

A Primer on Export Controls

Susan Wyatt Sedwick, PhD, CRA, CSM
Senior Consulting Specialist
Attain Partners
SRAI Distinguished Faculty

Learning Objectives

Identify the different export controls that can arise in sponsored research.

Recognize the role of the research administrator in export controls compliance.

What laws are we addressing?



International
Traffic in Arms
Regulations
(ITAR)
Department of Defense
Trade Controls
US Department of State



Export
Administration
Regulations
(EAR)
Bureau of Industry
Controls
US Department of
Commerce



OFAC

Sanctions
and
Embargoes
(OFAC)
US Department of
Treasury

What is controlled under the EAR?

Dual Use Technologies – Commerce Control List

- 0 Nuclear Materials, Facilities and Equipment
- 1 Materials, Chemicals, Microorganisms and Toxins
- 2 Materials Processing
- 3 Electronics Design, Development and Production
- 4 Computers
- 5 Part 1: Telecommunications and Part 2: Information Security
- 6 Sensors and Lasers
- 7 Navigation and Avionics
- 8 Marine
- 9 Aerospace and Propulsion



<https://www.bis.doc.gov/index.php/regulations/commerce-control-list-ccl>



Export Control Classification Number (ECCN)

3 = Electronics

A = End Items, Equipment,
Accessories, Attachments,
Parts, Components, and
Systems

3A001

Commerce Control Group

Commerce Control List Categories	
0	Nuclear Materials, Facilities And Equipment (and Miscellaneous Items)
1	Materials, Chemicals, Microorganisms and Toxins
2	Materials Processing
3	Electronics
4	Computers
5	Part 1 -- Telecommunications and Part 2 -- Information Security
6	Sensors and Lasers
7	Navigation and Avionics
8	Marine
9	Aerospace and Propulsion

3	= Electronics
A	= End Items, Equipment, Accessories, Attachments, Parts, Components, and Systems
3	A
0	0
1	1

EAR99

Five Product Groups	
A	End Items, Equipment, Accessories, Attachments, Parts, Components, and Systems
B	Test, Inspection and Production Equipment
C	Materials
D	Software
E	Technology

Commerce Control Group

Commerce Control List Categories	
0	Nuclear Materials, Facilities And Equipment (and Miscellaneous Items)
1	Materials, Chemicals, Microorganisms and Toxins
2	Materials Processing
3	Electronics
4	Computers
5	Part 1 -- Telecommunications and Part 2 -- Information Security
6	Sensors and Lasers
7	Navigation and Avionics
8	Marine
9	Aerospace and Propulsion

3 = Electronics

A = End Items, Equipment, Accessories, Attachments, Parts, Components, and Systems

3A001

Five Product Groups	
A	End Items, Equipment, Accessories, Attachments, Parts, Components, and Systems
B	Test, Inspection and Production Equipment
C	Materials
D	Software
E	Technology

EAR99

EAR Prohibitions

1. Exports/Reexports of controlled items/technology to controlled countries
2. De minimis amount of US content
3. Reexport foreign-produced direct product of US technology/software
4. Denial Orders-entities and persons
5. Consideration of end use/users
6. Exports to embargoed destinations
7. Support of proliferation activities
8. In-transit shipments
9. Terms and conditions of license
10. Duty to report violations



What is controlled under the ITAR?

Items on the Munitions List

- Includes both research on *defense articles* and training or assistance in developing *defense articles*
- Technical data related to the manufacture or production of *defense articles*
- Anything with a substantial military application or related to satellites
- <https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=70e390c181ea17f847fa696c47e3140a&mc=true&r=PART&n=pt22.1.121>



ITAR/U.S. Munitions List

Category I - Firearms, Close Assault Weapons and Combat Shotguns

Category II - Guns and Armament

Category III - Ammunition/Ordnance

Category IV - Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs and Mines

Category V - Explosives and Energetic Materials, Propellants, Incendiary Agents and Their Constituents.

Category VI - Vessels of War and Special Naval Equipment.

