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Harvard University

EXPORT CONTROL POLICIES AND PROCEDURES

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INTRODUCTION

Harvard University engages in research both in the United States and overseas. Harvard's activities include the development of products, goods, hardware, software, or materials (collectively, "items"), as well as research involving technology that may be subject to U.S. export control laws and regulations.

U.S. export-control laws and regulations generally impose the same restrictions on the export of items from universities that would apply to other exports from the U.S. Thus, if you are shipping a product to another country, you must make sure that the proposed shipment complies with the export-control laws. By the same token, if you are traveling abroad and want to bring certain items with you – materials relating to your work, encryption products, computers – again you may need to consult this Policy.

In addition, under U.S. export control laws and regulations, the release or disclosure of technology to a foreign national is deemed to be an export to that foreign national's country of origin and could be subject to licensing requirements. Because foreign nationals work at and with Harvard, and because Harvard activities may involve the disclosure of such technology, the policies and procedures described herein will also apply to the issue of "deemed exports" to foreign nationals.

Much of the controlled technology that foreign nationals have access to on campus at Harvard will not require licensing because of the exception for "fundamental research" or "educational information" under the relevant regulations. If the on-campus teaching of "basic and applied research" is free from restrictions on publication and involves information that is not subject to any access or dissemination controls, it generally qualifies for the "fundamental research" exemption. The information is deemed to be in the public domain, and no license is necessary for access to this information by foreign nationals. Similarly, there is an exception for educational information that is released by instruction in catalog courses and associated teaching laboratories of academic institutions.

Although the fundamental research exemption (coupled with the educational information exemption) may be broad, it generally does not authorize the transfer of goods outside of the U.S. In addition, the fundamental research exemption does not generally apply to work abroad, even if such research is being conducted at an institution that is affiliated with Harvard.¹

¹ A couple years ago, the Inspector General of the Commerce Department recommended that Commerce amend its regulations to require universities to seek licenses that would allow foreign nationals access to certain technology relating to certain equipment on campus. In other words, even though the fundamental research exemption allows for the exchange of information on campus – as long as the information has no access or dissemination controls on it – the Inspector General argued that it did not allow access to technology relating to very sensitive equipment. The Commerce Department sought

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The purpose of this document (the “Policy”) is to set forth Harvard’s policies and procedures for complying with U.S. export control laws and regulations. This Policy is a guide to facilitate compliance with U.S. export control laws and regulations, but is not a substitute for consulting the specific laws and regulations that are relevant to any given transaction or issue. This Policy also advises you where to turn if you need assistance in determining whether your proposed export complies with the applicable laws.

If a license is required, approvals can often take weeks or months before discussions or transfer of technical data can occur. Harvard personnel, including faculty, staff, research fellows, postdoctoral candidates, and students, should identify transactions that may trigger license requirements as soon as possible to provide sufficient time to determine if a license is necessary and, if so, to permit time to apply for the license.

Most licenses generally take from thirty to sixty days to obtain, and the licensing agencies can impose restrictions. Licenses for sensitive technology or for sensitive destinations can take longer to obtain.

1.0 APPLICABLE U.S. LAWS AND REGULATIONS

Three principal regulatory regimes govern the export of items and technology to a foreign country or a foreign national.

First, the export of items or technologies that are commercial or “dual-use” in nature (*i.e.*, have both civil and military applications) is subject to the Export Administration Act of 1979 (“EAA”) (which at present has lapsed, but its substantive provisions are in effect through Executive Order), and its implementing regulations, the Export Administration Regulations (“EAR”), 15 C.F.R. Pt. 730 *et seq.* The EAA and the EAR are administered by the U.S. Department of Commerce, Bureau of Industry and Security (“BIS”). Items subject to the jurisdiction of BIS are listed on the Commerce Control List (“CCL”) found in the EAR.²

Second, the export of defense articles (*i.e.*, items or technology that are “inherently military” in nature or are designed for intelligence and space-related purposes) as well as related technical data and services are subject to the Arms Export Control Act of 1976, as amended, Pub. L. 90-629, 82 Stat. 1320 (1976) (“AECA”) and its implementing regulations, the International Traffic in Arms Regulations (“ITAR”), 22 C.F.R. Pt. 120 *et seq.* The AECA and the ITAR are administered and enforced by the

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comments on a proposed amendment to the regulations and subsequently withdrew the proposal.

² The CCL is divided into ten categories and covers nuclear materials; materials, chemicals, microorganisms, and toxins; materials processing; electronics; computers; telecommunications and information security; lasers and sensors; navigation and avionics materials; marine-related materials; and propulsion systems, certain space vehicles, and related equipment.

U.S. Department of State, Directorate of Defense Trade Controls (“DDTC”). Items subject to the DDTC are listed on the U.S. Munitions List (“USML”) found in the ITAR.³

Third, the Office of Foreign Assets Control at the U.S. Department of the Treasury (“OFAC”) regulates all transactions abroad with prohibited parties, such as terrorists and countries subject to U.S. embargoes (hereinafter, “prohibited end-users”). OFAC also enforces the Trading with the Enemy Act and various Executive Orders, which are executed through regulations at 31 C.F.R. §511 *et seq.* Currently, the United States imposes the strictest embargoes on Cuba and Iran.

Most of Harvard’s activities involve items or technologies subject to the EAR. Moreover, before sharing items with a person or institution abroad or with a foreign national on campus, we must ensure that the proposed recipients are permitted to receive the items. Consequently, this Policy will address Harvard’s compliance with all three regulatory regimes.

2.0 IMPORTANT DEFINITIONS

The terms used in this Policy shall have the following definitions, unless otherwise specified in this Policy. Definitions of terms used in EAR are found at 15 C.F.R. Pt. 772. Definitions of terms used in the ITAR are found at 22 C.F.R. Pt. 120.

“Development.” Development is related to all stages prior to serial production, such as: design, design research, design analyses, design concepts, assembly and testing of prototypes, pilot production schemes, design data, process of transforming design data into a product, configuration design, integration design, and layouts.

“Deemed Export.” The release of technology or software source code to a “foreign national” (defined below) in the United States. Such a release is deemed to be an export to the country of which the foreign national is a citizen.

“Defense Article.” Any item or technical data designated on the USML, 22 C.F.R. Pt. 121.1, as well as technical data recorded and stored in any physical form, models, mockups or other items that reveal “technical data” directly relating to items on the USML.

³ The Munitions List covers such things as guns and armaments, ammunition, launch vehicles and missiles, explosives and other incendiary agents, vessels of war, tanks and military vehicles, aircraft, military training equipment, protective personnel equipment, fire control equipment, auxiliary military equipment (including cameras and cryptographic devices, software, and components), toxicological agents, spacecraft systems, nuclear weapons, and classified articles as well as technical data and services that relate to these categories.

“Defense Service.” The furnishing of assistance (including training) to foreign persons, whether in the United States or abroad, in the design, development, engineering, repair, maintenance, modification, operation, demilitarization, destruction, processing or use of defense articles or the furnishing to foreign persons of any technical data controlled by the ITAR.

“Export.” The actual shipment or transmission of items subject to export controls (i.e., the EAR or the ITAR) out of the United States, or the “release” of technology or software (including source code) to a foreign national in, or outside of, the United States. (A release of technology or source code to a foreign national in the United States is considered a “deemed export.”)

“Foreign national” means any person other than a U.S. citizen, a lawful permanent resident of the United States (i.e., a “greencard” holder), or a “protected individual” as defined in 8 U.S.C. § 1324b(a)(3) (e.g., refugees or persons seeking asylum).

“Knowledge.” Knowledge, and variants such as “reason to know” or “reason to believe,” includes not only positive knowledge that the circumstance exists or is substantially certain to occur, but also an awareness of a high probability of its existence or future occurrence. Such awareness is inferred from evidence of the conscious disregard of facts known to a person and also is inferred from a person’s willful avoidance of facts.

“Production.” All production stages, such as: product engineering, manufacture, integration, assembly (mounting), inspection, testing, and quality assurance.

“Re-export” means the transfer of defense articles and defense services to an end-user, end-user or destination without the prior approval of DDTC.

