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CYBERSECURITY & DATA PROTECTION PROGRAM (CDPP)

ISO 27001 & 27002

ACME Professional Services, LLC





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INTRODUCTION

The **Cybersecurity and Data Protection Program (CDPP)** provides definitive information on the prescribed measures used to establish and enforce the cybersecurity program at ACME Professional Services, LLC (ACME).

ACME is committed to protecting its employees, partners, clients and ACME from damaging acts that are intentional or unintentional. Effective security is a team effort involving the participation and support of every entity that interacts with ACME data and systems, applications and services. Therefore, it is the responsibility of both ACME personnel and third-parties to be aware of and adhere to ACME's cybersecurity and data protection requirements.

Protecting ACME data and the systems that collect, process and maintain this data is of critical importance. Commensurate with risk, cybersecurity and privacy measures must be implemented to guard against unauthorized access to, alteration, disclosure or destruction of data and systems, applications and services. This also includes protection against accidental loss or destruction. The security of systems, applications and services must include controls and safeguards to offset possible threats, as well as controls to ensure confidentiality, integrity, availability and safety:



- **<u>CONFIDENTIALITY</u>** This addresses preserving authorized restrictions on access and disclosure to authorized users and services, including means for protecting personal privacy and proprietary information.
- **<u>INTEGRITY</u>** This addresses protecting against improper modification or destruction, including ensuring non-repudiation and authenticity.
- <u>Availability</u> This addresses timely, reliable access to data, systems and services for authorized users, services and processes.
 - **SAFETY** This addresses reducing risk associated with technologies that could fail or be manipulated by nefarious actors to cause death, injury, illness, damage to or loss of equipment.

SECURE CONTROLS FRAMEWORK (SCF) STRUCTURE

The Cybersecurity & Data Protection Program (CDPP) leverages its structure and nomenclature from the Secure Controls Framework (SCF) to provide crosswalk mapping to:

- ISO 27001:2013
- ISO 27001:2022
- ISO 27002:2013
- ISO 27002:2013

The scope of the CDPP is tailored for ISO 27001 & 27002 controls, as shown in the crosswalk mapping in Appendix A at the back of this document.

PURPOSE

The purpose of the Cybersecurity and Data Protection Program (CDPP) is to prescribe a comprehensive framework for:

- Creating an Information Security Management System (ISMS) in accordance with ISO 27001.
- Protecting the confidentiality, integrity and availability of ACME data and information systems.
- Protecting ACME, its employees and its clients from illicit use of ACME information systems and data.
- Ensuring the effectiveness of security controls over data and information systems that support ACME's operations.
- Recognizing the highly networked nature of the current computing environment and provide effective company-wide management and oversight of those related Information Security risks.
- Providing for development, review and maintenance of minimum security controls required to protect ACME's data and information systems.



The formation of these cybersecurity policies is driven by many factors, with the key factor being a risk. These policies set the ground rules under which ACME operates and safeguards its data and systems to both reduce risk and minimize the effect of potential incidents.

These policies, including their related control objectives, standards, procedures and guidelines, are necessary to support the management of information risks in daily operations. The development of policies provides due care to ensure ACME users understand their day-to-day security responsibilities and the threats that could impact the company.

SCOPE & APPLICABILITY

These policies, standards and guidelines apply to all ACME data, systems, activities and assets owned, leased, controlled or used by ACME, its agents, contractors or other business partners on behalf of ACME. These policies, standards and guidelines apply to all ACME employees, contractors, sub-contractors and their respective facilities supporting ACME business operations, wherever ACME data is stored or processed, including any third-party contracted by ACME to handle, process, transmit, store or dispose of ACME data.

Some standards apply specifically to persons with a specific job function (e.g., a System Administrator); otherwise, all personnel supporting ACME business functions shall comply with the standards. ACME departments shall use these standards or may create a more restrictive standard, but none that are less restrictive, less comprehensive or less compliant than these standards.

These policies do not supersede any other applicable law or higher-level company directive or existing labor management agreement in effect as of the effective date of this policy.

ACME's documented roles and responsibilities provides a detailed description of ACME user roles and responsibilities, in regards to cybersecurity-related use obligations.

ACME reserves the right to revoke, change or supplement these policies, standards and guidelines at any time without prior notice. Such changes shall be effective immediately upon approval by management unless otherwise stated.

