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# Using Department of Commerce Export Control Classification Numbers In High Risk Property Reviews

BY GARY D. SWANSON, CPPM, CF, DUKE CITY CHAPTER  
Senior Property Administrator, Sandia National Laboratories /The Plus Group

CHAD A. TWITCHELL

Sandia National Laboratories Export/Import Control Office,

AND STEVE SULTEMEIER, CPPA, DUKE CITY CHAPTER,  
Sandia National Laboratories Export/Import Control Office

## Background

In October 1998, Sandia National Laboratories (SNL) managed and operated for the U.S. Department of Energy (DOE) by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Company, sold a supercomputer, knowing it was an export controlled item, but without a thorough understanding of the specific reasons for the export control restrictions on it. The supercomputer was sold to a company incorporated in the State of California but owned by a Chinese national. At the time of the sale, the SNL Property Administrator (PA) did not know the purchaser was a foreign national. By inadvertently providing the operating manuals with the supercomputer, the PA also was not aware that a "deemed export" might have occurred. Release of technical data that would require an export license to a foreign national in the United States is considered a "deemed export." One of the lessons learned from the sale is that it is vital to identify and comply with the applicable U.S. Government export control requirements on property prior to selling it or disposing of it in any manner. Had the SNL personnel involved in the sale known the supercomputer was export controlled for national security and nuclear non-proliferation, they would not have sold it on the open market.

Under the direction of DOE, SNL bought the supercomputer back. Fortunately, after careful review, the Department of Commerce (DOC) determined that no "deemed export" violation occurred, and the supercomputer was destroyed by SNL.

## Property Management Process Revisions

Based upon SNL's root cause analysis and in response to the recommendations made in two DOE internal reviews/investigations of the sale, the SNL Property Management Department (PMD) significantly revised their process for performing high risk property reviews of excess property.

The DOE Property Management Regulations (DOE-PMR) provide guidance for high risk personal property to include especially designed or prepared property, export controlled property, nuclear weapon components or weapon-like components, and proliferation sensitive property. The guidance is intended to ensure that the disposition of high risk personal property does not adversely affect the national security or nuclear nonproliferation objectives of the United States. It clearly defines especially designed or prepared property, nuclear weapon components or weapon-like components, and proliferation sensitive property. However, the definition in the regulations for export controlled property is not clear, especially for property controlled by the DOC. Under the DOC Export Administration Regulations (EAR), all property is export controlled to some extent. This issue created a problem in revising SNL's process for completing high risk property reviews.

One of the recommendations from the two DOE internal reviews/investigations of the supercomputer sale was for SNL PMD to work more closely with the SNL Export/Import Control Office (EICO) to ensure export control issues are fully considered in all disposal activities. Therefore, the PMD teamed with the EICO to develop a methodology that would define export controlled property items that would be included in the high risk property category.

## Commerce Control List (CCL)

The PMD and EICO teamed to review and recommend the use of the Export Control Classification Numbers (ECCNs) in the DOC Commerce Control List (CCL) of the EAR as a method of identifying property that is export controlled for national security or nuclear nonproliferation purposes as well as other reasons for control. We noted that the ECCN might be used to identify certain categories of high risk property and appeared to be more advantageous than researching equipment's detailed

specifications and comparing them with the specifications listed in the multilateral Nuclear Supplier's Group (NSG) Trigger and/or Dual-Use Lists.

The CCL is published as Supplement 1 to 15 Code of Federal Regulations (CFR) 774 of the EAR. The ECCNs included in the CCL define specifications for numerous types of equipment, software, and technologies that are export controlled for various reasons. ECCNs are composed of a digit, a letter, and three additional digits (e.g., 3A001).

The CCL is divided into 10 categories, numbered as follows (this number is the first digit in the ECCN of 3A001):

- 0 Nuclear Materials, Facilities and Equipment (and Miscellaneous Items);
- 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; and
- 9 - Propulsion Systems, Space Vehicles and Related Equipment

Within each category, items are arranged by group. Each category contains the same five groups. Each group is identified by the letters A through E, as follows (this letter is the second entry (alphanumeric) in the ECCN, 3A001):

- A - Systems, Equipment, and Components;
- B - Test, Inspection and Production Equipment;
- C - Materials;
- D - Software; and
- E - Technology

The third entry of the ECCN identifies the type of controls associated with the items contained in the entry (e.g., 3A001). The Reasons for Control associated with this digit are listed below:

- 0 - National Security reasons (including Dual Use and International Munitions List) and Items on the NSG Dual Use Annex and Trigger List
- 1 - Missile Technology reasons
- 2 - Nuclear Nonproliferation reasons
- 3 - Chemical & Biological Weapons reasons
- 9 - Anti-terrorism, Crime Control, Regional Stability, Short Supply, UN Sanctions, etc.

