.

VII. \textbf{Penalties for Export Violations}

A. \textbf{General Overview}

Generally, any person or entity that brokers, exports, or attempts to export a controlled item without prior authorization, or in violation of the terms of a license, is subject to penalties. Violators may incur both criminal and civil penalties. Although there is a maximum amount for a civil or criminal penalty, the actual penalty imposed is often multiplied. For instance, each shipment might be considered a separate violation, and BIS will often find multiple violations of related restrictions in connection to each shipment (\textit{e.g.}, export without a license, false representation, actions with knowledge of a violation, \textit{etc.}). A series of violations occurring over a period of time may result in hundreds of thousand or even millions of dollars of penalties.

B. \textbf{Defense Exports}

The Arms Export Controls Act and the ITAR provide that wilful violations of the defense controls can be fined up to $1,000,000 per violation, or ten years of imprisonment, or both.\textsuperscript{22} In addition, the Secretary of State may assess civil penalties, which may not exceed $500,000 per violation.\textsuperscript{23} The civil penalties may be imposed either in addition to, or in lieu of, any other liability or penalty. The articles exported or imported in violation, and any vessel, vehicle or aircraft involved in such attempt is subject to seizure, forfeiture and disposition.\textsuperscript{24} Finally, the Assistant Secretary for Political–Military Affairs may order debarment of the violator, \textit{i.e.}, prohibit the violator from participating in export of defense items.\textsuperscript{25}

\textsuperscript{22} 22 U.S.C. § 2778(c) and 22 C.F.R. § 127.3.

\textsuperscript{23} 22 U.S.C. § 2778(e) and 22 C.F.R. § 127.10.

\textsuperscript{24} 22 C.F.R. § 127.6.

\textsuperscript{25} 22 U.S.C. § 2778(g) and 22 C.F.R. § 127.7.
While imposing criminal liability is fairly rare, many major U.S. companies have been assessed significant civil penalties in the millions of dollars.\(^{26}\) For example, an investigation into the export practices of a leading manufacturer of military night vision equipment for the U.S. Armed Forces, resulted in the company’s Night Vision Division being debarred from export of defense items for three years. In addition, pursuant to a plea agreement this manufacturer agreed to pay a total of $100 million for its violations of defense export laws, one of the largest penalties ever paid in a criminal or civil case.

Both DDTC and BIS have stated that they believe that many universities are in violation of the regulations based on the low number of licenses received in relation to the number of foreign students enrolled.

C. DUAL-USE ITEMS EXPORTS AND ANTI-BOYCOTT VIOLATIONS

Similarly to the ITAR, violations of the EAR are subject to both criminal and administrative penalties. Fines for export violations, including anti-boycott violations, can reach up to $1,000,000 per violation in criminal cases, and $250,000 per violation in most administrative cases. In addition, criminal violators may be sentenced to prison time up to 20 years, and administrative penalties may include the denial of export privileges.\(^{27}\) A denial order is probably the most serious sanction because such order would bar a U.S. company from exporting for a period of years or bar a foreign entity from buying U.S. origin products for such period.

In most instances, BIS reaches negotiated settlements in its administrative cases, as a result of voluntary self-disclosures of violations by companies and individuals. Voluntary disclosures constitute a major mitigating factor in determining penalties, reducing the amount of penalty by up to 50 percent, provided certain conditions are met, such as the implementing of a comprehensive compliance program.\(^{28}\)

D. EXPORTS TO A SANCTIONED COUNTRY

\(^{26}\) For a thorough discussion of penalties imposed under the ITAR, see John C. Pisa-Relli, "Monograph on U.S. Defense Trade Enforcement" (February 2007).

\(^{27}\) These violations are based on the Export Administration Act of 1979, as amended (50 U.S.C. app. §§ 2401-2420), and inflation adjustments made in 15 C.F.R. § 6.4. From August 21, 1994, through November 12, 2000, the Act was in lapse. During that period, the President, through Executive Order 12924, which had been extended by successive Presidential Notices, continued the EAR in effect under the International Emergency Economic Powers Act (50 U.S.C. §§ 1701-1706 (IEEPA)). On November 13, 2000, the Act was reauthorized by Pub. L. No. 106-508 (114 Stat. 2360 (2000)) and it remained in effect through August 20, 2001. Since August 21, 2001, the Act has been in lapse and the President, through Executive Order 13222 of August 17, 2001, which has been extended by successive Presidential Notices, has continued the EAR in effect under IEEPA. The USA PATRIOT Improvement and Reauthorization Act of 2005, signed into law on March 9, 2006 (Pub. L. No. 109-177, 120 Stat. 192 (2006)), increased the limit of civil penalties available under IEEPA to $50,000. On October 16, 2007, President Bush signed the International Emergency Economic Powers Enhancement Act, Pub. Law No. 110-96, which amends IEEPA by increasing civil penalties up to $250,000 per violation, and criminal penalties up to $1,000,000 per violation.

