

Export Control Program

Researcher Training

Version 7 – Nov 2021



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Researcher Training

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Introduction



What is Export Control?

Export control consists of a group of federal laws / regulations that control the distribution of certain commodities, technologies, information and data

- They can limit:
 - What can be shipped out of the country and to whom it can be shipped
 - Access to information for certain foreign nationals and/or organizations
 - Foreign collaborations
- They determine when an export license is required to ship items or information abroad



Introduction

Purpose of the Regulations

To control the export of military and dual use products, technology and services to foreign persons or organizations

- Primarily for national security purposes
- Some economic reasons as well
- Dual Use: commercial items that could have military, national security or proliferation applications
 - Ex: computer technology and software, sensors, lasers



Introduction

Why Do We Care (about Export Control)?

- It's the law (we need to comply with the regulations)
- These regulations can affect:
 - What type of research we do
 - Who we hire
 - Who we can share information with
 - Who we work with (collaborators / sponsors)
 - Where we ship items
 - What items we ship
 - Level of security for projects / labs



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Definitions



Definitions

Export

- Sending or taking anything out of the United States in any manner, except mere travel outside of the U.S. by a person whose personal knowledge includes technical data; including:
 - Shipping – commercial shippers or hand-carry
 - Verbal transfer of technical data (i.e., phone, Zoom, Teams)
 - Electronic transfer of technical data (i.e., e-mail, fax, text, social media)
- Items: computers, equipment, biological agents, materials, substances, etc.



Definitions

Deemed Export

- Transfer (oral or visual disclosure) of technology, information or data to a foreign person within the U.S. is deemed to be an export to that person's home country
 - Deemed exports are treated in the same manner as a physical export to a foreign country
 - Foreign person needs to have knowledge to understand/interpret what they are seeing/hearing
- Examples of deemed export:
 - Foreign collaborators @ UW working on controlled technology
 - Phone calls regarding controlled technology w/ foreign collaborators working @ another U.S. university
 - Taking foreign visitors on a tour of a lab where they can view design details of controlled technology
 - Discussions regarding controlled technology w/ foreign persons at a conference w/in the U.S.



Definitions

Foreign Persons/Organizations

A Foreign Person or Organization is anyone who is NOT a U.S. Person. A U.S. Person is:

- U.S. citizen or national
- Permanent resident (green card holder) of the U.S.
- A refugee, someone granted political asylum or someone granted amnesty
- U.S. government agency and any state or local governments therein
- U.S. company, business, LLC or partnership
- U.S. university





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Regulations



Regulations

ITAR

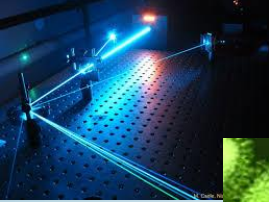

Name of Regulation:	International Traffic in Arms Regulations
Agency:	State Dept.
Items Controlled:	Military equipment & information
Listing:	United States Munitions List (22 categories) – 22CFR 121
Comments:	License required for all foreign destinations, except restricted locations (export to restricted locations not authorized)
UW Examples:	<p>Category IV: Launch vehicles, missiles, rockets,....</p> <ul style="list-style-type: none">• StarTracker <p>Category VII: Tanks and military vehicles</p> <ul style="list-style-type: none">• Terrain displacement under treaded vehicles <p>Category XII: Fire Control, optical, guidance and control equip.</p> <ul style="list-style-type: none">• NIR detector (reclassified to EAR)• AERI cryocooler (reclassified to EAR) <p>Category XV: Spacecraft systems and associated equipment</p> <ul style="list-style-type: none">• GOES-R





Regulations

EAR

Name of Regulation:	Export Administration Regulations
Agency:	Commerce Dept.
Items Controlled:	Dual use items & information
Listing:	Commerce Control List (10 categories) – 15CFR 774, Supp 1
Comments:	Need for a license depends on commodity, destination country, reason for control & exemptions
UW Examples:  	Category 1: Select agents Category 3: Electronics, such as multimeters, digital I/Os, D/A converters and integrated circuits Category 4: Computers and related equipment Category 5: Telecommunications equipment, ethernet switches, remote control power switches, encryption software Category 6: Lasers, optical sensors



Regulations

FACR

Name of Regulation:	Foreign Asset Control Regulations
Agency:	Treasury Dept.
Items Controlled:	Foreign assets (bank accounts)
Listing:	Specially designated nationals list
Comments:	More concerned with whom you are communicating rather than what you are communicating
Examples:	<ul style="list-style-type: none">• Benevolence International Foundation, Oak Lawn, IL• Ukrainian-Mediterranean Airlines, Kiev, Ukraine• Electronics Institute, Damascus, Syria• A-Team Chemicals Company LTD., Bangkok, Thailand• China Enriching Chemistry Limited, Shanghai, China• Proton Petrochemicals Shipping Limited, Nicosia, Cyprus



Regulations

Restricted Party Lists

Restricted Party Lists – Besides the Specially Designated Nationals List, the federal government maintains multiple lists of persons, organizations, companies, universities and vessels with which it has placed restrictions on transactions

