

# GUIDELINES ON EXPORT CONTROL AND NONPROLIFERATION



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Guidelines on Export Control  
and  
Nonproliferation

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## GUIDELINES ON EXPORT CONTROL AND NONPROLIFERATION

### 1.0

#### Purpose

These guidelines are intended to help Department of Energy (DOE) and DOE contractor personnel to implement a responsible, security-conscious, and consistent policy regarding DOE transfers of unclassified equipment, materials, and technology that could adversely affect U.S. security or commitments against the proliferation of weapons of mass destruction (WMD). Such transfers can take many forms; some examples are:

- Export of equipment, materials, or technology, including technical information, data, “know-how,” or services, that convey expertise.
- Cooperative Research and Development Agreements (CRADAs); work-for-others; patent assignments; equipment loans; donations or sales of surplus property or transfers to other federal, state, other public agencies, or the private sector.
- International and domestic exchange programs.
- Publications.
- Presentations at conferences or other forums.
- Visits or assignments of foreign nationals to DOE facilities.
- Foreign travel by DOE or DOE contractor employees.

- Other means of communication such as telephone calls, faxes, e-mail, mailings, or making DOE technology available on the Internet or any local net available to foreign nationals.

Even the methods of transfer that take place within the United States -- for example, the visit of a foreign national who gains access to DOE technology or the sale of DOE equipment that conveys technology -- may involve what the Departments of Commerce and State consider a "deemed export." In such cases, DOE and DOE contractors should ascertain the need for an export license before the access is granted or the equipment is sold.

When unclassified equipment, materials, or technology related to a nuclear, nuclear-related, or other WMD technology is transferred without restriction, among the beneficiaries may be nuclear proliferant or potential adversary countries. DOE maintains a list of countries considered sensitive for proliferation, national security, or terrorism reasons.

Of special concern are transfers related to nuclear weapons design and production, special nuclear material (SNM) production, and the sensitive technologies of the nuclear fuel cycle. Particular caution should be exercised when transferring items especially designed or prepared for use in nuclear fuel cycle activities or in the nuclear weapons program

Uncontrolled transfer of weapons-related or sensitive technologies to countries of concern is contrary to U.S. commitments as a member of the Treaty on the Non-Proliferation of Nuclear

Weapons (NPT), the Nuclear Suppliers Group (NSG) and the NPT Exporters Committee (Zangger Committee), the Missile Technology Control Regime (MTCR), the Australia Group (AG) on chemical and biological weapons, and the Wassenaar Arrangement (WA) on control of dual-use and munitions goods and technologies. It would also run counter to U.S. nonproliferation policy and national security objectives as reflected in U.S. laws and regulations. DOE dismantlement of nuclear weapons, facilities, and related infrastructure makes the need for caution on transfers especially acute. Adherence to these guidelines will help to protect against the inadvertent transfer of sensitive unclassified equipment, materials, or information inimical to the interests of the United States.

## **2.0**

### **Policy**

By international treaties and agreements, statutes, and policy, DOE is committed to encouraging scientific and technical exchanges that are mutually beneficial and are consistent with U.S. national security and nuclear nonproliferation objectives. As a member of the NPT, the United States is obligated, like all other nuclear-weapon state members, not to help other countries acquire nuclear weapons technology but, at the same time, to facilitate the transfer of technologies applicable to peaceful uses of nuclear energy to NPT adherents. Similar obligations regarding WMD flow from U.S. membership in the NSG and Zangger Committee, the MTCR, AG, and WA. DOE policy and procedures on the transfer of equipment and materials and the dissemination of scientific and technical information must balance the Department's commitment to U.S. nonproliferation and national security objectives against its commitments to sharing

peaceful nuclear technology and to U.S. technological progress, scientific and energy objectives, and support for U.S. industry. These sometimes conflicting commitments may require restricting such transfers, but only after careful consideration.

When it is necessary to control access to a technology, the primary means remains the classification system, augmented by the Unclassified Controlled Nuclear Information (UCNI) controls defined in Section 148 of the Atomic Energy Act. But legal, operational, scientific, or historical considerations make it impractical, ill-advised, or even impossible to classify *all* technology significant to national security or nonproliferation objectives. The transfer abroad of such unclassified but still sensitive technology is controlled by U.S. Government export laws and regulations.

