



# Export Control Legislation Update

## Speakers

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## Sponsors



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# Agenda

- **Export compliance overview**
- **Export controls and EDA**
- **Emerging issues for 2006**
- **Resources and Q&A**



# Export Compliance Overview

- **What is an Export?**
- **Purpose of Export Controls**
- **Multinational Framework**
- **US Specific Issues**
- **Export coordination and process**

# What is an Export?

Release of any goods, services or technology to a “non-US Person”

- **Export can be in any format:**
  - physical transfer of materials (documents, CDs),
  - oral/visual (presentations, webinars),
  - electronically (WAN-based access to software), etc.
- **Non-US Person can be in the US at time of Export**
  - This is a so called “deemed” export; unique to US law

Deemed Export: An export to *non-US person* (even inside the US).

Example: A Chinese national working in San Jose for EDA Co receives files from a US customer. By accessing the files, a deemed export to China has taken place.

# Purpose of Export Regulations

- Prevent the proliferation of nuclear, biological or chemical weapons
- Control the flow of military goods and services
- Keep technology out of the hands of terrorists
- Promote individual national foreign policies
  - Export Controls are the method by which countries impose sanctions
  - US Regulations follow US technology world-wide
- Export Enforcement is a function of Homeland Security

Controlled: An item is considered controlled if it is restricted for export purposes based upon its classification, destination and/or end-use.

# Multinational Framework

## Wassenaar Arrangement

*on Export Controls for Conventional Arms and Dual Use Goods and Technology*

### Multi-national framework:

- Common list of categories describing items of concern
- Each signatory has individual discretion, can regulate export of items in each category from their country
- US law requires “further assurances”: recipient must insure that further exports follow US law

## Signatories

- Argentina
- Australia
- Austria
- Belgium
- Bulgaria
- Canada
- Czech Republic
- Denmark
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Japan
- Luxembourg
- Netherlands
- New Zealand
- Norway
- Poland
- Portugal
- Republic of Korea
- Romania
- Russian Federation
- Slovakia
- Spain
- Sweden
- Switzerland
- Turkey
- Ukraine
- United Kingdom
- United States

Dual Use: A dual use item is one that is generally commercial in nature, but can also be used for military purposes. Most products we use, computers, tools, etc., are dual use items.

# US Specific Issues

- **Additional non-Wassenaar dual-use classification control categories (for anti-terrorism reasons)**
  - ECCNs of the form xx991 and xx992, e.g. 3D991
- **Embargoed countries**
  - Cuba, Libya†, Iran, Iraq†, N. Korea, Sudan, Syria
- **Denied parties – BIS, State, OFAC lists**
- **Further assurance requirements**
- **Additional encryption restrictions**
- **Deemed Export**
- **Default classification for anything not listed**
  - ECCN is EAR99

ECCN: Export Classification Control Number.

Tip: Wassenaar control list 3D3 becomes the US ECCN 3D003

EAR99: ECCN for anything not listed specifically in the control lists.

# Export Coordination and Process



- **It is your responsibility to comply with export regulations**
  - **BIS strongly recommends that exporters create and maintain an Export Management System (compliance program)**
    - Understand the regulations
      - Product classification
      - General Prohibitions
      - Training and documentation

# Export Coordination and Process



- **It is the exporter's responsibility to:**
  - **Know the classification (ECCN) of the item/technology being exported**
  - **Know where it is being exported**
  - **Know who will use it**
  - **Ensure that it will not be used for purposes contrary to the regulations**

# Export Coordination and Process



- Keep in mind that an export is judged both on physical destination AND citizenship of end-user, e.g. if the software has been lawfully exported to Germany and you invite a Chinese national to access the software in Germany, it's considered an export to both countries.
- May need two export licenses, e.g. if you are exporting from your office in Germany, then you may need permission from both Germany and the US