\(^{28}\) For a review of BIS investigations and penalties, see "Don't Let This Happen to You! Actual Investigations of Export Control and Anti-boycott Violations" at http://www.bis.doc.gov/complianceandenforcement/dontletthishappentoyou-2008.pdf.
Although potential penalties for violations of U.S. export laws vary depending on the country and product involved, an exporter may be subject to a maximum civil penalty of $250,000 per violation under OFAC regulations, with the exception of exports to Cuba.\textsuperscript{29} Violations of the Cuban sanctions are subject to a maximum penalty of $65,000 per violation.\textsuperscript{30}

The U.S. Government can also seek to criminally prosecute conduct where violations are willful and knowing. Such violations may reach $1,000,000 per violation and imprisonment of up to 20 years. In addition, where there is egregious conduct by the offender, BIS (who assists OFAC in enforcing sanctions) may suspend the export privileges of a company.

In assessing penalties, DDTC, BIS, and OFAC will consider a number of factors, both aggravating and mitigating. Mitigating factors include (1) whether the disclosure was made voluntarily; (2) whether this was a first offense; (3) whether the company had compliance procedures; (4) whether steps were taken to improve compliance after discovery of violations; and (5) whether the incident was due to inadvertence, mistake of fact, or good faith misapplication of the laws. Aggravating factors include: (1) willful or intentional violations; (2) failure to take remedial action after discovery; (3) lack of a compliance program; and (4) deliberate efforts to hide or conceal a violation.

\textsuperscript{29} Violations of most of the Economic Sanction Regulations are set under the IEEPA. See supra note 30.

\textsuperscript{30} The OFAC embargo of Cuba was promulgated under the Trading with the Enemy Act (TWEA).
KEY ISSUES IN UNIVERSITY RESEARCH

I. **DEEMED EXPORTS**

While exports are commonly associated with the shipment of a tangible item across the U.S. border, export controls have a much broader application. One of the most difficult issues with respect to export controls is the fact that an export is defined to include the transfer of controlled information or services to foreign nationals even when the transfer takes place within the territory of the United States. Though taking place inside the U.S., the transfer is “deemed” to be an export (as if exporting to the country of the foreign national). The term “deemed export” is unique to the EAR.

Both the ITAR and the EAR provide for deemed exports, even though in the case of defense exports the regulations generally speak of exports. While the ITAR distinguishes between the transfer of technical data and defense services, the EAR generally provides for the release of technology. Such transfer or release may be made through oral, visual, or other means. An export may occur through:

1. a demonstration;
2. oral briefing;
3. telephone call or message;
4. laboratory or plant visit;
5. presenting at conferences and meetings;
6. faxes or letters;
7. hand-carried documents, hardware or drawings;
8. design reviews;
9. the exchange of electronic communication;
10. posting non-public data on the Internet or the Intranet;
11. carrying a laptop with controlled technical information or software to an overseas destination; or
12. collaborating with other universities / research centers through research efforts.

The issue of deemed exports is particularly relevant to university research because of the activities that normally take place at a university. While a university may be involved in the shipment abroad of equipment or machinery to participate in a conference, a joint project, or
equipment loan programs, most often faculty and students are engaged in teaching and research. Whenever teaching or research are related to controlled equipment or technology, foreign students’ or researchers' involvement may trigger export control compliance issues.

II. **U.S. AND FOREIGN PERSONS**

For purposes of defense and dual-use exports, a *U.S. person* is defined as a U.S. entity or a U.S. citizen, a person lawfully admitted for permanent residence in the United States (i.e., green card holder), or a person who is a protected individual under the Immigration and Naturalization Act (8 U.S.C. § 1324b(a)(3) (i.e., certain classes of asylees)). A U.S. person may be engaged in activities that are export controlled, unless there are some additional restrictions that limit participation to U.S. citizens.

The regulations define foreign person as anyone who is not a U.S. person. BIS looks at the person's most recent citizenship or permanent residence. DDTC looks at the person's country of origin (i.e., country of birth) and all current citizenships.

Note that the definitions for a U.S. and a foreign person differ for purposes of the OFAC sanctions. For a discussion, see *Overview of Export Controls*, Section V, above.