For transfers of nuclear, nuclear-related, and other WMD-related equipment, materials and technology, U.S. Government export controls enforce the requirements of the Atomic Energy Act, the Nuclear Non-Proliferation Act, the Export Administration Act, and the Arms Export Control Act. These statutes and their implementing regulations require licenses from the Department of Commerce, Nuclear Regulatory Commission, or Department of State (DOS) or an authorization from the Secretary of Energy before certain unclassified nuclear, nuclear-related and other WMD commodities and technical information can be exported.

U.S. Government export control regulations reflect the export control lists of the NSG, an international organization of major nuclear supplier countries dedicated to nuclear nonproliferation. These NSG lists may be found in International Atomic Energy Agency

Information Circular (INFCIRC) 254, as amended. The INFCIRC 254/Part 1 list comprises equipment and materials especially designed or prepared for nuclear application and is known as the NSG Trigger List because the items on it "trigger" the imposition of International Atomic Energy Agency safeguards. The INFCIRC 254/Part 2 list comprises items which have both nuclear and non-nuclear applications and is known as the NSG Dual-Use List.

Pursuant to section 57 b. of the Atomic Energy Act, as implemented by DOE regulations 10 CFR Part 810, the Secretary of Energy's authorization is required for U.S. persons engaging directly or indirectly in the production of special nuclear material outside the United States. DOE also reviews license applications submitted to the Department of Commerce (DOC), the Department of State (DOS), and the Nuclear Regulatory Commission (NRC) for other nuclear and nuclear-related exports. DOE-sponsored activities often require the export of equipment, materials, or technology subject to DOC, DOS, or NRC license; in such cases, the DOE program office or contractor involved must obtain the required export license. But even when a DOE export falls within the scope of 10 CFR Part 810, DOE should conduct an export control review of the technology to be provided. A private sector export of such technology would be subject to authorization by the Secretary of Energy; lack of an export control review for DOE-sponsored exports could defeat the intent of the NPT, U.S. laws and regulations, and U.S. international commitments.

These guidelines describe requirements and methods for DOE export control review. They are intended to:

- Help identify equipment, materials, and technology requiring review and possible licensing or restriction.

- Encourage a reasoned weighing of proliferation and national security concerns against program objectives, scientific and technological advance, or economic benefit when considering transfers of technology subject to export control.

### 3.0

#### Scope

These guidelines are applicable to all unclassified scientific and technical equipment, materials, and technology in the possession or control of DOE or its contractors which require an export license or authorization for transfer to another country. The U.S. Government export control regulations to be applied in accordance with these guidelines are:

- DOE's regulations 10 CFR Part 810, "Assistance to Foreign Atomic Energy Activities."
- Nuclear Regulatory Commission regulations 10 CFR Part 110, "Export and Import of Nuclear Materials and Facilities."
- Department of Commerce Export Administration Regulations (EAR) 15 CFR Part 730-774, especially 15 CFR Part 744, "Control Policy: End-User and End-Use Based," the discussion of Technical Data in 15 CFR 734, and 15 CFR 774 (Commerce Control List);
- Department of State regulations 22 CFR Parts 120-130, "International Traffic in Arms Regulations" (ITAR), especially Category 16.

The guidelines govern export control responsibilities not only at DOE sites but also for DOE-sponsored off-site activities, such as events at non-DOE locations or presentations or publications by DOE or DOE contractor personnel. However, they do not apply to requests for



technical information submitted pursuant to the Freedom of Information Act; nor do they apply to fundamental scientific and engineering research as defined in National Security Decision Directive (NSDD) 189.<sup>1</sup> Fundamental research, conducted to advance general knowledge, is normally not of export control concern. The results of such research are traditionally shared broadly throughout the international scientific community. However, in rapidly advancing research fields, fundamental research may develop practical applications that make it subject to export control. Further, fundamental research sometimes uses technologies or computational tools and techniques that may be sensitive and subject to export control. And in extraordinary circumstances fundamental research may be classified if it is particularly significant to national security. These guidelines do not affect procedures for dealing with the potential generation of classified information by fundamental research.

Another area in which export controls may not apply is U.S. Government negotiations with foreign governments or in international forums. When U.S. Government representatives engage in such discussions, under a License Exception granted by the Department of Commerce (Section 740.11 of the Export Administration Regulations), they may draw upon technical information that otherwise would require an export license for transmittal abroad. A good example would be transmittal of technical information deemed essential for U.S. engagement in arms control negotiations directed by the National Security Council. This License Exception applies, however, only when transmittal of the information results from an official interagency decision.

