

# Boston University

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## MEMORANDUM

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**To:** Selected CRC Faculty, Deans, Department Chairs,  
Center Directors and Department Administrators

**Date:** September 26, 2005

**From:** David Campbell, Provost *DC*  
Joan Kirkendall, Director of Sponsored Programs *JK*

**Subject:** Export Control Laws and Regulations

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### Background

Export control laws are federal regulations that define the conditions under which certain information, technologies, and commodities can be transmitted to individuals overseas (including U.S. citizens) or to a foreign national anywhere (in the U.S. or abroad). These laws are implemented by the Department of Commerce through its Export Administration Regulations (EAR), the Department of State through its International Traffic in Arms Regulations (ITAR), and the Department of Treasury through its Office of Foreign Assets Control (OFAC) regulations. The Federal government takes these matters very seriously. It is vitally important that Boston University researchers understand and thoroughly comply with export control laws and regulations. Failure to do so can lead to significant limitations on research. It can also subject both the University and individual researchers to civil and criminal liability.

The Department of State controls the export of defense articles, defense services, (see Key Definitions) and related technical data. The Department of Commerce regulates the export of dual use defense and/or commercial use commodities, software and technologies – items designed for commercial purposes which may have military or security applications. The Department of Treasury administers and enforces economic and trade sanctions based on U.S. foreign policy and national security goals.

Export control regulations have the potential to impact substantially Boston University's research program in science and engineering. If research involves specified technologies, the EAR and/or ITAR may require the University to obtain prior federal approval before allowing foreign nationals (see Key Definitions) to participate in the research, before partnering with a foreign company, or before sharing research results in any manner (including by publication or presentation at conferences) with persons who are not U.S. citizens or permanent residents. In addition, export controls may limit the University's ability to export equipment needed for experiments or research conducted abroad.

Export regulations apply whether research is funded by a federal or nonfederal grant, contract or other agreement, and apply whether or not the EAR or ITAR are cited in the award document. If a

researcher accepts export-controlled technology or information from a government agency or from industry, even unknowingly, the researcher is subject to ITAR or EAR regulations.

The technical data and information generated by most research activities are excluded from export controls because of a general exclusion for fundamental research. Boston University protects its claims to the fundamental research and the publicly available and public domain exclusions provided by the government by refusing to allow any restrictions on publications and research results and restrictions on the involvement of foreign nationals in its research agreements. Consequently, it is important that OSP and PIs work together to ensure that such restrictions are not accepted in the University's grants, contracts, and other research agreements.

This memorandum provides a brief discussion of the current export control regulations and the exclusions from the regulations that are relevant to university-based research. Also included is a checklist to assist PIs and OSP in determining whether the research they are proposing may be subject to export controls. The checklist is available on-line at <http://www.bu.osp>.

All engineering and science faculty (including faculty in Geography, African Studies, Archaeology and Remote Sensing) **must** complete this checklist for every research project submitted to OSP for proposal review. At the point of grant/contract award, PIs will need to work with OSP Grant Administration staff prior to commencing any research that might involve export-controlled articles, technology or technical data. Such cooperation will be necessary to make a final determination as to whether or not the research is subject to the regulations and to make these determinations far enough in advance to obtain licenses if required.

As noted above, violation of the export regulations can be severe and result in both civil and criminal penalties for individual researchers and for the University. Penalties include the loss of research funding, the denial of export privileges, fines, and prison sentences. Contact OSP immediately if you think you may have violated export controls so that the University can best assess how to remedy the situation.

### Scope of the Export Control Regulations

Export control laws prohibit the unlicensed export of certain commodities, technologies and information for reasons of national security or protection of trade. Most exports do not require government licenses; only those designated in the EAR, ITAR or OFAC require licenses. Export controls usually arise for one or more of the following reasons:

- The nature of the export has actual or potential military applications;
- U.S. government concerns about the destination country, organization or individual; and
- U.S. government concerns about the declared or suspected end use or the end user of the export.

