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# *Technology and Deemed Exports*

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# Agenda

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- What are deemed exports?
  - Overview of technologies subject to Department of Commerce licensing
  - Deemed export trends
  - Key policy issues
  - Licensing process
  - Deemed Export Advisory Committee (DEAC)
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# What are “Deemed Exports”

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The Export Administration Regulations (EAR) define a deemed export as the release of technology or source code subject to the EAR to a foreign national in the United States. Part 734.2(b)(2)(ii).

Such release is “deemed” to be an export to the home country of the foreign national.

Situations that can involve release of U.S technology or software include:

- Tours of laboratories
  - Foreign national employees involved in certain research, development, and manufacturing activities
  - Foreign students or scholars conducting research
  - Hosting of foreign scientist
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# “Deemed Export” Concerns

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- The deemed export program, in place since 1994, remains an important mechanism to prevent the diversion of sensitive dual use technologies to countries and end users of concern.
  
  - The deemed export program addresses two concerns:
    - The vital role of foreign nationals in U.S. industry and academia, contributing to the strength of our industrial base and our high-technology advantage, and ultimately our national security;
  
    - Foreign countries seek to illegally acquire controlled U.S. technology that could be diverted to the development of weapons programs.
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# Foreign Nationals Not Subject to the Deemed Export Rule

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- Any foreign national is subject to the deemed export rule except:
    - A foreign national granted U.S. citizenship;
    - A foreign national granted permanent residence status (i.e., “Green Card” holders);
    - A foreign national granted status as a “protected individual” under 8 U.S.C. 1324b(a)(3). Protected individuals include political refugees and political asylum holders.
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# Scope of Technology Controls

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- General Technology Note  
Supplement No. 2 to part 774
    - “Development”
    - “Production”
    - “Use”
    - “Required”
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# *"Development"*

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- "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, layouts
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# *"Production"*

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- Means all production stages, such as:
    - product engineering,
    - manufacture,
    - integration,
    - assembly (mounting),
    - inspection,
    - testing,
    - quality assurance.
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# "Use"

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All of these are required in order to qualify as controlled "use" technology.

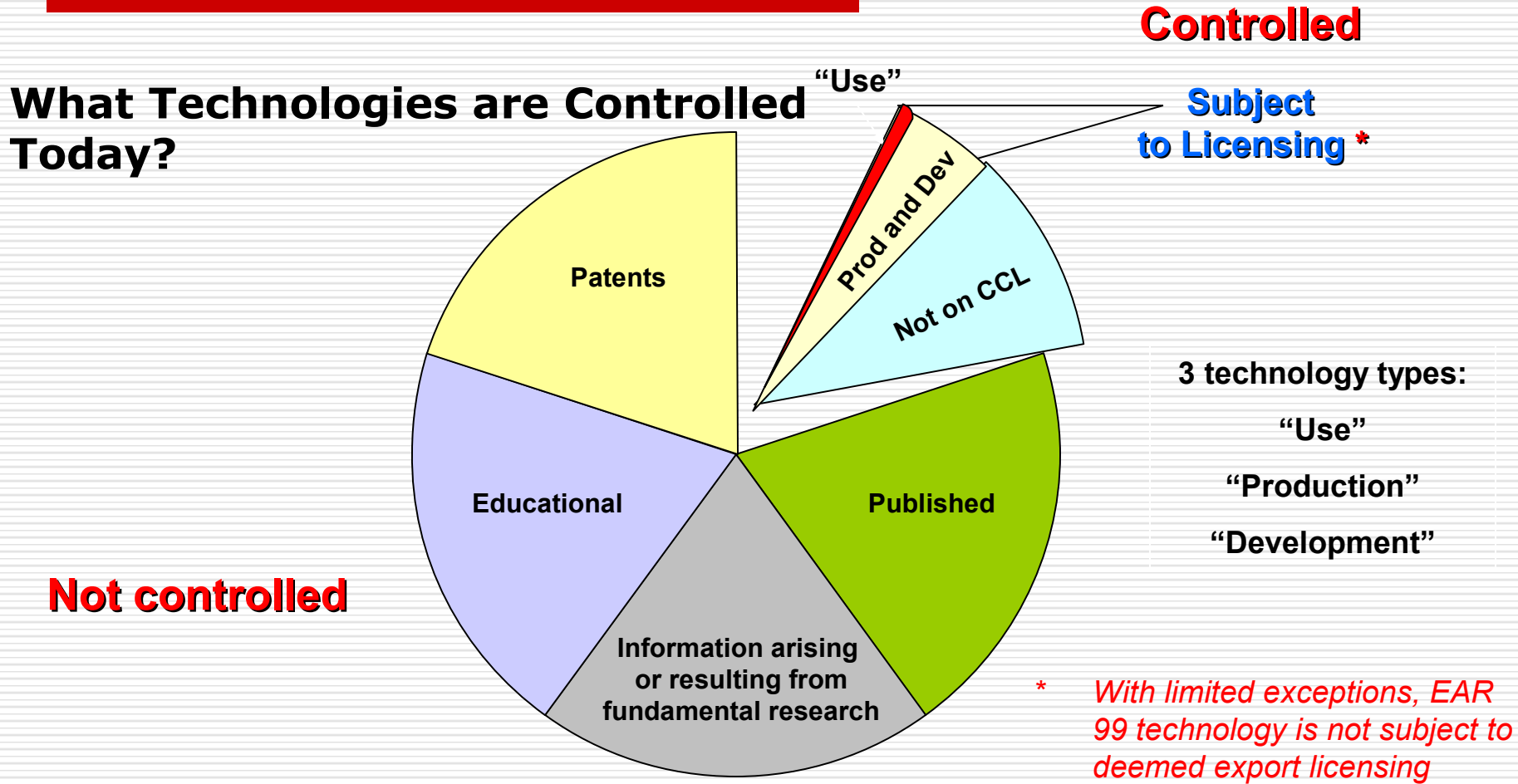
- Operation,
  - installation (including on-site installation),
  - maintenance (checking),
  - repair,
  - overhaul, and,
  - refurbishing.
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## *"Required"*