- Reasons parties are added to lists:
 - Terrorists, drug lords, export regulations/sanctions violations, weapon smugglers, oligarchs of governments under scrutiny, WMD developers
- Other governments maintain their own lists:
 - Australia, Japan, Saudi Arabia, Canada, Interpol, EU

Examples of Restricted Parties:
Beihang University-China
University of Electronic Science and Technology of China
Malek Ashtar University-Iran
Tsunami Relief Fund-Sri Lanka



Regulations

Exemptions for Universities

- **Fundamental Research Exemption (ITAR, EAR)**
 - No license is required for fundamental research – basic or applied research in science or engineering resulting in information that is ordinarily published and shared broadly in the scientific community

- **Public Domain Exemption (ITAR, EAR)**
 - No license is required to export information or research that is generally available in the public domain. This does not apply to physical equipment, materials, substances, etc.

- **Education Exemption (ITAR, EAR)**
 - No license is required to transfer information to students, including foreign nationals, concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges or universities



Non-Compliances



Non-Compliances

Results of Non-Compliance

- *Civil & criminal penalties levied against individuals & organizations*
- *Disciplinary action by university toward responsible individual*
- *Bad press*
- *Loss of research funding*

You can be held personally liable for non-compliance





Non-Compliances

- Responsibility to comply lies with individual -

Case of J. Reece Roth - U of Tenn (Sept 2008)

- *Retired professor in plasma physics*
- *Convicted on 18 counts of conspiracy, fraud & violating ITAR*
- *Gave 2 grad students from China & Iran access to sensitive info*
- *Sentence - 48 months in prison*
 - *Worst case: 175 yrs in prison; \$15.5M*

Teledyne LeCroy, New York (June 2015)

- *Exporting 2 oscilloscopes (3A292) to Beihang University, China (an entity-listed university)*
- *Failed to get export licenses & file accurate shipping documentations;*
- *Value of oscilloscopes < \$16K*
- *Fine = \$75K*

FLIR Systems – Wilsonville, OR (Apr 2018)

- *Fined \$30M for violating ITAR*
 - *Half the fine suspended for continual remedial measures*
 - *\$15M paid over 5 years*
- *347 violations*
- *Transfer of ITAR-restricted equipment to dual national employees of Iran, Iraq, Lebanon and Cuba*
- *Example: Multi-sensor thermal imaging system*



What Should You Look Out For?



What Should You Look Out For?

Finding export control issues is much like looking for a golf ball in a haystack





What Should You Look Out For?

Contract Clauses

- **Publication restrictions**
 - Sponsor needs to approve publication
 - Nullifies the fundamental research exemption
 - Requires waiver from OVCRGE
- **Personnel restrictions**
 - Sponsor will not allow participation by persons from certain countries
- **Export control paragraph**
 - Does it apply to your project?
 - Ask for ITAR or EAR classification





What Should You Look Out For?

Contract Clauses (cont.)

- **NDA (for technical information)**
 - May not allow you to publish some of your research
- **CUI (Controlled Unclassified Information)**
 - Not fundamental research
 - Requires compliance with NIST 800-171 information system security
 - >100 information security requirements
 - Required under DFARS 252.204-7012
 - Will likely be accompanied with a publication restriction
- **DoD Funding**
 - Budget Activities 1 & 2 – Typically considered fundamental research
 - Budget Activities 3 – 7 – Development, not fundamental research





What Should You Look Out For?

International Shipping

■ Who?

- To whom are you shipping? Is the recipient a restricted party?
- Do you know who the end user is?

■ What?

- Some items require an export license (i.e., military equipment; spaceflight H/W or S/W; select agents; some lasers; high speed cameras; night vision goggles)

■ Where?

- **E:1/E:2 Countries: Cuba, Iran, North Korea, Syria and Crimea – Major restrictions**
- **OFAC & US Embargo List:** Balkans (western), Belarus, Burma, Central African Republic, China, Cuba, Democratic Republic of the Congo, Ethiopia, Iran, Iraq, Lebanon, Libya, Mali, Nicaragua, N. Korea, Russia, Somalia, South Sudan, Sudan and Darfur, Syria, Ukraine, Venezuela, Yemen, Zimbabwe
- **ITAR Prohibited Countries (22CFR 126.1):** Afghanistan, Belarus, Burma, Cambodia, Central African Republic, China, Cuba, Cyprus, Democratic Republic of the Congo, Eritrea, Ethiopia, Haiti, Iran, Iraq, Lebanon, Libya, N. Korea, Russia, Somalia, South Sudan, Sudan, Syria, Venezuela, Zimbabwe





What Should You Look Out For?

International Travel

- **Where?**
 - Similar destination concerns as shipping
- **Why?**
 - Conferences, meetings – What do you plan to discuss?
 - Research – Is this fundamental research?
- **Who?**
 - Are you meeting with specific persons?
 - Some foreign universities are subject to restrictions by the federal gov't
- **What?**
 - An export license may be required when traveling and taking something on a plane either in checked or hand-carried luggage
 - **Hand-carry to a foreign country = ship to a foreign country**





What Should You Look Out For?

