Controlled Unclassified Information

Implementation and Features

Shared • Standardized • Transparent

Information Security Oversight Office (ISOO)

Outline

- Why protect CUI?
- Impacts to National Security
- Existing Agency Policy and Procedure
- Protection Today
- An Information Security Reform
  - Protection defined
  - What we protect (CUI Registry)
  - How we protect (32 CFR 2002)
  - NIST SP 800-171
  - Federal Acquisition Regulation
  - Oversight Approach
  - Phased Implementation
- Features

Why protect CUI?

- The loss or improper safeguarding of CUI could be expected to have a serious adverse effect on organizational operations, organizational assets, or individuals.
  - significant degradation in mission capability to an extent and duration that the organization is able to perform its primary functions, but the effectiveness of the functions is significantly reduced;
  - significant damage to organizational assets;
  - significant financial loss; or
  - significant harm to individuals that does not involve loss of life or serious life threatening injuries

- The loss or improper safeguarding of CUI has a direct impact on national security

Impacts to National Security

- The OPM Data breach is a significant CUI incident
  - Personnel files of 4.2 million former and current government employees.
  - Security clearance background investigation information on 21.5 million individuals.

OPM failed to implement a longstanding requirement to use multi-factor authentication for network access.

"The intelligence and counterintelligence value of the stolen background investigation information for a foreign nation cannot be overstated, nor will it ever be fully known."

– *The OPM Data Breach: How the Government Jeopardized Our National Security for More than a Generation* September 7, 2016.

Government expense (to notify and protect those impacted) = $350 Million

How did we get here?

- **Laws, Regulations, and Government-wide policies (LRGWP) identified what to protect but failed to say how.**

- Agencies took steps to **define protection** through the issuance of policy and procedure
  - Physical
  - Electronic
  - Dissemination (sharing)
  - Destruction

- **Lack of oversight over sensitive information programs**

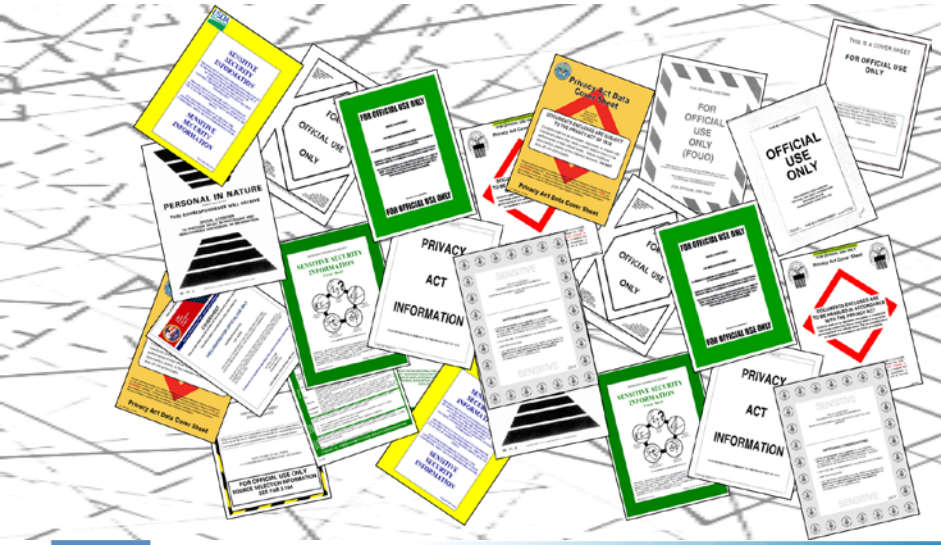
Agency Policy and Procedure created:

- **Inefficient patchwork system** with more than 100 different policies and markings across the executive branch
- **Inconsistent** marking and safeguarding of documents
- **Unnecessarily restrictive** dissemination policies
- **Impediments** to authorized information sharing

