



EXPORT CONTROL COMPLIANCE TRAINING FOR HOSTS OF FOREIGN NATIONALS

Oak Ridge National Laboratory (ORNL) complies with all applicable federal laws, regulations, and DOE directives related to Export Control compliance. Any technology or commodity shipped, transferred, or communicated outside the United States (U.S.) or to a foreign national within the U.S. is an export. Exports must be controlled to protect United States security which includes our national defense as well as our economic health and industrial competitiveness.

This training applies to all ORNL staff and their subcontractors who will host foreign national visitors, guests, or assignees. Hosts of foreign nationals must ensure that all export control requirements are met. Certain technologies may require that ORNL obtain an export license from a particular governing agency before a transfer can occur.

Upon completion of this training, you will be able to:

1. Accurately recognize export controlled activities
2. Correctly identify technical data or technology that can become exports
3. Accurately recognize activities that cause deemed exports
4. Sufficiently explain how technology evolves to being controlled by a governing jurisdiction
5. Competently execute the host responsibilities associated with export control
6. Immediately notify the Export Control Department of any export control violation
7. Fully consider a series of questions related to export control before, during, and after the foreign national assignment or visit
8. Appropriately use available resources to obtain further information about export control

WHAT IS AN EXPORT?

At some point, virtually all ORNL programs, divisions, offices, and employees and subcontractors are involved in export controlled activities.

Examples of export controlled activities include:

- International shipments,
- Drop shipments (overnight),
- Foreign travel,
- Foreign visits and assignments,
- E-mail,
- Faxes,
- Phones,
- Internet,
- Transmission of technology or technical documentation via a contractual instrument

WHAT IS AN EXPORT? (continued)

Export Control compliance requires all ORNL staff to understand and be aware of the technology, items, or equipment to be shipped or transmitted abroad. Such technologies and commodities can be classified as a deemed export, an export, or a re-export.

A *deemed export* is the main type of export associated with foreign national visits and assignments. Technical data or technology provided, transferred, or disclosed to a foreign national *within* the United States is a deemed export.

Technical data or technology provided, transferred, or disclosed to a foreign national *outside* the United States is an *export*.

After technical data or technology has been exported to a foreign country, a *re-export* is the same data or technology provided, transferred, or disclosed to another foreign country.

HOW DO DEEMED EXPORTS OCCUR?

Deemed exports can occur through many avenues including:

- Conversations
- Phone calls



- E-mails
- Visual inspections
- Daily work
- Drawings or maps
- Faxes
- Conferences/meetings

TECHNOLOGY EVOLUTION STAGES

Technology evolves through three stages. As technology nears the third stage, it is subject to export control.

Stage One

The first stage produces basic fundamental research and/or publicly available information. The official definitions of basic fundamental research and publicly available information as defined by the Department of Commerce and published in the code of federal regulations are:



Basic Fundamental Research – experimental or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena or observable facts, not primarily directed towards a specific practical aim or objective.

Publicly Available Information – information that is generally accessible to the interested public in any form, and therefore not subject to the EAR (Export Administration Regulations).

In the first stage, a specific end-user has not been identified. This type of research and information is not under the jurisdiction of Export Control.

Stage Two

The second stage is the most difficult to determine. In this grey area, the ideas begin to move from a concept (open research) to a specific application. At this point, technology restrictions begin coming into place. Very broad guidance is available at this stage, and it is subject to change as the technology evolves.

