



EXPORT CONTROL AND FUNDAMENTAL RESEARCH POLICY

SUMMARY

Federal export control regulations govern the conditions under which certain items, information and technologies can be exported to foreign countries, including exports to a US citizen on foreign soil and “deemed exports” to a foreign national on US soil. These laws have been implemented for reasons relating primarily to national security and foreign policy objectives. They are administered by both the Department of Commerce through its *Export Administration Regulations* (EAR) and the Department of State through its *International Traffic in Arms Regulations* (ITAR).

As a general rule, Brigham Young University conducts only fundamental research in basic and applied science and engineering which is widely and openly published and made available to the scientific and academic community. BYU does not undertake classified work or research requiring national security controls. Based on the University's openness in research practices and federal laws prohibiting unlawful discrimination based on nationality, country of origin, ethnicity, gender, race or religion, BYU does not accept any conditions of award which would restrict any members of the research group, including faculty, students and staff, from the ability to participate fully in all of the intellectually significant portions of the project.

POLICY

Faculty and researchers at Brigham Young University need to be aware of the implications of the export control regulations on research, especially research in the fields of science and engineering. EAR and ITAR regulations restrict export-controlled information and technologies, and may govern the ability of both the university and the researcher to:

- (i) disclose or discuss previously unpublished information at conferences and meetings where foreign nationals are in attendance,
- (ii) engage in collaborations and joint research projects with foreign nationals,
- (iii) transfer research equipment, information and technologies abroad, and
- (iv) allow foreign scholars and students to participate in certain research conducted at Brigham Young University.

Fortunately, the majority of research conducted at Brigham Young University is not subject to export control regulations, either because the research does not involve export-controlled information and technologies, or because the research qualifies as a “fundamental research” exemption under the regulations. Fundamental research is defined by the export control regulations as openly-conducted basic and applied research in science and engineering that is not subject to access, dissemination, or participation restrictions. In other words, by not accepting (whether by funding grants, contracts or other agreements) any restrictions on publication or foreign national access to research involving export-controlled information and technologies, the university is able to claim the fundamental research exemption. It is thus critical that all academic and research activities at BYU involving export-controlled information and technologies be conducted openly and without prohibition on the publication and dissemination of the results.

Brigham Young University requires prior evaluation and approval of all third party requests (e.g., federal government agency, private company, or vendor) wherein university officials, employees or researchers are asked (i) either to receive or to send export-controlled information or technologies or (ii) to engage in research that would produce export-controlled information or technologies which are subject to a) limitations on a researcher’s right to publish the results of such research or b) restrictions on foreign national access to and participation in such research. Before such third party requests are approved, BYU will need to be assured of full compliance with all applicable federal regulations and requirements under ITAR and EAR.

BYU faculty and researchers need to understand their obligations under the ITAR and EAR regulations. The penalties for non-compliance are severe for both individual researchers as well as the university, and may involve loss of research funding, fines (up to \$1,000,000) and/or imprisonment. BYU will assist faculty and researchers in conducting a thorough review of the research project and any associated contract provisions. It is important to note, however, that the principal investigator has the primary responsibility to ensure full compliance.

If you have any questions about how ITAR and EAR regulations apply to specific research, please contact the Director of the Office of Research and Creative Activities at 422-3841.

EXPORT CONTROL AND FUNDAMENTAL RESEARCH PROCEDURES

- I. Background
- II. Definitions
- III. Regulations
- IV. Export Licenses for Overseas Shipments
- V. Accepting a Third Party Controlled Items or Data under a Potential Research Award to BYU
- VI. Recordkeeping Requirements

I. BACKGROUND

Export controls, established in the regulations of several federal agencies, impose access, dissemination, and participation restrictions on “controlled” information and tangible items. An export is defined as the shipment or disclosure of materials and information to another country, while a “deemed export” is the disclosure of controlled information to foreign nationals in the US (see Definitions, Section II). A license or other approval must be obtained from the US Commerce Department before any item in the US may be exported; if the item is on the Munitions List, an export license or other authority must be sought from the State Department. Brigham Young University will comply with all applicable export controls, as established by federal regulations (see Regulations, Section III).

The export laws include some blanket restrictions. A few countries, such as Cuba and North Korea, are the subject of embargoes, and nothing can be exported to them. Similarly, there are lists of individuals and organizations that are associated with terrorism and nothing can be exported to them. In addition, certain activities (such as development of weapons of mass destruction) are inherently contrary to the national interest, and any activity or export in support of those activities is illegal, no matter where it is conducted or who is conducting it.

