

APPLICABILITY OF EXPORT CONTROL REGULATIONS TO RESEARCH PROJECTS AND RESULTS AT PURDUE UNIVERSITY

The federal Export Administration Regulations (“EAR”) and International Traffic In Arms Regulations (“ITAR”) control the export of certain commodities, software, technical data and certain other information to foreign countries. The EAR and the ITAR can restrict the furnishing of information, technical data and software to foreign persons, whether this takes place abroad or in the United States. In the university context, these regulations can prohibit foreign persons from participating in research projects or having access to information resulting from research under some circumstances unless an export license has been obtained in advance. While most university activities are not governed by the EAR or the ITAR, where these rules do apply they must be followed. Punishment for violations can be severe.

Purdue has developed the following guidelines to help researchers and others in the university community to recognize situations where EAR and ITAR may apply to research projects and results, but each individual is ultimately responsible for understanding and complying with the EAR and the ITAR when applicable to his or her activities. Considering the following points will help individuals determine whether or not the EAR or the ITAR may apply in particular situations and to identify situations which may require further guidance.

1. What are Export Control Regulations?

“Export” means an actual shipment or transmission of items, services, or technical data subject to either the Export Administrative Regulations (EAR) or the International Traffic in Arms Regulations (ITAR) out of the United States, or release of technology, software, or technical data subject to either EAR or ITAR to a foreign national in the United States. Technology, software, or technical data is “released” for export through 1) visual inspection by foreign nationals of U.S. origin equipment and facilities, 2) oral exchanges of information in the United States or abroad, or 3) the application to situations abroad of personal knowledge or technical experience acquired in the United States.

2. What is the purpose of the Export Administration Regulations (EAR)?

The primary focus of the EAR is to control the export of dual use technologies – i.e., items that are used, or have the potential to be used, for military as well as non-military purposes if such export could adversely affect the national interests of the United States.

3. What types of dual use technologies are subject to the EAR?

Items which are subject to the EAR are listed on the Commerce Control List (CCL). This is a very long and detailed list broken down into ten broad categories. The ten categories are:

- Category 0 - Nuclear materials, facilities and equipment
- Category 1 - Materials, chemicals, microorganisms, and toxins
- Category 2 - Materials processing
- Category 3 - Electronics design, development, and production
- Category 4 - Computers
- Category 5 - Telecommunications (Part 1) and Information Security (Part 2)
- Category 6 – Sensors and lasers
- Category 7 – Navigation and avionics
- Category 8 - Marine
- Category 9 – Propulsion systems, space vehicles and related equipment

4. Does the EAR apply to fundamental research conducted at Purdue University?

Fundamental research is not subject to the EAR. Fundamental research is defined as basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community. Normally, the results of fundamental research are published in scientific literature, thus making it publicly available. Research which is intended for publication, whether it is ever accepted by scientific journals or not, is considered to be fundamental research.

Therefore, the EAR applies only to researchers at Purdue who are conducting work in the areas that are subject to EAR and are willing to accept sponsor restrictions on publishing the results of the work.

5. What is the purpose of the International Traffic in Arms Regulations (ITAR)?

ITAR places strict controls on the export of “defense articles” and “defense services.” Defense articles include any item or technical data on the United States Munitions List (USML), and defense services include the furnishing of assistance to foreign persons, whether or not in the United States, with respect to defense articles, and the furnishing of any technical data associated with a defense article.

6. **What is on the USML?**

The following categories of defense articles and services are included on the USML:

- Firearms
- Artillery projectors and armaments
- Ammunition
- Launch vehicles, guided missiles, ballistic missiles, rockets, torpedoes, bombs, and mines
- Explosives, propellants, incendiary agents, and their constituents
- Vessels of war and special naval equipment
- Tanks and military vehicles
- Aircraft and associated equipment
- Military training equipment
- Protective personnel equipment
- Military electronics
- Fire control, range finder, optical and guidance and control equipment
- Auxiliary military equipment
- Toxicological agents and associated equipment
- Spacecraft systems and associated equipment
- Nuclear weapons, design, and testing equipment
- Classified articles, technical data and defense services not otherwise enumerated
- Directed energy weapons
- Submersible vessels, oceanographic and associated equipment
- Miscellaneous articles not listed above with substantial military applicability and which were designed or modified for military purposes.

7. **Does the ITAR apply to fundamental research conducted at Purdue University?**

The availability of an exemption for fundamental research relating to defense articles and defense services controlled under ITAR is highly limited. Therefore, any work being conducted in the areas covered by the USML must be restricted so that foreign nationals do not have access to the work being conducted or to the resulting data, unless either:

- an export license has been obtained;
- governmental approval to proceed without an export license has been obtained; or

- the Associate Director, Sponsored Program Administration and the Associate Vice Provost for Research have determined that the ITAR does not impose restrictions under the facts of the particular situation.

8. What are the expectations of the Principal Investigator conducting work that is controlled under the EAR or ITAR?

- Notify the Associate Director, Sponsored Program Administration or the Associate Vice Provost for Research that work is being planned that may be subject to export controls under EAR or ITAR. Those officials or their staffs will conduct a review to determine if the work is subject to controls under either the EAR or ITAR.
- If the work is determined to be controlled under EAR or ITAR, the Principal Investigator will be asked:
 - (i) Either to satisfy all of the following:
 - a. Submit a copy of each paper or thesis planned for publication of research resulting from the project to the Associate Vice Provost for Research for a determination as to what review procedures are appropriate prior to publication.
 - b. Restrict participation in the project to only U.S. citizens or lawful permanent residents. Access to data and results of the project must be restricted so that no foreign national may obtain access to any project data.
 - c. Any graduate student fulfilling his or her research requirement with results from this project must be a U.S. citizen or a lawful permanent resident. In addition, his or her thesis defense must be presented to a panel of only U.S. citizens or lawful permanent residents. The thesis must be reviewed and approved by the Associate Director, Sponsored Program Administration and the Associate Vice Provost for Research prior to publication.
 - d. Foreign nationals may not have access to stored data or information on the project, whether through computer networks and other electronic media or otherwise. Often, the only way to protect this data is to have it stored on a computer that is not connected to any networks.

- (ii) Or to satisfy one of the following:
- a. Before beginning the project, obtain an export license for the data/product to be developed from the project.
 - b. Before beginning the project, consult with the Associate Director, Sponsored Program Administration and the Associate Vice Provost for Research to determine that no license is required under the facts of the particular situation.

9. What is involved in obtaining an export license?

A request must be submitted to either the Department of Commerce for EAR controlled items or the Department of State for ITAR controlled items. Export licenses can take up to 3-6 months for review before a final determination is made. A request for an export license would be initiated through the office of the Vice Provost for Research.

10. Are there other regulations to consider?

Yes, under some circumstances. Different rules govern the export (including downloading to electronic bulletin boards or web sites, or otherwise making available for transfer outside the United States) of certain encryption software under the EAR. Other rules apply to the protection of classified information and to the export of commodities and technology relating to nuclear reactor vessels and to special nuclear materials.

11. Who do I call if I have further questions?

Associate Vice Provost for Research
Peter Dunn 494-3996

Associate Director, Sponsored Program Administration
Mike Ludwig 496-3089