Export Control Regulatory Updates you Need to Know

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Agenda

• State & Commerce definition updates
  o Final Fundamental Research (EAR) & new limits
  o Proposed FRE, Defense Services (ITAR)

• IT Security Compliance Requirements
  – DFARS 252.204-7012,
  – NIST SP 800-171 and NIST SP 800-53

• Treasury Sanctions
  – Cuba
  – Iran

• Identification Techniques
Fundamental research is determined by “publishability” and not by basic or applied nature of research itself.

Contractual controls indicate that research is not “fundamental” if there are clauses that:

- Specify export control requirements
- Restrict access by foreign persons
- Restrict publication or dissemination

‘Fundamental Research’ means 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. . . the results of which ordinarily are restricted for proprietary or national security reasons.”
Definitions of Fundamental Research

• 15 CFR §734.8, EAR – “Technology” or “software” that arises during, or results from fundamental research and intended to be published is not subject to EAR

• 22 CFR §120.11(a)(8), ITAR – Fundamental Research included within Public Domain definition
  – Institutions of higher learning only - not as flexible as EAR
  – 2015 Proposed Rule of new §120.49 can be a problem for universities
EAR Fundamental Research Definition

• “Research in science, engineering, or mathematics, the results of which ordinarily are published and shared broadly within the research community, and for which the researchers have not accepted restrictions for proprietary or national security reasons.” (15 CFR §734.8(c))

• Prepublication review okay if:
  — There is a temporary delay in publication to ensure patent rights not compromised
  — Sponsor reviews for inadvertent release of furnished proprietary information
  — If related to a Federally Funded Research and Development Center (FFRDC) to control release of info
Analysis EAR Definition Changes

- The words “basic” and “applied” removed – “mathematics” added
  - Incorporates 2004 OIG “publishability” standard as opposed to “basic” and “applied”
- New definition includes technology and software
- Clarifies when conduct of fundamental research using technology and/or software is subject to export controls
• **Note 1(a):** Clarifies that technology or software released to *conduct* fundamental research may still be subject to the EAR.

• **Note 2(a):** States that where a company, researcher or institution decides to restrict or not publish technology or software contained in results (*outputs*) are subject to the EAR.

♫ This may occur *during* research *conduct* *(e.g. an “ah-ha moment”)*.
Current ITAR Definition

§120.11(a)(8) - “…..Fundamental Research is defined to mean basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community, as distinguished from research the results of which are restricted for proprietary reasons or specific U.S. Government access and dissemination controls. University research will not be considered fundamental research if:

i. The University or its researchers accept other restrictions on publication of scientific and technical information resulting from the project or activity, or

ii. The research is funded by the U.S. Government and specific access and dissemination controls protecting information resulting from the research are applicable.”
Proposed ITAR Definition

• §120.49 (a) - Technical data that arises during, or results from, fundamental research and is intended to be published is not technical data when:
  ✓ Conducted in the U.S. at institution of higher learning; or,
  ✓ Funded, in whole or in part by the U.S. government.

• §120.49 (b) Research sponsor proprietary information review would nullify the FRE.
§120.49 (c) “Basic or applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community. This is 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.”

1) **Basic research** means experimental or theoretical work to acquire new knowledge and not directed to a specific aim or objective.

2) **Applied research** (i) normally follows basic research but may not be severable from the related basic research; (ii) attempts to determine the potential of scientific discoveries or improvements in technology, materials, processes, devices, or techniques; and (iii) attempts to advance the state of the art.
The Fundamental Research Exclusion

It’s Not A Blank Check
Limits to the FRE

If subject to export controls or other prohibitions:

- Exports (shipping) of Certain Hardware, Software, Technology
- Financial Dealings with Prohibited Parties or Entities
- Export Controlled activities – “technical assistance”
- Other Transactions Involving Sanctioned Countries or Prohibited Parties

Fundamental Research does NOT cover --
FRE Not Applicable *If*:

- Sponsor approval required prior to publication
- Publication of the results of the project restricted
- Other access and dissemination restrictions are in the agreement, such as:
  - DFARS 252.204.7000
    - Get in writing research is “Fundamental Research”
  - DFARS 252.204.7008/7012
  - No foreign persons allowed
Proposed Defense Services Definition

1. Furnishing or assisting to a foreign person whether in US or abroad in production, assembly, testing, [maintenance] modification, demilitarization, destruction or processing of a defense article...by a U.S. person to a foreign person who has knowledge of U.S. origin technical data...related to the defense article.