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- As applied to "technology" or "software", refers to only that portion of "technology" or "software" which is peculiarly responsible for achieving or extending the controlled performance levels, characteristics or functions.
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# The Universe of Dual Use Technology



Dual Use Technology

# Technology Not Subject to the EAR

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- **Publicly available (EAR 734.7)**
    - **Generally accessible to the interested public**
    - **Periodicals, books, print, electronic other media forms**
    - **Libraries (university, public etc)**
    - **Open patents**
    - **Open conferences**
  - **Fundamental Research (EAR 734.8)**
    - **Basic and applied research where resulting information is ordinarily published and broadly shared within scientific community**
  - **Educational information (EAR 734.9)**
    - **Released by instruction in catalog courses**
    - **Associated teaching laboratories of academic institutions**
  - **Patent information (EAR 734.10)**
    - **Public information available on patent application**
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# Recent Debate Over Deemed Export Policy

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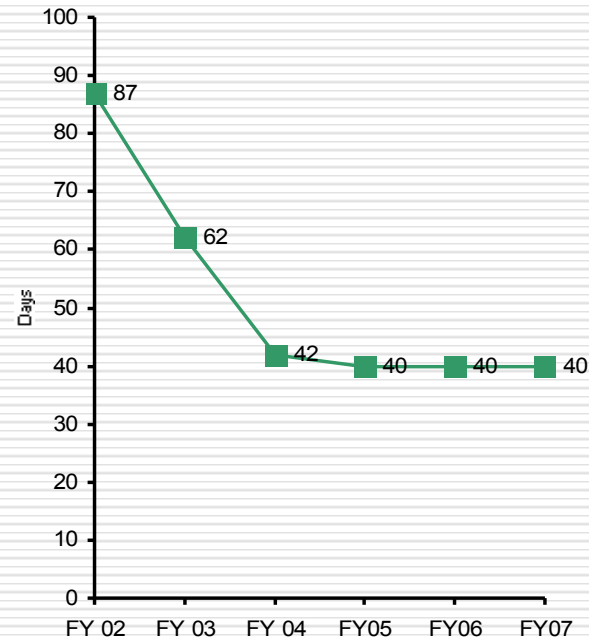
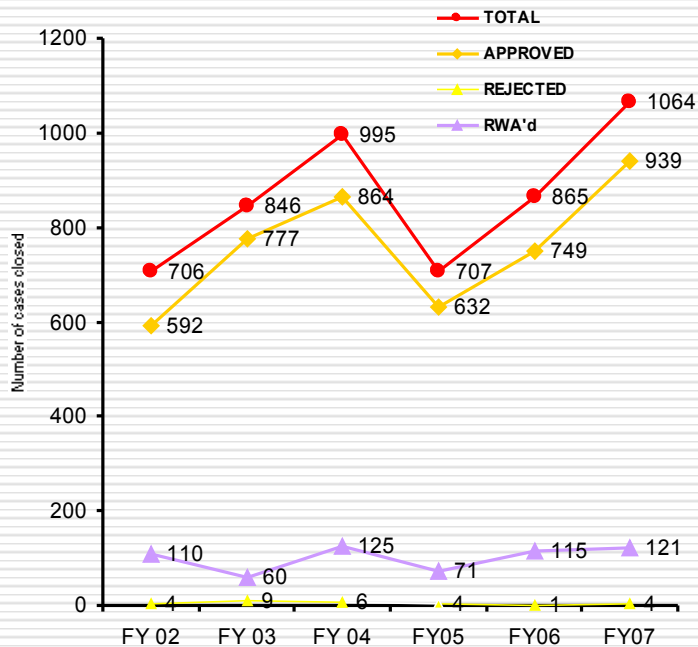
- 2004: Commerce Office of Inspector General (OIG) Report
    - Highly critical of the Deemed Export Program
  
  - 2005: BIS published two deemed export related Federal Register Notices:
    - Establishment of Advisory Committee and Clarification of Deemed Export-Related Regulatory Requirements (71FR29301 of 05/22/06)
    - Withdrawal of the Deemed Export Advanced Notice of Proposed Rulemaking (71FR30840 of 05/31/06)
  
  - 2006-2007: Deemed Export Advisory Committee deliberations
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# Deemed Export FY2007 Summary

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- In FY2007, the Bureau approved 88%, returned without action approximately 11%, and denied less than 1% of the total of 1,064 deemed export license applications
  - Almost 54% of the deemed export licenses processed are for PRC foreign nationals
  - Followed in descending order by foreign nationals from India (9%), Iran (6%), Russia (6%), UK (5%) and Germany (1%).
  - Most deemed export licenses are processed in 40 days
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# Annual Deemed Export Licensing Trends

