



**U.S. Department of Commerce  
Bureau of Industry and Security**

**U.S. Export Controls: Technology,  
Deemed Exports & Encryption**

**February 25, 2010**

# Export Controls



- The United States controls on the export of sensitive items and technologies for national security and foreign policy reasons.
- Controls are both multilateral and unilateral
- Overall goal is to facilitate legitimate trade that does not jeopardize national security

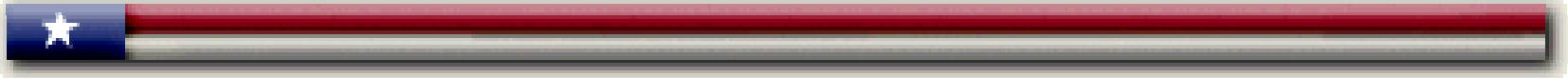
# Agency Jurisdiction



- Commerce - Bureau of Industry and Security (BIS)
  - Controls exports of commercial items including “dual-use” items (items that have both commercial and military applications)
- Department of State (Directorate of Defense Trade Controls)
  - Controls exports of items specifically designed, developed, configured, modified or adapted for a military application
- Other regulatory agencies – such as Dept. of Treasury, Dept. of Energy, Nuclear Regulatory Commission

# Authority for Dual-Use Controls



- 
- Export Administration Act (EAA)
  - International Emergency Economic Powers Act (IEEPA)
  - Other Laws
  - Executive Order 13222





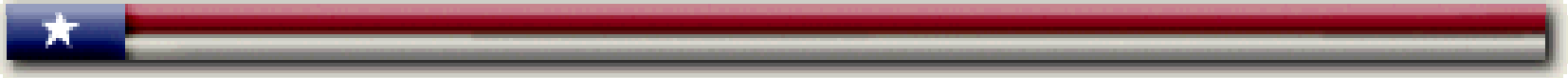
# What is Covered?



- Items
  - Commodities
  - Software
  - Technology
- Exports
  - An actual shipment or transmission of items out of the United States
- Reexports
  - An actual shipment or transmission of items subject to the EAR from one foreign country to another foreign country



# Scope of Dual-Use Controls

- 
- Most items in the U.S. economy except as controlled by other agencies fall under EAR;

## **BUT:**

- Of \$1,300.5 billion in total U.S. exports worldwide in 2008
- Only \$69.1 billion worth of export licenses issued by Commerce (all destinations)

# Subject to the EAR

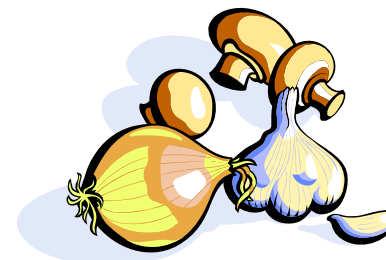
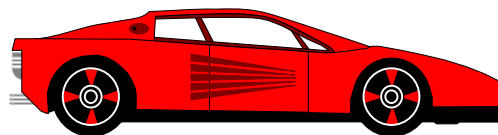


- Commerce Control List
  - Multilateral (Wassenaar/NSG/AG/MTCR)
  - Unilateral (Antiterrorism/Regional Stability)
- Items are listed by Export Commodity Classification Numbers (ECCNs)



# EAR99

If an item subject to the EAR does not fall within a specific ECCN, it is designated as “EAR99”, provided it is not subject to the jurisdiction of another agency





# Multilateral Export Control Regimes



- Wassenaar Arrangement
  - Conventional arms and dual-use goods and technologies
- Missile Technology Control Regime (MTCR)
  - Unmanned delivery systems capable of delivering weapons of mass destruction
- Australia Group (AG)
  - Chemical and biological weapons
- Nuclear Suppliers Group (NSG)
  - Nuclear weapons



# Reasons for Control



## Regime/Convention-based

CB = Chemical & Biological  
Weapons

CW = Chemical Weapons  
Convention

EI = Encryption Item

FC = Firearms Convention

NP = Nuclear Nonproliferation

NS = National Security

MT = Missile Technology

UN = United Nations

## Unilateral

AT = Anti-Terrorism

CC = Crime Control

RS = Regional Stability



# ECCN & Country Chart

- **ECCN: Export Control Classification Number**
  - Identifies specific items on the Commerce Control List
- **Country Chart – Supp. No. 1 to Part 738**
  - Table that shows license requirements for various destinations based on CCL reasons for control