“Release.” Technology or software is “released” for export through: (i) visual inspection by foreign nationals of U.S.-origin equipment, facilities or documentation; (ii) oral or written exchanges of information in the United States or abroad; or (iii) the application to situations abroad of personal knowledge or technical experience acquired in the United States.

“Technology” means specific information necessary for the “development,” “production,” or “use” of a product. The information takes the form of “technical data” or “technical assistance.” Information that is generally accessible or available to the public is not “technology” subject to the EAR.

“Technical Assistance” may take forms such as instruction, skills training, working knowledge, and consulting services. Technical assistance may involve the transfer of “technical data.”

“Technical Data” includes information “required for” the design, development, production, manufacture, assembly, operation, repair, testing, maintenance, or modification of defense articles. It may take forms such as 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, and read-only memories.

“U.S. Person.” Any individual who is a citizen of the United States, a permanent resident alien of the United States, or any person physically located in the United States. Any juridical person (corporation, association, etc.), including foreign branches, organized under the laws of the United States or any jurisdiction within the United States.

“Use.” Operation, installation (including on-site installation), maintenance (including checking), repair, overhaul and/or refurbishing.

3.0 SUMMARY OF POLICY

Harvard is committed to compliance with applicable U.S. laws and regulations pertaining to exports of items, services, and technology by or on behalf of Harvard. This Policy applies both to exports outside the United States as well as to exports to foreign nationals within the United States.

This Policy has several objectives. *First*, it is designed to promote the free exchange of ideas in a university environment consistent with applicable restrictions under U.S. laws and regulations. *Second*, it seeks to ensure that activities conducted by Harvard in the United States and overseas relating to the export or re-export of U.S.-origin goods, services and technology comply with applicable export-control laws and regulations. *Third*, it is intended to ensure by means of procedures contained in this Policy that no transfer of goods, services, or technology subject to export controls takes place beyond what is authorized by U.S. export control laws and regulations or by the terms of any export license or other approval granted by the U.S. government. *Fourth*, it ensures that any and all documentation completed in accordance with this Policy is accurate and complete. *Fifth*, it sets out points of contact should any member of the Harvard community need assistance in complying with the laws.

Compliance with the rules and procedures prescribed in this Policy is the responsibility of all Harvard personnel, wherever located. Failure to follow these rules and procedures can result in disciplinary action. Violations of the legal requirements can result in severe criminal and/or civil penalties for Harvard and the individual(s) involved, as well as Harvard’s loss of export and government contracting privileges.

4.0 INTERNAL COMPLIANCE STRUCTURE

All Harvard employees and those acting on Harvard’s behalf are responsible for ensuring that Harvard conducts its activities in compliance with the requirements of U.S.

export control laws and regulations and the rules and procedures set forth in this Policy. (Annex B contains the Harvard Export Control Compliance Policy Statement.) It is particularly important for a university like Harvard that frequently works with international researchers and collaborators to determine early in the process of any activity the potential requirement for export-control authorizations. This requires full and timely disclosure of all relevant facts in a transaction in a clear, straightforward, and comprehensible manner.

The Vice Provost for Research Policy shall oversee Harvard's compliance with U.S. export-control laws and regulations and shall be primarily responsible for ensuring that this Policy is properly implemented and followed. The Vice Provost shall create an Export Council composed of representatives from the faculty of the various schools as well as representatives from OSP and OTTL. The Council will consult with the Office of the General Counsel, as appropriate. Each school shall be responsible for designating individual(s) to serve on the committee. The committee shall meet regularly to assist with implementation of the Policy. Any questions regarding compliance with export-control laws and regulations or this Policy shall be directed to the Vice Provost or the Export Council or the representative of the Export Council from your faculty. The Vice Provost shall be responsible for updating this Policy on the Harvard intranet site at www.provost.harvard.edu.

All communications with U.S. licensing authorities shall be made through the Vice Provost or a person designated by Vice Provost as an "empowered" official. Any submission of licenses to the State Department, Commerce Department, or OFAC may be coordinated with OGC.

The employee who seeks to export an item shall be responsible for performing the export licensing analysis for any potential Harvard export. A checklist to assist the employee in determining whether an export license is required for a potential transaction is attached at Annex C to this Policy.

The Harvard employee should seek the assistance of OTTL if the proposed export relates to any agreements supervised by those offices.

The Harvard employee should seek the assistance of OSP if a sponsored research project raises export issues. OSP will work with the individual to ensure that any agreements supervised by OSP qualify for treatment under the applicable fundamental research exemption within the guidelines outlined at Annex D.

For any exports not covered by one of these offices, it shall be the responsibility of the Harvard employee to coordinate any exports with a representative of the Export Council.

5.0 OUTLINE OF PROCEDURE TO ENSURE COMPLIANCE

Determining whether an export is subject to a licensing requirement is a complicated process that necessarily involves a full understanding of the item. Before

sending material or data abroad or sharing such material or data with foreign nationals on campus, Harvard personnel must ask a series of questions.

First, does the item appear on the USML or is it otherwise subject to ITAR?

Any article, technical data, or service that is specifically designed, developed, configured, adapted, or modified for a military or intelligence application, or for use in space, generally is subject to the ITAR. If it is subject to the ITAR, a State Department export license most likely will be required, and you should contact promptly the Vice Provost or another member of the Export Council before seeking to export the item. An index to the USML can be found at the following website:

http://www.access.gpo.gov/nara/cfr/waisidx_99/22cfr121_99.html.

Second, does the item appear on the CCL or is it otherwise subject to the EAR?

An index for items on the CCL is available at the following website, which provides individual links to each of the categories as well as the other Commerce Department regulations: http://www.gpo.gov/bis/ear/ear_data.html. If the item is not on the CCL, then it is classified as “EAR 99.” EAR 99 items do not require export licenses provided the end-user and end-use are not restricted for any of the reasons noted below.

Third, if the item is subject to the EAR, what is the reason for classification?

The CCL contains not only descriptions of items, but also notations indicating the reason for the control. For example, an item may be controlled for “AT” or anti-terrorism reasons. Or an items may be controlled for “NP” or non-proliferation reasons.

Fourth, are you permitted to send items with the reason for control classification to the country of ultimate destination?

Once you have classified the item and have identified the reason for control, you must check the country chart contained in the EAR to determine whether the items with those reasons for control can be shipped to the destination without a license. The country chart can be found at the following link: <http://www.gpo.gov/bis/ear/pdf/738spir.pdf>.

Fifth, are you exporting to a prohibited end-user, including a prohibited country?

Set forth in the checklist at Annex C are the links to the various lists of prohibited end-users. If the individual or entity to which you are shipping is on any of those lists, then you cannot send the items without first consulting a member of the Export Council.

Sixth, are you aware of any “red flags,” suggesting that the material or data may be diverted from your intended recipient or used for a prohibited purpose?

Seventh, regardless of whether a license is required, are you required to file a Shipper’s Export Declaration (“SED”)?

In general, if the value of the shipment exceeds \$2500, then you are required to file an SED.

Eighth, are you required to include a Destination Control Statement on your shipment?

You are required to include a Destination Control Statement on your package if you are exporting items on the CCL or the USML. The Destination Control Statement is a legend that states you have complied with the export laws.

The checklist set forth at Annex C is intended to assist Harvard personnel in answering these questions. In addition, the descriptions of procedures set forth in Sections 6 through 10 below are designed to walk you through the inquiry. If at any stage of the process you are uncertain about how to proceed or you determine that a license is or may be required, please contact the Vice Provost or another member of the Export Council.

6.0 SCOPE OF CONTROLS UNDER THE ITAR

Items and related technical data subject to the ITAR are set forth on the U.S. Munitions List (“USML”) found in Section 121.1 of the ITAR. Generally, the USML includes any military intelligence or defense-related hardware, software and technical data as well as some “space-qualified” hardware, software, technical data, and services suitable for use in space.