Category VII - Tanks and Military Vehicles

Category VIII - Aircraft and Associated Equipment

Category IX - Military Training Equipment and Training

Category X - Protective Personnel Equipment and Shelters

Category XI - Military Electronics

Category XII - Fire Control, Range Finder, Optical and Guidance and Control Equipment

Category XIII - Auxiliary Military Equipment

Category XIV - Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment.

Category XV - Spacecraft Systems and Associated Equipment

Category XVI - Nuclear Weapons, Design and Testing Related Items

Category XVII - Classified Articles, Technical Data and Defense Services Not Otherwise Enumerated

Category XVIII - Directed Energy Weapons

Category XIX - [Reserved]

Category XX - Submersible Vessels, Oceanographic and Associated Equipment

Category XXI - Miscellaneous Articles







OFAC

What is controlled under OFAC?

- Enforcement of economic and trade sanctions based on US foreign policy and national security goals
- Specially Designated Nationals List
 - Individuals
 - Entities
 - Countries
- Targeted foreign countries and regimes, terrorists
- Activities related to the proliferation of weapons of mass destruction
- Other threats to national security
- <https://www.treasury.gov/resource-center/sanctions/pages/default.aspx>


Current Countries of Particular Concern

- Burma
- People's Republic of China (along with Hong Kong and Macau)
- Cuba
- Eritrea
- Iran
- Democratic People's Republic of (North) Korea
- Nicaragua
- Pakistan
- Russia
- Saudi Arabia
- Tajikistan
- Turkmenistan



National Security Decision Directive (NSDD) 189

Fundamental Research means 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.

A large yellow triangle is positioned in the bottom right corner of the slide, pointing towards the top right.

Definition of Public Domain

Under the Export Administration Regulations (EAR), "publicly available" information is not subject to export controls. This includes information that is already published or will be published, such as:

- Information available through sales at bookstores and newsstands.
- Information available through subscriptions that are available without restriction.
- Information available at public libraries or from which the public can obtain documents.
- Information available through patents.
- Information available through open conferences, meetings, seminars, trade shows, or exhibitions.
- Information resulting from fundamental research that is ordinarily published and shared broadly within the scientific community.


Exclusions & Exceptions

Exclusions

- Information in the Public Domain
- Fundamental research
- Educational Exclusion
 - Catalog courses and instructional labs
- Foreign patent applications

Exceptions

- EAR
 - Temporary (TMP) *Tools of the Trade*
- ITAR
 - If ordered under federal contract



Controlled Unclassified Information (CUI)

Information that laws, regulations, or government-wide policies require to have safeguarding or dissemination controls, excluding classified information

Dual Use Research of Concern (DURC)

1. Enhance its harmfulness;
2. Disrupt immunity against it without justification;
3. Confer resistance to drugs or detection;
4. Increase stability or transmissibility;
5. Alter the species or type of cells infected;
6. Make the host more susceptible; **or**
7. Generate an extinct agent on regulated list.





BIOSECURITY OVERSIGHT FRAMEWORK FOR THE FUTURE OF SCIENCE

- Findings and recommendations from the National Science Advisory Board on Biosecurity (NSABB) – January 2023
- United States Government Policy for Oversight of Dual Use Research of Concern and Pathogens with Enhanced Pandemic Potential – May 2024
- Implementation Guidance – May 2024
- Stricter review of Dual Use Research of Concern (DURC)/PEPP

Retrieved from <https://osp.od.nih.gov/wp-content/uploads/2023/01/DRAFT-NSABB-WG-Report.pdf>
<https://aspr.hhs.gov/S3/Documents/USG-Policy-for-Oversight-of-DURC-and-PEPP-May2024-508.pdf>
<https://aspr.hhs.gov/S3/Documents/USG-DURC-PEPP-Implementation-Guidance-May2024-508.pdf>



Risks for U.S. Universities

- Collaborations/discussions with foreign national collaborators and students especially when involving proprietary information
- Taking or shipping items or transferring technology that is controlled to a foreign country or foreign national
- Performing defense services
- Visiting scientists
- Travel to foreign countries including fieldwork and instruction
- Technology and material transfers
- Faculty “start up” companies

Deemed Exports

- “Deemed Export” – foreign national with access to information restricted by EAR/ITAR.
 - Applies to research assistants and students
 - Applies to visiting foreign researchers
 - Applies to U.S. citizens visiting a foreign country
- Does not apply to U.S. Citizens, permanent residents and those with US asylum protection