International Travel (cont.)

- **AES Submissions**
 - U.S. Customs will require you to submit an Electronic Export Information filing (EEI) two (2) hours prior to your departure if you are carrying:
 - An item being that requires an export license
 - The value of the items hand-carried are \geq \$2500 for a single tariff code (Schedule B code)
 - Rough diamonds
- **Hand-carried Items**
 - Complete a commercial invoice and forward to your customs broker to complete the EEI filing
- **Clean laptop program**





What Should You Look Out For?

Purchasing

- **Are you purchasing goods, software, information or data from a foreign supplier?**
 - Are they in an E:1 country?
 - Are they a restricted party?
- **Purchasing Screening**
 - POs and direct payments screened daily (prior to payment) for vendors on restricted party lists
- **P-Card Purchases**
 - P-Card purchases are not screened prior to payment; screened retrospectively
 - Difficult to screen due to poor vendor info & payment services (i.e., PayPal)





What Should You Look Out For?

Foreign Staff & Collaborations

■ Visas

- All H-1b/O-1 applicants reviewed for export control compliance
- J-1 scholars (and affiliated organizations) from restricted countries screened for restricted parties
- F-1 students not screened unless requested



■ Controlled Projects / Technology

- A deemed export license may be needed to transfer controlled technology to foreign staff
- An export license may be needed to transfer controlled technology to foreign collaborators
- Depends on regime (ITAR or EAR), technology involved, country of citizenship and tasks

■ Students

- Students are people too – Remember your students when looking at export compliance
- A foreign student in your lab is treated the same as a full-time, foreign staff member



What Should You Look Out For?

Encryption

- Encryption presents its own set of special rules under EAR and ITAR
- Use of encryption on any project may require a license when foreign nationals are involved
- Even if a license is not required, a classification report may need to be submitted





What Should You Look Out For?

Services

- **Service - Work done for hire that is not considered research**
 - University exemptions do not apply
- **Examples:**
 - Analysis of unknown pharmaceutical substances
 - Manufacturing items that are incorporated into commercial devices
 - Providing materials for outside university or commercial research
- **Concerns**
 - Physical export of controlled items, technology or information to foreign persons
 - Services conducted at UW by foreign staff/students using controlled technology (deemed export)





What Should You Look Out For?

Foreign Talent Recruitment Programs (FTRPs)

- **Foreign countries have talent programs to recruit scholars in the US to work for them both here and abroad**
 - The biggest and most well-known program is the 1000 Talents Program from China; China has over 200 FTRPs
 - Russia, India, and Iran have their own
- **They recruit persons with ties to the foreign country and scholars who have never been there**
 - Be suspicious of offers offering large stipends, fully operational labs, multiple trips to a country or extended stays in a country
- **Usually require time in the foreign country, setting up a lab, publishing papers listing a foreign institution**
 - Oftentimes contracts will be in a foreign language, and, if translated, may not be translated correctly
 - Contracts may not be terminated without the foreign government's agreement
 - Contracts may include language that would actually violate UW policies as well as federal law
- **Some talent programs are alleged to be connected with information gathering and outright spying**
- **Recently, the federal government passed a law that will go into effect in the future that states anyone who has been a member of these programs cannot receive DOD funding**
 - DOE does not allow employees to be participants in FTRPs
 - In Aug 2019, a U of Kansas Researcher was indicted for fraud for failing to disclose a COI w/ a Chinese university
 - These requirements are becoming more prevalent in DOD, DOE, NIH and NSF agreements/awards

These relationships must be disclosed on Outside Activities Report (OAR), even if no money is changing hands.

If you ever have any doubt, please contact the COI, Legal Affairs or Export Control offices

Ver. 7, 12/8/21



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Outcomes



Outcomes

Technology Control Plan (TCP) / Lab Security

- **Prevent unauthorized access to controlled equipment, materials, technology, software, information or data**
- **Written plan describing:**
 - What items are controlled
 - Where the items are located
 - Who can have access
 - How the access is controlled – Door locks, keypad access, lockouts, lock boxes, password protection, encryption
- **Developed in collaboration between PI and Export Control Office**
- **All lab staff should review and sign off on TCP**
- **Adequate control may prevent need for deemed export licenses**





Outcomes

Export Licenses

- **Not the “end of the world”**
 - Typically takes 1-2 months to submit and receive approval on licenses from the Depts. of Commerce and State
 - Export Control Office submits about 6 license applications a year (average 2010-2018)
- **Notify Export Control Office if an export license may be needed**
 - Can we manage information to prevent the need for a license?
 - Is there an exception we can use?
 - Develop license strategy
 - Type of license (EAR or ITAR)
 - What does the license cover?
 - When is the license needed?



Contact Information



Contact Information

For Additional Information, Contact:

- *Tom Demke, UW-Madison Export Control Officer*
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- *Bethany Nelson, UW-Madison Export Control Coordinator*
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- *Ben Griffiths, UW Senior Legal Counsel*
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- *Or e-mail: exportcontrol@grad.wisc.edu*

UW Export Control Website:

<https://research.wisc.edu/integrity-and-other-requirements/export-control/>