Under ITAR, an article may be designated by DDTC as a defense article if it is specifically designed, developed, configured, adapted, or modified for a military application, and: (i) it does not have predominant civil applications, and does not have performance equivalent (defined by form, fit and function) to those of an article or service used for civil applications; or (ii) it is specially designed, developed, configured, adapted, or modified for a military application, and has significant military or intelligence applicability such that control under the ITAR is necessary. The determination as to whether an item satisfies these conditions is based on the history of the development of the item and the environment (*i.e.*, civil, dual-use, or military) from which the item emerged, and *not* its intended end-use. The intended use of the item after its export (*i.e.*, for a military or civilian purpose) is not relevant in determining whether the article or service is subject to control under ITAR.

With a few exceptions, almost all entities in the United States that engage in the business of either manufacturing defense articles or exporting defense articles, or furnishing defense services, must register with DDTC. If Harvard decides to export ITAR goods, technical data, or services subject to registration, it may need to fulfill the registration requirement.

Given the complexities of the ITAR regulations, you should contact the Vice Provost immediately if you believe that you are dealing with a defense item covered by the regulations. Submission of an Agreement to DDTC and/or approval by the relevant agencies of the U.S. Government generally takes months, so this approval process, as well as the internal review, should be factored in to any planning.

7.0 SCOPE OF CONTROLS UNDER THE EAR

Given the nature of the research and work conducted at Harvard, it is far more likely that the export issues the University confronts will implicate the EAR, rather than the ITAR. The determination of whether a license under the EAR would be required to export abroad or to a foreign national involves the consideration of two factors: (1) the classification of the item or technology within the CCL, and (2) the country of ultimate destination. (See Supp. No. 1 to 15 C.F.R. Pt. 774, and the “Country Chart” at 15 C.F.R. Pts. 738 & 742).

7.1 Items Subject to Control under the EAR

In general, the following items are subject to varying degrees of control under the EAR:

Items and technologies specifically identified on the Commerce Control List (“CCL”), which is set forth in 15 C.F.R. Part 774. (The CCL is the “master list” of all items and technology “subject to the EAR.”)

U.S.-origin items and technology that are not subject to the exclusive jurisdiction of another U.S. government agency and that are not specifically listed on the CCL. (Such items and technology remain “subject to the EAR” and are classified as “EAR 99.”)

The CCL is divided into ten categories: (0) Nuclear Materials, Facilities and Equipment and Miscellaneous; (1) Materials, Chemicals, Microorganisms, and Toxins; (2) Materials Processing; (3) Electronics; (4) Computers; (5) Telecommunications and Information Security; (6) Lasers and Sensors; (7) Navigation and Avionics; (8) Marine; (9) Propulsion Systems, Space Vehicles and Related Equipment. Each category contains five groups: (A) Equipment, Assemblies and Components; (B) Test, Inspection and Production Equipment; (C) Materials; (D) Software; and (E) Technology.

Within each group, individual items are identified by an Export Control Classification Number (“ECCN”) consisting of a set of digits and a letter, e.g., 3A001. The first digit identifies the general category. The letter following identifies the group. The last three digits differentiate individual entries.

7.2 Classifying Under the EAR

The proper classification of each item is the initial step in determining whether there are any licensing requirements under the EAR. Harvard may choose to classify the items and technology, check with the manufacturers, or submit a classification request to BIS.

In order to determine whether the CCL requires a license for any given export or reexport, the first step is for the person most knowledgeable about the characteristics and capabilities of the item or technology to locate the ECCN (or subpart of the ECCN) on the CCL that most specifically describes the item or technology at issue. The easiest way to accomplish this is to contact the manufacturer. If that is not possible, the individual seeking to export the item shall classify the item with the assistance of a representative of the Export Council or the Vice Provost, as necessary.

In order to classify an item yourself, you should begin by referring to the detailed index to the CCL, located at http://www.gpo.gov/bis/ear/ear_data.html. Suppose, for example, you wish to export a biological processing fermenter. According to the index to the CCL, “Fermenter, biological processing” has an ECCN number 2B352b for fermenters with a capacity of greater than 20 liters. (If the capacity is less than 20 liters, then 2B235b does not apply.)

Next, you must verify the classification number by consulting the portion of the EAR that describes the fermenter. Thus, you look under Section 2, Materials Processing, to determine whether the more detailed description fits the fermenter that you intend to send.

Once you have confirmed that the description in the regulations accurately describes the item for export, you must determine the reason for the control. The reasons are listed in the relevant section of the EAR under the section heading, “License Requirements.” Thus, for example, Section 2B235b identifies the reasons for control of the fermenter as “CB” (chemical and biological weapons), column 3, and “AT” (anti-terrorism), column 1.

The final step is to consult the “Country Chart” found at Supplement No. 1 to EAR Part 738 (<http://www.gpo.gov/bis/ear/pdf/738spir.pdf>) to determine whether the reasons for control apply to the country of destination. As an example, suppose you intend to ship the fermenter to a former postdoc in Belgium. You consult the country chart and determine that there is no “x” in the third column marked “CB,” and there is no “x” in the first column marked “AT.” This means that you do not need an export license to ship the fermenter to Belgium. Suppose, instead, you intend to ship the fermenter to China. If you consult the country chart, you will see that there is an “x” in the third column marked “CB,” although there is no “x” in the first column marked “AT.” Chances are high that you would need a license to export the fermenter to China, unless another exception is available.

7.3 Exceptions to EAR

There are several categories that are explicitly exempted from the EAR. Types of information that would not be “subject to the EAR” include:

- (1) Publicly available technology and software that are generally accessible to the public in any form;

- (2) Information that arises during or results from “fundamental research”;
- (3) Educational information; and
- (4) Information contained in certain types of patent applications.

In addition, there are license exceptions contained in the regulations. The license exceptions are contained in part 740 of the EAR (15 C.F.R. §740). Note that not all license exceptions are available for all countries or nationals from all countries.

7.3.a. Fundamental Research Exception

There is an exception in the EAR that allows universities to conduct certain research and share information with foreign nationals on campus without seeking a license. To qualify for the university exception:

- (1) the teaching of basic and applied research in science and engineering must occur at an accredited university in the United States; and
- (2) the research must be free from restrictions on publication and involve information that is not subject to any access or dissemination controls.

The information is deemed to be in the public domain, and no license is necessary for access to this information by foreign nationals. A great deal of teaching and research conducted on campus qualifies for this exemption.

Under the EAR, the access and dissemination controls referred to in the regulations do *not* include prepublication reviews to prevent the inadvertent disclosure of proprietary information or to preserve patent rights. Other forms of prepublication review, however, could nullify the exemption. For example, prepublication reviews by corporate sponsors may nullify the exemption.

Nullification of the exemption could have serious consequences to research conducted on campus both for the researchers and for the institution. For example, before foreign nationals could work on a project, the University may need to secure a license, depending on the classification of the technology and the nationalities of those with access to the technology. Thus, before committing to a corporate sponsor that it may hold up publication to further its commercial purposes, you should contact a member of the Export Council.

With limited exceptions, the fundamental research exemption does not authorize the transfer of goods (rather than information) outside of the United States. Exports from U.S. universities are subject to the same regulations as other exports from the U.S. In addition, the fundamental research exemption does not generally apply to work abroad, even if such research is being conducted at an institution that is affiliated with Harvard.

7.3.b. Educational Information

Educational information also is not subject to the EAR if it is released by instruction in catalog courses and associated teaching laboratories of academic institutions. Teaching in laboratories, even if it involves access to sensitive technology, would likely be covered by this exemption.

7.3.c. Patents

Information in patents and open (published) patent applications available at any patent office is in the public domain and thus is not subject to a license under the EAR. Information contained in a patent application, or an amendment, modification, supplement, or division of an application, and authorized for filing under the license provisions of 37 C.F.R. Part 5 from the Commissioner of Patents also does not require a separate license from the Commerce Department for export.

It is important to note that only the precise information contained in the patent or patent applications is free from restrictions under the EAR. Variations on that information, or the application of the information, may be controlled depending on the technology.

Patent applications to countries subject to OFAC restrictions require either a specific or general license for prosecution and filing. If you intend to export any data in reliance upon this exemption, or if you seek patent protection in countries subject to OFAC sanctions, contact the Vice Provost before proceeding.