# License Exceptions

- **Authorization to export or reexport without a license**
- **Part 740 of EAR provides details**
- **Most exceptions have a three letter symbol used for export clearance purposes**
- **Some require notification, review, and/or supporting documentation prior to use**

# License Exceptions



- **CIV:** Civil end users
- **TSR:** Technology and software under restriction
- **TMP:** Temporary Exports
- **ENC:** Encryption commodities and software
- **LVS:** Shipments of limited value



# Items on the CCL: Example




**2B007 “Robots” having any of the following characteristics described in the List of Items Controlled and specially designed controllers and “end-effectors” therefor.**

(specific technical parameters follow)

*Reasons for Control: NS, NP, AT*



# Technology Controls



*Related Controls:* (1) See ECCN 2D001 for “software” for items controlled under this entry. (2) ECCNs 2E001 (“development”), 2E002 (“production”), and 2E201 (“use”) for technology for items controlled under this entry. (3) Also see ECCNS 2B207, 2B225, and 2B997.

# CCL Technology Entry



**2E001 “Technology” according to the General Technology Note for the “development” of equipment or “software” controlled by 2A (except 2A983, 2A991, or 2A994), 2B (except 2B991, 2B993, 2B996, 2B997, or 2B998), or 2D (except 2D983, 2D991, 2D992, or 2D994).**

*Reasons for Control:* NS, MT, NP, CB, AT





# Technology Controls



- For “Development” of controlled item – all stages prior to serial production
- For “Production” of controlled item – all production stages including inspection and testing
- For “Use” of controlled item – operation, installation, repair, overhaul

# Technology NOT Subject to the EAR



- Publicly Available Technology:
  - Generally available to the interested public through books, periodicals, electronic media
  - In libraries (public, university)
  - Released at open conferences

# Technology NOT Subject to the EAR



- Technology that is a product of Fundamental Research (EAR § 734.8)
  - Basic and applied research where resulting information is ordinarily published and broadly shared with the scientific community.

# Technology NOT Subject to the EAR



- 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

# Technology NOT Subject to the EAR



- Technology subject to the exclusive export licensing jurisdiction of another agency such as:
  - Directorate of Defense Trade Controls
  - Nuclear Regulatory Commission
  - Department of Energy

# Technology Subject to EAR



- All other technology
- Technology listed on the Commerce Control List
  - Based on Export Commodity Classification Number (ECCN)
  - License requirements vary by Country and end-user

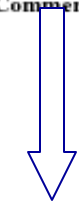
# Where is It Going?

## *Destination*



Commerce Control List Overview and the Country Chart

Supplement No. 1 to Part 738—page 1



Countries

### Commerce Country Chart

#### Reason for Control

	Chemical & Biological Weapons			Nuclear Nonproliferation		National Security		Missile Tech	Regional Stability		Firearms Convention	Crime Control			Anti-Terrorism	
	CB 1	CB 2	CB 3	NP 1	NP 2	NS 1	NS 2	MT 1	RS 1	RS 2	FC 1	CC 1	CC 2	CC 3	AT 1	AT 2
	Afghanistan	X	X	X	X		X	X	X	X	X		X		X	
Albania	X	X		X		X	X	X	X	X		X	X			
Algeria	X	X		X		X	X	X	X	X		X		X		
Andorra	X	X		X		X	X	X	X	X		X		X		
Angola	X	X		X		X	X	X	X	X		X		X		
Antigua & Barbuda	X	X		X		X	X	X	X	X	X	X		X		
Argentina	X					X	X	X	X	X	X	X		X		
Armenia	X	X	X	X		X	X	X	X	X		X	X			
Aruba	X	X		X		X	X	X	X	X		X		X		
Australia	X					X		X	X							
Austria	X					X		X	X	X		X		X		
Azerbaijan	X	X	X	X		X	X	X	X	X		X	X			
Bahamas, The	X	X		X		X	X	X	X	X	X	X		X		
Bahrain	X	X	X	X		X	X	X	X	X		X		X		

# Is an Export License Required?



- “X” in the box
  - License
  - License Exception
- No “X” in the box
  - NLR - No License Required \*

\* (Unless General Prohibitions 4-10 apply (EAR Part 736.2))





