Export Controls for the Research Administrator

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Meet the Presenters

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Plan for This Session

Learning Objectives

- ✓ Participants will be able to identify the three major export control regulatory schemes and the three major exclusions that apply to academic institutions.
- ✓ Participants will gain an understanding of the Fundamental Research Exclusion and how that benefits universities.
- ✓ Participants will gain familiarity with export-controlled research.
- ✓ Participants will be able to identify higher risk situations that may require escalation to their institutions' export control office.

Session Outline

Part 1: Core Regulations and Fundamental Research

Part 2: Driving Export Compliance Beyond Fundamental Research

Questions and Case Studies

Part 1: Core Regulations and Fundamental Research

What is Export Control?

The set of federal laws & regulations that regulate the transfer of information, commodities, technology, and software considered to be strategically important to the U.S. in the interest of national security, economic, and foreign policy concerns.

- Shipments/transfers out of the US
- Transfer to foreign nationals in the US (deemed export)

Types of Exports

Physical/Tangible Exports

- Shipping or hand-carrying items out of the US

Technology (Deemed) Exports

- Transfer of information, items or software to foreign persons in the US or out of the US

Software Exports

- Access to source code is an export
- Access to object code is usually not
- Access by foreign persons in the US or out of the US

Regulatory Framework

International Traffic in Arms Regulations (ITAR)

- Overseen by the Department of State
- Governs military, weapons and space-related technologies
- Items listed on the US Munitions List (USML); identified as Roman Numeral Categories

Export Administration Regulations (EAR)

- Overseen by the Department of Commerce
- Governs “dual-use” items (those with both military and commercial applications or strictly commercial applications)
- Items listed on the Commerce Control List (CCL); identified with Export Control Classification Numbers (ECCN)

Office of Foreign Assets Control (OFAC)

- Overseen by the Department of the Treasury
- Governs transactions with countries and/or entities subject to embargo, boycott, or trade sanctions
- Comprehensive sanctions: North Korea, Iran, Syria, and the Crimea, Donetsk, and Luhansk Regions of Ukraine – export control prior approval required for all activities

Exclusions for Academic Institutions

Public Information Exclusion

- Information already published or in the Public Domain

Educational Information Exclusion

- Information commonly taught in courses at universities

Fundamental Research Exclusion (FRE)

- Results, data, and information obtained under Fundamental Research

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Fundamental Research Exclusion

"Fundamental Research" is defined as "basic and applied research in science, engineering, and mathematics, where the resulting information is ordinarily published and shared broadly within the scientific community."

- Under the FRE, information and/or "software" that arise during, or result from, "fundamental research" are not subject to export controls.
- **Tangible items resulting from the research** (prototypes, etc.) **are controlled** and may require an export license.
- **IMPORTANT:** The FRE does **not** apply to controlled items or information used in the research, such as purchased items, software from national labs, or data provided by a sponsor.