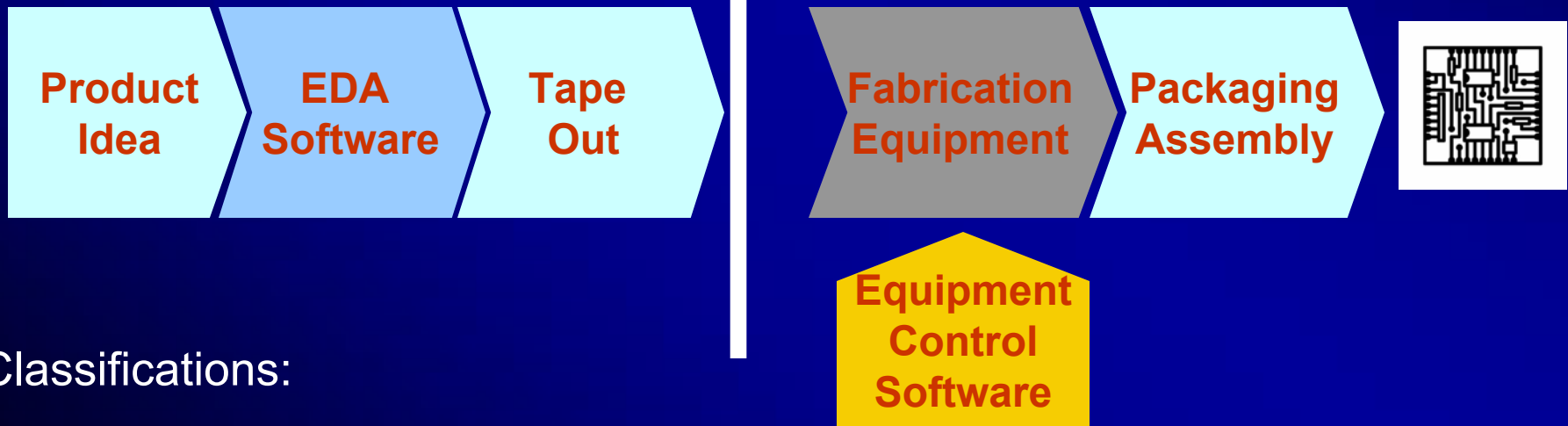
# Agenda

- **Export compliance overview**
- **Export controls and EDA**
  - **EDA classification**
  - **Encryption**
  - **Customer Support**
  - **ITAR**
- **Emerging issues for 2006**
- **Resources and Q&A**

# Export Control view of EDA/IC

## Front End

## Back End

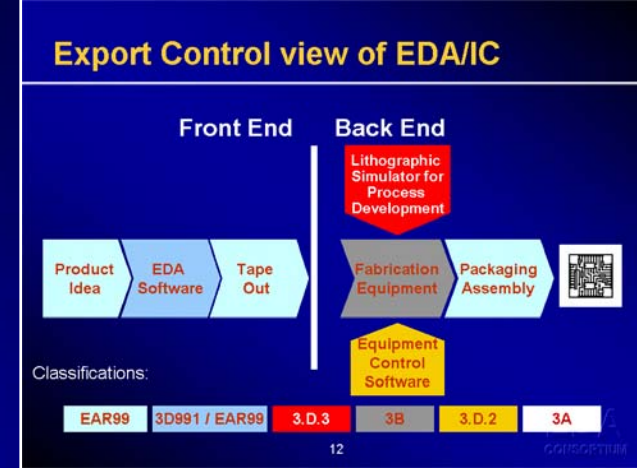


Classifications:



# EDA Classification

- **EAR99 / 3D991**  
(US specific anti-terrorism categories)
  - Most EDA software
  - Software still must be export screened (denied parties, embargoed countries, end-use, etc.)
- **3.D.3 (US 3D003)**
  - Software for physics based lithographic simulation
  - May cover certain physics based TCAD tools
  - Does not include model based OPC, SPICE, etc.



## Brought to you by EDAC – April 2004!

**3D003** ‘Physics-based’ simulation “software” specially designed for the “development” of lithographic, etching or deposition processes for translating masking patterns into specific topographical patterns in conductors, dielectrics or semiconductor materials.

Technical Note: ‘Physics-based’ in 3.D.3. means using computations to determine a sequence of physical cause and effect events based on physical properties (e.g., temperature, pressure, diffusion constants and semiconductor materials properties).

Note 1. Libraries, design attributes or associated data for the design of semiconductor devices or integrated circuits are considered as “technology”.

# *Decontrolled* EAR99 / 3D991 EDA Software

- Architecture design
- Logic design and synthesis
- Formal verification
- Emulation/simulation
- Physical implementation tools
- Physical Verification (DRC, LRC, LVS)
- Geometry Manipulation (OPC, RET, etc.)
- Mask Data Preparation
- Non-physics based TCAD products
- Plus:
  - Design rules
  - Circuit verification rules
  - Other “model based” simulators

**CAUTION:** Software still must be export screened (denied parties, embargoed countries, end-use, etc.)

# Possibly *Controlled* Items

- Designs and silicon IP created with EDA tools
  - Classification is determined based on technology and intended use
  - Export restrictions depend on classification and country of development
- Anything *specially modified* for use in military applications or for use by military end-users

# Encryption

- **EDA software frequently incorporates encryption to help protect customer IP data**
  - **US government has additional export restrictions on encryption technology**
    - >55bit strength is “strong encryption”
  - **Software classified for encryption purposes has use and import restrictions in other countries**
    - US and Wassenaar Category 5
    - Notification and/or licensing
    - Example: France, Russia, Israel, China (PRC), more.