7.3.d. Other License Exceptions

In addition to these general exceptions, there are more specific exceptions that may be available depending on the item you intend to export. Although the combination of ECCN and ultimate destination may indicate that a license is required to export certain hardware, software, or technology to a certain destination, there are several “License Exceptions” that may be available depending on the details of the transaction, the item at issue, and its ultimate destination. Each ECCN will indicate whether certain License Exceptions are available, and details on all License Exceptions are provided in Part 740 of the EAR. If a license exception is available, and all of the requirements of the License Exception are satisfied, then a license is not required and the item/technology can be exported under the authority of that License Exception, provided no end-use/end-user restrictions apply. A member of the Export Council, with the advice of the OGC, can help you to determine whether another exemption is available. Please note, however, that the regulations require the exporters to retain documents for five years for any exports shipped pursuant to exceptions.

8.0 PROHIBITED END-USES OR PROHIBITED END-USERS

Once you have determined that no license is required under the EAR (and the ITAR) for export of an item, you must ensure that the export is not being sent to a prohibited end-user or being put to a prohibited end-use. End-user controls focus on the

identity of the end-user. End-use controls focus on the known end-use of the item or technology.

Both end-user controls and end-use controls are addressed specifically in the EAR. These controls apply even if the applicable ECCN and country chart normally indicate that the export is not subject to licensing requirements. In addition, other government agencies maintain lists of individuals and entities with which we should not transact any business. For example, OFAC maintains a list of Specially Designated Nationals (“SDNs”) and Specially Designated Terrorists (“SDTs”), and the DDTC maintains a list of “debarred” parties (*i.e.*, individuals and entities that have lost export privileges) with whom U.S. persons are prohibited from engaging in transactions. OFAC also maintains a list of countries that are subject to sanctions or embargoes. The current list is outlined in Annex E although you should follow the directions at Annex E to update the country list at the time of export as the OFAC sanctions change frequently.

8.1. Prohibited End-Users and Prohibited Destinations

Before exporting material or data to an individual entity, you should check the lists identified in the checklist at Annex C. If the intended recipient appears on one of those lists, it is very likely that you would not be able to send the item to the intended recipient without, at a minimum, a license.

Currently, several countries are subject to at least some level of sanctions pursuant to regulations administered by the U.S. Department of the Treasury, Office of Foreign Assets Controls (“OFAC”). A list of these countries is attached at Annex F. Currently, Cuba and Iran are subject to the most stringent embargoes. Because the list of countries subject to OFAC sanctions frequently changes, you should check the following link for the current list of countries: <http://www.ustreas.gov/offices/enforcement/ofac/>.

It is Harvard’s policy to comply with all requirements for transactions with individuals on any of the lists of prohibited end-users as well as the countries that are subject to U.S. unilateral or multilateral sanctions or embargoes. Thus, the approval of the Vice Provost must be obtained in writing before any person retained or otherwise employed by Harvard can become involved with, participate in, or have any dealings whatever in transactions involving any of the individuals on the lists at Annex C, the countries listed in Annex F, or nationals of the countries listed in Annex E that are not U.S. citizens or lawful permanent residents.

8.2. Prohibited End-Uses

The EAR prohibits U.S. persons from exporting goods, software, and technology with the “knowledge” that such items could contribute to the proliferation of weapons of mass destruction. Additional details about nuclear end-use controls, missile technology end-use controls, and chemical and biological weapons end-use controls can be found at Part 744 of the EAR. Guidance as to what constitutes “knowledge” of these restricted end-uses can be found under the “Know Your Customer” Guidance and Red Flags found in Supplement No. 3 to Part 732 of the EAR. The Red Flags are also listed in Annex C.

If a project raises any red flags, then the Harvard official contemplating engaging in the project shall contact a representative of the Export Council before proceeding further.

9.0 SHIPPER'S EXPORT DECLARATIONS AND DESTINATION CONTROL STATEMENTS

In addition to export control laws and regulations, it is Harvard's policy to comply with other requirements associated with exports of items or technology, including the filing of Shipper's Export Declarations ("SEDs"), when necessary, and Destination Control Statements.

9.1 SEDs

If the item you are shipping has a value of more than \$2500, you will need to file an SED. This information frequently is on the international air waybills for commercial shippers such as Federal Express, DHL, UPS, and these common carriers will generally prompt you to fill out the appropriate form. For assistance in filling out an SED, refer to <http://www.census.gov/foreign-trade/regulations/forms/index.html>, which will walk you through the process.

To determine the value in U.S. dollars, enter the selling price or cost if not sold, including freight, insurance, and other charges to U.S. port of export, but excluding unconditional discounts and commissions (nearest whole dollar, omit cents). The value to be reported on the SED is the exporter's price or cost if not sold, to the foreign party.

If there is an intellectual property agreement associated with the item to be exported, the value to be reported will depend on whether to value the item as the full cost of the agreement or whether the cost of the agreement is for the services and intellectual property associated with the item, and the cost for the actual item is some subset of the total price of the agreement. The exact valuation will depend on the facts of the individual transfers. SEDs generally are not required for e-mail transmissions or for transfers of software developed by Harvard. If the website noted above does not provide sufficient guidance for valuation purposes, contact a member of the Export Council.

9.2 Destination Control Statements

If the export is subject to the EAR, and is on the Commerce Control List and thus not classified as EAR 99, the invoice and the bill of lading, air waybill, or other export-control document that accompanies the shipment from its point of origin in the United States to the ultimate consignee or end-user abroad must, at a minimum, contain the following Destination Control Statement, as required under 15 C.F.R. § 758.6:

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

If the export is subject to the ITAR , the bill of lading, invoice, and license must include the following statement, as required under 22 C.F.R. § 123.9(b):

These commodities are authorized by the U.S. Government for export only to [country of ultimate destination] for use by [end-user]. They may not be transferred, transshipped on a non-continuous voyage, or otherwise disposed of in any other country, either in their original form or after being incorporated into other end-items, without the prior written approval of the U.S. Department of State.

10.0 Anti-Boycott Provisions

U.S. law encourages, and in specified cases requires, U.S. persons and those in the U.S. to refuse to participate in foreign boycotts not supported by the U.S. The laws apply to all boycotts not sanctioned by the U.S. (including, for example, prohibitions on discrimination on the basis of race, religion, sex, national origin or nationality) but in practical terms, the laws primarily apply to the Arab League boycott of Israel.

U.S. law prohibits participation in an unauthorized boycott. Examples include:

- Agreements to refuse or actual refusal to do business with or in Israel or with blacklisted companies.
- Agreements to discriminate or actual discrimination against other persons based on race, religion, sex, national origin or nationality.
- Agreements to furnish or actual furnishing of information about business relationships with or in Israel or with blacklisted companies.
- Implementing financial instruments with prohibited boycott terms or conditions.

Under some cases, an organization must report the request to participate in a boycott. If you become aware of any potential boycott activity, complete the screen at Annex F and then contact a member of the Export Council.

11.0 ACCESS TO CLASSIFIED TECHNOLOGY

There are also very stringent government rules and regulations concerning classified materials. Currently, Harvard does not engage in work that involves classified materials.

12.0 TRAINING

It is Harvard's policy to educate its employees regarding items and technology subject to, and the basic requirements for complying with, U.S. export control laws and regulations, as well as the consequences for failure to comply.

13.0 INTERNAL REVIEWS

RMAS shall have the responsibility for auditing the compliance of various divisions within Harvard with the rules and procedures set forth in this Policy. Harvard personnel with supervisory authority are encouraged periodically to review the export control compliance activities of those under their supervision.

14.0 RECORDKEEPING

An essential element of this Policy is to ensure that Harvard export control documents are maintained in an accurate and consistent manner and are available for inspection by U.S. government agencies with export licensing jurisdiction.

Generally, Harvard is required to retain certain types of documents related to export transactions for a period of five (5) years from the later of the date that the transaction ended or the licensed activity was complete. Furthermore, Harvard must make those documents available to the U.S. government agencies administering export controls upon request.