Protection today

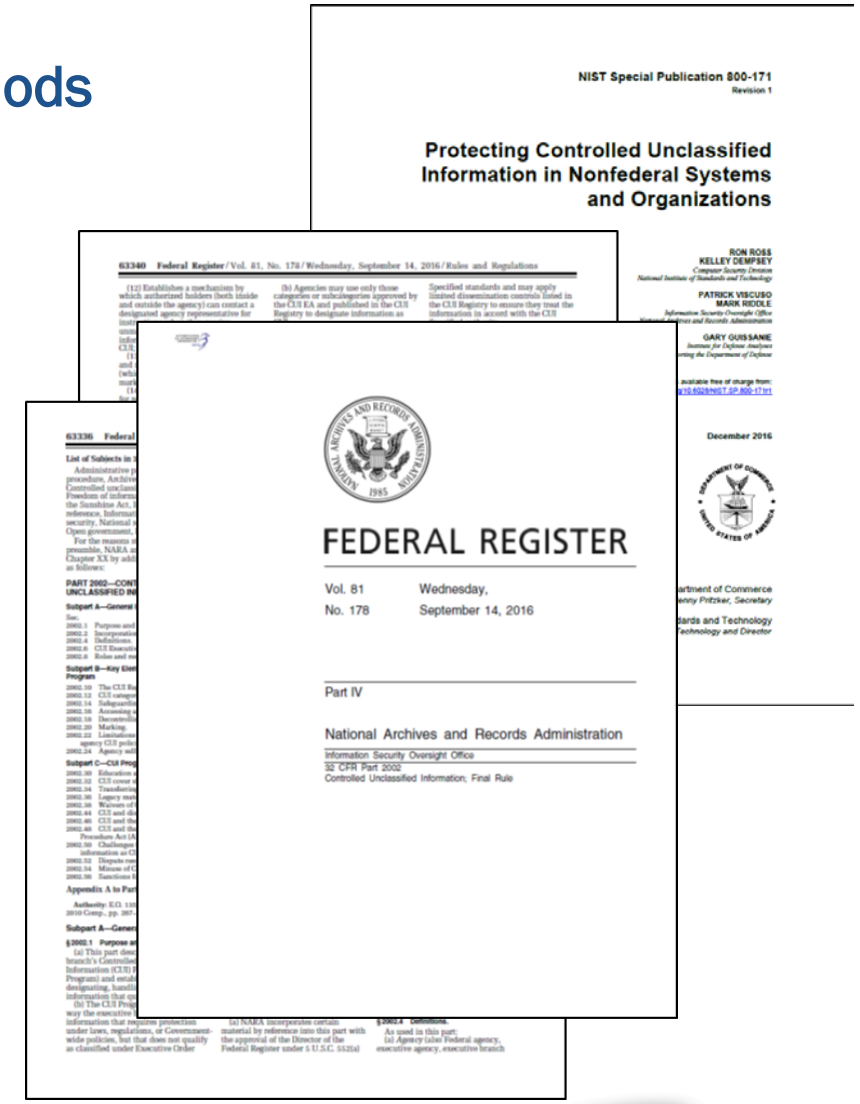
Information Security Reform

- Clarifies and limits what to protect
- Defines safeguarding
- Promotes authorized information sharing
- Reinforces existing legislation and regulations



Protection is defined under the CUI Program

The “best” (or most agreed upon) methods



CUI Registry = What we protect

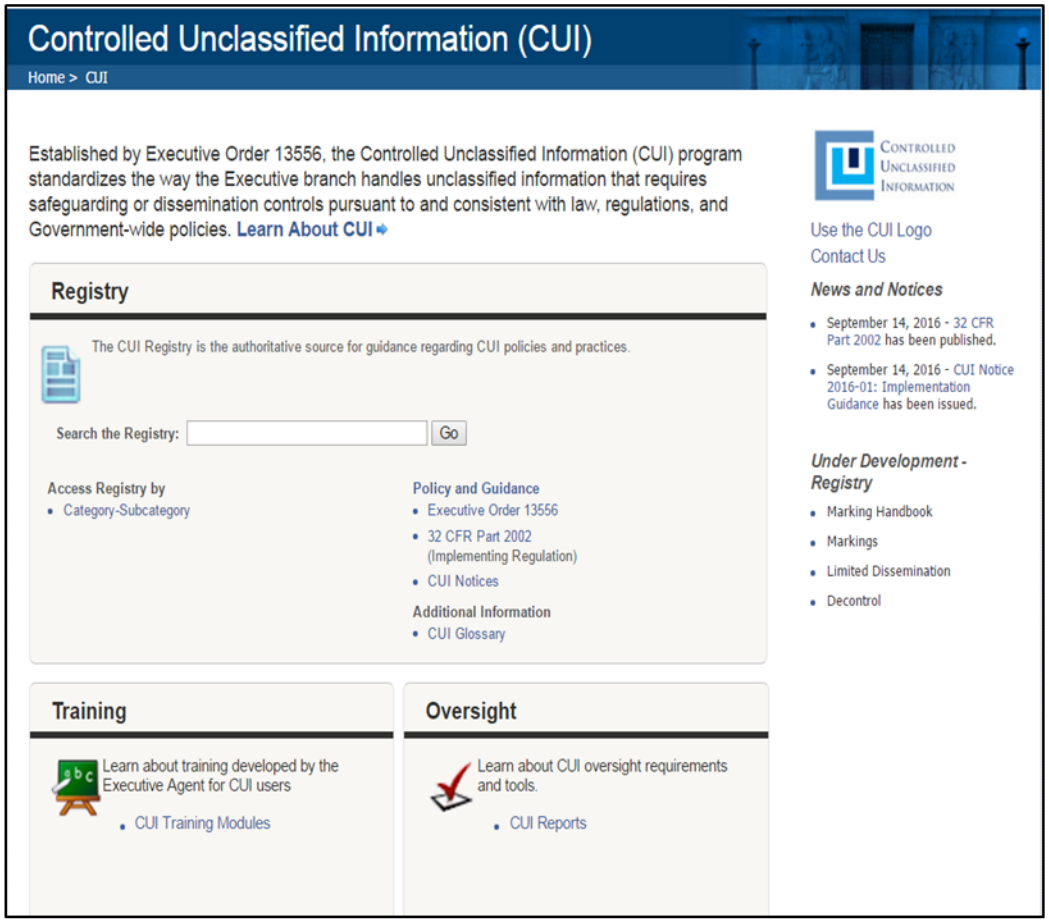
The CUI Registry is the repository for all information, guidance, policy, and requirements on handling CUI.

The CUI Registry is a catalogue of what the Executive branch should be protecting.