Travel Abroad

- Equipment
 - Laptops, handhelds, and encryption products
 - Most publicly available software is not subject to export controls under the EAR (Source code v. Executable code)
 - Blueprints, drawings, schematics
- Controlled technologies/data at a "closed" conference or meeting (not open to all technically qualified members of the public where attendees are not permitted to take notes and registration fees are "reasonable")
- Money transactions and the exchange of goods and services in certain countries
- Travel to sanctioned/embargoed countries
- Denied persons and entities

Securing Laptops and Handhelds

BEFORE

- Use a loaner or purchase a new hard drive/phone
- Check for [Encryption Restrictions](#)
- Update security patches and backup
- Leave sensitive information at home

DURING

- Check networks carefully before connecting
- Keep list of credentials used
- Avoid portable storage
- Control access

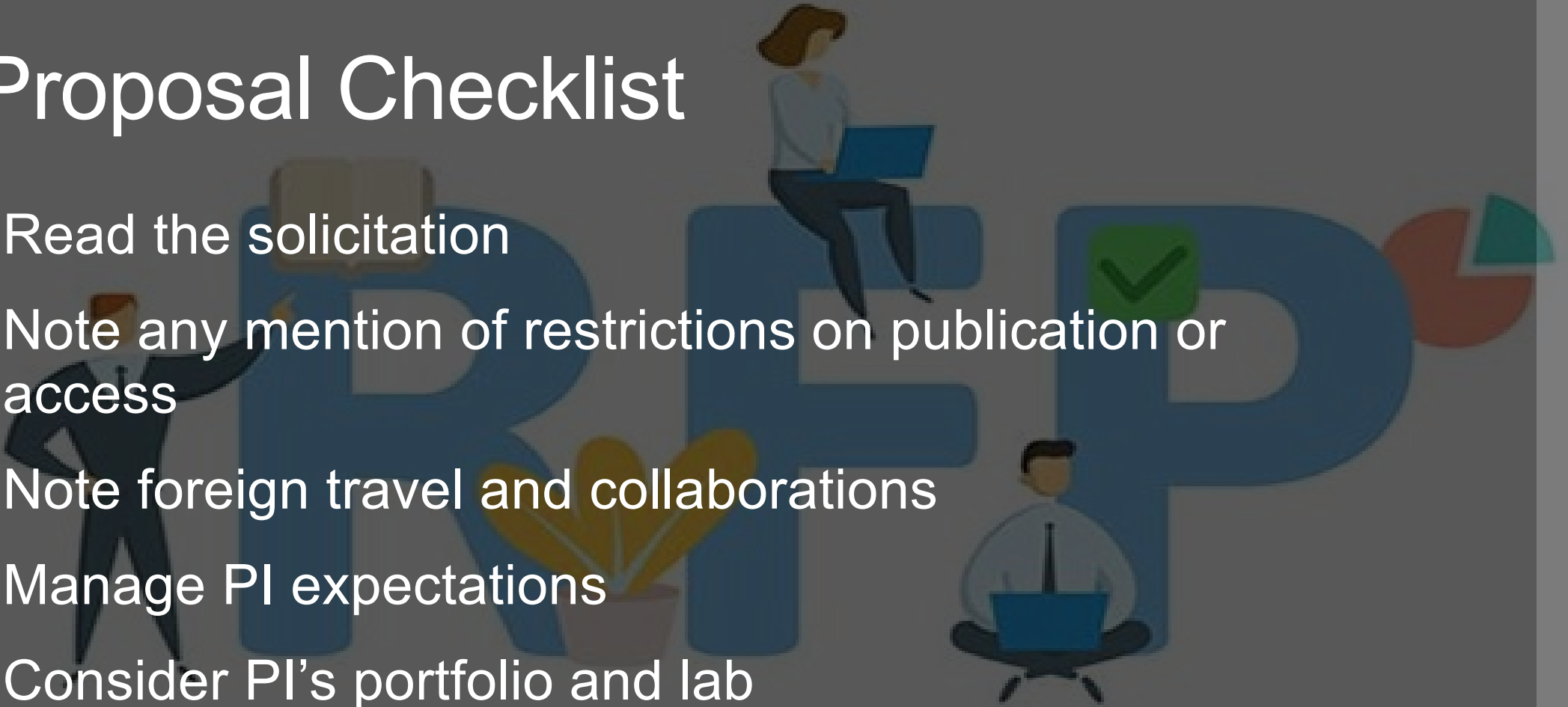
AFTER

- Assume your computer has been compromised
- Clean hard drive and erase all credentials
- Report suspicious activity