Generally, an export includes: (1) actual shipment of any covered articles, technology or software out of the U.S.; (2) the electronic or digital transmission of any covered technology or software out of the U.S.; (3) any release or disclosure by physical, electronic, oral or visual means of any covered technology or software in a foreign country, or to foreign nationals in the U.S.; or (4) furnishing assistance or training in the design, development or use of covered articles, technology or software on behalf of or for the benefit of a foreign entity or person anywhere. Note that the term "export" refers, therefore, to more than articles, technology or software leaving the shores of the United States. It also includes "deemed exports," which occur when technology (EAR) or technical data (ITAR) (see Key Definitions), is transmitted to a foreign national in the U.S. (including on university campuses).

When an item is controlled, a license may be required before it can be exported. This requirement relates not only to tangible items (e.g. equipment, prototypes or software) but also to technical data, including information necessary for the design, development, production or use of a product, and may include the research results themselves. The requirement also covers technical assistance, which includes instruction, training, and consulting services.

There are certain countries where it is the policy of the U.S. generally to deny export licenses. These countries currently include Cuba, Iran, Libya, North Korea, Sudan and Syria. For a comprehensive list of countries proscribed under the various export regulations, see "Export Controls and Embargo Key" at [http://web.mit.edu/osp/www/Export%20Controls\\_Embargo%20Key.doc](http://web.mit.edu/osp/www/Export%20Controls_Embargo%20Key.doc).

### Exclusions from Export Controls

*Please note that the exclusions below apply only to information and, in some cases, software associated with the research. These exclusions do not apply to equipment, articles, services or encryption software.*

#### 1. Exclusion for Information that is Publicly Available or in the Public Domain:

Public domain information (ITAR) and publicly available information and software (EAR) is published and generally accessible or available to the public through:

- publication in periodicals, books, print, electronic, or any other media available for general distribution to any member of the public;
- subscriptions that are available without restriction to any individual who desires to obtain or purchase the published information;
- websites available to the public free of charge or at a cost which does not exceed the cost of reproduction and distribution;
- libraries open to the public, including most university libraries;
- patents and open (published) patent applications;
- release at an "open" conference, meeting, seminar, trade show or other open gathering in the U.S. (ITAR) or anywhere (EAR), which is generally accessible by the public for a fee reasonably related to the cost and where attendees may take notes and leave with notes;
- **fundamental research** (see below); or
- **educational information** (see below).

#### 2. Fundamental Research Exclusion:

The fundamental research exclusion applies to information (ITAR) and information and software (EAR):

- resulting from "basic and applied research in science and engineering" conducted at an "accredited institution of higher education" (EAR) or "higher learning" (ITAR) "located in the U.S."
- that is "ordinarily published and shared broadly within the scientific community" and
- that is not "restricted for proprietary reasons or specific national security reasons" (EAR) or subject to "specific U.S. Government access and dissemination controls" (ITAR).

In accordance with the educational and research mission of universities, this exclusion, if it applies, generally ensures that there will be no restrictions on the conduct of fundamental research and permits U.S. universities to allow foreign members of their community (students, faculty and visitors) to participate in such research projects without securing a "deemed export" license.

### 3. Educational Information Exclusion:

Whether in the U.S. or abroad, this exclusion covers the instruction of all students, including foreign nationals, in general science, math and engineering principles commonly taught at schools, colleges and universities (ITAR), and conveying information through courses listed in course catalogues and in associated teaching laboratories of academic institutions (EAR), even if the information concerns controlled items. **The EAR exclusion does not cover controlled information conveyed outside the classroom or teaching lab of an institution.**

### Resources

Export Administration Regulations (EAR), Title 15, sections 730-774 of the Code of Federal Regulations (CFR) are promulgated and implemented by the Department of Commerce. The EAR regulate the export of goods and services identified on the Commerce Control List (CCL), Title 15 CFR section 774, Supp.1. Items on the CCL are primarily commercial in nature but can have military applications (computers, pathogens, etc.) and are broken down into 10 topical categories and one catch-all category. The EAR and CCL are available online at <http://www.access.gpo.gov/bis/>. Items or activities subject to the EAR may require securing a license from the Commerce Department in order to be exported. The license requirements and countries and/or foreign nationals affected depend on the applicable CCL category. A list of CCL general categories is included in the attached Checklist.