Other than these blanket restrictions, U.S. export controls are built around two lists of controlled items, software and technologies. One, the U.S. Munitions List (USML), is part of the *International Traffic in Arms Regulations* (ITAR), which is administered by the State Department. The USML is relatively short (8-9 pages), but many of its provisions are very broad. In general, any item, software or technology that is developed for a specifically military application is likely to be subject to the ITAR. In addition, a few years ago items and associated software or technology intended for space launch were made subject to the ITAR. Therefore, satellite instrumentation of a non-military scientific nature is covered by ITAR. The second list is the Commerce Control List (CCL), which is part of the *Export Administration Regulations* (EAR), administered by the Commerce Department. This list is long (over 175 pages) and contains many technologically complex descriptions. Generally, the EAR covers “dual use” items and technology—those which have both a military use and a significant civilian use. The CCL has ten broad categories; each category includes separate listings of items (equipment and components, test equipment, materials), software and “technology” related to the items. “Technology” is any information (including designs or blueprints) that is necessary to develop,

make, or use an item. There are 16 different reasons that an item or technology might be listed on the CCL. Depending on the reason, the restrictions on exports can be extensive (e.g., for national security, licenses are required to all locations except Canada), or narrow (anti-terrorism controls affect only a few countries).

Export controls concerning participation in the research by foreign nationals in this country, i.e., “deemed export” restrictions, generally do not apply to the conduct, products, or results of “fundamental research.” As a matter of policy, Brigham Young University conducts only fundamental research as defined by the export control regulations--namely, openly-conducted basic and applied research in science and engineering that is not subject to access, publication, dissemination, or participation restrictions. As a result, the university is not required to obtain prior federal approval for such research and other scholarly activities involving foreign nationals at Brigham Young University.

In the case of actual shipments of items or disclosure of export-controlled information outside the US, however, Brigham Young University is required either

- 1) to obtain a license or
- 2) to document an express determination that no license is needed.

Also of concern are transactions involving export-controlled information provided to a faculty member or researcher at Brigham Young University by third parties, such as vendors, subcontractors, or government collaborators. These transactions may generate disclosure restrictions that may only be acceptable if they fall within the narrow exceptions provided by this policy and qualify for treatment under an exemption in the export control regulations (see Accepting a Third Party’s Controlled Item or Data under a Potential Research Award, Section V).

In all of these cases, there are related recordkeeping requirements that must be observed (see Recordkeeping Requirements Section VI).

II. DEFINITIONS

A. Export

“Export” means to send or take controlled articles out of the United States in any manner; to transfer ownership or control of a controlled article to a foreign person; or to disclose information about a controlled article to a foreign government or foreign person. The article being sent or taken out of the United States is also referred to as an “export.”

B. Deemed Export

“Deemed Export” is a term used by the Commerce Department to describe the situation where a foreign national on US soil may be exposed to, or have access in any manner to, an export-controlled item or export-controlled information. Although the State Department does not use this term, but rather includes this concept in its definition of export, Brigham Young University will use the term “deemed export” when discussing access by foreign nationals to controlled data

or material on US soil, without regard to which agency may have cognizance over the transaction.

C. Disclosure

The foreign export laws generally prohibit disclosure without a properly obtained license from the appropriate government agency of export-controlled information and technologies by any method to a foreign national. Methods of disclosure include, but are not limited to: fax, telephone conversations, email communications, computer data exchanges, mailings, document exchanges, face-to-face discussions, training materials and presentations, visual inspections, etc.

D. US Person

A “US person” is a citizen of United States, a lawful permanent resident alien of the US, or someone here as a protected political asylee or under amnesty. A “foreign person” is anyone who is not a US person. The word “person” includes organizations and entities, such as universities. The general rule is that only US persons are eligible to receive controlled information or articles without first obtaining an export license from the appropriate agency.

E. Fundamental Research

The concept of “fundamental research” was established by National Security Decision Directive 189 (NSDD 189), which establishes a national policy with regard to how such research shall be treated for purposes of the various export control regimes.

NSDD 189 defines fundamental research as:

...basic and applied research in science and engineering where the resulting information is to be shared broadly within the scientific community.