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<sup>1</sup> NSDD 189 defines fundamental research as “basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, as distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reasons.”

An individual agency acting on its own may not convey export controlled technical information to foreign government representatives without first obtaining an export license. But the same individual agency may convey export controlled technical information to foreign government representatives under the License Exception when empowered by a U.S. government decision that the agency shall do so.

Finally, according to the Department of Commerce Export Administration Regulations (15 CFR 779), in applying the Guidelines for export control purposes, DOE sites should treat foreign nationals who are lawfully admitted for permanent residence in the United States (Permanent Resident Aliens - PRA) as they do U.S. citizens; thus, transfer of technology to a PRA or giving a PRA access to DOE equipment or materials is not considered an export.

The areas of DOE export control concern embrace the full range of technologies pertinent to proliferation of weapons of mass destruction and to national security. For historical reasons, the main focus of DOE -- and these guidelines -- is on nuclear and nuclear-related technologies. These technology areas are described in the DOE Sensitive Subjects List and in much greater detail in DOE's Nuclear Technology Reference Book (NTRB), much of which is classified. But the range of technologies in which DOE is engaged goes far beyond the nuclear; it encompasses virtually all fields of weaponry, including missiles, conventional arms, and chemical and biological weapons, as well as many fields of peaceful research and development. Non-nuclear technologies are described in considerable detail in the Department of Defense's Militarily Critical Technologies List (MCTL). They also are included in the DOE Sensitive Subjects List. However, discussion of a technology in the NTRB, the MCTL, or the Sensitive Subjects List

does not mean that *all* commodities associated with the technology require an export license. In this respect they differ sharply from the export control lists of the NSG, the MTCR, the AG, and the WA; all equipment, materials and technology described in these lists are export controlled by the member countries. Therefore, U.S. export control regulations cover all items on these lists.

#### **4.0 Export Controls on Equipment, Materials, and Technology**

Qualified DOE or DOE contractor personnel considering the transfer of equipment, materials, or technologies must conduct an export control review prior to any such transfer. The transfer may not be an export, but the review is required for both foreign and domestic transfers (e.g., public auction, donation, direct sale, cooperative program, work-for-others, transfers to other agencies, off-site events, information exchange, public presentation, publication, foreign travel, shipment, mail, fax, e-mail, or webpage).

If the transfer involves an export by DOE or a DOE contractor to another country -- for example, a loan or other transfer of equipment as part of a program of cooperation -- DOE or a DOE contractor must obtain any necessary export license. But bear in mind that some exports can take place entirely within the United States. DOC and DOS consider domestic release of technology to a foreign national who is not a U.S. permanent resident a "deemed export" to that person's country. Therefore, a DOE laboratory may need to obtain an export license before letting a foreign national who is not a PRA purchase or otherwise have access to its equipment, materials, or technology. For example, an export license may be required for a non-PRA foreign national to buy at auction a surplus DOE computer whose export to the foreign national's country would

require an export license or for the foreign national to have access to the computer during an assignment at a DOE laboratory.

However, even if a transfer is to U.S. citizens entirely within the United States, DOE policy requires that an export control review be made. For example, a transfer of DOE equipment, materials, or technology via public auction or CRADA agreement, must include export control guidance in the sale contract or other transfer agreement; and the agreement must require that DOE's export control guidance be passed on in the event of retransfer, including any domestic retransfer. In some agreements, DOE approval should be required for retransfer. Whatever conditions are imposed on a transfer, the responsible DOE site must maintain records showing the conditions .

U.S. export controls on nuclear, nuclear-related, dual-use and military-related commodities are published in DOE's regulations 10 CFR Part 810; Nuclear Regulatory Commission regulations 10 CFR Part 110; Department of Commerce Export Administration Regulations (EAR) 15 CFR Part 730-774, especially 15 CFR Parts 734, 744, and 774 (Commerce Control List); and Department of State regulations 22 CFR Parts 120-130, especially Category 16.