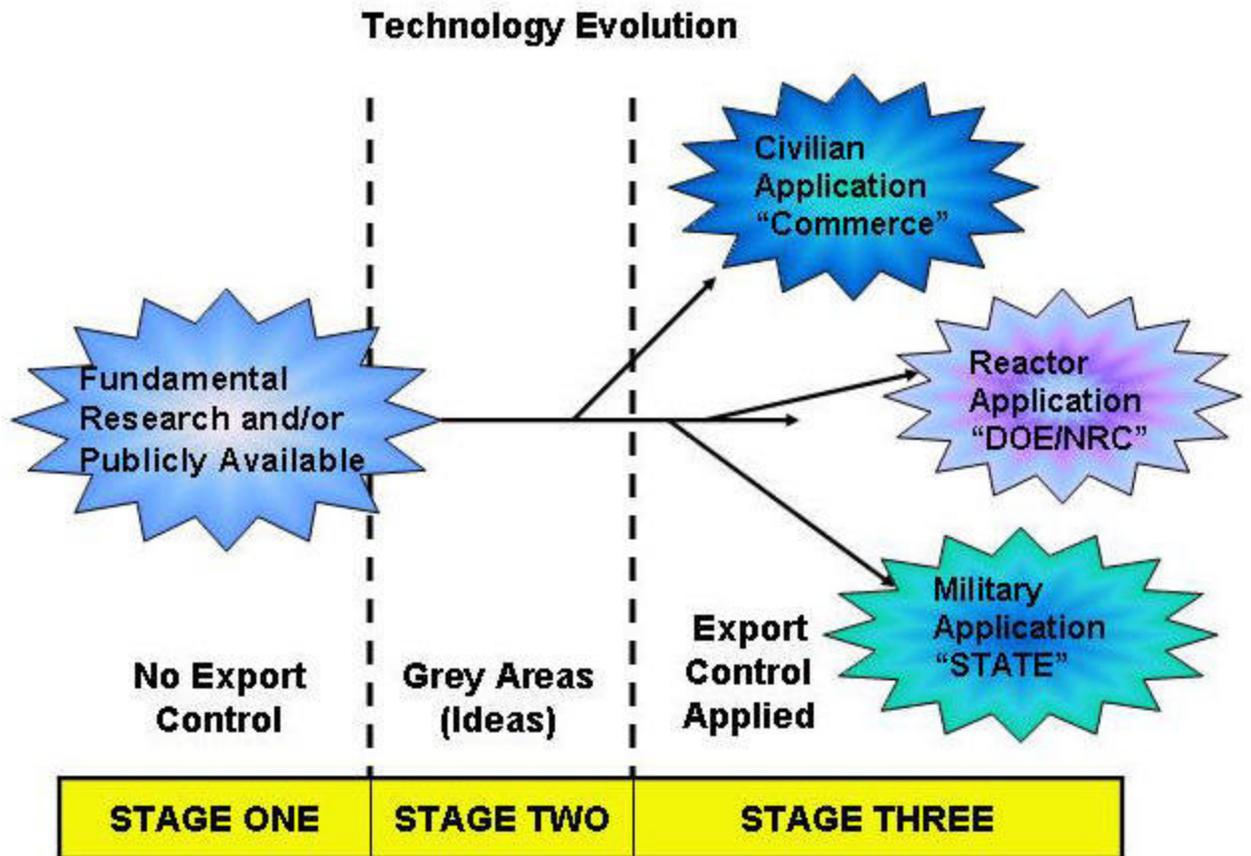
TECHNOLOGY EVOLUTION

Stage Three

The third stage brings an idea to fruition. The idea has a specific end-use and specific end-users which could be export controlled. The information could be proprietary or controlled by the sponsor.

At this point, the technology becomes controlled by various governing jurisdictions. The Department of Commerce covers civilian applications. The Department of Energy and the Nuclear Regulatory Commission have jurisdiction over nuclear reactor applications. Military applications fall under the Department of State.

This diagram shows the three stages of technology evolution.



TECHNOLOGIES AND GOVERNING JURISDICTIONS

Listed below are examples of export control technologies, items, and equipment employed by ORNL and their corresponding governing jurisdiction.



Department of Energy

Various technologies in the following areas:

- Isotope separation technologies
 - Gaseous diffusion
 - Gas centrifuge
 - Aerodynamic separation
 - Chemical exchange and column separation
 - Electromagnetic (calutrons)
 - Laser
 - Plasma separation process
- Heavy water production
- Lithium isotope separation
- Tritium production and processing
- Nuclear fuel processing
- Nuclear-related technologies (e.g., space power)



Department of Commerce

- Nuclear materials, facilities, & equipment (NRC)
- Materials processing
- Electronics
- Computers
- Information security
- Propulsion systems, space vehicles and related equipment
- Materials, chemicals, microorganisms, & toxins
- Sensors & lasers
- Navigation & avionics
- Marine
- Telecommunications

TECHNOLOGIES AND GOVERNING JURISDICTIONS (continued)

Listed below are examples of export controlled technologies, items, and equipment employed by ORNL and their corresponding governing jurisdiction.



Nuclear Regulatory Commission

- Nuclear Materials, Facilities, and Equipment (including miscellaneous items supporting the activity):
 - Systems, equipment, and components
 - Test, inspection and production equipment
 - Materials
 - Software



Department of Agriculture

- Plant and plant products when offered for export or re-export
- Animal and animal products – *Note:* Inspection license must be obtained prior to exporting to a foreign country. The foreign country establishes the requirements.

HOW ARE EXPORTS LICENSED?

Obtaining a license requires submitting a written letter or application with supporting documentation to the appropriate governing jurisdiction. The Export Control Department, along with technical input from the host, completes this task. Oftentimes, the governing jurisdiction may grant a license with specific conditions and riders required to comply with the license authorization.

WHAT OTHER RESTRICTIONS ARE APPLICABLE TO EXPORT CONTROL?

Other restrictions may be applicable to your foreign national visitor, guest, or assignee.



- 🌐 You may not export or re-export to embargoed destinations which are currently Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.
- 🌐 Special restrictions may apply to the countries of Algeria, Armenia, Azerbaijan, Belarus, China, Georgia, India, Israel, Kazakhstan, Kyrgyzstan, Moldova, Pakistan, Russia, Taiwan, Tajikistan, Ukraine, and Uzbekistan.
- 🌐 You may not support nuclear proliferation, chemical and biological weapons, and/or missile technology for foreign entities and/or countries. Be sure you know your customers/associates, their businesses, their employers, etc.