NSDD 189 provides that the conduct, products, and results of fundamental research are to proceed largely unfettered by deemed export restrictions. It also states that the government must determine - before releasing a research opportunity - whether the research should be classified or otherwise kept secret. Research that carries access, participation, or dissemination restrictions will not qualify as fundamental research for purposes of the export control regulations.

Because export regulations expressly recognize that fundamental research is not subject to deemed export controls, no export license or other authorization is needed to involve foreign nationals in fundamental research activity at BYU. However, such research may give rise to export issues if it requires exposure of foreign nationals to export-controlled items or information being provided by a third party. Vendors, and occasionally government collaborators, may have needed information or equipment that is disclosure-restricted. Please see Section V for guidance.

It is important to note that limited prepublication review by sponsor/third party requesters is permitted and does not nullify the fundamental research exemption *if* it serves only to ensure that preexisting proprietary information is not inadvertently disclosed in publication or to ensure that publication will not compromise the patent rights of the sponsor/third party.

Recent interpretations by the federal government seem to indicate that the fundamental research exemption may not apply to information relating to export-controlled equipment used in fundamental research projects and classes (i.e., that an export control license is required in a fundamental research project before information about the use of export-controlled equipment can be shared with foreign nationals working on the project).

F. Public Domain

“Public Domain” is a term used in the ITAR that generally corresponds to information that is published and generally available to the public: (1) through sales at newsstands and bookstores; (2) through subscriptions which are available without restriction to any individual who desires to obtain or purchase the published information; (3) through second class mailing privileges granted by the US Government; (4) at libraries open to the public or from which the public can obtain documents; (5) through patents available at any patent office; (6) through unlimited distribution at a conference, meeting, seminar, trade show or exhibition, generally accessible to the public, in the United States; (7) through public release (i.e., unlimited distribution) in any form (e.g., not necessarily in published form) after approval by the appropriate government agency; and (8) through fundamental research in science and engineering at accredited institutions of higher learning in the US where the resulting information is ordinarily published and shared broadly in the scientific community, as distinguished from research the results of which are restricted for proprietary reasons or specific US Government access and dissemination controls.

III. REGULATIONS

A. State Department - International Traffic in Arms Regulation (ITAR) 22 CFR 120-130

The US Department of State, Office of Defense Trade Controls (ODTC), is responsible for items and information inherently military in design, purpose, or use. Referred to as “defense articles,” such items are found on the US Munitions List, 22 CFR 121 (linked above). Spacecraft and satellites, even if not for military use, are on the Munitions List, along with their associated systems and related equipment. Information related to Defense Articles is referred to as “technical data.”

B. Commerce Department - Export Administration Regulation (EAR) 15 CFR 700-799

The US Department of Commerce, Bureau of Industry and Security (BIS), has export jurisdiction over every thing in the United States, although BIS does not require a license for every export. BIS controls goods and information having both civilian and military uses by including them on the Commerce Control List, 15 CFR 774. This is also known as the “Dual Use List” (linked above). BIS uses the term “technology” when referring to information about the goods on the Commerce Control List.

C. Treasury Department - Office of Financial Assets Control (OFAC) CFR 500-599

The US Department of the Treasury oversees US trade embargo through its Office of Foreign Assets Control (OFAC). Empowered by the *Trading with the Enemy Act* and the *International Emergency Economic Powers Act*, OFAC enforces anti-terrorism sanctions at our borders and through Customs. Concerned with the giving of “assistance” to the enemy, the pertinent regulations provide OFAC with broad authority to interdict vaguely defined “prohibited transactions” involving persons from sanctioned countries.

The export control regulations summarized here impose severe monetary and criminal penalties for failure to comply with their requirements.

IV. EXPORT LICENSES FOR OVERSEAS SHIPMENTS

The Commerce Department has export jurisdiction over all goods and all “technology” (Commerce Department term for information) in the United States, unless some other agency has expressly been given such authority. However, this does not mean that a license must be obtained before any item or piece of information can be shipped.

In order to determine whether it is necessary to obtain an export license from the relevant federal agency to send tangible items outside the United States, the researcher preparing the shipment needs to consider:

- the description of the item,
- its intended end-use and end-user, and
- its destination.

Items and equipment used to conduct fundamental research, or which is the result of fundamental research, going to a country that is not on any list of prohibited destinations, for use in that country in furtherance of fundamental research, ordinarily will qualify for “No License Required” (NLR) treatment under the Commerce Department regulations (EAR 99).