International Traffic in Arms Regulations (ITAR), 22 CFR sections 120-130, are promulgated and implemented by the Department of State and control the export of articles, services and related technical data that the State Department has determined to be inherently military in character. These items, listed on the U.S. Munitions List (USML), are organized into general categories. These categories include military munitions and technology, missiles, chemical and biological agents, weapons of mass destruction, space-related technology and equipment, remote sensing, nanotechnology/new materials, sensors, and, in each category, components, software and technical data and services directly related to the items specified. The ITAR and the USML are available at <http://pmdtc.org/reference.htm>. A list of USML general categories is included in the attached Checklist.

The Department of Treasury through the Office of Foreign Assets Control (OFAC) administers and enforces economic and trade sanctions based on U.S. foreign policy and national security goals. These regulations are implemented at 31 CFR sections 500-599. OFAC sanctions, which focus on the end-user or country rather than the technology, target certain foreign countries, terrorists, international narcotics traffickers, and those engaged in activities related to the proliferation of weapons of mass destruction. OFAC has the authority to impose controls on transactions and exports from the US to specific foreign persons, countries, and entities. The Sanctions Program and Country Summaries are available at <http://www.treas.gov/offices/enforcement/ofac/sanctions/>. The Specially Designated Nationals (SDN) List is available at <http://www.treas.gov/offices/enforcement/ofac/sdn/>.

### Key Definitions

**A Deemed Export** is any release of controlled technology to a foreign national within the U.S. Such release is "deemed" to be an export to the home country or countries of the foreign national. This includes providing technical assistance or training to foreign nationals within the U.S. (EAR 734.2.b.2.ii.)

**A Defense Article** is any item or technical data designated on the U.S. Munitions List. This term includes technical data recorded or stored in any physical form, models, mockups or other items that reveal technical data directly relating to items designated on the USML. It does not include basic marketing information on function or purpose or general system descriptions. (ITAR 120.6)

**Defense Service** means (1) the furnishing of assistance (including training) to foreign persons, whether in the U.S. or abroad, in the design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, processing or use of defense articles; (2) the furnishing to foreign persons of any technical data controlled by ITAR, whether in the U.S. or abroad; or (3) military training of foreign units and forces. (ITAR 120.9)

A **Foreign National** is any person who is not a lawful permanent resident (as demonstrated by the issuance of a permanent resident visa, i.e., "Green Card") or a protected individual. It also means any foreign corporation, business association, partnership, trust, society or other entity or group that is not incorporated or organized to do business in the U.S., as well as international organizations and foreign governments and any agency or subdivision of foreign governments (e.g., diplomatic missions). (EAR 734.2.b.2.ii., ITAR 120.16)

**Technical Data:** (1) Information, other than software, as defined at (4) below, which is required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance or modification of defense articles. This includes information in the form of blueprints, drawings, photographs, plans, instructions and documentation, (2) Classified information relating to defense articles and defense services, (3) Information covered by an invention secrecy order, (4) Software, directly related to defense article, including, but not limited to the system functional design, logic flow, algorithms, application programs, operating systems and support software for design, implementation, test, operation, diagnosis and repair. (5) This definition does not include (a) information concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges and universities, (b) information in the public domain, or (c) basic marketing information on function or purpose or general system descriptions of defense articles. (ITAR 120.10)

**Technology:** Specific information necessary for the development, production or use of a product. The information takes the form of technical data or technical assistance. (EAR 772)

**Technical Data** may include blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, or read-only memories.

**Technical Assistance** may include instruction, skills training, working knowledge and consulting services. Technical Assistance may involve the transfer of technical data.

Note: Portions of this memorandum are based on the guidance the Columbia University Office of Projects and Grants provided to its faculty on December 30, 2003.