Screening checklists are available at the following url:
<http://home.ornl.gov/divisions/contracts/contresp09a2.htm>.

HOST RESPONSIBILITIES FOR EXPORT CONTROL

Always complete the following steps when hosting a foreign national visitor, guest, or assignee.

- 🌐 Establish the work to be done by the foreign national, and determine the governing jurisdictions for any export control issues. The Export Control Department can help the host make this determination.
- 🌐 Perform a walk-down of the area/buildings in which the foreign national will work. Check for any equipment/technology in the area that may be export controlled. Add any specific details relating to export control to the security plan in NEP.
- 🌐 If the technology/equipment is export controlled, a license may be required prior to the authorization of an NEP assignment or visit.
- 🌐 Make sure others in the work area/work team are aware of any export control issues, and inform them of their associated responsibilities.

HOST RESPONSIBILITIES FOR EXPORT CONTROL (continued)

Always complete the following steps when hosting a foreign national visitor, guest, or assignee.

- 🌐 If work will be done on high-performance computers, or related high-tech equipment, check and document the output to verify that it is within the approved scope cited in the NEP system.
- 🌐 If a material change in scope, end-use, or end-user occurs, have the information in NEP updated.
- 🌐 Monitor the work of foreign nationals to determine if their efforts have progressed past the point of fundamental research or publicly available information; are considered proprietary research; or have intellectual property rights.
- 🌐 Maintain all applicable export control documentation for five years as required by governing jurisdictions.

WHAT ARE THE PENALTIES FOR VIOLATIONS?

The penalties for the violation of export control laws and regulations can be severe. Both the company and the individual can be prosecuted.

ORNL can be fined up to 5 times the value of the export or \$1 million whichever is greater.

ORNL can be denied export privileges; laboratory staff would not be allowed to host foreign visitors, go on foreign travel, partner with foreign-owned companies, or correspond with foreign nationals.

ORNL could be denied the privilege of doing business with the U.S. Government which, in effect, would put the Laboratory out of business.

A specific individual can be fined up to \$1 million, face life imprisonment, or both.

ORNL staff are required to notify the appropriate government agency if an export control violation occurs. Failure to “self-disclose” changes any civil penalties to criminal penalties.

WHEN HOSTING A FOREIGN NATIONAL, ASK YOURSELF THESE QUESTIONS BEFORE, DURING, AND AFTER THE VISIT OR ASSIGNMENT.

- 🌐 Is this technology/data export controlled? (Contact the Export Control Department for help.)
- 🌐 Does this technology/data contain intellectual property or proprietary information?
- 🌐 Does this technology/data have a restricted and/or controlled end-use or end-user?
- 🌐 Does this technology/data meet the requirements for fundamental research or publicly available information?
- 🌐 Is this technology restricted by the sponsor?
- 🌐 Is any of the equipment on which the foreign national will be working or be viewing export controlled?
- 🌐 Have you been diligent in assuring that no controlled technology has been transferred to a foreign national?
- 🌐 Have you reviewed the output and product to ensure it is consistent with the scope and performance objectives?

NEED ASSISTANCE?



If you have any questions related to export control, please call the Oak Ridge National Laboratory’s Export Control Department. They are happy to answer your questions and help you determine whether you are transferring technology via a “deemed export.”

Export Compliance
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Rolf Migun

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574-7920

Officer
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Officer

Willy Besancenez

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WHAT OTHER REFERENCES ARE AVAILABLE?

Should you have further questions, the websites listed below are invaluable resources for detailed information on export control.

Export Control Web Page

<http://home.ornl.gov/divisions/contracts/contresp09a.html>

Procedure Export control ORNL-CR-008

<https://sbms.ornl.gov/sbms/SBMSearch/ORNLProc/cr008.htm>

Department of Commerce

http://w3.access.gpo.gov/bis/ear/ear_data.html

Department of State

http://www.pmdtc.org/docs/ITAR/22cfr121_Part_121.pdf

Nuclear Regulatory Commission

<http://www.nrc.gov/reading-rm/doc-collections/cfr/part110/full-text.html>

Department of Energy

http://www.llnl.gov/expcon/sensitive_subjects.html

Export Control Compliance Training for Hosts of Foreign Nationals

Acceptance of Responsibility Statement

I have reviewed the material in "Export Control Compliance Training for Hosts of Foreign Nationals." I fully understand and accept my responsibilities for export control as a host of foreign nationals.

Export Control Compliance Training for
Hosts of Foreign Nationals

Self-Study Training Module 92008

I have reviewed the material in "Export Control Compliance Training for Hosts of Foreign Nationals." I fully understand and accept my responsibilities for export control as a host of foreign nationals.

Date: _____

Name: _____

Badge: _____

Charge: _____

Bldg./MS/Phone: _____

Return this form to:

RTSSD,
Stephanie Burke
Bldg. 2661, MS-6425