ECCNs with a 0 in this digit (e.g., 3A001) also designate "Especially Designed or Prepared Property" and "Proliferation Sensitive Property" as defined by the DOE-PMR:

The numbers in either the third or fourth item (e.g., 3A001) serve to differentiate between multilateral and unilateral entries. An entry with the number "9" as the third item identifies the entire entry as controlled for a unilateral concern (e.g., 2B991 for anti-terrorism reasons). If the number "9" appears as the fourth item, the item is controlled for unilateral purposes based on a proliferation concern (e.g., 2A292 is controlled for unilateral purposes based on nuclear nonproliferation concerns).

The last digit within each entry (e.g., 3A001) is used for the sequential numbering of ECCNs to differentiate between entries on the CCL.

The reason items within each ECCN are export controlled is provided at the beginning of each ECCN section. Since Reasons for Control, the third item of an ECCN, are not mutually exclusive, items controlled within a particular ECCN may be controlled for more than one reason. The Reasons for Control as stated in the regulation are:

- AT Anti-Terrorism
- CB Chemical & Biological Weapons
- CC Crime Control
- CW Chemical Weapons Convention
- EI Encryption Items
- FC Firearms Convention
- MT Missile Technology
- NP Nuclear Nonproliferation
- NS National Security
- RS Regional Stability
- SI Significant Items
- SS Short Supply
- XP Computers

Those items, software, and technologies most tightly controlled are defined in the EAR with a specific ECCN as described above. But most items, software, and technologies are not specified on the CCL and yet are still subject to the EAR. These are identified as "EAR99." While they have the least amount of control, they are nonetheless considered "subject to the EAR" and are export controlled.

## ECCN Database

When the representatives of the PMD and EICO began using the CCL ECCNs as a methodology to define export controlled property items that would be included in the high risk property category, the PMD developed an ECCN Database that included the model number, manufacturer, description, ECCN, whether the item is releasable or not, and the date when the ECCN information was received. Shortly after the database was developed, the Los Alamos National Laboratory (LANL) Export Control Office provided additional ECCN data that also was incorporated into the database. Another column was then added to the database to indicate if the ECCN informa-

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tion was researched by LANL or SNL. As of the end of June 2001, this database contains more than 1,170 items. This has become a valuable resource in looking up items previously screened and speeds up the process of reviewing related and like items.

As the PMD and EICO representatives gained experience in using the ECCNs for determining export controls on property, they noticed the vast majority of property being disposed of was designated EAR99 or was export controlled for anti-terrorism (AT) reasons only (i.e., ECCNs such as XA99X or XB99X).<sup>1</sup> At the same time, the PMD was revising the process and procedures for high risk property reviews to address the issues in the findings from SNL's root cause analysis and the two DOE internal reviews/investigations of the supercomputer sale. Most of the revisions were relatively straight forward; however, because of the all inclusive DOE definition of all export controlled property being considered as high risk, it was difficult to quantify which export controlled property should be considered high risk and remain consistent with the DOE-PMR.

The stated purpose of the DOE-PMR High Risk Property Management program is to ensure that the disposition of high risk personal property does not adversely affect the national security or nuclear nonproliferation objectives of the United States. Two CCL reasons for property to be export controlled are national security and nuclear nonproliferation. Since property that is export controlled only for anti-terrorism or designated as EAR99 are clearly outside those reasons, SNL requested approval from the DOE Albuquerque Operations Office to exclude this property from the high risk property category. SNL's request was approved on May 22, 2000. Therefore, property that is export controlled only for anti-terrorism reasons or designated as EAR99 may be dispositioned without any of the additional requirements for high risk property.

### **SNL High Risk Property Review Process**

The SNL high risk property review process focuses primarily on scientific and laboratory test equipment although all property being disposed of in any manner receives a high risk property review. Representatives of the PMD and EICO jointly perform high risk property reviews of property turned in to the SNL Reapplication Facility. They first physically review each property item to determine if it is a nuclear weapon component, military item, or an item that was made for a military purpose.<sup>2</sup> Any nuclear weapon component or property that was used in the development, production, or testing of nuclear weapon components is marked as high risk property, numbered, and entered into the High Risk Property Control Log. All high risk property is moved into a High Risk Property Holding Area until it is destroyed.