A detailed description of the types of documents and records that are required to be maintained can be found in 15 C.F.R. Pt. 762 and 22 C.F.R. Pt. 122.5.

15.0 VIOLATIONS, REPORTING AND AUDIT

The penalties for violating the export-control laws are severe. Violations can result in substantial criminal and civil penalties for both the individual involved in the violation (*e.g.*, fines of up to \$250,000 per violation or imprisonment for 10 years) and substantial fines and penalties for Harvard. Violations also can result in the loss of export privileges for Harvard or for individuals involved in the violation. Failure to comply with the requirements of U.S. export control laws and regulations, and the provisions contained in this Policy, are also grounds for disciplinary action, up to and including termination of employment.

If any Harvard employee becomes aware that a violation or possible violation of U.S. export control laws or regulations or this Policy has occurred, or is about to occur, he or she should report the details of the suspected violation directly to the Vice Provost, another member of the Export Council, or the Compliance HELPLINE (877-694-2275).

The Export Council has the authority to stop any proposed transaction by Harvard that in its judgment, could result in a violation of U.S. export control laws or regulations or this Policy by Harvard or its employees. Any Harvard employees involved in a

transaction stopped by the Export Council shall cooperate by providing information about the transaction at issue and shall take no further action with respect to the transaction until an internal investigation of the suspected violation is conducted as described below, and the written authorization to proceed with the transaction is obtained.

The Export Council shall investigate any suspected violations. If the Export Council determines that an export control violation has occurred, it shall inform the Harvard administration of the facts surrounding the violation and provide their recommendations for what actions Harvard should take in response to the violation.

RMAS shall prepare periodic reviews of the Harvard Export Control Policies and Procedures. It shall submit a report of its review to the Provost.

ANNEX A

List of Websites Containing Additional Information on Export Controls

<u>Bureau of Export Administration</u>	www.bis.doc.gov
Denied Persons List	http://www.bis.doc.gov/dpl/Default.shtm
Entity List	http://www.bis.doc.gov/Entities/Default.htm
Unverified List	http://www.bis.doc.gov/Enforcement/UnverifiedList/unverified_parties.html
EAR Regulations Online	http://www.gpo.gov/bis/index.html
<u>Office of Foreign Assets Controls</u>	http://www.ustreas.gov/offices/enforcement/ofac/
List of Specially Designated Nationals and Blocked Persons	http://www.treas.gov/offices/enforcement/ofac/sdn/
<u>Directorate of Defense Trade Controls</u>	http://pmdtcc.state.gov/
List of Debarred Parties	http://www.cbp.gov/xp/cgov/export/persons_list/
<u>Department of Defense</u>	www.defenselink.mil/
Technology Security Administration	http://www.defenselink.mil/policy/sections/policy_offices/dtsa/index.html
<u>U.S. Customs and Border Protection</u>	http://www.cbp.gov/
<u>Department of Energy</u>	http://www.energy.gov/
<u>Nuclear Regulatory Commission</u>	www.nrc.gov
<u>Food and Drug Administration</u>	www.fda.gov
<u>U.S. Government Printing Office</u>	http://www.gpo.gov/

ANNEX B

Harvard Export Control Compliance Policy Statement

Harvard University investigators engage in a broad range of innovative and important research both in the United States and overseas. These activities include the sharing and development of products, goods, hardware, software, or materials (collectively, “items”), as well as research involving technology that may be subject to U.S. export control laws and regulations. The purpose of this document is to restate for the Harvard community the essential aspects of the laws and regulations concerning exports, confirm our policy for compliance, and explain how the University will provide our researchers with the assistance they may need to ensure compliance with these complicated laws.

Overview of Export Controls

The Departments of Commerce, State, and Treasury administer the primary controls on exports of goods or commodities. The Department of Commerce regulates the export of items and information that have civil applications, the Department of State regulates the export of items that have military applications or that relate to space, and the Department of the Treasury enforces country-specific embargoes. In certain circumstances, these agencies may require the University to secure a license before the item or information is exported to another country or shared with a foreign national.

Department of Commerce Controls

The Bureau of Industry and Security (“BIS”) of the U.S. Department of Commerce implements and enforces U.S. export control regulations relating to the export of “dual-use” goods and technologies (having both civil and military applications) as well as exclusively civil items. Items subject to the jurisdiction of BIS are listed on the Commerce Control List (“CCL”) found in the Export Administration Regulations.⁴ Whether a license is required to export or reexport an item on the CCL is determined by examining the precise classification of the item, the destination of the item, and the end-user. BIS also maintains the Denied Persons List and the Entities List, which identify specific persons and entities to which exports are not permitted without the prior approval of BIS.

⁴ The CCL covers such things as materials, chemicals, microorganisms, and toxins; materials processing; electronics; computers; telecommunications and information security; lasers and sensors; navigation and avionics materials; marine-related materials; and propulsion systems, certain space vehicles, and related equipment. (The index to the CCL is located at http://www.gpo.gov/bis/ear/ear_data.html.)

Department of State Controls

The Directorate of Defense Trade Controls (“DDTC”) of the U.S. Department of State regulates the export of defense goods, technical data, and defense services. DDTC administers the International Traffic in Arms Regulations (“ITAR”).

Generally, a defense article is an item developed for a military application that does not have a predominant civilian application.⁵ Unless an exemption applies, a license must be obtained before any defense article is exported to a foreign country or foreign national. Authorization by DDTC is also required for any agreement under which a U.S. person will furnish assistance to foreign persons in the development, design, production or use of a defense article or under which a U.S. person will license to a foreign party the right to manufacture U.S.-origin defense articles abroad. DDTC maintains a list of “debarred” persons and entities whose exporting privileges have been revoked as a consequence of violations of the ITAR.

Department of Treasury Controls

The Office of Foreign Assets Control (“OFAC”) of the U.S. Department of Treasury administers and enforces certain country-specific controls that take the form of economic embargoes against countries, currently including Burma (Myanmar), Cuba, Iran, Iraq, Libya, North Korea, Liberia, Sudan, Syria, and Zimbabwe. The scope of these economic and trade embargoes varies from country to country. OFAC has adopted regulations that detail the scope of the embargo against each country. New sanctions were recently imposed against Syria, and restrictions on trade with Iraq and Libya have been significantly reduced.

OFAC also maintains lists of Specially Designated Terrorists and Specially Designated Nationals and Blocked Persons, with whom U.S. persons are prohibited from engaging in any transactions due to U.S. foreign policy and national security concerns. Transfers of items and information to individuals or entities on these lists are prohibited without the prior approval of OFAC.

Deemed Exports

In addition to regulating the export of actual goods or commodities, U.S. export controls cover the export or release of “technical data” or technology (which includes information, whether printed, inscribed on media, or communicated orally). The release of such information is called a “deemed export.” Under the deemed export rule, the transfer or release of technical data or information subject to U.S. export controls to a “foreign national,” whether it occurs in

⁵ The ITAR cover such things as guns and armaments, ammunition, launch vehicles and missiles, explosives and other incendiary agents, vessels of war, tanks and military vehicles, aircraft, military training equipment, protective personnel equipment, fire control equipment, auxiliary military equipment (including cameras and cryptographic devices, software, and components), toxicological agents, spacecraft systems, nuclear weapons, and classified articles as well as technical data and services that relate to the enumerated categories. (The index to the Munitions List can be found at <http://www.fas.org/spp/starwars/offdocs/itar/p121.htm#ITAR>.)

the United States or abroad, is “deemed” an export from the United States to the home country of the foreign national. At universities, this issue arises most frequently in connection with the participation of international researchers or collaborators in projects involving controlled technology.

Much of the controlled technology that our international students and scholars have access to on campus at Harvard will not require licensing because of the exceptions contained in the regulations for “fundamental research” or “educational information” under the relevant regulations. If the on-campus teaching of “basic and applied research” is free from restrictions on publication and involves information that is not subject to any access or dissemination controls, it generally qualifies for the “fundamental research” exemption. The information is deemed to be in the public domain, and no license is necessary for access to this information by foreign nationals.