III. **INFORMATION NOT SUBJECT TO OR EXCLUDED FROM EXPORT CONTROLS**

It is important to note that most of the activities that Vanderbilt University engages in are fundamental research. As such, most activities are not subject to export controls, or even if controlled, do not require licensing. Both the ITAR and the EAR have special provisions relating to information that is not subject to export controls, including limited exclusions regarding the release of information in the context of university research and educational activities. Additionally, the embargo regulations have exceptions for certain information and informational materials.

A. **PUBLICLY AVAILABLE**

The ITAR and the EAR do not control information which is published and generally accessible or available to the public. Note that even though the two regimes have similar scope, the ITAR and the EAR vary in the specific information that qualifies as publicly available.

- **ITAR provision**: The ITAR describes such information as information in the *public domain*. The information in the public domain may be obtained through:
  - sales at newsstands and bookstores;
  - subscription or purchase without restriction to any individual;

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31 22 C.F.R. § 120.15; 15 C.F.R § 734.2(b).
32 22 C.F.R. §§ 120.10(a)(5) and 120.11.
second class mailing privileges granted by the U.S. Government;

- at libraries open to the public;

- patents available at any patent office;

- unlimited distribution at a conference, meeting, seminar, trade show or exhibition, generally accessible to the public, in the United States;

- public release in any form after approval of the cognizant U.S. Government agency; or

- fundamental research in the U.S. (See Key Issues in University Research, Section III.C. Fundamental Research, below.)

- **EAR provision:** The EAR does not control publicly available technology if it is already published or will be published. Information is published when it becomes generally accessible to the interested public in any form, including:

  - publication in periodicals, books, print, etc., available for general distribution free or at cost;

  - readily available at libraries open to the public or university libraries;

  - patents and open patents applications available at any patent office; or

  - release at an open conference, meeting, seminar, trade show, or other gathering open to the public.

The EAR requires that the publication is available for distribution free or at price not to exceed the cost of reproduction and distribution; however, the ITAR does not have such a requirement.

Note also that the EAR does not specify where an open conference, meeting, seminar or trade show must take place, and thus allows, for example, participation at a foreign conference so long as the conference is open to all technically qualified members of the public, and attendees are permitted to take notes. Unlike the EAR, the ITAR limits participation in conferences and similar events to those that are taking place in the United States.

### B. Educational Information

Both the ITAR and the EAR address the issue of general educational information that is typically taught in schools and universities. Such information, even if it relates to items included on the USML or the CCL, does not fall under the application of export controls.

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33 15 C.F.R. §§ 734.3(b)(3) and 734.7.
• **ITAR provision**: The ITAR specifically provides that the definition of "technical data" does not include information concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges and universities.\(^{34}\)

• **EAR provision**: The EAR provides that publicly available "educational information" is not subject to the EAR, if it is released by instruction in catalogue courses and associated teaching laboratories of academic institutions.\(^{35}\)

Therefore, a university graduate course on design and manufacture of very high-speed integrated circuitry will not be subject to export controls, even though the technology is on the CCL. The key factor is the fact that the information is provided by instruction in a catalogue course. Foreign students from any country may attend this course because the information is not controlled.

The information will not be controlled even if the course contains recent and unpublished results from laboratory research, so long as the university did not accepted separate obligations with respect to publication or dissemination, *e.g.*, a publication restriction under a federal funding.\(^{36}\)

C. **FUNDAMENTAL RESEARCH**

During the Reagan administration, several universities worked with the Federal government to establish national policy for controlling the flow of information produced in federally funded fundamental research at colleges, universities and laboratories resulting in the issuance of the National Security Decision Directive 189 ("NSDD"), National Policy on the Transfer of Scientific, Technical and Engineering Information on September 21, 1985. In a letter dated November 1, 2001, President George W. Bush’s administration reaffirmed NSDD 189. NSDD 189 provided the following definition of *fundamental research* that has guided universities in making licensing decisions relative to fundamental research exclusions provided under both the EAR and ITAR.

> Basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, as 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.

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\(^{34}\) 22 C.F.R. § 120.10(a)(5).

\(^{35}\) 15 C.F.R. §§ 734.3(b)(3) and 734.9.

\(^{36}\) 15 C.F.R. § 734, Supp. No. 1, Questions C(1) to C(6).
Research conducted by scientists, engineers, or students at a university normally will be considered fundamental research. University based research is not considered fundamental research if the university or its researchers accept (at the request, for example, of an industrial sponsor) other restrictions on publication of scientific and technical information resulting from the project or activity. Scientific and technical information resulting from the research will nonetheless qualify as fundamental research once all such restrictions have expired or have been removed.