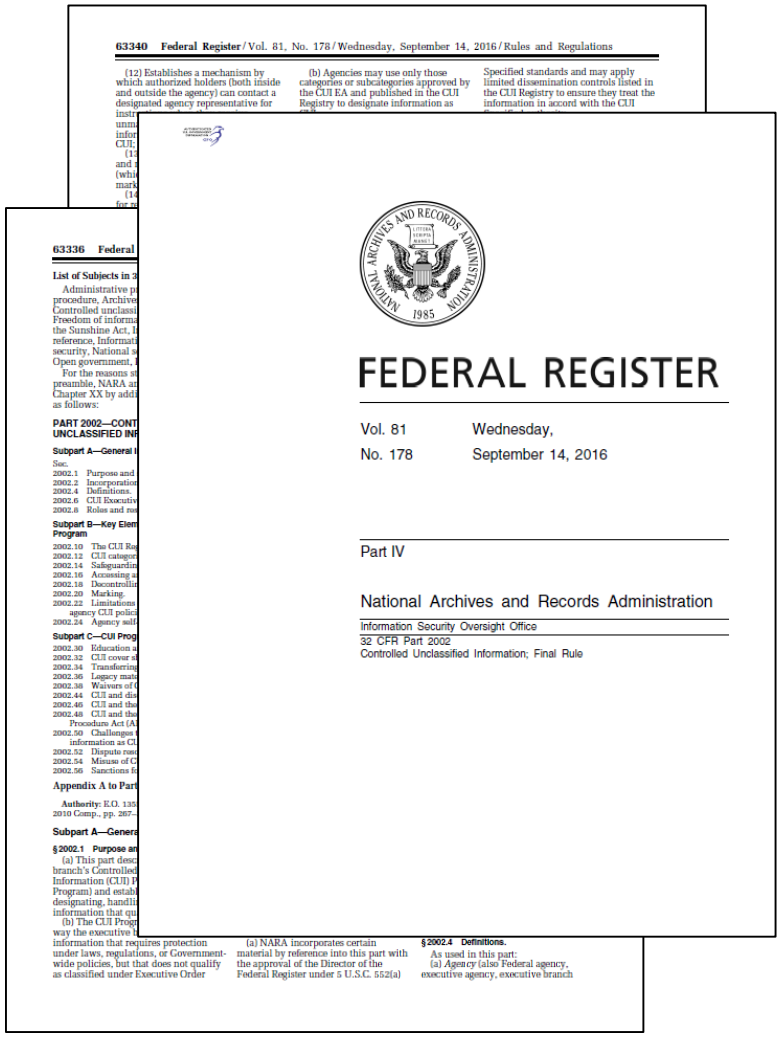
The CUI Registry identifies all approved CUI categories and subcategories, provides general descriptions for each, identifies the basis for controls, establishes markings, and includes guidance on handling procedures.

- Categories and Subcategories
- Limited Dissemination Controls
- Marking Guidance
- CUI Notices
- Training and awareness
- Annual Reports to the President

www.archives.gov/cui



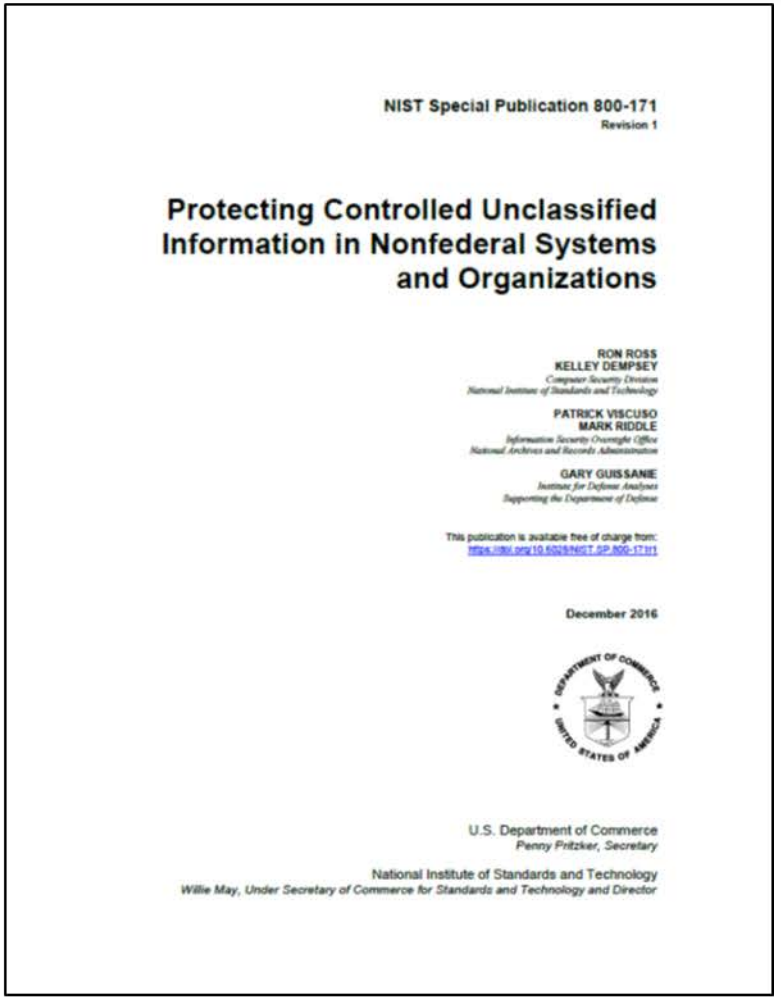
32 CFR 2002 = How we protect



- Effective: November 14, 2016
- Started implementation efforts within the Executive branch
- Establishes a protection baseline
  - Designation
  - Physical and Electronic Environments
  - Marking
  - Sharing
  - Destruction
  - Decontrol
- Emphasizes unique protections described in law, regulation, and/or Government-wide policies (authorities)

NIST Special Publication 800-171 (Revision 1)

- Agencies must use NIST SP 800-171 when establishing security requirements to protect CUI's confidentiality on non-Federal information systems.
- The NIST 800-171 is intended for use by federal agencies in appropriate contractual vehicles or other agreements established between those agencies and nonfederal organizations.
- Establishes requirements for protecting CUI at the **Moderate Confidentiality Impact Value**.
- Non-tailorable requirements
- Allows for Flexibility in how to meet requirements



NIST Special Publication 800-171
Revision 1

Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations

RON ROSS
KELLEY DEMPSEY
Computer Security Division
National Institute of Standards and Technology

PATRICK VISCUSO
MARK RIDDLE
Information Security Oversight Office
National Archives and Records Administration

GARY GUISSANE
Institute for Defense Analyses
Supporting the Department of Defense

This publication is available free of charge from:
https://doi.org/10.6028/NIST.SP.800-171r1

December 2016

U.S. Department of Commerce
Penny Pritzker, Secretary

National Institute of Standards and Technology
Willie May, Under Secretary of Commerce for Standards and Technology and Director