Note also that specific training and documentation is needed whenever you are shipping chemicals, biologicals or other dangerous materials. See the Office of Risk Management for details.

V. ACCEPTING A THIRD PARTY’S CONTROLLED ITEMS OR DATA UNDER A POTENTIAL RESEARCH AWARD TO BYU

In the event that a third party (federal government agency, private company, or vendor) approaches BYU or a BYU researcher, with a request to accept controlled items, data or to engage in research that would produce controlled and/or covered items or data, Brigham Young University requires that the procedure outlined below be followed to evaluate the third party request. It is understood that even though the conduct, products, and results of fundamental research may proceed openly and be shared freely with foreign nationals in the United States without concern for deemed export restrictions, export-controlled information or materials provided by a third party may not be openly shared with foreign nationals, even though those individuals may be important contributors to the performance of the fundamental research.

Identification of a contract that carries ITAR/EAR scrutiny is the collective responsibility of the faculty researcher and ORCA. This identification and the procedure that follows must be done prior to an authorized signature of university acceptance.

Procedure for case by case evaluation of a third party request to accept or engage in research that is controlled or covered under ITAR/EAR/OFAC:

1. Researcher must disclose third party request to Department Chair.
2. Third party request must be brought to the attention of the appropriate Dean's office. Chair and Dean (or appropriate Associate Dean) must determine level of importance and "fit" of proposed activity in the overall scope of the College.
3. Department & College will meet with the Director of The Office of Research & Creative Activities (ORCA) to review the potential restrictions that would follow the proposed activity. It is possible that ORCA will discover the potential coverage by ITAR/EAR/OFAC in the review of an award document. In such an event the Researcher, Chair, and Dean will then be brought together as noted above. The Office of the General Counsel will also be involved in the review process on a case-by-case basis as warranted.
4. A determination will be made if the activity is such that the researcher and BYU are willing to comply with the attendant restrictions and requirements. If an activity is to be accepted, the export control requirements must be honored by the researcher who agrees to be a recipient of such information, or award.

A. Export controls on individual eligibility as a recipient

Generally, federal regulations require that only US persons - American citizens or Green Card holders as defined in Section II- may be provided with export-controlled information. Nonetheless, there are some specific exemptions from the ITAR available to those within the University community that may be useful. It is important to keep such exemptions in mind should it become necessary to share any ITAR-restricted restricted information beyond the original recipient.

Full Time Bona Fide Employee Exemption, 22 CFR 125.4(10)(b)

Foreign persons who are regular, full-time employees of US institutions of higher education are eligible to receive, without a license, ITAR-controlled data so long as:

- the employee's permanent abode throughout the period of employment is in the U.S.;
- the employee is not a national of a country to which exports are prohibited; and
- the institution informs the employee that the data may not be further disclosed to another foreign national without the prior written approval of the State Department.

University Exemption - Technology, 22 CFR 123.16(b)

US institutions of higher education do not need a license to export articles they have fabricated for fundamental research purposes, including research, scientific and experimental satellites to

- European Union, NATO-allied, strong non-NATO allied countries or
- Member countries of the European Space Agency

so long as the following conditions are met:

- (i) the export is for fundamental research
- (ii) all of the information about the article, including its design, and all of the resulting information obtained through fundamental research involving the article, will be published and shared broadly within the scientific community and
- (iii) the article is not restricted for proprietary or national security reasons.

University Exemption - Information, 22 CFR 125.4(d)

Information about experimental, scientific, and research satellites fabricated exclusively for use in fundamental research may be shared with countries and nationals of countries identified in 22 CFR 123.16(b)(10)(i) when:

- engaged in international fundamental research;
- under the aegis of an accredited US institution of higher education;
- in direct support of fundamental research as per 22 CFR 120.11(8); and
- limited to discussion on assembly and integration into the satellite or spacecraft of the experimental/research device.

VI. RECORDKEEPING REQUIREMENTS

Each of the relevant export control regulations contains recordkeeping requirements that must be satisfied even if you have determined that no license is required or that an exemption or exception is available that relieves you from seeking approval through the appropriate government agency.

Schools and departments must keep records of actual exports and related transactions (such as reliance on an exemption) in their research project files. In addition, a copy of each such record should be provided to ORCA.