2. Development and/or integration

3. Assistance without the use of technical data

4. Participating in combat operations

5. Furnishing assistance to 126.1 country in any form
(a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information, regardless of medium unless:

1) The Contracting Officer has given prior written approval;

2) The information is otherwise in the public domain before the date of release; or

3) The information results from or arises during the performance of a project that has been scoped and negotiated by the contracting activity with the contractor and research performer and determined in writing by the contracting officer to be fundamental research in accordance with NSDD-189.
Safeguarding covered Defense Information and Cyber Incident Reporting

(i) ... the covered contractor information system shall be subject to the security requirements in (NIST) (SP) 800-171, “Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations”... in effect at the time the solicitation is issued or as authorized by the Contracting Officer.

(ii)(A) The Contractor shall implement NIST SP 800-171, as soon as practical, but not later than December 31, 2017. For all contracts awarded prior to October 1, 2017, the Contractor shall notify the DoD Chief Information Officer (CIO), via email at osd.dibcsia@mail.mil, within 30 days of contract award, of any security requirements specified by NIST SP 800-171 not implemented at the time of contract award.

(B) The Contractor shall submit requests to vary from NIST SP 800-171 in writing to the Contracting Officer, for consideration by the DoD CIO.
What is CUI?

• Controlled Unclassified Information (CUI) is information the Government creates or possesses, or that an entity creates or possesses for or on behalf of the Government, that a law, regulation, or Government-wide policy requires or permits an agency to handle using safeguarding or dissemination controls (NARA, 32 CFR 2002)
CUI Categories

- Agriculture
- Controlled Technical Information
- Critical Infrastructure
- Emergency Management
- Export Control
- Financial
- Geodetic Product Information
- Immigration
- Information Systems Vulnerability Information
- Intelligence
- International Agreements
- Law Enforcement
- Legal
- North Atlantic Treaty Organization (NATO)
- Nuclear
- Patent
- Privacy
- Procurement and Acquisition
- Proprietary Business Information
- SAFETY Act Information
- Statistical
- Tax
- Transportation
Types of CUI Security Requirements

- **Basic Controls** (30 Controls) (basic security from FIPS 200)
  - Controls are required, but the agency provides no specific control guidance.
  - No specific handling or dissemination controls

- **Specified Controls** (110 Controls) (derived from 800-53)
  - Agencies require specific control to protect the information
  - Specific safeguard, handling and dissemination controls
  - May be more stringent or simply differ from those required by CUI Basic.
Contract Controls Invoking NIST and CUI

- **1852.204-76** (Basic Safeguarding NASA IT)
- **DFAR 252.204-7000** (Dissemination of Info.)
- **DFAR 252.204-7012** (Safeguarding CDI/CUI)
- **NIST SP 800-171** issued (contractor IT systems)
- **DFARS 252.239-7009** (Rep. of Cloud Computing)
- **FAR 52.204-21** (FAR Basic Safeguarding of CDI)
- **DFARS 252.204-7008** (Compliance w/ CDI/CUI)
- **32 CFR 2002** (NARA CUI NIST Rule)
- **FAR 52.XXX-XX**

IT Systems required to be compliant for DoD December 31, 2017

NIST will be a requirement in many federal funded contracts!
Trade Sanctions
Trade Sanctions-Iran

**General Rule:** U.S. Regulations require U.S. Government approval in the form of an export control license or general license from the Office of Foreign Assets Control (OFAC) prior to the sale or supply of *goods*, *technology*, or *services* to Iran.

**“General License G”**: General License G” permits certain Iranian educational activities without having to seek further approval from OFAC.
Examples of educational activities that are permitted under “General License G”:

• Student academic exchanges.

• Filing and processing applications.

• Acceptance of payments for submitted applications and tuition.

• Employing Iranian persons in a teaching capacity within the U. S.

• Student’s in Iran participating in undergraduate level online courses provided by U.S. academic institutions in the humanities, social sciences, law, or business.

• The export to Iran of educational information (e.g. published papers, or electronic data).

• U.S. persons who are enrolled in U.S. academic institutions are authorized to participate in educational courses or engage in noncommercial academic research at Iranian universities at the undergraduate level.

• U.S. persons who are enrolled in U.S. academic institutions are authorized to participate in educational courses at the graduate level or engage in noncommercial academic research at Iranian universities in the humanities, social sciences, law, or business at levels above the undergraduate level.

• U.S. persons are authorized to administer professional certificate examinations and university entrance examinations, and to provide those services that are necessary for admission to U.S. academic institutions, to individuals who are located in Iran.
Trade Sanctions-Cuba

• **General Rule:** Pursuant to OFAC, “most transactions between the U. S., or persons subject to U.S. jurisdiction, and Cuba continue to be prohibited, and OFAC continues to enforce the prohibitions of the Cuban Asset Control Regulations.”