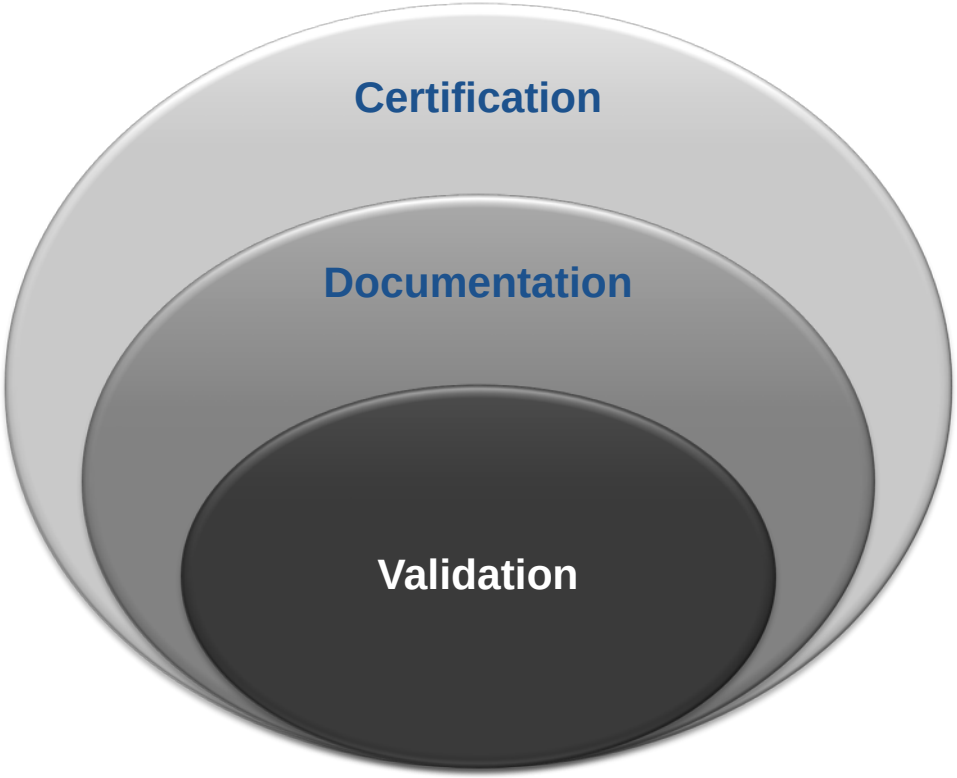
Federal Acquisition Regulation (FY18)

Will standardize the way the Executive branch conveys safeguarding guidance

Oversight Approach

- Based on CUI, quantity, mission/purpose, and existing practices
- Evaluation and assessment based on CUI Program standards

SAM
SYSTEM FOR AWARD MANAGEMENT



Phased Implementation

- Within the Executive branch and within Agencies

- **CUI practices and Legacy practices will exist at the same time.**
  - Legacy practices will be phased out as agencies implement

- Implementation includes:
  - Program Management
  - Policy
  - Training
  - Physical Safeguarding
  - Incidents
  - Systems
  - Self Inspection
  - **Contracts and agreements (likely to be last phase of implementation)**

Executive Branch Implementation = 3-5 years

Features

- Basic and Specified CUI
- Limitations on Applicability
- Safeguarding
  - Controlled Environments (physical)
  - Controlled Environments (electronic)
- Moderate baseline
- Marking (Banner & Limited Dissemination Controls)
  - Bulk or Alternative Markings
  - Legacy and Markings
- Destruction (including multi-phased)
- Products to Assist
- Tools you can use

Two types of CUI: Basic and Specified

- CUI Basic = LRGWP identifies an information type and says protect it.

Examples include: Agriculture, Ammonium Nitrate, Water Assessments, Emergency Management, Bank Secrecy, Budget, Comptroller General, Geodetic Product Information, Asylee, Visas, Information Systems Vulnerabilities, Terrorist Screening, Informant, Privilege, Victim, Death Records

- CUI Specified = LRGWP identifies an information type and says to protect it, and also includes one or more specific handling standards for that information.

Examples include: Sensitive Security Information, Student Records, Personnel, Source Selection, Nuclear, Safeguards Information, NATO Restricted, NATO Unclassified, Federal Grand Jury, Witness Protection, DNA, Criminal History Records, Financial Records, Export Control, Protected Critical Infrastructure Information, Controlled Technical Information

Limitations on applicability

Limitations on applicability of agency CUI policies

- Agency policies pertaining to CUI do not apply to entities outside that agency unless the CUI Executive Agent approves their application and publishes them in the CUI Registry.

- Agencies may not levy any requirements in addition to those contained in the Order, this Part, or the CUI Registry when entering into contracts, treaties, or other agreements about handling CUI by entities outside of that agency.

General Safeguarding Policy

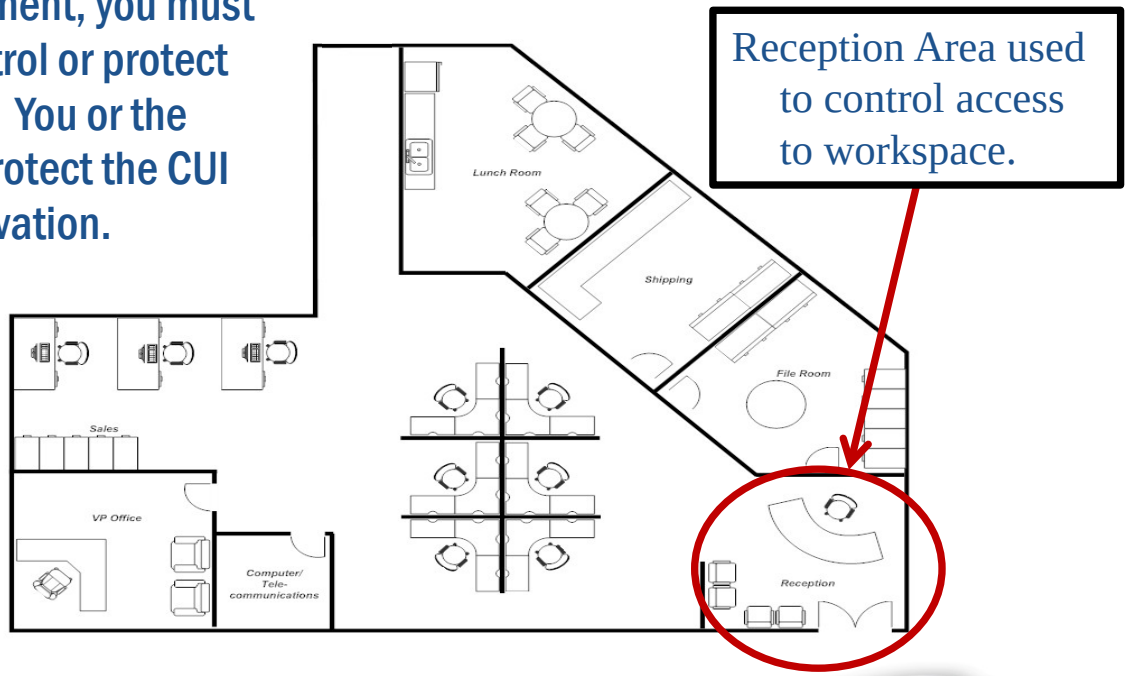
- Agencies must safeguard CUI at all times in a manner that minimizes the risk of unauthorized disclosure while allowing for access by authorized holders.
  - For categories designated as CUI Specified, personnel must also follow the procedures in the underlying law, regulation, or Government-wide policy that established the specific category or subcategory involved.