Similarly, there is an exception for educational information that is released by instruction in catalog courses and associated teaching laboratories of U.S. academic institutions. Thus, we do not need to secure a license from the government to share information with our international community on campus if the information is provided through instruction in the classroom or in our laboratories on campus in the United States. Some distance learning courses may also fall within this exception.

Although the fundamental research exemption (coupled with the educational information exemption) may be broad, it generally does not authorize the transfer of physical items outside of the U.S. In addition, the fundamental research exemption does not generally apply to work conducted abroad by Harvard researchers, even if such research and informational exchanges are being conducted at an institution that is affiliated with Harvard. To be eligible for the fundamental research exemption, the research must take place at an accredited institution in the United States.

Penalties for Violations

In the event of a violation of U.S. export control law, both the university and the individuals involved in the violation may be liable. The exporter and the individual employees involved may be subject to severe administrative and civil sanctions as well as criminal penalties. For example, “knowing” violations of the EAR are punishable by a fine of up to five times the value of the exports involved, or \$50,000, whichever is greater. “Willful” violations can result in penalties of up to \$1 million per violation. Exports are subject to a strict liability standard, so even negligent exports can trigger fines of \$10,000 to \$120,000 per violation. In addition to fines, individuals may be imprisoned for intentional violations. Penalties can also include the denial of export privileges and debarment from contracting with the federal government. Almost all enforcement actions are public.

Harvard’s Policy

It is Harvard’s policy that all personnel, including employees, visiting scientists, postdoctoral fellows, students, and other persons retained by or working at or for Harvard conduct their affairs in accordance with U.S. laws and regulations, including compliance with

U.S. export control laws and regulations applicable to its operations. The laws and regulations governing exports are detailed and complex. Employees with responsibility for Harvard's export-control compliance program or whose duties include a significant amount of work with foreign nationals will be offered formal training sessions on the U.S. export-control laws and regulations and their applicability to their jobs. All Harvard employees with managerial or supervisory authority over foreign nationals or projects involving materials or technology subject to export controls should view export-control compliance as an important part of their day-to-day responsibilities. It is particularly important in an institution like Harvard that frequently works in tandem with researchers and collaborators from abroad to determine early in the process of any international collaboration the potential requirement for export-control authorization.

To ensure compliance with these regulations, Harvard has developed a manual, *Harvard University Export Control Policies and Procedures*, a copy of which is available on the Harvard University intranet at www.provost.harvard.edu. No Harvard personnel may transfer any items or technology contrary to U.S. export control laws and regulations or *Harvard University Export Control Policies and Procedures*. The policies and procedures include a number of screening steps required prior to exporting. In addition, the policies and procedures identify people to contact to answer questions about whether specific research activities raise any export issues. Failure to comply with these laws and regulations, or failure to comply with the *Harvard University Export Control Policies and Procedures*, may result in disciplinary action.

Contact Information

Harvard is establishing an "Export Council" to assist with ensuring compliance with export-control obligations. If you are planning to export materials abroad, to engage in international collaborations that will involve the transfer of materials or equipment, or have any questions about the application of export controls to activities in which you are involved, please contact the Vice Provost for Research or a member of the Export Council.

ANNEX C

Checklist for Export Compliance for Exports from the U.S.

Checklist for Export Compliance for Exports from the U.S.

NAME(S) OF PROPOSED RECIPIENT:	
PROPOSED DESTINATION COUNTRY / NATIONAL ORIGIN OF PROPOSED RECIPIENTS:	

Classification of Goods, Technology and Software

<u>Result</u>	<u>Screen</u>
<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Is the article, technical data or service to be provided subject to the International Traffic in Arms Regulations (“ITAR”) (22 C.F.R. § 120 et. seq.)? Any article, technical data or service that is specifically designed, developed, configured, adapted or modified for a military or intelligence application, or for use in space, generally is subject to the ITAR. If it is subject to the ITAR, a State Department export license most likely will be required. If you need assistance determining whether the proposed export is subject to the ITAR, or if it is subject to the ITAR, contact the Vice Provost.</p>
<input type="checkbox"/> Yes <input type="checkbox"/> No ECCN: _____	<p>If not subject to the ITAR, are the goods, technology or software subject to the Export Administration Regulations (“EAR”) (See 15 C.F.R. § 734.2)?</p> <p>What is the Export Control Classification Number (“ECCN”)? ECCN can be obtained from the manufacturer, you may wish to classify it yourself, or you can seek the assistance of the Commerce Department.</p> <p>If you need to classify it yourself, is the item on the Commerce Control List (“CCL”) maintained by BIS and found in Supplement No. 2 to EAR Part 744? An index for items on the CCL, as well as all of the categories and country chart noted below is available at the following website which provides individual links to each of the categories as well as the other Commerce Department regulations in this form: http://www.gpo.gov/bis/ear/ear_data.html</p> <p>The CCL is divided into ten categories: (0) Nuclear Materials, Facilities and Equipment and Miscellaneous; (1) Materials, Chemicals, Microorganisms, and Toxins; (2) Materials Processing; (3) Electronics; (4) Computers; (5) Telecommunications and Information Security; (6) Lasers and Sensors; (7) Navigation and Avionics; (8) Marine; (9) Propulsion Systems, Space Vehicles and Related Equipment. Each category contains five groups: (A) Equipment, Assemblies and Components; (B) Test, Inspection and Production Equipment; (C) Materials; (D) Software; and (E) Technology.</p> <p>Within each group, individual items are identified by an Export Control Classification Number (“ECCN”) consisting of a set of digits and a letter, e.g., 3A001. The first digit identifies the general category. The letter following identifies the group. The last three digits differentiate individual entries.</p>

Reason for Control: _____	<p>If the item is not on the CCL then it is classified as “EAR 99.” EAR 99 items do not require export licenses provided the end-user and end-use is not restricted for any of the reasons noted below.</p> <p>What is the reason for control? After the ECCN has been identified, the item should be reviewed to determine the reason for control. The portion of the ECCN entitled “License Requirements” must be consulted to see if the specific subpart of the ECCN is identified or if the License Requirements apply to the “entire entry.” For example, a reason for control could be “AT” for “Anti-Terrorism”.</p>
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License Requirements based on Classification of Goods, Technology and Software Subject to the Export Administration Regulations

<u>Result</u>	<u>Screen</u>
<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>After determining the reason for control, the next step is to consult the “Country Chart” found at Supplement No. 1 to EAR Part 738 and determine whether the License Requirements identified for the item or technology apply to the country of ultimate destination. For example if the item is “AT” controlled look in the column entitled “AT” to see if there is a checkmark next to the box for the destination country. If the ECCN is controlled for export to the ultimate destination then a license is required unless a license exception is available.</p> <p>Is an export license required based on the ECCN for the material / technology and its destination? (See Supp. No. 1 to 15 C.F.R. § 774, Country Chart at Supp. No. 1 to 15 C.F.R. § 738.)</p>
<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Is a License Exception available? If so, are all requirements for using it satisfied? (See ECCN for material / technology at issue, 15 C.F.R. § 740.)</p>

Red Flag, Prohibited Party and Prohibited Activity Review

<u>Result</u>	<u>Screen</u>
<input type="checkbox"/> Yes <input type="checkbox"/> No	Any knowledge of a prohibited nuclear end-use? (See 15 C.F.R. § 744.2.)
<input type="checkbox"/> Yes <input type="checkbox"/> No	Any knowledge of a prohibited missile technology end-use? (See 15 C.F.R. § 744.3.)
<input type="checkbox"/> Yes <input type="checkbox"/> No	Any knowledge of a prohibited chemical or biological weapons end-use? (See 15 C.F.R. § 744.4.)
<input type="checkbox"/> Yes <input type="checkbox"/> No	Any knowledge of prohibited maritime nuclear propulsion end use? (See 15 C.F.R. § 744.5.)
<input type="checkbox"/> Yes <input type="checkbox"/> No	Any knowledge of additional proliferation activities? (See 15 C.F.R. § 744.6.)
<input type="checkbox"/> Yes <input type="checkbox"/> No	Any reason to suspect involvement with terrorism or the financing or support of terrorism?
<input type="checkbox"/> Yes <input type="checkbox"/> No	Any “Red Flags” raised by transaction? (See Supp. No. 3 to 15 C.F.R. § 732 and the “Red Flags” attachment to this checklist.)