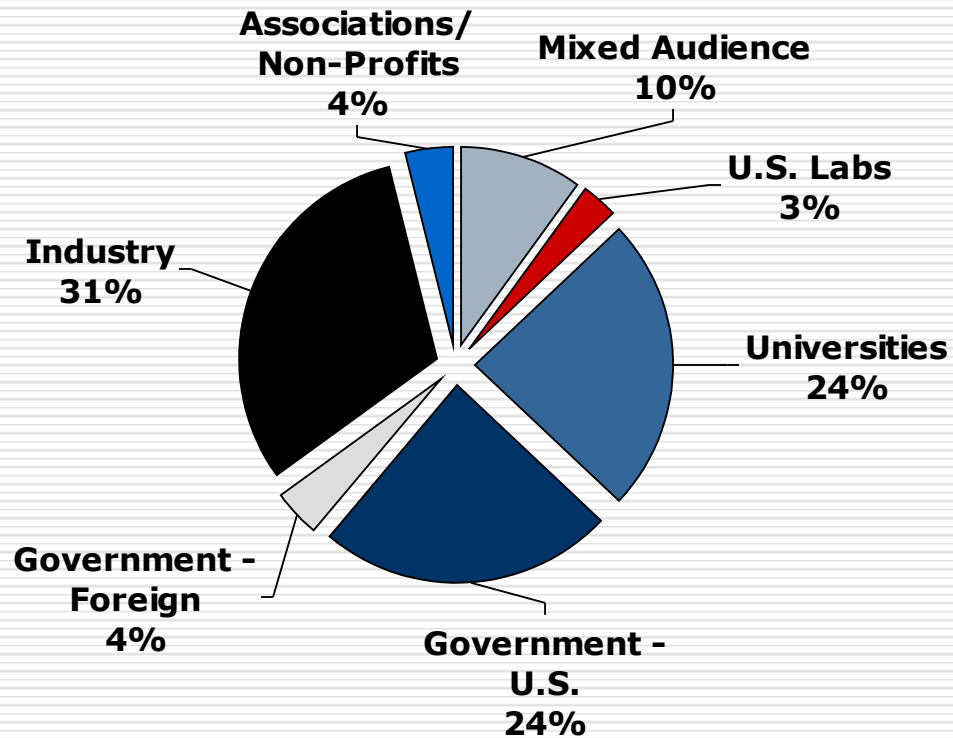


## Most Common Deemed Exports:

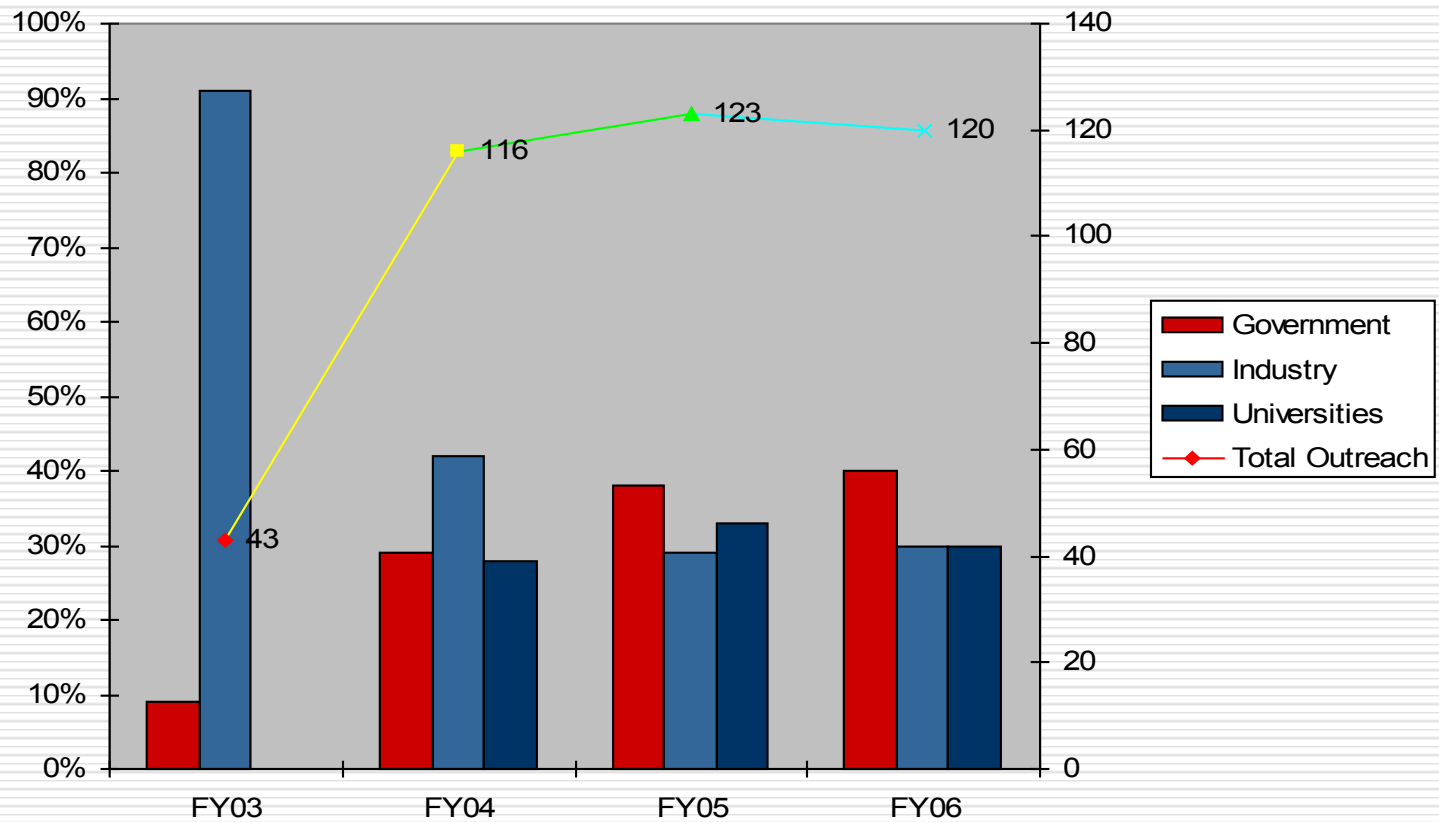
- **Semiconductor & Electronics - Category 3**
- **High Performance Computers - Category 4**
- **Telecommunications - Category 5**