Any National Stock Number signifying a military item

or an item that was manufactured for a military purpose is recorded and the Kirtland Air Force Base Defense Reutilization and Management Organization is contacted to determine its demilitarization code. SNL then disposes of such items in accordance with the Department of Defense Demilitarization and Trade Security Controls Manual, DOD Manual 4160.21-M-1. In this manner, none of this material is offered for disposition, and therefore cannot be exported.

Once the representatives of the PMD and EICO determine the item is not a nuclear weapon component, military item, or item that was made for a military purpose, they check the ECCN Database for the item. If the item is listed and releasable, they mark the item with "Release" and the date. If the item is listed but not releasable, they mark it as high risk property, number it, and enter it into the High Risk Property Control Log. The item is marked for destruction with a large painted yellow "X" and moved into a High Risk Property Holding Area until it is destroyed. This process prevents the item from being purchased by a Foreign National and thereby exporting the item.

If the item is not listed in the ECCN Database, the representatives of the PMD and EICO determine if the item warrants contacting the manufacturer to determine the ECCN. If they come to a decision that the manufacturer of the property is not well known and/or the property has a relatively low value, the item is marked for destruction with a large painted red "X" and moved into a High Risk Property Holding Area until it is destroyed. If they decide the manufacturer is relatively well known and/or the item is a high value item, they place a dated "Hold" tag on the item. They then record the model number, manufacturer name, description, serial number, property number (if any), and any other information that might assist in locating the manufacturer on a SNL developed data sheet.

The PMD subsequently contacts the manufacturer, determines the equipment's ECCN, and adds it to the ECCN Database. If the PMD is unable to locate the manufacturer, the manufacturer's name is added to a list of such manufacturers so no future equipment identified from any manufacturers on this list is held for review. The PMD may accomplish additional research into the equipment's ECCN using SNL employees with expertise in using that type of equipment. If the ECCN cannot be determined by either method, the item is marked for destruction with a large painted red "X" and moved into a High Risk Property Holding Area until it is destroyed.

### **Conclusions**

The High Risk Review Process and the Export Control Review Process are closely linked at Sandia National Laboratories and serve, to all intents and purposes, the



same functions: To protect national security and further nonproliferation policies of the U.S. Government. The ECCNs found in the DOC EAR provide an extremely useful tool in performing high risk property reviews when used in conjunction with a well-organized process. The ECCN is particularly useful for identifying equipment that is included in the NSG Trigger and Dual-Use Lists as it eliminates the requirement to research detailed specifications for equipment and compare them to the specifications of items on those lists. Using the EAR along with other pertinent regulations, the process effectively screens and destroys items that are closely controlled prior to items being released for public review.

However, it must be noted that an ECCN is not an end in itself. The ECCN does not provide any assistance for weapons components and equipment used in the research, development, testing, and manufacture of such items; munitions list items, and items export controlled by the NRC, DOE, and other government agencies. These items also must be identified as an integral part of the high risk review process as discussed above. ◆

1 It should be noted that technologies (e.g., XEXXX) and software (e.g., XDXXX) are rarely if ever reviewed as part of the high risk process.

2 It is important to note that nuclear weapons test equipment and components are controlled by the Department of State International Traffic In Arms Regulation (ITAR) 22 CFR 120-130 and may have controls by DOE, the Nuclear Regulatory Commission (NRC) and other agencies. In addition, items specifically designed, developed and used for military use are also ITAR controlled.

**GARY SWANSON, CPPM, CF** is the President of the NPMA Duke City Chapter. He is a Senior Property Administrator, under contract through the Plus Group, at Sandia National Laboratories (SNL), a Department of Energy Designated Contractor. He is responsible for the High Risk Property Management and Control Program at SNL.

**CHAD TWITCHELL** is the current president of the Export Control Coordinators Organization (ECCO). He has spent most of his career in purchasing and contracts in both the private and public sectors and enjoys leading the Export/Import Control Office (EICO) at SNL.

After a 24-year career in the USAF, **STEVE SULTEMEIER, CPPA** has been with SNL for over seven years. He has been with the EICO since October 1999 and is the senior member responsible for the rigorous coordination between the EICO and the High Risk Property Management and Control Program at SNL.