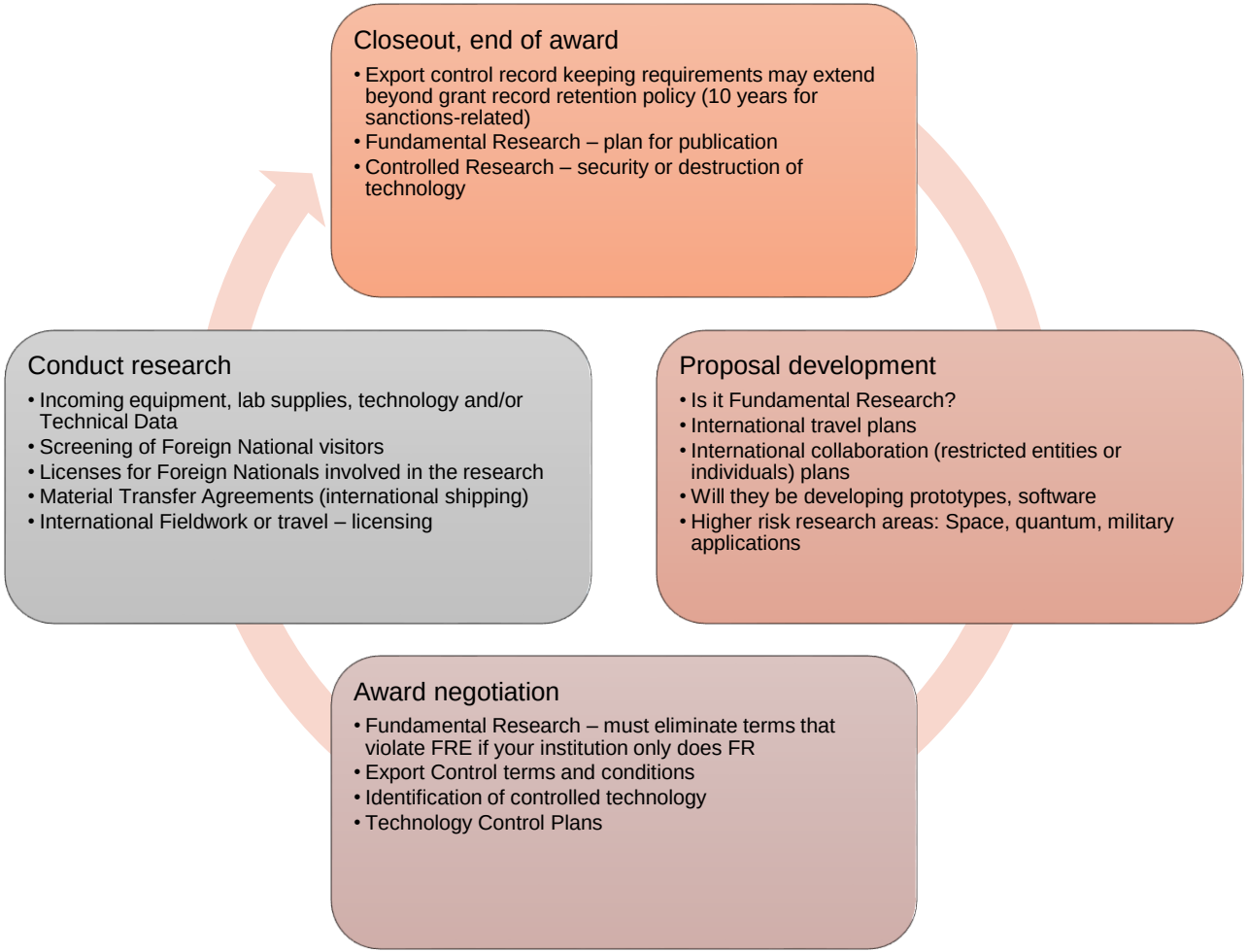
Openness in Research Policies

"Fundamental Research Only" institutions do not accept terms that violate FRE.

Policies usually include statements such as:

- Institution will not accept T&C that allow modification to or approval of publications by an external sponsor;
- Institution will not accept publication restrictions, including unspecified publication delays or terms that prohibit or restrict dissemination;
- Foreign faculty, students, and scholars will not be singled out for restriction in access to the institution's educational and research facilities and activities

Export Control Applies throughout the Grant Lifecycle



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Beyond Research: Ensuring Institutional Compliance

Area	Export control goal
Student groups working on CubeSats or other space-related projects	Ensure students understand the lifecycle of the project, primarily which parts fall under an exclusion, and that launch-related activities are likely ITAR controlled
Purchasing	Ensure supplier is not a Restricted Party and that proper licensing is in place (as needed) BEFORE technology/equipment/items arrive on campus
International Shipping and Material Transfer Agreements	Ensure all parties/collaborators are not Restricted Parties and that proper licensing is in place BEFORE items leave the US
International travel with institution-owned technology	Ensure all parties/collaborators are not Restricted Parties, that proper licensing is in place for any equipment, and that researchers know when to pause to contact export control for guidance
Visitor review	Ensure the individual and home institution are not Restricted Parties; provide guidance depending on country of origin (especially Comprehensively Embargoed Countries – Iran, Cuba, North Korea, certain regions of Ukraine, Syria)
Screen entities and individuals prior to engagement	Ensure the individual/entity is not a Restricted Party or sanctioned by OFAC

Controlled Inputs into Fundamental Research (FR): Examples

Technical data for a piece of controlled third-party equipment

Researchers require schematic plans detailing the location of connection points for an ITAR-controlled cryostat. The cryostat will remain at the controlled facility, but the institutional researchers need to build the structure that goes inside. The technical data is stored in the secured computing infrastructure with access limited to researchers on the compliance plan.