# Outreach Activities - FY 07

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# Outreach Activities – FY03 through FY06



# Key Policy Issues

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- Citizenship of foreign nationals subject to the Deemed Export Rule
  - Fundamental Research
  - Definition of “use” technology
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# Scope of Fundamental Research Is Unchanged

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- “Fundamental research is basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community.” (EAR Part 734.8)
  - “While the product of the fundamental research is not subject to the EAR because the results of that research are intended for publication and dissemination within the scientific community, authorization may be required if during the conduct of the research controlled technology is released to a foreign national.” (71FR30840 of 05/31/06)
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# Scope of Fundamental Research Is Unchanged

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- Fundamental research technology is not subject to the EAR because:
    - the technology that rises during or results from the research is normally made public; and,
    - the technology necessary to conduct the research is normally obtained from public or published sources.
  
  - If preexisting technology necessary to conduct the research is export controlled; or, if a researcher makes a decision to control the technology that results from the research, then, deemed export licensing requirements must be considered.
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# The Universe of Research

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**Publicly available technologies**

**(Not Subject to the EAR)**

**Preexisting Export Controlled Technologies (Subject to the EAR)**

**Results of research published: (e.g., Fundamental Research)**

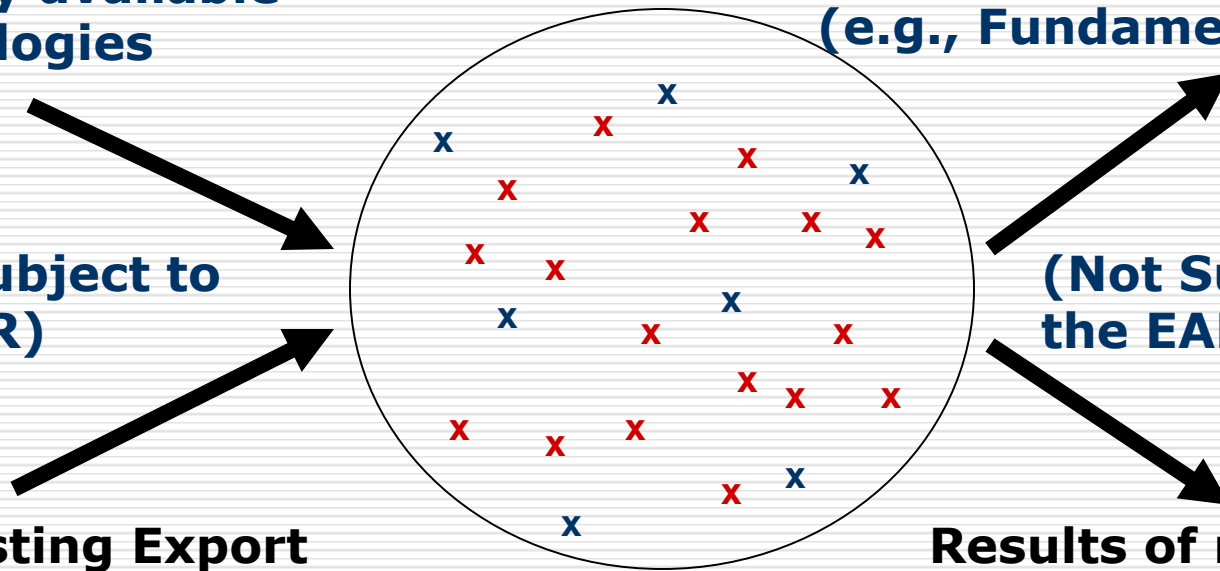
**(Not Subject to the EAR)**

**Results of research withheld from publication (Subject to the EAR)**

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**INPUT**

**OUTPUT**



# Clarification of “Use” Technology

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- The use of export controlled equipment is not a deemed export. Deemed exports occur only if controlled technology is transferred.
  