**CAUTION:** It is every exporter’s responsibility to comply with the regulations.

# Brought to you by EDAC – Again!

## 5.A.2 = Classification for High Strength Encryption

Note **5.A.2. does not control:...**

**c. Equipment where the cryptographic capability is not user-accessible and which is specially designed and limited to allow any of the following:**

**1. Execution of copy-protected software;**

**2. Access to any of the following:**

**a. Copy-protected contents stored on read-only media; or**

**b. Information stored in encrypted form on media (e.g. in connection with the protection of intellectual property rights) when the media is offered for sale in identical sets to the public; or**

**3. Copying control of copyright protected audio/video data ; or**

**4. Encryption and/or decryption for protection of libraries, design attributes, or associated data for the design of semiconductor devices or integrated circuits in the electronic design process**

# Brought to you by EDAC – Again!

- **Timetable:**

  - **Preliminary discussion with BIS – January 04**

  - **Detailed proposal with government agencies – June 04**

  - **Inclusion onto US Agenda for Wassenaar – March 05**

  - **Negotiation and acceptance at Wassenaar Tech conference – April 05**

  - **Ratification by Wassenaar Plenary – December 05**

  - **Ratification / Adoption into US regulations – expected Q2'06**

- **What this means:**

  - Encryption software used in the design cycle to protect intellectual property (e.g. SPICE models, libraries, reusable designs) will now be 5D992 (same control level as 3D991)

  - No regulatory change for:

    - Software that provides clear-text encrypt/decrypt

    - IP that itself implements encryption (Bluetooth standard, Wireless USB standard, etc.)

# Questions for customer support

- Do you have *non-US Persons* in your customer support environment?
- Does the customer know their data could be exported?
  - Are there export restrictions on your customer's data?
- Who has virtual access to your customer's data?
  - Don't unintentionally export data!
- On site support
  - Can your support engineer enter your customer's environment?
    - **Deemed Export**

# ITAR

ITAR = International Trade in Arms Regulations

- A *dual use* item becomes classified under ITAR if it is *specially modified* for use by a military end-user
- Do you sell to/support the military or military contractors?
  - Customer data handling only by US-Persons, otherwise State Department export license is required
  - Registration with State Department as a Defense contractor
    - Required prior to filing license applications

# Emerging Issues for 2006

- CHINA
  - *Catch-All* legislation
- Legislative environment
  - Proposed EAA amendment
    - Tougher EE regulations
  - DoD Export Compliance Program proposal for defense contractors

# Catch-All

- The December 2003 Wassenaar Arrangement Plenary meeting called upon member states to:
  - "take appropriate measures to ensure that their regulations require authorisation for the transfer of *non-listed dual-use* items to destinations subject to a binding United Nations Security Council arms embargo . . . when . . . the items in question are or may be intended . . . for a military end-use."
    - **Non-listed dual use = US CCL-listed items**  
**= xx991, xx992 and possibly EAR99 items**
- This applies to countries subject to regional arms embargos in which Wassenaar member states are participants, thus would cover exports to China as well as 19 other countries, including, among others, Burma, Belarus, Cote d'Ivoire, Indonesia, Liberia, Syria, Vietnam, Yemen and Zimbabwe.

# Catch-All

- Possible regulations:
  - Broad-base for all subject countries excepting China
  - China restrictions narrowed to:
    - **Technology, or:**
      - **CCL class, i.e.: all items controlled for AT reasons**
      - **Specific set of end-users or end-use**
  - Watch for proposed rule in March 2006

# China

- **Legislative environment**
  - **Unease with China**
    - IPR issues
    - Protectionist trade barriers
    - Military buildup
  - **Unease translates into protectionist US legislation**
    - 2005 bills included EU sanctions, military procurement restrictions

# Export Administration Act (EAA)

- Current EAA dates to 1997. Lapsed in 2001
  - Proposed Senate redraft of EAA in 2001 died in the house.
  - Folded into Presidential regulations in 2001 under International Emergency Economics Powers Act (IEEP)
- HR4572 introduced by Rep. Henry Hyde
  - “Consensus bill”, has backing of Hyde and Senators Mike Enzi (R-WY) and Richard Shelby (R-AL), Commerce, the Administration and key business groups
  - “First Step towards reforms” – *Commerce Department*
  - Amendments for either stricter or fewer controls will bring opposition to kill the bill
    - “Will simply not go forward if it attracts controversial amendments” – *Peter Lichtenbaum, Assistant Secretary of Commerce, January 11<sup>th</sup>.*