Both the ITAR and the EAR provide that information published and generally accessible to the public through fundamental research is not subject to export controls. However, there are certain restrictions. In order to take advantage of this exemption:

- such information must be produced as part of basic and applied research in science and engineering and must be broadly shared within the scientific community (i.e., no restrictions on publication / dissemination of the research results); 37
- it is essential to distinguish the information or product that results from the fundamental research from the conduct that occurs within the context of the fundamental research;
- while the results of the fundamental research are not subject to export controls, an export license may be required if during the conduct of the research export controlled technology is to be released to a foreign national. Such export controlled technology may come from the research sponsor, from a research partner institution, or from a previous Vanderbilt research project.38

One major difference is that the ITAR requires that, to qualify as fundamental research, research must be performed at accredited institutions of higher learning in the United States. Under the EAR, fundamental research may occur at facilities other than accredited institutions of higher learning in the United States.

Under both the ITAR and the EAR, research performed at universities will not qualify as fundamental if the university (or the primary investigator) has accepted publication or other dissemination restrictions.

- ITAR provision: the fundamental research exception does not apply to research the results of which are restricted for proprietary reasons, or specific U.S. Government access and dissemination controls.39

37 ITAR § 120.11(a)(8); EAR §§ 734.3(b)(3) and 734.8(a).
38 See BIS Revisions and Clarification of Deemed Export Related Regulatory Requirements, 71 Fed. Reg. 30840, 30844 (May 31, 2006). (This interpretation of fundamental research by BIS, while not binding, is instructive as to how DDTC might interpret its regulations.)
39 22 C.F.R. §§ 120.11(a)(8) and 120.10(a)(5).
• **EAR provision:** the 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 reasons or specific national security reasons.\(^{40}\) Under the EAR, university-based research is not considered fundamental research if the university or its researchers accept restrictions (other than review to ensure no release of sponsor–provided proprietary or patent information) on publication of scientific and technical information resulting from the project.\(^{41}\)

The EAR instructs that prepublication review by a sponsor of university research solely to ensure that the publication would not inadvertently divulge proprietary information that the sponsor has initially furnished, or compromise patent rights, does not constitute restriction on publication for proprietary reasons.

The EAR also has provided examples of "specific national security controls" which will trigger export controls. These include requirements for prepublication review and approval by the Government, with right to withhold permission for publication; restriction on prepublication dissemination of information to non–U.S. citizens or other categories of persons; or restrictions on participation of non–U.S. citizens or other categories of persons in the research.\(^{42}\)

While the ITAR does not contain such descriptive provisions, the EAR is instructive as to interpreting the limitations on fundamental research.

**D. FULL–TIME UNIVERSITY EMPLOYEES**

Under a specific exemption, the ITAR allows a university to disclose unclassified technical data in the U.S. to a foreign person who is the university's *bona fide* and full time regular employee. The exemption is available only if:

- the employee's permanent abode throughout the period of employment is in the United States;

- the employee is not a national of a country to which exports are prohibited pursuant to ITAR § 126.1 (See current list of countries at [http://www.pmddtc.state.gov/regulations_laws/documents/official_itar/ITAR_Part_126.pdf](http://www.pmddtc.state.gov/regulations_laws/documents/official_itar/ITAR_Part_126.pdf));

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\(^{40}\) EAR § 734.8(a).

\(^{41}\) EAR § 734.8(b)(5). However, once the sponsor has reviewed and approved the release, the results may be published as fundamental research.

\(^{42}\) EAR § 734.11(b).
• the university informs the individual in writing that the technical data may not be transferred to other foreign persons without the prior written approval of DDTC; and

• the university documents the disclosure of technical data under the exemption providing: (1) a description of the technical data; (2) the name of the recipient / end-user; (3) the date and time of export; (4) the method of transmission (e.g., e-mail, fax, FedEx); (5) the ITAR reference, i.e., ITAR § 125.4(b)(10), Full-Time University Employee.

Note that the "full-time bona fide employee" requirement will preclude foreign students and postdoctoral researchers from qualifying for access to technical data under this exemption. Generally, a H1B work visa would be required.

This exemption only applies to the transfer of technical data and discussions related to the data. Discussions may occur between the foreign full-time employee and other university employees working on the project. Additionally, the outside company (sponsor of the research) would have to apply for a DSP-5 license to provide technical data directly to the foreign national employee, and if the outside party and the employee are to engage in discussions and interchange concerning the data, then the proper authorization would be a Technical Assistance Agreement (TAA) rather than the DSP-5.