International fieldwork using a specialized GPS unit

A research team will travel to several countries with a specialized GPS unit controlled under the EAR to gather information about tree canopy coverage. The GPS unit requires a BIS license for temporary export.

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Controlled Inputs into Fundamental Research (FR): Examples

<u>ITAR-controlled software for mapping seismic data</u>

Researchers are tracking earthquake activity using specialized software under a DoD-funded FR award. The software allows them to see the movement of the earth as an earthquake happens, but it was developed for military purposes. The software is on a dedicated laptop with multi-factor authentication.

Part 2: Driving Export Compliance Beyond Fundamental Research

How to Triage an Issue

"W" Question	Information to Gather	Regulatory Impact
What do you want to send or share?	Description of tangible goods, technology, and software/code	Jurisdiction and classification
Who are you sharing it with?	University, company, individuals, contractual parties, informal parties	End-user, military end-user, restricted parties
Where do you want to share it?	Destination country	Country, citizenship, end-user, military end-user
Why do you want to share it?	Purpose, application	end-use, military end-use

Classification of “Items”

Jurisdiction

Department of Commerce (BIS)

Classification (EAR)

- Commerce Control List (CCL)
- Export control classification number (ECCN / Sub-ECCNs)
- Example: 1C351.d.14 (ricin)

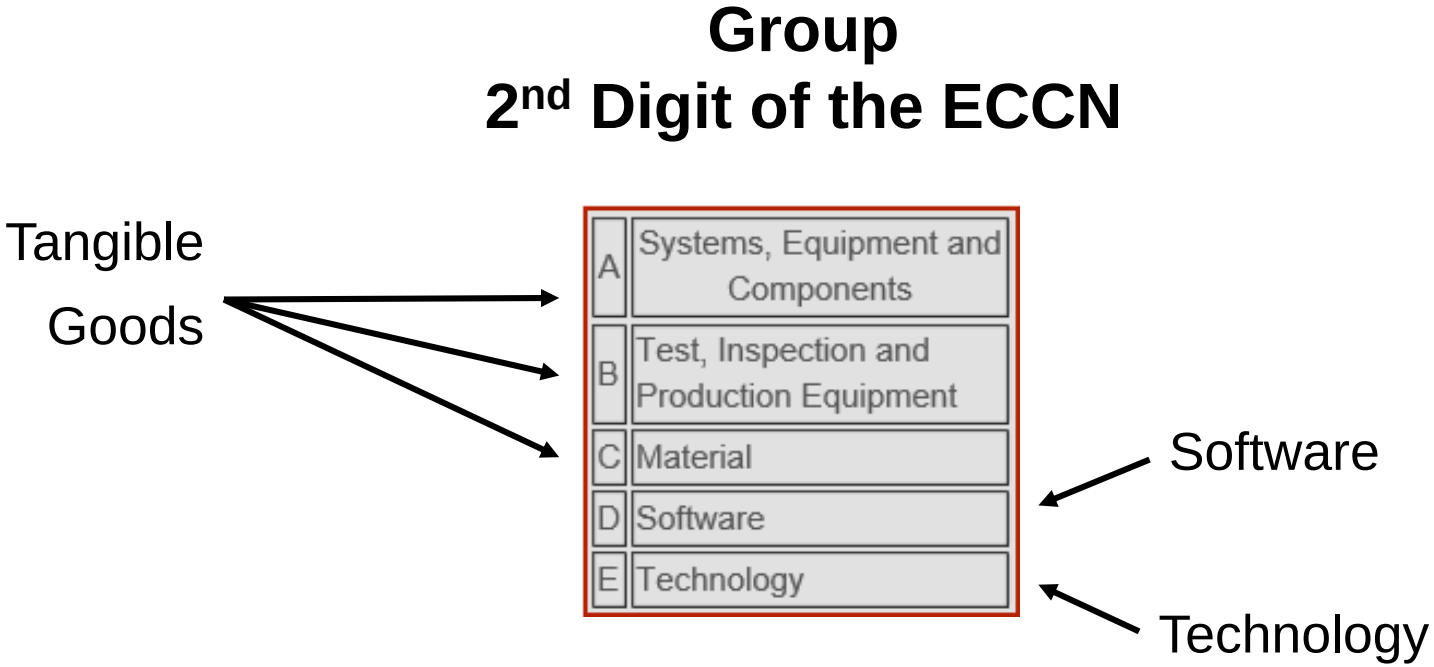
Jurisdiction

Department of State (DDTC)