# Deemed Exports



# Deemed Export/Reexport



- Release of technology or source code subject to the EAR to a foreign national in the U.S. or abroad
- Considered (“deemed”) to be an export or reexport to that person’s home country
  - Does not apply to U.S. Citizens, individuals granted permanent resident status (Green Card), protected individuals

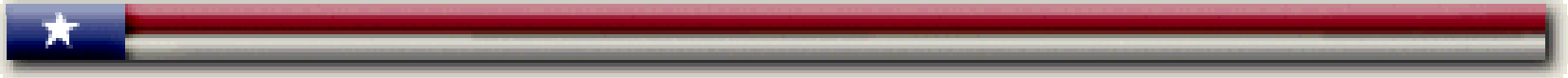
# Deemed Exports License Requirements



- Is the technology (or source code) subject the EAR?
- Is a license required for the home country of the person?

# Technology or Source Code Possible Release Methods



- 
- Tours of laboratories
  - Research, development, & manufacturing activities
  - Foreign students or scholars conducting research
  - Hosting a foreign scientist

# Deemed Export License Requirements



- Usually Commerce Control List Based
- Other license requirements based on
  - End use
  - Embargoed destinations
  - Entity List

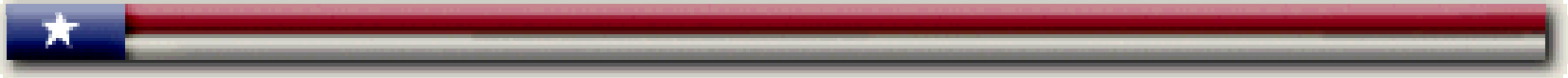
# Deemed Export License Requirements: Summary



- Classify the commodity
- Look for a related software (D) or technology (E) ECCN usually in the same category
- Most software and technology ECCNs apply to software or technology for “development,” “production,” or “use.”

# Deemed Export License Requirements



- 
- Identify reasons for control
  - Based on the foreign national's home country, check the Country Chart to determine if a license is required for that destination

# License Exceptions for Deemed Exports



- **TSR: Technology and Software Under Restriction (EAR § 740.6)**
  - Applies to technology and software controlled for national security only for country group “B” nationals (much of Asia, South America)
  - Letter of assurance required



# License Exceptions for Deemed Exports



- CIV: Civil End Use (EAR § 740.5)
  - ECCN 3E002 (electronics) technology.
- APP: Adjusted Peak Performance (EAR § 740.7)
  - ECCNs 4D001 and 4E001 (computer) software and technology
- Both require foreign national review

# Foreign National Review (FNR) Sections 740.5 & 740.7



- 
- Applicant must submit FNR request before disclosing technology under license exceptions CIV and APP.
  - Request must provide same information on the foreign national as a license application.
  - Faster review than license applications

# Technology Control Plan



- The requirement for technology control plans are a standard condition found in deemed export and technology exports licenses.

# Technology Control Plan (Cont)



- Essential elements:
  - Physical security plan
  - Information security plan
  - Personnel screening procedures
  - Training and awareness program
  - Self evaluation program
  - Corporate commitment to export compliance



# Encryption



# Encryption Basics



- Most encryption hardware and software is eligible for export under license exception ENC (after one-time review by USG)
- Encryption items exported to U.S. companies and their subsidiaries in any country (other than embargoed) and for internal company use (including product development) does not require a license (no deemed exports).



# More Encryption Basics

- No license or review is required to export:
  - “Personal Network Area” items (e.g., wireless headsets, mice, hand held scanners, GPS receivers, game console controllers).
  - Items containing “Ancillary Cryptography” that do not have information security as their primary function (e.g., Household appliances, games/gaming, anti-piracy and anti-theft prevention, automotive)

# Encryption Basics



- Items that MAY require a review or license:
  - Network Infrastructure Products
  - Open Cryptographic Interfaces
  - Certain exports to Government End Users
  - Exports to Country Group E:1  
(Embargoed/Terrorist destination) and foreign  
nationals from Country Group E:1



# Encryption Contacts



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# The Future



- President Obama: Export Control Reform Directive (August 2009)
  - Existing system rooted in Cold War
  - Focuses too much on allies, widely available technologies
- Being Spearheaded by NSC, NEC
- “Deemed Exports” and Technology Controls likely targets