- Safeguarding measures that are authorized or accredited for classified information are sufficient for safeguarding CUI.

Controlled Environments (physical)

Controlled environment is any area or space an authorized holder deems to have adequate physical or procedural controls (*e.g.*, barriers and managed access controls) for protecting CUI from unauthorized access or disclosure.

- When outside a controlled environment, you must keep the CUI under your direct control or protect it with at least one physical barrier. You or the physical barrier must reasonably protect the CUI from unauthorized access or observation.



Controlled Environments (Electronic)

Limit and control access to CUI within the workforce by establishing electronic barriers.

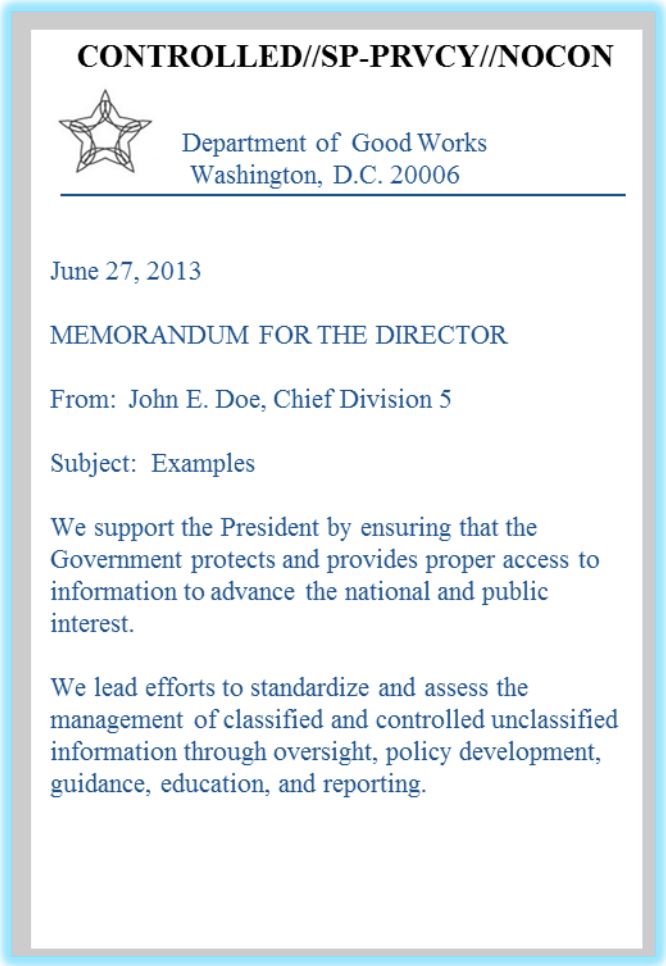
- Dedicated network drives, SharePoint sites, intranet sites
- Assess who has a lawful government purpose for access
  - Mission or function

System Requirements: Moderate

- Systems that store or process CUI must be protected at the Moderate Confidentiality Impact Value.
  - FIPS PUB 199 & 200
  - NIST SP-800-53 (Risk Based Tailoring)

Marking CUI

- Agencies must uniformly and conspicuously apply CUI markings to all CUI prior to disseminating it.
- The CUI banner marking must appear, at a minimum, at the top center of each page containing CUI.
- Purpose is to inform or alert recipients/users that CUI is present and of any special handling requirements.



CONTROLLED//SP-PRVCY//NOCON

Department of Good Works
Washington, D.C. 20006

June 27, 2013

MEMORANDUM FOR THE DIRECTOR

From: John E. Doe, Chief Division 5

Subject: Examples

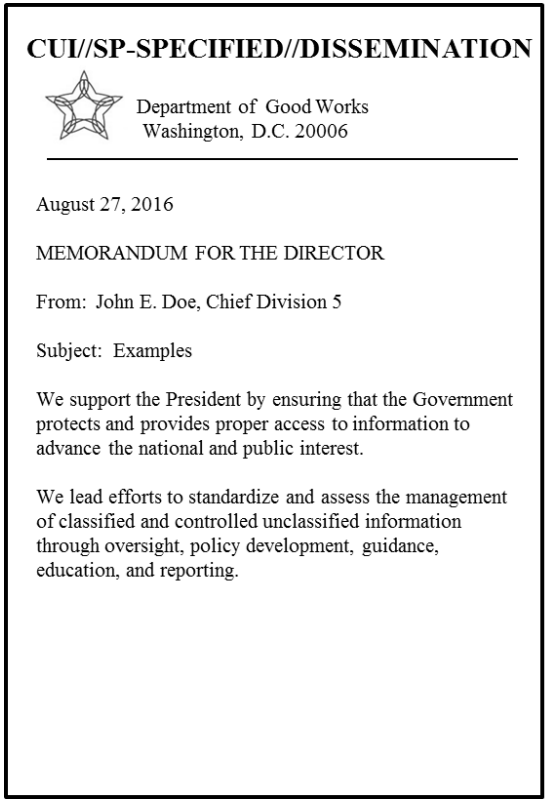
We support the President by ensuring that the Government protects and provides proper access to information to advance the national and public interest.