POLICY OVERVIEW

To ensure an acceptable level of cybersecurity risk, ACME is required to design, implement and maintain a coherent set of policies, standards, procedures and guidelines to manage risks to its data and systems.

The CDPP addresses the policies, standards and guidelines. Data / process owners, in conjunction with asset custodians, are responsible for creating, implementing and updated operational procedures to comply with CDPP requirements.

ACME users must protect and ensure the Confidentiality, Integrity, Availability and Safety (CIAS) of data and systems, regardless of how its data is created, distributed or stored.

- Security controls will be tailored accordingly so that cost-effective controls can be applied commensurate with the risk and sensitivity of the data and system; and
- Security controls must be designed and maintained to ensure compliance with all legal requirements.

VIOLATIONS OF POLICIES, STANDARDS AND/OR PROCEDURES

Any ACME user found to have violated any policy, standard or procedure may be subject to disciplinary action, up to and including termination of employment. Violators of local, state, Federal and / or international law may be reported to the appropriate law enforcement agency for civil and / or criminal prosecution.

EXCEPTION TO STANDARDS

While every exception to a standard potentially weakens protection mechanisms for ACME systems and underlying data, occasionally exceptions will exist. When requesting an exception, users must submit a business justification for deviation from the standard in question.



CYBERSECURITY & DATA PROTECTION PROGRAM STRUCTURE

MANAGEMENT DIRECTION FOR CYBERSECURITY & DATA PROTECTION

The objective is to provide management direction and support for cybersecurity and data protection in accordance with business requirements and relevant laws and regulations.⁵

An Information Security Management System (ISMS) focuses on cybersecurity management and technology-related risks. The governing principle behind ACME's ISMS is that, as with all management processes, the ISMS must remain effective and efficient in the long-term, adapting to changes in the internal organization and external environment.

In accordance with leading practices, ACME's ISMS incorporates the typical "Plan-Do-Check-Act" (PDCA) or Deming Cycle, approach:

- Plan: This phase involves designing the ISMS, assessing IT-related risks and selecting appropriate controls.
- <u>Do</u>: This phase involves implementing and operating the appropriate security controls.
- <u>Check</u>: This phase involves reviewing and evaluating the performance (efficiency and effectiveness) of the ISMS.
- Act: This involves making changes, where necessary, to bring the ISMS back to optimal performance.

POLICIES, CONTROLS, STANDARDS, PROCEDURES & GUIDELINES STRUCTURE

ACME's cybersecurity and data protection documentation is comprised of five (5) core components:

- (1) <u>Policies</u> are established by the organization's corporate leadership establishes "management's intent" for cybersecurity and data protection requirements that are necessary to support the organization's overall strategy and mission;
- (2) <u>Control Objectives</u> identify the technical, administrative and physical protections that are generally tied to a law, regulation, industry framework or contractual obligation;
- (3) <u>Standards</u> provide organization-specific, quantifiable requirements for cybersecurity and data protection;
- (4) <u>Procedures</u> (also known as Control Activities) establish the defined practices or steps that are performed to meet to implement standards and satisfy controls / control objectives; and
- (5) <u>Guidelines</u> are additional guidance that is recommended, but not mandatory.

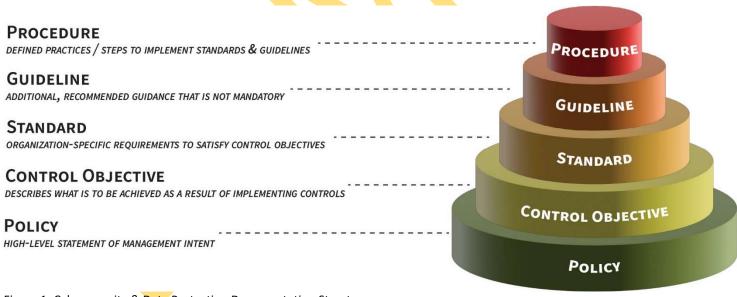


Figure 1: Cybersecurity & Data Protection Documentation Structure

⁵ ISO 27002:2013 5.1



CYBERSECURITY & PRIVACY GOVERNANCE (GOV) POLICY & STANDARDS

<u>Management Intent</u>: The purpose of the Cybersecurity & Privacy Governance (GOV) policy is to govern a documented, risk-based program that supports business objectives while encompassing appropriate cybersecurity and privacy principles that addresses all applicable statutory, regulatory and contractual obligations.