DOE and DOE contractor personnel familiar with these export control regulations can generally determine the requirements for a given item without further assistance. Personnel not familiar with the regulations should first consult the NSG control lists cited earlier; if an item is on an NSG list, it is covered in U.S. Government export control regulations. In regard to nonnuclear items, personnel not familiar with export control regulations or seeking greater technical detail

should consult the Sensitive Subjects List, the MCTL or, if need be, the lists of the relevant multinational export control regime. Most important, DOE's Nuclear Transfer and Supplier Policy Division (NN-43) and almost all DOE sites have personnel who regularly deal in export control matters and can provide assistance as necessary.

## **5.0 Export Control of DOE Surplus**

DOE property transfers, of surplus property or otherwise, must take place in accordance with DOE Property Management Regulations 41 CFR 109. DOE property being transferred in surplus or other sales, loans, donations, CRADAs, work-for-others agreements, cooperative agreements, inter-agency transfers, or technical exchange programs that is determined to be subject to export control should be designated as such. The recipients should be informed in writing of their responsibility to obtain required export licenses or authorizations for retransfer to another country. Recipients also should be required to pass on DOE's export control guidance if they retransfer the property domestically.

### **5.1 Transfer of Surplus Property and "Deemed Exports"**

In some cases an export license may be needed for even a domestic transfer of surplus property to a foreign national. For example, the sale of DOE surplus equipment to a foreign national in the United States may constitute a "deemed export" because the foreign national thereby gains access to the technology inherent in the equipment. Therefore, before transferring title to export controlled DOE property to a foreign national, DOE or DOE contractor officials should ascertain

whether a “deemed export” may occur. If so, and if a DOC or DOS license would be needed to export the item to the foreign national’s country, DOE must obtain the license before the property changes hands. DOC or DOS export control authorities must be consulted and the discussion documented in such cases

Export control review of surplus property may determine that it should be rendered useless for nuclear purposes before being offered to the public or that the sales agreement should require its disposal as scrap. In some cases, the review may determine that the property is too sensitive for sale or other transfer and, therefore, that it must be destroyed by DOE. Surplus equipment or materials especially designed or prepared for nuclear use will be either sold for scrap after being made useless for nuclear purposes or will be destroyed; the same will be done for weapons components. To establish whether equipment or materials are especially designed or prepared for nuclear use, consult Part 1 of the NSG lists (INFCIRC 254). All items on the Part 1 list are especially designed or prepared and, therefore, carry a “presumption of destruction.” The same presumption applies to nuclear weapon components. But the presumption of destruction may be appealed and alternative disposition approved on a case-by-case basis. Such appeals must be made to the Assistant Secretary for Nonproliferation and National Security (NN-1). If the appeal is granted and alternative disposition is approved for NSG Trigger List items or weapons components, precautions must be taken to prevent any use inconsistent with U. S. Government nonproliferation or national security policy. This may require physically modifying equipment prior to transfer, placing conditions in the transfer agreement, or both.

Export Controlled Information (ECI) is a category of information DOE established more than a decade ago as a nonproliferation tool. ECI is defined as unclassified technical information whose export is subject to export control and whose unrestricted public dissemination could help proliferants or potential adversaries of the United States.

To understand why DOE established the ECI category, consider how a private firm treats its technology. The profit motive restrains the firm from making its technical information, technical data, technical expertise, and “know-how” publicly available. The profit motive does not restrain U.S. Government agencies, which are encouraged to freely disseminate information to the public, with appropriate safeguards. But public dissemination of technology is, in effect, to export it to all countries, and some DOE technology -- even unclassified technology -- could help proliferants or potential adversaries. Therefore, DOE requires an ECI review before public release of technology that could help proliferants or potential adversaries; and just as a U.S. Government agency may deny an export license for technology posing proliferation concerns, DOE may restrict dissemination of ECI. An ECI review must be conducted before publication of DOE technology that could help proliferants or potential adversaries or its presentation at a conference open to foreign nationals. Further, export licensing requirements must be met for any export of ECI, including “deemed export” transfer to foreign nationals at DOE sites; and anyone given access to ECI at a DOE site must comply with export licensing requirements before retransfer of the ECI to foreign nationals. Site managers are responsible for ensuring that required ECI reviews are performed.

The fact that technical information deals with items discussed in the NSG lists, the NTRB or MCTL is not by itself sufficient reason to withhold it from public release; rather, it is a reason to review the specific technical information involved to determine whether limiting release is warranted.