We lead efforts to standardize and assess the management of classified and controlled unclassified information through oversight, policy development, guidance, education, and reporting.

Marking CUI: Banner Marking

The CUI Banner Marking may include up to three elements:

- The CUI Control Marking (mandatory) may consist of either the word "CONTROLLED" or the acronym "CUI."
- CUI Category or Subcategory Markings (mandatory for CUI Specified). CUI Control Markings and Category Markings are separated by two forward slashes (//). When including multiple categories or subcategories in a Banner Marking they are separated by a single forward slash (/).
- Limited Dissemination Control Markings. CUI Control Markings and Category Markings are separated from Limited Dissemination Controls Markings by a double forward slash (//).



CUI//SP-SPECIFIED//DISSEMINATION

Department of Good Works
Washington, D.C. 20006

August 27, 2016

MEMORANDUM FOR THE DIRECTOR

From: John E. Doe, Chief Division 5

Subject: Examples

We support the President by ensuring that the Government protects and provides proper access to information to advance the national and public interest.

We lead efforts to standardize and assess the management of classified and controlled unclassified information through oversight, policy development, guidance, education, and reporting.

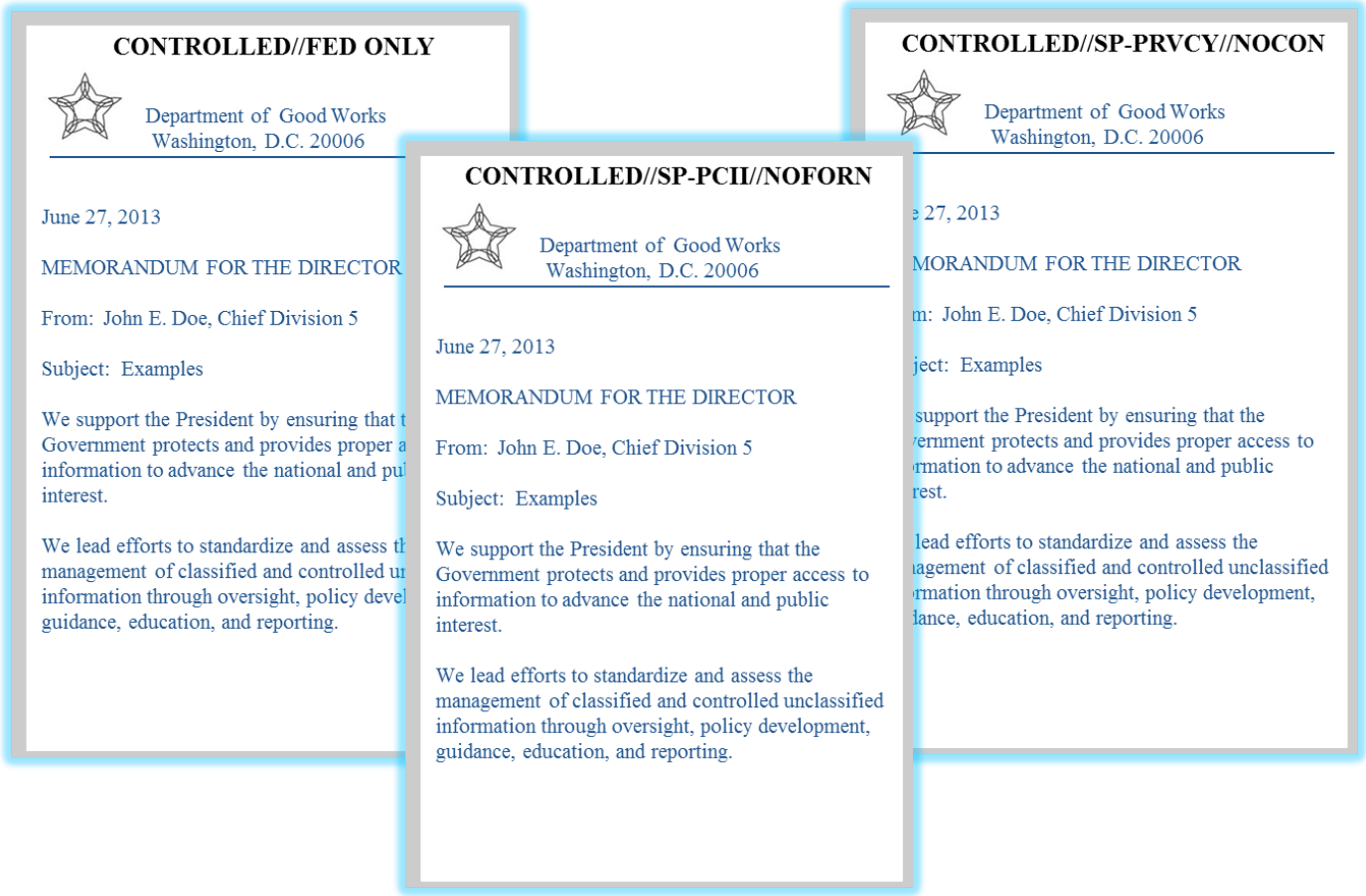
Portion Marking = Best Practice

Limited Dissemination Controls

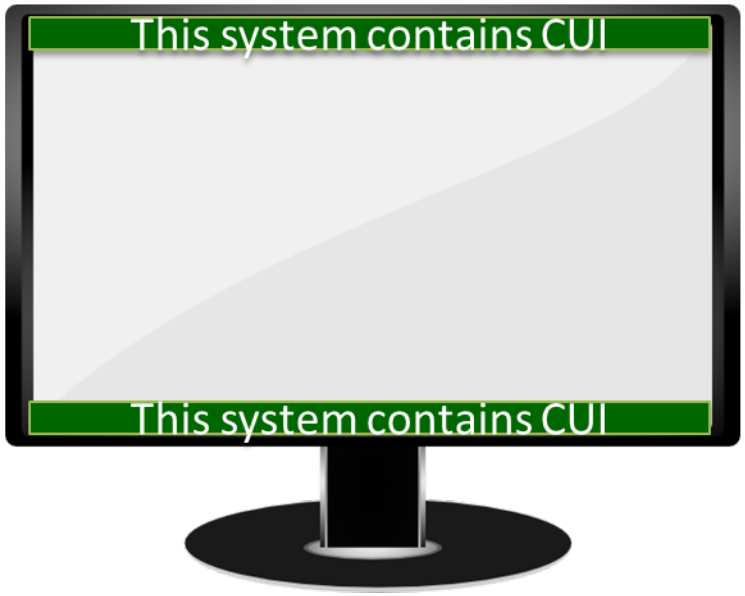
No Foreign Dissemination	Information may not be disseminated in any form to foreign governments, foreign nationals, foreign or international organizations, or non-US citizens.	NOFORN
Federal Employees Only	Dissemination authorized only to (1) employees of United States Government Executive branch departments and agencies (as agency is defined in 5 U.S.C. 105), or (2) armed forces personnel of the United States or Active Guard and Reserve (as defined in 10 USC 101).	FED ONLY
Federal Employees and Contractors Only	Dissemination authorized only to (1) employees of United States Government Executive branch departments and agencies (as agency is defined in 5 U.S.C. 105), (2) armed forces personnel of the United States or Active Guard and Reserve (as defined in 10 USC 101), or (3) individuals or employers who enter into a contract with the United States (any department or agency) to perform a specific job, supply labor and materials, or for the sale of products and services, so long as dissemination is in furtherance of that contractual purpose.	FEDCON