Proposal Checklist

- Read the solicitation
- Note any mention of restrictions on publication or access
- Note foreign travel and collaborations
- Manage PI expectations
- Consider PI's portfolio and lab

Request for proposal



Restrictive Clauses

Restrictions on publication of results requiring approval to publish (beyond acceptable review to protect proprietary information furnished by sponsor or to allow for protection of intellectual property)

Restrictions on the use of foreign nationals for national security concerns

Proprietary Information
Export Controlled Subject

Department of Defense Contracts

- DFARS 252.204-7000 Disclosure of Information (Oct 2016)
- DFARS 252.204-7012 Safeguarding Covered Defense Information and Cyber Incident Reporting (Jan 2023)
- DFARS 252.204-7021 Cybersecurity Maturity Model Certification Requirements (Jan 2023)
- NIST 800-171 Rev. 2 Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations



DFARS 252.204-7000 Disclosure of Information.

As prescribed in [204.404-70](#) (a), use the following clause:

DISCLOSURE OF INFORMATION (OCT 2016)

(a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information, regardless of medium (e.g., film, tape, document), pertaining to any part of this contract or any program related to this contract, unless—

- (1) The Contracting Officer has given prior written approval;
- (2) The information is otherwise in the public domain before the date of release; or
- (3) The information results from or arises during the performance of a project that involves no covered defense information (as defined in the clause at DFARS [252.204-7012](#)) and has been scoped and negotiated by the contracting activity with the contractor and research performer and determined in writing by the contracting officer to be fundamental research (which by definition cannot involve any covered defense information), in accordance with National Security Decision Directive 189, National Policy on the Transfer of Scientific, Technical and Engineering Information, in effect on the date of contract award and the Under Secretary of Defense (Acquisition and Sustainment) memoranda on Fundamental Research, dated May 24, 2010, and on Contracted Fundamental Research, dated June 26, 2008 (available at DFARS PGI [204.4](#)).

(b) Requests for approval under paragraph (a)(1) shall identify the specific information to be released, the medium to be used, and the purpose for the release. The Contractor shall submit its request to the Contracting Officer at least 10 business days before the proposed date for release.

(c) The Contractor agrees to include a similar requirement, including this paragraph (c), in each subcontract under this contract. Subcontractors shall submit requests for authorization to release through the prime contractor to the Contracting Officer.

Proposed Rule on CUI



New and Revised FAR Clauses

FAR 52.204-2

- Introduces Standard Form identifying categories of CUI which may be handled for a project with reporting requirements.

FAR 52.204-21

- Establishes the baseline for safeguarding CUI.

FAR 52.204-WW

- Requires notification within 8 hours of discovering improperly, unmarked or unidentified CUI.

FAR 52.204-XX

- Establishes comprehensive requirements for identifying and safeguarding CUI, reporting incidents and preserving data.

FAR 52.204-YY

- Assigns responsibility for labeling new CUI developed to contractors.

Technology Transfer

Material Transfers

Non-Disclosure Agreements

Invention Disclosures

Licensing Technology

7 Elements of a Good Compliance Program

Established Policies, Procedures and Controls

Exercise Effective Compliance and Ethics Oversight

Exercise Due Diligence to Avoid Delegation of Authority to Unethical Individuals

Communicate and Educate Employees on Compliance and Ethics Programs

Monitor and Audit Compliance and Ethics Programs for Effectiveness

Ensure Consistent Enforcement and Discipline of Violations

Respond Appropriately to Incidents and Take Steps to Prevent Future Incidents

Contact

Susan Wyatt Sedwick, PhD, CRA, CSM

Senior Consulting Specialist

ssedwick.ctr@attainpartners.com