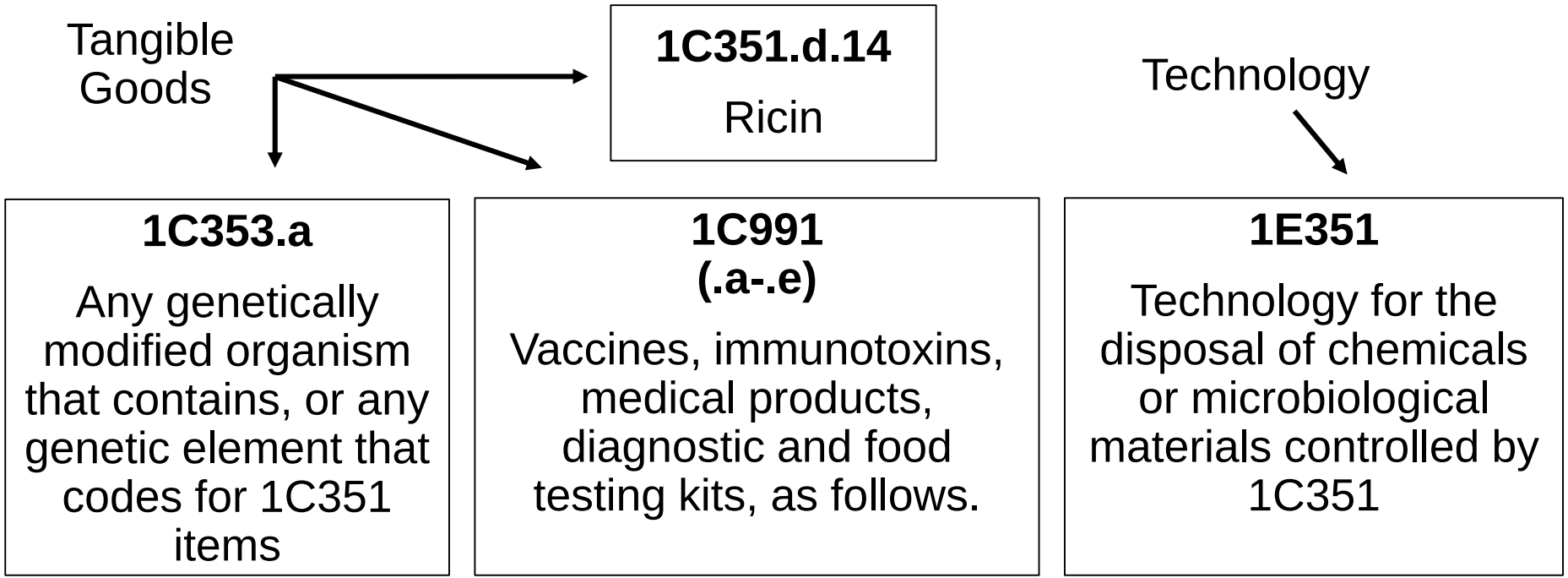
Classification (ITAR)

- United States Munitions List (USML)
- Category / Sub Category
- Example: Category V.i

Type of “Item”: CCL



Related ECCNs: Example



(See 15 CFR 774 Suppl. No. 1 for full descriptions)

USML Category: Example

Category V

Explosives and Energetic Materials, Propellants, Incendiary Agents, and Their Constituents

USML Category: Example

(See 22 CFR 121 for full descriptions)

(a) Explosives, and mixtures thereof, as follows…

Tangible Goods

(i) Developmental explosives, propellants, pyrotechnics, fuels, oxidizers, binders, additives, or precursors therefor funded by the Department of Defense via contract or other funding authorization.

Technical data definition includes **software**!