• **Exceptions:** OFAC has issued general licenses within 12 categories of authorized travel for many travel-related transactions to, from, or within Cuba, including, but not limited to, journalistic activity, professional research and professional meetings, educational activities, workshops, exportation, importation, or transmission of information or information materials.

• **Key:** The educational activities must be under the auspices of a U.S. Institution and most activities require a letter from the U.S. Institution (See 31 CFR 515.565).
Trade Sanctions-Cuba

Examples of educational activities that are exempt from the CACRs or permitted under the general licenses

• The transfer of information to a Cuban national (does not include items controlled by the EAR).
• Importing of research samples.
• Professional research in Cuba or attending professional meetings or conferences in Cuba.
• Participation in structured educational programs in Cuba as part of a course offered at the U.S. institution (program must be at least 10 weeks).
• Noncommercial academic research in Cuba specifically related to Cuba and for the purpose of obtaining a degree.
• Participation in a formal course of study at a Cuban academic institution (course must be at least 10 weeks and must be accepted for credit toward the student's degree at the U.S. institution).
• Teaching at a Cuban academic institution (duration of the teaching must be at least 10 weeks).
• Sponsorship of a Cuban scholar at a U.S. institution.
• Sponsorship of non-commercial academic seminars, conferences, symposia, and workshops related to Cuba or global issues involving Cuba.
• Academic exchanges and joint non-commercial academic research projects with academic institutions in Cuba.
• Providing standardized testing services to Cuban nationals, wherever located.
• Offering Internet-based courses, to Cuban nationals, wherever located, provided that the course content is at the undergraduate level or below.
Assessing for Export Controls
Assessing Input, Conduct and Output

- Tool for identifying and assessing red-flags
- Breaks a research program into four areas and examines each separately for “red-flags”
- Red-flags require additional inquiry
- **Input:** Technology, software & hardware required for performance.
- **Conduct:** Performance (e.g. operating a research instrument).
- **Output:** Results are separate and distinguishable from conduct.
Examples of “Inputs”

• Proprietary information:
  ✓ Non-public domain technology/software
  ✓ Proprietary processes, techniques
  ✓ Trade secrets
  ✓ Things intentionally left out of a patent
  ✓ Industry provided technical data/technology
Assessing Inputs

**EAR**
- Receiving
  - non-public domain technology or software?
  - proprietary information/techniques, methods, know-how, etc.
  - NDA, CDA, PIA, MTA

**ITAR**
- Receiving
  - Military technical data?
  - Controlled Unclassified Information (CUI),
  - Controlled Defense Information (CDI),
  - DD-2345, Military Critical Technical Data Agreement?
  - Is a DD-254?
Examples of “Conduct”

- Physically operating research equipment or instruments
- Instruction, technical assistance
- Accessing facilities, systems, equipment and software
- Often subject to a contractual controls:
  - Access, pre-publication dissemination, publication or foreign person participation restrictions
  - National security controls
Assessing Conduct

**Contractual Conditions**

- Access (IT systems, facilities, equipment, software)
- Dissemination / Distribution limitations
- Pre-publication approval
- Foreign national participation
Examples of “Outputs”

• Research Results
• Data left on instruments
• Closed conference presentations
• Invention disclosures
• Patent applications
• Test schedule information/milestones
• Capabilities or limitations of technologies under test and evaluation
• Shortcomings revealed in experimentation
• Characterization data
• New and unusual test and evaluation techniques
• Inability of selected components or systems to operate properly
• Lab journals
• Reports, posters, presentations
Assessing Outputs

**EAR**
- Are results proprietary?
- Do the results generate an EAR-controlled item?
- Reports?

**ITAR**
- Fabrication of a defense article?
- Distribution limited reports?

**International Shipping**
- Physical shipments outside the U.S.
1. Is there anything about the activity that is not public or cannot be made public?
   - Inputs provided by the sponsor
   - Research conduct and contract controls
   - Output resulting from the activity

2. Is whatever it is that is not public on a control list?
   - Commerce Control List (CCL) – EAR
   - U.S. Munitions List (USML) – ITAR
   - Dept of Energy (DoE) / Nuclear Regulatory Commission (NRC)

3. Technologies on the control lists are “off limits” to foreign persons
## Input, Conduct, Output Worksheet

<table>
<thead>
<tr>
<th>Input</th>
<th>ICO Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Conduct</td>
</tr>
<tr>
<td>Output</td>
<td>Fundamentally research / specially designed defense service / developmental</td>
</tr>
</tbody>
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Questions?
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