<input type="checkbox"/> Yes <input type="checkbox"/> No	Has any U.S. government agency instructed you not to transact business with this person/entity?
<input type="checkbox"/> Yes <input type="checkbox"/> No	Proposed recipient identified on List of Denied Persons? (See Supp. No. 1 to 15 C.F.R. § 764, http://www.bis.doc.gov/dpl/Default.shtm)
<input type="checkbox"/> Yes <input type="checkbox"/> No	Proposed recipient identified on List of Unverified Parties? (http://www.bis.doc.gov/Enforcement/UnverifiedList/unverified_parties.html)
<input type="checkbox"/> Yes <input type="checkbox"/> No	Proposed recipient identified on Entities List? (See Supp. No. 4 to 15 C.F.R. § 744, (http://www.bis.doc.gov/Entities/Default.htm))
<input type="checkbox"/> Yes <input type="checkbox"/> No	Proposed recipient identified on OFAC’s List of Countries Subject to Sanctions? (http://www.ustreas.gov/offices/enforcement/ofac/programs/index.shtml)
<input type="checkbox"/> Yes <input type="checkbox"/> No	Proposed recipient identified on OFAC’s List of Specially Designated Nationals and Blocked Persons? (http://www.treas.gov/offices/enforcement/ofac/sdn/)?
<input type="checkbox"/> Yes <input type="checkbox"/> No	Proposed recipient identified on list of “debarred” persons? (http://www.cbp.gov/xp/cgov/export/persons_list/)
<input type="checkbox"/> Yes <input type="checkbox"/> No	Has any party to the transaction asked you to participate in an international boycott (such as an agreement to refuse to work with another person on the basis of race, religion, sex, national origin or nationality) or is the proposed recipient located in a country identified by the U.S. Treasury Department as supporting boycotts? (As of April 7, 2004, the list is as follows: Bahrain, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates, and Republic of Yemen.) If so, complete the Anti-Boycott screen.

If you checked yes to any of the items in the previous box, please explain:

<input type="checkbox"/> Yes <input type="checkbox"/> No	Will a Shippers Export Declaration (“SED”) be filed or an exemption claimed and specified on the shipping documentation? (Note that this information frequently is on the international air waybills for commercial shippers such as Federal Express, DHL, UPS, etc.)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	If the export is subject to the EAR, and is on the Commerce Control List and thus not classified as EAR 99, will the invoice and on the bill of lading, air waybill, or other export control document that accompanies the shipment from its point of origin in the United States to the ultimate consignee or end-user abroad contain, at a minimum, the following requirement statement as required under 15 C.F.R. § 758.6? “These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.”

“Red Flags” Indicating Possible Diversion

Note: Some indicators may not be relevant depending on the technology for export

- The recipient or its address is similar to one of the parties found on the Commerce Department’s Bureau of Industry and Security’s list of denied persons.
- The recipient or agent is reluctant to offer information about the end-use of the item.
- The product’s capabilities do not fit the recipient’s line of business, such as an order for sophisticated computers for a small bakery.
- The goods, software or technology sought is incompatible with the technical level of the country to which it is being shipped, such as semiconductor manufacturing equipment being shipped to a country that has no electronics industry.
- The recipient is willing to pay cash for a very expensive item when the terms of sale would normally call for payments over time.
- The recipient has little or no background in the field associated with the export.
- The recipient is unfamiliar with the product’s performance characteristics but still wants the product.
- Routine installation, training, or maintenance services are declined by the recipient.
- Delivery dates are vague, or deliveries are planned for out of the way destinations.
- A freight forwarding firm is listed as the export’s final destination.
- The shipping route is abnormal for the product and destination.
- Packaging is inconsistent with the stated method of shipment or destination.
- When questioned, the recipient is evasive and especially unclear about whether the purchased product is for domestic use, for export, or for reexport.

ANNEX D

Office of Sponsored Programs Checklist

Agreements

- Is the agreement subject to export-control restrictions? An agreement generally will be subject to export-control restrictions unless:
 - The deliverable is solely published information and software and there are no access and dissemination controls or restrictions on publication (EAR Part 734.7; ITAR Part 120.11);
 - The information qualifies for the fundamental research exemption (EAR Part 734.8; ITAR 120.11); or
 - If the agreement is with the U.S. Government for technology subject to the EAR and specific national security controls are agreed to under the project (EAR Part 734.11).
- The key element for determining whether work under an Agreement is ineligible for the fundamental research exemption is whether there is an access and dissemination control.
- Under the EAR, prepublication review by a sponsor or university research solely to ensure that the publication would not inadvertently divulge proprietary information that the sponsor has furnished to researchers does not change the status as fundamental research. However, release of information from a corporate sponsor to university researchers where the research results are subject to prepublication review is subject to the EAR. (EAR Part 734.8(b)(2)).
- Under the ITAR, generally any prepublication review generally will invalidate the fundamental research exemption. (Some government agencies take the position that a prepublication review solely to ensure that the publication would not inadvertently divulge proprietary information is permissible. The State Department has not acknowledged that this approach is permissible, but it also has not instituted any enforcement actions based solely on a prepublication review for proprietary information.)

Agreements with Access and Dissemination Controls

- If there are access and dissemination controls including any restrictions on publication, then the PI will need to complete a review to determine whether the goods, technology or software is subject to the International Traffic in Arms Regulations or the Export Administration Regulations, and if so, the appropriate classification number.
- Any agreement, and all transfers abroad should be screened against the names on the various lists maintained by the Department of Commerce, State Department and Office of Foreign Assets Control.

Subcontracts

- Subcontracts should include clauses placing other parties to the agreement of the potential for export controls.

Suggested Export Control Subcontract Provision (Modify Based on Contract)

Subcontractor agrees to comply with all applicable United States laws and regulations, including United States laws and regulations controlling the export of goods, technology, software and services. Applicable regulations include, without limitation, the International Traffic in Arms Regulations, the Export Administration Regulations, and the regulations administered by the Office of Foreign Assets Control at the U.S. Department of the Treasury.

The transfer of goods, technology, software or services, including technical data, whether within or outside the U.S., to a foreign person, may require a license from the pertinent agency of the United States Government and/or written assurances by Subcontractor that Subcontractor shall not transfer goods, technology, software or services to certain foreign persons without prior approval of such agency. Subcontractor acknowledges that it will take all necessary steps to comply with export regulations including obtaining export licenses if necessary.

Harvard University neither represents nor warrants that a license shall not be required nor that, if required, it will be issued.

**Export Administration Regulations
Sections Most Relevant to Sponsored Research**

15 C.F.R. § 734.7 Published information and software.

(a) Information is “published” when it becomes generally accessible to the interested public in any form, including:

(1) Publication in periodicals, books, print, electronic, or any other media available for general distribution to any member of the public or to a community of persons interested in the subject matter, such as those in a scientific or engineering discipline, either free or at a price that does not exceed the cost of reproduction and distribution (See Supplement No. 1 to this part, Questions A(1) through A(6));

(2) Ready availability at libraries open to the public or at university libraries (See Supplement No. 1 to this part, Question A(6));

(3) Patents and open (published) patent applications available at any patent office; and

(4) Release at an open conference, meeting, seminar, trade show, or other open gathering.

(i) A conference or gathering is “open” if all technically qualified members of the public are eligible to attend and attendees are permitted to take notes or otherwise make a personal record (not necessarily a recording) of the proceedings and presentations.

(ii) All technically qualified members of the public may be considered eligible to attend a conference or other gathering notwithstanding a registration fee reasonably related to cost and reflecting an intention that all interested and technically qualified persons be able to attend, or a limitation on actual attendance, as long as attendees either are the first who have applied or are selected on the basis of relevant scientific or technical competence, experience, or responsibility (See Supplement No. 1 to this part, Questions B(1) through B(6)).

(iii) “Publication” includes submission of papers to domestic or foreign editors or reviewers of journals, or to organizers of open conferences or other open gatherings, with the understanding that the papers will be made publicly available if favorably received. (See Supplement No. 1 to this part, Questions A(1) and A(3)).