  - The regulatory definition of “use” is technology for “operation, installation (including on-site installation), maintenance (checking), repair, overhaul **and** refurbishing.”
    - All six attributes of the definition must be present in order to qualify as controlled “use” technology.
    - Otherwise the technology is likely EAR99.
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# Commodity Classifying Technology Subject to the EAR

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## □ Thumb rule

(If the technology is under DOC jurisdiction and not publicly available):

- Does the technology enable replication of the export controlled item (production technology)?
- Does the technology enable design improvement of the export controlled item (development technology)?
- Is the item being used to produce or design weapons of mass destruction, military hardware, export controlled dual use items (controlled use technology)?

□ *If the answer to all of the above questions is no: The item is likely EAR 99*

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# Technology Control Plan (TCP)

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- TCPs are a standard condition found in deemed export and technology export licenses
  
  - A TCP should contain the following essential elements:
    - Corporate commitment to export compliance
    - Physical security plan
    - Information security plan
    - Personnel screening procedures
    - Training and awareness program
    - Self evaluation program
  
  - *TCPs are a good practice for all holders of export controlled technology*
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# Deemed Export Advisory Committee

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- Purpose: to address the complex issues surrounding technology transfers involving the release of controlled dual-use technology to foreign nationals in the United States
  - Establishment of this FACA Committee announced via Federal Register Notice in May 2006.
  - Committee members formally named by Secretary Gutierrez in a September 12, 2007 Press Release.
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# Deemed Export Advisory Committee Members

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**Norman Augustine, Retired Chairman & CEO, Lockheed Martin Corporation\***

**Sean O'Keefe, Chancellor, Louisiana State University**

**Robert Gates, PhD, President of Texas A&M University\*\***

**General John A. Gordon, Former Deputy Director, Central Intelligence Agency**

**Albert Carnesale, PhD, Former Chancellor of the University of California at Los Angeles**

**Eva Pell, PhD, Senior Vice President and Dean of the Graduate School, Penn State University**

**Ruth David, PhD, President & CEO, Analytic Services, Inc.**

**Michael Splinter, CEO, Applied Materials**

**The Honorable John Engler, President, National Association of Manufacturers**

**James Siedow, PhD, Vice Provost for Research and Professor of Biology, Duke University**

**Anthony Frank, PhD, Provost and Senior Vice President, Colorado State University**

**William A. Wulf, PhD, AT&T Chair in Engineering and Applied Science, University of Virginia**

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*\*Chairperson*

*\*\* Resigned to become Secretary of Defense*

# Committee Meetings

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- Committee held the following meetings (Required by law to meet at least quarterly):

Washington, D.C. - October 12, 2006

Santa Clara, CA - January 22-23, 2007

Atlanta, GA - May 2, 2007

Cambridge, MA - June 19, 2007

Chicago, IL - July 30-31, 2007

Washington, D.C. - September 10, 2007

- Public Sessions well-attended and well-received by industry, academia and others.
  - Committee has received valuable input from industry, academia and associations.
  - Open dialogue has been an invaluable part of this process.
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# What is Next?

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- The Challenge: find the tipping point between America's need for vigilant security and its equally great desire to sustain and enhance scientific and commercial innovation.
  - The final report is expected to be delivered to the Secretary of Commerce in late 2007.
  - DOC/BIS anticipates releasing the report soon after review by the Secretary and will make it available online.
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<http://www.bis.doc.gov>

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□ **Licensing**

■ **Deemed Exports**

- Process Improvements
- Licensing Guidance
- Frequently Asked Questions
- Q & A's Clarifying Deemed Export Licensing Policy

■ **Advisory Opinions**

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# Deemed Export Contacts

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