No Dissemination to Contractors	No dissemination authorized to individuals or employers who enter into a contract with the United States (any department or agency) to perform a specific job, supply labor and materials, or for the sale of products and services. Note: This dissemination control is intended for use when dissemination is not permitted to federal contractors, but permits dissemination to State, local, or tribal employees.	NOCON
Dissemination List Controlled	Dissemination authorized only to those individuals, organizations, or entities included on an accompanying dissemination list. Note: Use of this limited dissemination control supersedes other limited dissemination controls, but cannot supersede dissemination stipulated in federal law, regulation, or Government-wide policy.	DL ONLY
Authorized for release to certain nationals only	Information has been predetermined by the designating agency to be releasable or has been released only to the foreign country(ies)/international organization(s) indicated, through established foreign disclosure procedures and channels. It is NOFORN to all foreign country(ies)/international organization(s) not indicated in the REL TO marking. Note: See list of approved country codes for use with REL TO here. USA must always appear first when using REL TO followed by additional permitted trigraph country codes in alphabetical order.	REL TO XXXX
Display Only	Information is authorized for disclosure to a foreign recipient, but without providing the foreign recipient with a physical copy for retention, regardless of medium to the foreign country(ies)/international organization(s) indicated, through established foreign disclosure procedures and channels.	DISPLAY ONLY

Marking CUI with Dissemination Controls

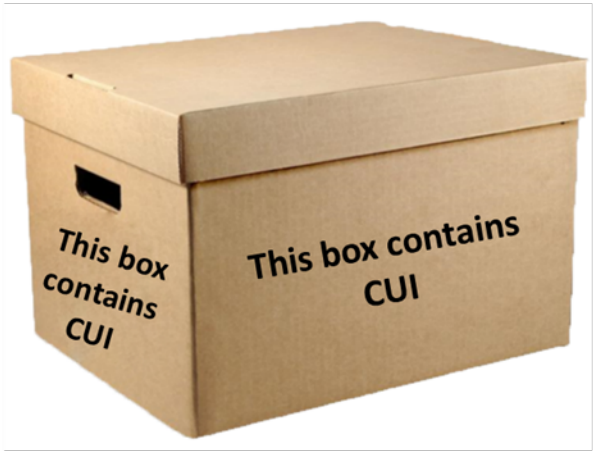
Dissemination Controls can be applied to limit sharing or to convey requirements found in Laws, Regulations, or Government wide policies.



Bulk & System Markings



Agencies may authorize or require the use of alternate CUI indicators on IT systems, websites, browsers, or databases through agency CUI policy. These may be used to alert users of the presence of CUI where use of markings has been waived by the agency head.



Legacy Information and Markings

Legacy Information is unclassified information that an agency marked as restricted from access or dissemination in some way, or otherwise controlled, prior to the CUI Program.

All legacy information is not automatically CUI. Agencies must examine and determine what legacy information qualifies as CUI

Discontinue all use of legacy markings

CONTROLLED//SP-PRVCY//NOCON

Department of Good Works
Washington, D.C. 20006

June 27, 2013

MEMORANDUM FOR THE DIRECTOR

From: John E. Doe, Chief Division 5

Subject: Examples

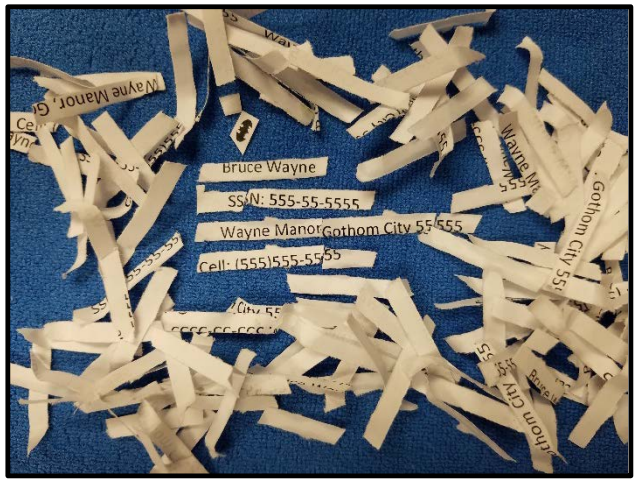
We support the President by ensuring that the Government protects and provides proper access to information to advance the national and public interest.