(b) Software and information is published when it is available for general distribution either for free or at a price that does not exceed the cost of reproduction and distribution. See Supplement No. 1 to this part, Questions G(1) through G(3).

(c) Notwithstanding paragraphs (a) and (b) of this section, note that encryption software controlled under ECCN 5D002 for “EI” reasons on the Commerce Control List and mass market encryption software with symmetric key length exceeding 64-bits controlled under ECCN 5D992 remain subject to the EAR. See §740.13(e) of the EAR for certain exports and reexports under license exception.

15 C.F.R. § 734.8 Information resulting from fundamental research.

(a) Fundamental research

Paragraphs (b) through (d) of this section and §734.11 of this part provide specific rules that will be used to determine whether research in particular institutional contexts qualifies as “fundamental research”. The intent behind these rules is to identify as “fundamental research” basic and applied research in science and engineering, where the resulting information is ordinarily published and shared broadly within the scientific community. Such research can be distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary reasons or specific national security reasons as defined in §734.11(b) of this part. (See Supplement No. 1 to this part, Question D(8)). Note that the provisions of this section do not apply to encryption software controlled under ECCN 5D002 for “EI” reasons on the Commerce Control List (Supplement No. 1 to part 774 of the EAR) or to mass market encryption software with symmetric key length exceeding 64-bits controlled under ECCN 5D992. See §740.13(e) of the EAR for certain exports and reexports under license exception.

(b) University based research

(1) Research conducted by scientists, engineers, or students at a university normally will be considered fundamental research, as described in paragraphs (b)(2) through (6) of this section. (“University” means any accredited institution of higher education located in the United States.)

(2) Prepublication review by a sponsor of university research solely to insure that the publication would not inadvertently divulge proprietary information that the sponsor has furnished to the researchers does not change the status of the research as fundamental research. However, release of information from a corporate sponsor to university researchers where the research results are subject to prepublication review, is subject to the EAR. (See Supplement No. 1 to this part, Questions D(7), D(9), and D(10)).

(3) Prepublication review by a sponsor of university research solely to ensure that publication would not compromise patent rights does not change the status of

fundamental research, so long as the review causes no more than a temporary delay in publication of the research results.

(4) The initial transfer of information from an industry sponsor to university researchers is subject to the EAR where the parties have agreed that the sponsor may withhold from publication some or all of the information so provided. (See Supplement No. 1 to this part, Question D(2)).

(5) University based research is not considered “fundamental research” if the university or its researchers accept (at the request, for example, of an industrial sponsor) other restrictions on publication of scientific and technical information resulting from the project or activity. Scientific and technical information resulting from the research will nonetheless qualify as fundamental research once all such restrictions have expired or have been removed. (See Supplement No. 1 to this part, Question D(7) and D(9)).

(6) The provisions of §734.11 of this part will apply if a university or its researchers accept specific national security controls (as defined in §734.11 of this part) on a research project or activity sponsored by the U.S. Government. (See Supplement No. 1 to this part, Questions E(1) and E(2)).

(c) Research based at Federal agencies or FFRDCs

Research conducted by scientists or engineers working for a Federal agency or a Federally Funded Research and Development Center (FFRDC) may be designated as “fundamental research” within any appropriate system devised by the agency or the FFRDC to control the release of information by such scientists and engineers. (See Supplement No. 1 to this part, Questions D(8) and D(11)).

(d) Corporate research

(1) Research conducted by scientists or engineers working for a business entity will be considered “fundamental research” at such time and to the extent that the researchers are free to make scientific and technical information resulting from the research publicly available without restriction or delay based on proprietary concerns or specific national security controls as defined in §734.11(b) of this part.

(2) Prepublication review by the company solely to ensure that the publication would compromise no proprietary information provided by the company to the researchers is not considered to be a proprietary restriction under paragraph (d)(1) of this section. However, paragraph (d)(1) of this section does not authorize the release of information to university researchers where the research results are subject to prepublication review. (See Supplement No. 1 to this part, Questions D(8), D(9), and D(10)).

(3) Prepublication review by the company solely to ensure that publication would compromise no patent rights will not be considered a proprietary restriction for this purpose, so long as the review causes no more than a temporary delay in publication of the research results.

(4) However, the initial transfer of information from a business entity to researchers is not authorized under the “fundamental research” provision where the parties have agreed that the business entity may withhold from publication some or all of the information so provided.

(e) Research based elsewhere

Research conducted by scientists or engineers who are not working for any of the institutions described in paragraphs (b) through (d) of this section will be treated as corporate research, as described in paragraph (d) of this section. (See Supplement No. 1 to this part, Question D(8)).

15 C.F.R. § 734.11 Government-sponsored research covered by contract controls.

(a) If research is funded by the U.S. Government, and specific national security controls are agreed on to protect information resulting from the research, §734.3(b)(3) of this part will not apply to any export or reexport of such information in violation of such controls. However, any export or reexport of information resulting from the research that is consistent with the specific controls may nonetheless be made under this provision.

(b) Examples of “specific national security controls” include requirements for prepublication review by the Government, with right to withhold permission for publication; restrictions on prepublication dissemination of information to non-U.S. citizens or other categories of persons; or restrictions on participation of non-U.S. citizens or other categories of persons in the research. A general reference to one or more export control laws or regulations or a general reminder that the Government retains the right to classify is not a “specific national security control”. (See Supplement No. 1 to this part, Questions E(1) and E(2).)

International Traffic in Arms Regulations

Sections Most Relevant to Sponsored Research

22 C.F.R. § 120.11 Public domain.

(a) *Public domain* means information which is published and which is generally accessible or 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 U.S. 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 cognizant U.S. government department or agency (see also §125.4(b)(13) of this subchapter);
- (8) Through fundamental research in science and engineering at accredited institutions of higher learning in the U.S. where the resulting information is ordinarily published and shared broadly in the scientific community. Fundamental research is defined to mean basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community, as distinguished from research the results of which are restricted for proprietary reasons or specific U.S. Government access and dissemination controls. University research will not be considered fundamental research if:
 - (i) The University or its researchers accept other restrictions on publication of scientific and technical information resulting from the project or activity, or
 - (ii) The research is funded by the U.S. Government and specific access and dissemination controls protecting information resulting from the research are applicable.

ANNEX E

Countries Subject to OFAC Sanctions

A list of countries that presently are subject to at least some level of sanctions under the regulations of the U.S. Department of the Treasury, Office of Foreign Assets Controls (“OFAC”) can be found at 31 C.F.R. Ch. V. The most recent information about the nature and scope of OFAC sanctions regulations is on the OFAC website at <http://www.ustreas.gov/offices/enforcement/ofac/programs/index.shtml>. The scope of the sanctions varies from country to country. As of September 2004, Cuba is subject to an almost total embargo, very few activities are permitted in Iran, and most activities are permitted in Iraq and Libya although licenses are required for export of any item on the Commerce Control List or the Munitions List.

ANNEX F

Anti-boycott Compliance Screen

COMPANY/CONSIGNEE NAME: _____
DESTINATION: _____
SCREEN PERFORMED BY: _____
DATE OF SCREEN: _____

1. Has anyone in the transaction, for reasons of anti-boycott compliance, agreed to refuse or actually refused to do business with Israel or with blacklisted companies?
 Yes No

2. Does anyone in the transaction, for reasons of anti-boycott compliance, have agreements to discriminate or does it actually discriminate against other persons based on race, religion, sex, national origin, or nationality?
 Yes No

3. Has Harvard been required or requested by a foreign person to furnish information about Harvard's business relationships with Israel or with blacklisted companies?
 Yes No

4. Has Harvard been required or requested to furnish information about race, religion, sex or national origin of any person?
 Yes No

5. Do any third-party documents require that Harvard take boycott-related actions prohibited by the anti-boycott regulations?
 Yes No

If any of the above questions are answered affirmatively, do not proceed with export. Contact the Vice Provost immediately. Harvard may be required by law to report solicitations to participate in boycotts, even if Harvard rejects the request.