
Export Controls

How to Comply with Export Controls

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Purpose of Regulation

- Technological superiority is a significant element in the defense of the United States, along with research, innovation, and development of critical technologies. There are significant economic interests of the government that might be compromised by unauthorized exports.



Federal Laws/Regulations

- Export Administration Act of 1979
 - Implementing : The Export Administration Regulations (EAR) 15 CFR 730-774
- Arms Export Control Act (Pub. L. 90-629)
 - Implementing: International Traffic in Arms Regulations (ITAR) 22 CFR 120-130



Regulatory Agencies Cont'd

- U.S. Department of Energy
- Nuclear Regulatory Commission
- U.S. Department of Interior
- Food and Drug Administration
- U.S. Department of Homeland Security
 - Border and Transportation Security
 - U.S. Customs Service



What is export controls?

- Export controls are a set of federal laws, policies and regulations which restrict the export of controlled items, technology and software.
- Various reasons for controlling these items:
 - National Security
 - Chemical and Biological
 - Nuclear Non-Proliferation
 - Missile Technology
 - Regional Stability
 - Crime Control
 - Anti-terrorism



What is an export?

A shipment or transfer of items, software, or technology to a foreign person, foreign entity or foreign destination.



Definition of Technology

Technology includes information that can be used or adopted for the development, production, or use of a controlled item. This information can take the form of technical data or assistance.

- Examples include but are not limited to:
 - blue prints, sketches, models, drawings, software, manuals, training and technical services



How technology is transferred?

- Controlled information can be exported through transmittal in various ways including:
 - *verbal, written, electronic and/or visual disclosure or exposure*
- When information is transmitted to a foreign person within the U.S., it is considered a deemed export.



What is a deemed export?

A “deemed export” is a transfer of technology or source code to a foreign person in the U.S.

- The export is deemed to be an export to that individual’s country of citizenship
- Methods of transfer include: *telephone, email, conversation, training sessions, facility tours, etc...*



Who is considered a foreign person?

- Any foreign government,
- Foreign corporation or organization that is not incorporated or organized to do business in U.S., and
- Any person who is not a U.S. citizen, lawful permanent resident (green cardholder), or individual given asylum or refugee status



Areas of Particular Concern

Research in the following areas:

- Engineering
- Space Sciences
- Computer Sciences
- Research with encrypted software
- Agricultural Research and Development
- Biomedical Research
- Energy Research
- Laser Research
- Research with controlled chemicals, biological agents, and toxins



Exclusions Specific to Higher Education

The University can apply these four exclusions involving research, deemed exports, and international travel in most cases.

- Fundamental Research
- Public Domain
- Educational
- Patent



Fundamental Research Exclusion (Sect §734.8)

- Fundamental Research Exclusion
 - Basic and applied research in science and engineering conducted in the U.S. where the resulting information is ordinarily published and shared broadly within the scientific community
“National Security Decision Directive 189 (NSDD 189)”



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Public Domain Exclusion (Sect §734.7)

- Published information that is generally accessible to the public does not require a license
 - Examples-
 - Publication in periodicals, books, print, electronic, or any other media available for general distribution to the public or community of interested persons



Public Domain Exclusion Cont'd

- Examples-
 - Ready availability at libraries open to the public or at university libraries;
 - Through published patents;
 - Through release at an open conference, meeting, seminar, trade show or exhibition



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Education/Teaching Exclusion (Sect §734.9)

- Education/Teaching Exclusion (Sect 734.9)
 - Instruction in catalog courses and associated teaching laboratories of academic institutions
 - Does not apply to encryption object code software with particular control classification



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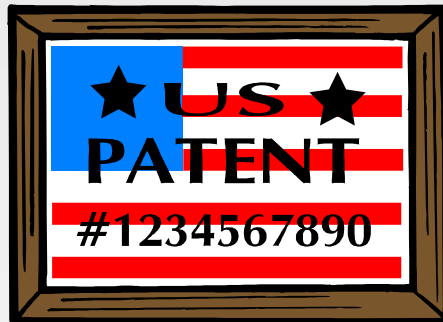
Patent Information (Sect § 734.10)

- Information in a patent application prepared with foreign technical data being executed to be filed with the U.S. Patent & Trademark Office (USPTO).
- Information in a patent application, or an amendment, modification, supplement or division of an application, is authorized for filing in a foreign country in accordance (USPTO), 37 CFR part 5



Patent Information (Sect § 734.10) Cont'd

- Information contained in a patent application is sent to a foreign country before or within six months after the filing of the application for purpose of obtaining signature of the inventor.