We lead efforts to standardize and assess the management of classified and controlled unclassified information through oversight, policy development, guidance, education, and reporting.

Destruction

- Unreadable, Indecipherable, and Irrecoverable
- NIST SP 800-88, Guidelines for Media Sanitization
- Other methods acceptable with verification and documentation
  - Multi-phased destruction

NOT APPROVED



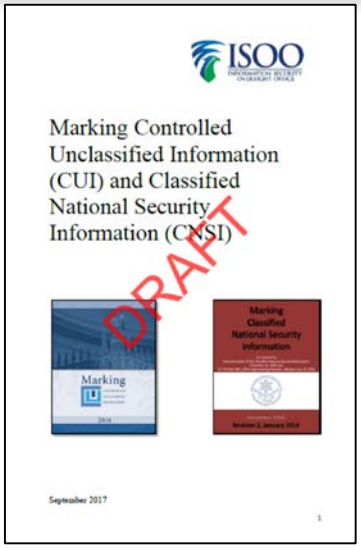
Destroy paper using cross cut shredders that produce particles that are 1mm by 5 mm.

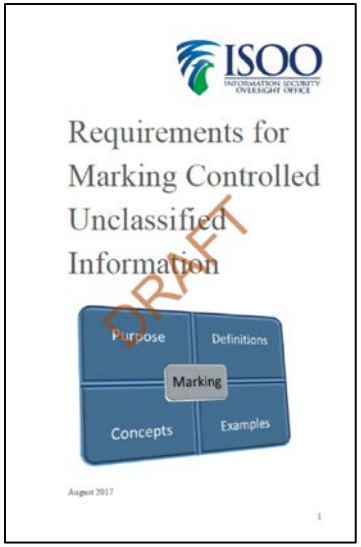
APPROVED

Products to assist

- Marking Book
  - https://www.archives.gov/files/cui/20161206-cui-marking-handbook-v1-1.pdf
- YouTube Video
  - https://www.youtube.com/watch?v=Ov0HwefzHww
- CUI Marking Trifold Brochure
  - https://www.archives.gov/files/cui/documents/2016-marking-trifold-v1.pdf
- CUI Audio, Photography and Video Markings Brochure
  - https://www.archives.gov/files/cui/documents/2017-Audio-Photo-Video-bifold-v1.pdf

New and Coming Soon!



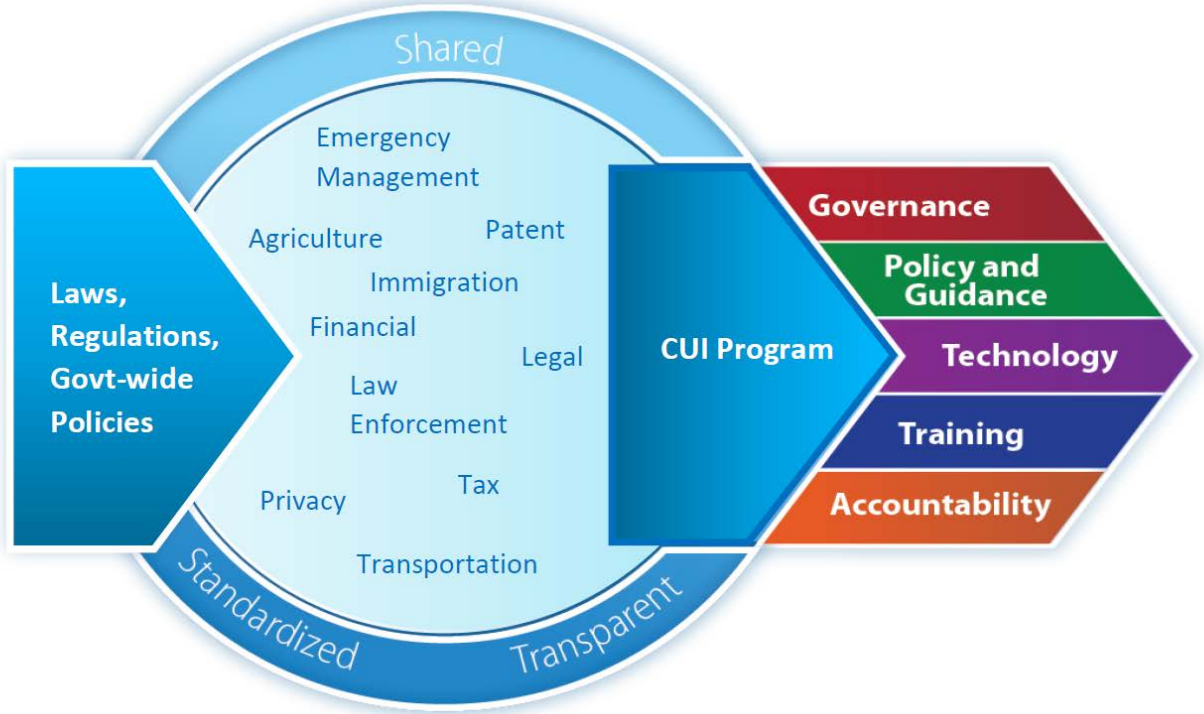


CUI BLOG

Training Videos:

- Marking Requirements
- Marking Options (coversheets)
- Controlled Environments
- Decontrol
- Lawful Government Purpose
- Destruction

Questions?


Shared
Emergency Management
Agriculture
Patent
Immigration
Financial
Legal
Law Enforcement
Privacy
Tax
Transportation
Standardized
Transparent
Laws, Regulations, Govt-wide Policies
CUI Program
Governance
Policy and Guidance
Technology
Training
Accountability