By checking the NSG lists or U.S. export control regulations, the reviewer can establish whether the technology, if proposed for export, would require a U.S. Government export license or authorization. If so, the reviewer can determine whether it should be released publicly by posing a series of questions:

- Could uncontrolled release reasonably be expected to contribute to nuclear proliferation? Could it help a proliferant significantly to improve its ability to develop nuclear weapons or gain know-how for producing or preparing nuclear weapons materials?
- Could uncontrolled release reasonably be expected to adversely affect U.S. national security? Could an adversary country gain significant technical advantage, negate a U.S. advantage, or find it significantly easier to develop advanced weapons or make other military progress?
- Is the technical information of such character that association with its source -- for example, a DOE weapons laboratory -- would implicitly enhance its value to a proliferant or adversary?

If the reviewer concludes that unlimited dissemination would adversely affect U.S. nonproliferation objectives or national security, the technical information should be designated



ECI, with appropriate markings, and its *uncontrolled* dissemination, especially uncontrolled *foreign* dissemination, should be prevented. However, designation as ECI does not prevent sharing of the information among DOE or DOE contractor employees. With appropriate precautions and obtaining an export license when required, ECI also can be transferred under work-for-others agreements, exchanges based upon agreements for international cooperation, exchanges under U.S.-approved programs of the International Atomic Energy Agency, or exchanges with countries posing no proliferation or national security concerns. As noted earlier, DOE maintains a list of countries considered sensitive for reasons of national security, nonproliferation, foreign policy, or support of terrorism.

Markings to be affixed to technical information determined to be ECI may vary depending on the needs and preferences of site or program managers.

The following format is preferred:

#### *EXPORT CONTROLLED INFORMATION*

*Contains technical information whose export is restricted by statute. Violations may result in administrative, civil, or criminal penalties. Limit dissemination to U.S. Department of Energy employees and contractors and other U.S. Government agencies. The cognizant program manager must approve other dissemination. This notice shall not be separated from the attached document.*

*Reviewer (Signature)*

*Date*

Sites that have developed their own ECI marking formats may retain them as long as they contain at least the information elements of the preferred format.

DOE scientists and engineers, technology security experts, export control specialists, facility shipping offices, classification officers, property management personnel, and legal departments all may have roles to play in the export control review process. Technical input by individuals familiar with the equipment, materials, or technology involved may be essential to identifying potentially sensitive commodities or technologies or to determining applicable export controls. Such technical experts may also know best how, for example, to render proliferation-sensitive equipment useless to a nuclear proliferant but still useful for nonnuclear purposes or as scrap. At some sites, the certification that an ECI review has been made may best be accomplished simultaneously with declassification review. Classification offices should have copies of the NTRB, the MCTL, and the pertinent export control regulations.

If technology is determined to be ECI, it should be released domestically only to a controlled distribution, such as a U.S. firm that is party to a CRADA or a technical exchange agreement, or a U.S. purchaser of surplus property. Bear in mind that a U.S. firm dealing with DOE in a CRADA, work-for-others arrangement or other contractual agreement may be foreign-owned; in such cases, the U.S. firm may need to obtain an export license before transferring DOE technical information, equipment, or material to its foreign parent.

ECI should be protected as far as legally allowable from release to foreign countries, organizations, or individuals unless authorized by the appropriate Headquarters program manager. Such protection should be especially afforded -- again, as far as legally allowable -- to

ECI sought by nationals of countries on DOE's Sensitive Country List. ECI documents should *not* be made available on the Internet or a local net available to foreign nationals. If technical information is controlled by DOE under its Part 810 regulations, then a DOE program manager may direct its release to foreign recipients as part of a DOE program. If the program manager is acting pursuant to a technical cooperation agreement; the agreement itself should have been approved by the Assistant Secretary for Nonproliferation and National Security. If the agreement was not approved and the information is ECI, the Nuclear Transfer and Supplier Policy Division should be consulted before the ECI is transferred.

For foreign nationals at DOE facilities to be given access to ECI, a DOC or DOS license, granting approval of the "deemed export," must be obtained; likewise DOE or DOE contractor employees traveling abroad should not disseminate ECI without an Individual Validated License granted by the appropriate licensing authority. However, under current law, a report sought under the Freedom of Information Act may not be withheld on grounds that the report contains ECI.