(j) Technical data…and **defense services**… directly related to the defense articles described in paragraphs (a) through (i) of this category

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Technology Control Plans (TCPs)

- **Internal control plan** to ensure only authorized persons have access the export controlled goods, technologies, or software
- De facto requirement for a deemed export license application
- Physical access and electronic access
- Designed around specific controlled items, not individuals

Restricted Party Lists

- Restricted party screening (RPS)
- Each department has its own list(s)
- Due diligence with a potential match
- Free government search tool
  Consolidated Screening List
- Examples
  - Denied Persons List (BIS)
  - Unverified List (BIS)
  - Entity List (BIS)
  - Military End-User List (BIS)
  - Specially Designated Nationals List (OFAC)

Entity List Examples

Nanjing University

Beijing University of Aeronautics and Astronautics

Harbin Engineering University

Yerevan Telecommunications Research Institute

Sanctioned Countries

Key Countries of Concern

Iran
Cuba
Syria
North Korea
Russia
Certain Regions of Ukraine

- Country List
- Country-specific restrictions
- General licenses vs specific licenses

Licensing & Other Authorizations

Possibilities: prohibited, exclusion or exemption applies, requires a license, license exception applies, or does not require a license

- BIS: license and deemed export license
- DDTC: license and technology assistance agreements (TAAs)
- OFAC: specific license
- No fee, except DDTC has annual registration fee

Essential Pre-Award Questions to Facilitate Export Control Review

1. Are there any required approvals for publication or restrictions on who can access the results of or participate in the research?
2. Will this proposal involve any international collaboration, travel, field work, or shipping?
    1. If yes:
        1. What equipment, devices or other university-owned items will be used/shipped?
        2. What countries may be involved?
3. Does this research involve the development of prototypes or other new physical items or software?
4. Does this research have any military applications?
    1. If yes, confirm that you have included the “dual-use” statement in your proposal.
    2. Example “Dual-use” statement: The research under this proposal is being developed for both military and civil purposes.

A YES or UNSURE response to any of these questions will trigger export control review.

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Case Study: Exports of Tangible Materials and Technology

A faculty member at a university is an expert in infectious diseases and is working with an Indian company to further research vaccine development for COVID-19.

The novel approach incorporates vaccines for the Hantaan virus.

The PI has a standing relationship with this company.

What questions need to be asked?

Case Study: Exporting “Services” From Your Home Office

A researcher wants to give a research talk at an Iranian university via a video platform such as Zoom. The graduate students in their Archeology program would benefit from talking with this researcher about the research they have been doing on ancient Egyptian writings on naturally existing rock formations. They are not travelling, so the time investment is small.

Should they give the talk?

Answer: Case Study: Exporting “Services” From Your Home Office

No, at least not without discussing with the Export Control Office first.

Exporting “services” to Iran requires a license.

→ Per the Iranian Transactions and Sanctions Regulations, having a discussion about research is a service

Two options:

1.Send a recorded talk about their published research (no license required)

2.Work with the Export Control Office to apply for a license to provide this “service” so they can have an interactive talk with the graduate students (but these can take months to receive)

Case Study: International Collaboration

A researcher has an active collaboration with an Australian university. They are paid summer salary effort by the Australian institution. The researcher submitted an NSF grant on related research that also pays summer salary effort. If the grant is funded, are there any heightened export control risks?

Consider these export control issues:

1. What are you sharing with the Australian university? Is any of the data not developed under Fundamental Research?
2. Are you sharing tangible goods or software? Travelling with equipment?

Note: Recent regulatory changes loosened licensing requirements for US to Australia exports, but review is still required

Case Study: International Collaboration

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Other relevant issues/conditions of funding

- Disclosed activity to NSF on the grant application
- Disclosed activity to Brown on COI/COC form
- You do not exceed 100% effort in total
  - 2 summer months NSF + 2 summer months from Australian funding = 200% effort
  - 1 summer month NSF + 1 summer month from Australian funding = 100% effort
- The non-US institution is not on a government restricted or denied party list
- The researcher has a clear written contract for the “outside activity”

What if the Collaborating Institution is in China?

Same rules apply, plus these notes:

- Shipping or hand carrying certain items to China requires an EEI filing and potentially a Military End Use/User Certification even if an export license is not required
- Unlike Australia, many universities are restricted entities, so be sure to complete Restricted Party Screening and review any associated risks and requirements

Resources

- Office of Foreign Assets Control
- Bureau of Industry and Security
  - Export Administration Regulations (EAR)
  - Commerce Control List (CCL)
- Directorate of Defense Trade Controls (Department of State)
  - International Traffic in Arms Regulations (ITAR)
  - US Munitions List (USML)
- Brown University Export Control Website
- NCURA Magazine article – October/November 2022 issue (log into your NCURA dashboard - publications – NCURA magazine – past issues)
- Traliance Export Controls Essential Training Program (EAR, on-demand)

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Questions?