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Other Exclusions

Encryption Software Exclusion

- “Publicly available” mass market encryption object code software with a symmetric key length greater than 64-bits;
- “Publicly available” encryption object code classified under 5D002 on the CCL when corresponding source code meets the criteria specified under license exception TSU;



Encryption Software Exclusion



- “Publicly available” mass market encryption software with a symmetric key length of 64 bits or less; and
- “Publicly available” encryption software that is classified under ECCN 5D992 for reasons other than “mass market” determination.

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Penalties for Non-Compliance

Failure to comply with export controls

- Civil penalties:
 - \$250,000 (or twice the transaction value) fine imposed for each violation of International Emergency Economic Powers (IEEPA)
 - Applies to individuals and organizations
- Criminal penalties:
 - Up to \$1,000,000 fine for individuals/entities and/or up to 20 years imprisonment



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Examples of Scenarios

- Scenario 1

A university professor sends a technical manual for a “controlled” equipment to a colleague in France. The disk is mailed through a shipping company. The package is marked as “book & gift” its value is nominal.

- Implication 1

This professor has done this many times in the past with many other items. “It’s just a small thing,” he thinks, “I couldn’t get in trouble for that.” His actions violates EAR and ITAR. All shipping companies require a SED (Shipper’s Export Documentation) to be filed with the appropriate ECCN code with the package.

If the authorities find out about this package, it is not the shipping company in trouble but the university and professor



Examples of Scenarios Cont'd

- Scenario 2

Results of a particular research will be published in a scientific journal. Because the Exclusion rule applies, the Principal Investigator does not check the EAR/ITAR rules nor screen against Restricted Party lists even though it is known that “controlled” equipment and technology will be used.

- Implication 2

Since controlled equipment and technology will be used, the university must still find out exactly what controls must be observed and how. This is especially with regards “use of” and ‘access to” the equipment and technology and what sort of foreign participation is allowed.



Examples of Violations

- Texas Tech University

In January 2003, Texas Tech University sparked a major bioterrorism scare after reporting to authorities that vials of plague bacteria were missing from its research lab.

Within hours of making that report more than 60 federal agents descended on the facility to launch a full-scale investigation. As the news made headlines around the world, President Bush was debriefed about the incident because of concerns that terrorists might have been involved.

A federal probe eventually determined that the vials were exported to Tanzania without proper export documentation. Indictments were laid against a Texas Tech professor, Dr. Thomas Butler, who was found guilty of arranging the illegal shipment. His penalty was 2 years in prison, \$37,400 in fines, on the denied persons list for 10 years. The university was fined \$250,000 in relation to the charges against Butler.

Source: Associated Press/BIS/ The Scientist



Examples of Violations Cont'd

- University of Tennessee – Knoxville
 - University and Dr. John Roth failed to obtain export controls licenses for Chinese and Iranian graduate students involved on U.S Air Force project awarded to Atmospheric Glow Technologies Inc. (ACT) and UT was the sub-recipient of ACT's contract.
 - Roth had been invited to lecture at two Chinese Universities regarding his research with ACT and U.S. Air Force. He had asked his graduate student to send his research data to a foreign person's email address.
 - This visit drew the attention of the FBI because sensitive technology had been transferred to a "deemed export" and through email to a foreign person in China.
 - All research data regarding the project was seized from Roth's offices and laboratories as evidence, the professor was found guilty of fifteen counts and was convicted for 4 years.



Examples of Violations Cont'd

- A second professor, Daniel Sherman working on the project with Roth and ACT was also convicted and given for 14 months in prison.
- The graduate student was deported after the violations came out from the federal investigation.
- Roth and Sherman believed their research was considered fundamental thus excluded it from EAR/ITAR regulations.
- The courts in both cases stated ignorance is no excuse of the law.

Source: USDOJ/knoxnews.com



Thank You!

- If you have any questions related to this presentation, please contact:

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