### 6.3

#### **ECI and OSTI**

ECI review should be initiated early enough to avoid conflicts with planned publication, presentation, distribution, or visit schedules, and should be consistent with guidelines implementing DOE Order 241.1 of August 17, 1998, that require contractors or Operations or Program Offices to forward reports to the Office of Scientific and Technical Information (OSTI), Oak Ridge, Tennessee, with a completed DOE Form 241.1, Announcement of Department of

Energy (DOE) Scientific and Technical Information (STI). The form sent to OSTI records the outcome of the ECI review, including dissemination guidance. When no dissemination guidance is given, OSTI will provide the report on request only to DOE and its major U.S. contractors or to other U.S. Government agencies unless the responsible program manager advises otherwise.

#### **6.4 ECI Responsibilities**

The author of a technical document should be consulted in the ECI review of the document. DOE and DOE contractor personnel reviewing their own documents for ECI should inform their supervisors of their findings. Supervisors should ascertain that the reviewers are technically qualified and have an understanding of the factors involved in technology transfer. Supervisors also should document that ECI issues have been considered as part of the clearance process for a publication, meeting presentation, response to a foreign request for technical information, or security plan for controlling access by a foreign national. The overall ECI review process at each site should be approved by the site manager.

A reviewer who determines that information constitutes ECI will indicate the permissible domestic dissemination. For example, a reviewer may authorize dissemination only to DOE and its major contractors or to all Federal agencies and their U.S. contractors. The reviewer may attach to the document a list of authorized recipients or a "non-dissemination" list of sensitive countries. In any case, ECI dissemination guidance is intended to prevent the domestic release of technology by OSTI or any other DOE entity to unauthorized foreign governments, firms, and individuals unless it is reviewed and approved for release by the Headquarters Program Office.

A Headquarters Program Office authorizing release to an otherwise unauthorized recipient must notify the reviewing office and OSTI of the action. A Headquarters Program Office intending to export ECI must take care that any required export license is obtained.

#### **6.5 Recordkeeping on ECI**

ECI documentation will be maintained at reviewing offices and be available to Headquarters program managers and to the Nuclear Transfer and Supplier Policy Division, NN-43. The documentation should include foreign requests for material determined to be ECI, the disposition of the request, and the reason therefor. Headquarters program managers should monitor review activities periodically to assure uniformity and consistency with DOE policy as reflected in these guidelines.

#### **6.6 Restrictions on Release of ECI**

An ECI review finding that a proposed release is inconsistent with nonproliferation or national security policy may require revision of either the content or dissemination of the technical information. Just as DOE sometimes denies a firm's request for authorization to export technology or sets conditions on the authorization, DOE may, in the case of publication of ECI or its presentation at an international meeting, determine that U.S. policy requires that some technical content be excised or that participation by nationals of sensitive countries in the meeting be restricted. In the latter case, meeting participants must sign a commitment not to transmit the ECI to sensitive country nationals and to advise other recipients of the ECI

restrictions. Abstracts or proceedings associated with such verbal presentations also must be reviewed.

## **6.7 Visits and Assignments, Foreign Travel, and “Deemed Exports”**

In the case of a visit or assignment of a foreign national to a DOE facility, measures should be taken to control access to export controlled equipment, materials or technology, and necessary export licenses must be obtained. Bear in mind that acquisition of DOE technology by the foreign national may be a “deemed export” requiring an export license before the foreign national is given access. Similarly, a DOE or DOE contractor employee going abroad should consider whether technology to be conveyed in planned discussions requires an export license; if so, an export license should be obtained before the trip.

Hosts of foreign visitors or assignees should familiarize themselves with the requirements of pertinent DOE Orders and the DOE-wide computerized Foreign Access Records Management System (FARMS). In planning visits and assignments, hosts should consult DOE’s Sensitive Country List and the Sensitive Subjects List, as well as lists of sensitive subjects developed at some of the national laboratories; these latter are narrower in scope than the Department-wide list but may offer more specificity on the subjects that are likely to be encountered at a particular site.

In an era of increasing collaboration between U.S. and foreign scientists, engineers, and other technical personnel at DOE facilities, transfers of technology during such collaboration must adhere to U.S. export control laws and regulations. Export control requirements must be considered in determining the appropriateness of foreign national access to DOE technology

Foreign nationals from sensitive countries may need a license to acquire many technologies and all foreign nationals may need a license to acquire certain technologies.<sup>2</sup>

Similarly, DOE travelers should familiarize themselves with the pertinent DOE Orders and the requirements of the computerized Foreign Travel Management System.