# HR4572

- **“Stops short” of an EAA re-write, but limited to a 2-year extension of the existing EAA**
- **“Good Government” bill providing direct statutory authority rather than through IEEPA.**
  - **Comprehensive review of CCL**
  - **Sets policy for the various multilateral export control agencies – by urging greater uniformity in members’ regulations, more openness in decision processes.**
  - **Provides privacy protection for export applications**
    - **Current protection doesn’t exist since EAA lapsed and IEEPA doesn’t address this**

# HR4572

- **Increases penalties for civil violations from \$11,000 to \$500,000. Denials from 5 to 10 year minimums**
  - **Special “enforcement fund” of \$1m gathered from company fines to bolster investigation activities**
    - **Increases authority for undercover work, wiretaps and overseas investigations**

# DFARS legislation – Proposed Rule

- **DFARS = Defense Federal Acquisition Regulation Supplement**
  - Amend DFARS to require DoD contractors to implement and maintain effective export compliance programs
    - Register with DDTC
    - Maintain compliance program ensuring controls over physical, visual & electronic access
    - Physical access control plan – unique badging/segregation for non-US persons
    - Conduct training & periodic audits/assessments
  - Proposed rule issued July '05. 150+ comments received
  - Decision meeting February 1<sup>st</sup>. Decision?

# Agenda

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# Resources

- EDAC:
  - [http://www.edac.org/resources\\_export.jsp](http://www.edac.org/resources_export.jsp)
- Wassenaar Arrangement:
  - <http://www.wassenaar.org>
- Bureau of Industry and Security (US export regulator)
  - <http://www.bis.doc.gov>
- State Department – Office of Defense Trade Controls
  - <http://www.pmdtc.org>
- Vendor internet sites
  - Many EDA vendors post their product's export classifications on the internet

# Terminology Quick Reference

<u>Term</u>	<u>Meaning</u>
<b>AES</b>	Automated Export System. Automated system for filing <u>Shippers' Export Declaration</u> with US Customs and Census bureaus
<b>Classification</b>	Refers to the ECCN of an item
<b>Control list</b>	A document that describes the categories of concern. The primary list is the multinational Wassenaar Arrangement dual use list. The US-specific list can be found in the EAR and contains additional US-specific entries.
<b>Controlled</b>	An item is considered controlled if it is restricted for export purposes based upon its classification, destination and/or end-use.
<b>DDTC</b>	Department of Defense Trade Controls – State Department group that administrates the ITAR
<b>Deemed Export</b>	An export to <i>non-US person</i> (even inside the US).
<b>Dual use</b>	An item having primarily commercial purposes, but which also can be used for military purposes. Most items are “dual use”, e.g. personal computers.
<b>EAR</b>	Export Administration Regulations, the US regulations found within 15 C.F.R. ( <a href="http://www.access.gpo.gov/bis/ear/ear_data.html">www.access.gpo.gov/bis/ear/ear_data.html</a> ) that implement the dual-use export control regime and include the control list.
<b>EAR99</b>	US-specific classification for a dual use item not specifically found on the control list.

# Terminology Quick Reference

<u>Term</u>	<u>Meaning</u>
<b>ECCN</b>	Export Control Classification Number
<b>ENC</b>	License exception granted for export of “high strength” encryption products. Requires review by BIS and Encryption agency.
<b>Exporter of Record</b>	Company or individual legally responsible for the export of goods or technology from the US
<b>Export License</b>	Formal license received from BIS or DDTC allowing for export of goods and/or technology. May be required based upon goods or technology; parties to the transaction; or end-use
<b>General Prohibitions</b>	10 General prohibitions to export, found in part 736 of EAR
<b>ITAR</b>	International Trade in Arms Regulations 22 CFR 120-130
<b>License Exception</b>	Exceptions allowed to requirement for an export license; outlined in part 740 of the EAR
<b>OFAC</b>	US Treasury’s Office of Foreign Assets Control. Administers and enforces economic and trade sanctions based on US foreign policy and national security goals. <a href="http://www.treas.gov/offices/enforcement/ofac/">http://www.treas.gov/offices/enforcement/ofac/</a>
<b>SED</b>	Shipper’s Export Declaration. Legal declaration of terms of export shipment, including ECCN, License/license exception, value, parties to the transaction. Automated filing through AES

# Terminology Quick Reference

<u>Term</u>	<u>Meaning</u>
<b>Schedule B Number</b>	Harmonized Tariff System code used to identify all products and materials for import & export customs duties and taxes. Trade statistics based off records of these transaction. All physical shipments over \$2,500 require schedule B input.
<b>US Person</b>	Person holding US Citizenship, Green Card, or special refugee status. Someone who is legally protected from being deported due to citizenship status.
<b>xx991 / xx992 ECCNs</b>	US-specific anti-terrorism (AT), and related, classifications for certain dual use items on the control list

# Your Questions?