## **7.0 Establishing Export Control Review**

Most DOE facilities, laboratories, and other sites already have developed structures to deal with export control review, technology security, ECI, declassification, and related issues. Requiring a rigid one-size-fits-all scheme is not practical, but site management is responsible for modifying site organization as necessary to ensure that the increased export control review responsibilities called for by these Guidelines are fulfilled, as well as the needs of each site. DOE believes this approach will lead to the most effective export control review program at each site.

When no export control review mechanisms exist, it is the responsibility of Headquarters offices, field offices, program managers, and contractor organizations to establish them as necessary. If differences emerge regarding facility guidelines or their application, or if review bodies in contractor organizations or field offices are unable to make a clear determination regarding a planned publication, presentation, sale of surplus property, donation, CRADA or other transfer, they should refer the matter to the responsible Headquarters program office. If necessary, the

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<sup>2</sup> This guidance is not intended to preclude access by DOE or contractor employees who are foreign nationals from sensitive countries if they are permanent resident aliens under the Immigration and Naturalization Act.

Headquarters program office should seek the advice of the Nuclear Transfer and Supplier Policy Division, Office of Arms Control and Nonproliferation, Telephone (202) 586-2331, Fax (202) 586-1348.

## **8.0 Developing Program or Facility Guidelines**

As experience is gained, program managers, laboratories, and other contractor facilities may decide they need more detailed "program guidelines" or "facility guidelines" for their specialized areas of activity. Such guidelines may be prepared by program managers and other experts familiar with the technologies involved. However, to ensure consistency among locally prepared and applied guidelines, these should be reviewed by the appropriate Headquarters Program Office in coordination with the Nuclear Transfer and Supplier Policy Division.



## APPENDIX 1

### Useful Web Sites for Export Control

- Department of Commerce Export Administration Regulations -  
<http://www.access.gpo.gov/nara/cfr/cfr-table.serch.html>
- Department of Energy Regulations 10 CFR Part 810 -  
[http://www.access.gpo.gov/nara/cfr/waisidx/10cfr810\\_99.html](http://www.access.gpo.gov/nara/cfr/waisidx/10cfr810_99.html)
- Department of State International Traffic in Arms Regulations – 22 CFR 120-130 -  
<http://www.pmdtc.org/itar2.htm>
- Militarily Critical Technologies List -  
<http://www.dtic.mil/mctl>
- Missile Technology Control Regime Guidelines -  
<http://www.acda.gov/export.htm>
- Nuclear Regulatory Commission 10 CFR 110 -  
<http://www.nrc.gov/NRC/CFR/index.html>
- Nuclear Suppliers Group Guidelines – INFCIRC 254 Parts I and II -  
<http://www.iaea.org/worldatom/infcircs/inf201-300.html>
- Nonproliferation Treaty Exporters Committee (Zangger) INFCIRC 209 -  
<http://www.iaea.org/worldatom/infcircs/inf201-300.html>
- Wassenaar Arrangement Control Lists -  
<http://www.wassenaar.org>

## APPENDIX 2

## Glossary of Acronyms

AG	-	Australia Group
CRADA	-	Cooperative Research and Development Agreement
CRD	-	Confidential Restricted Data
DE	-	Directed Energy
EAR	-	Department of Commerce's Export Administration Regulations
ECI	-	Export Controlled Information
ICF	-	Inertial Confinement Fusion
INFCIRC	-	Information Circular of the International Atomic Energy Agency
ITAR	-	Department of State's International Traffic in Arms Regulations
MCTL	-	Department of Defense's Militarily Critical Technologies List
MTCR	-	Missile Technology Control Regime
NPT	-	Treaty on the Non-Proliferation of Nuclear Weapons
NSG	-	Nuclear Suppliers Group
NTRB	-	Nuclear Technology Reference Book
OSTI	-	Office of Scientific and Technical Information
PRA	-	Permanent Resident Alien
R&D	-	Research and Development
SNM	-	Special Nuclear Material
SRD	-	Secret Restricted Data
UCNI	-	Unclassified Controlled Nuclear Information
WA	-	Wassenaar Arrangement
WMD	-	Weapons of Mass Destruction