<u>Policy</u>: ACME shall implement and maintain a maturity-based capability to strengthen the security and resilience of its technology infrastructure and data protection mechanisms against both physical and cyber threats. Security control decisions shall take applicable statutory, regulatory and contractual obligations into account, but ACME acknowledges that being compliant does not equate to being secure, so all stakeholders shall protect the confidentiality, integrity, availability and safety of ACME's technology resources and data, regardless of the geographic location of the data or technology in use. Cybersecurity and data protection controls shall be tailored accordingly so that cost-effective controls can be applied commensurate with the risk and sensitivity of the data and technology in use.

<u>Supporting Documentation</u>: This policy is supported by the following control objectives, standards and guidelines.

GOV-01: DIGITAL SECURITY GOVERNANCE PROGRAM

Control Objective: The organization facilitates the implementation of cybersecurity and privacy governance controls.⁶

<u>Standard</u>: ACME's cybersecurity program must be represented in a single document, the Cybersecurity & Data Protection Program (CDPP) that:

- (a) Must be reviewed and updated at least annually; and
- (b) Disseminated to the appropriate parties to ensure all ACME personnel understand their applicable requirements.

<u>Guidelines</u>: The security plans for individual systems and the organization-wide CDPP together provide complete coverage for all cybersecurity and privacy-related controls employed within the organization.

GOV-01.1: DIGITAL SECURITY GOVERNANCE PROGRAM | STEERING COMMITTEE

<u>Control Objective</u>: The organization coordinates cybersecurity, privacy and business alignment through a steering committee or advisory board, comprising of key cybersecurity, privacy and business executives, which meets formally and on a regular basis.⁷

<u>Standard</u>: ACME must establish a cybersecurity and privacy steering committee, or advisory board, comprised of key stakeholders from ACME Lines of Business (LOB) and technology-related executives that:

- (a) Meets formally and on a regular basis; and
- (b) Receives briefings from the following:
 - 1. Chief Information Security Officer (CISO) on matters of cybersecurity;
 - 2. Chief Privacy Officer (CPO) on matters of privacy; and
 - 3. Chief Risk Officer (CRO) on matters of enterprise risk.

<u>Guidelines</u>: To achieve proper situational awareness across the organization, key cybersecurity and privacy leaders must facilitate communication with business stakeholders. This includes translating cybersecurity, privacy and risk concepts and language into business concepts and language as well as ensuring that business teams consult with cybersecurity and privacy teams to determine appropriate controls measures when planning new business projects.

The steering committee, or advisory board, can best advise the CISO, CPO and CRO on important matters pertaining to the organization to ensure technology, cybersecurity and privacy practices support the overall strategy and mission of the organization.

GOV-01.2: DIGITAL SECURITY GOVERNANCE PROGRAM | STATUS REPORTING TO GOVERNING BODY

<u>Control Objective</u>: The organization provides governance oversight reporting and recommendations to those entrusted to make executive decisions about matters considered material to the organization's cybersecurity and privacy program.

Standard: ACME's Chief Information Security Officer (CISO) must:

(a) Operate a repeatable process for reporting to ACME's board of directors, or similar oversight function; and

 ⁶ ISO 27001-2013: 4.3, 4.4, 5.1, 6.1.1 | ISO 27002-2022: 5.1, 5.4, 5.37 | NIST SP 800-53 R5: PM-1
 ⁷ ISO 27001-2013: 4.3, 6.2, 7.4, 9.3, 10.2



- (b) Provide detailed reporting, along with recommendations, to the oversight body; and
- (c) Document feedback received.

Guidelines: None

GOV-02: PUBLISHING CYBERSECURITY & PRIVACY DOCUMENTATION

<u>Control Objective</u>: The organization establishes, maintains and disseminates cybersecurity and privacy policies, standards and procedures.⁸

<u>Standard</u>: The Cybersecurity & Data Protection Program (CDPP) document represents the consolidation of ACME's cybersecurity and privacy policies and standards. The CDPP is endorsed by ACME's executive management and shall be:

- (a) Disseminated to the appropriate parties to ensure all affected personnel are made aware of and understand their applicable requirements to protect cardholder data;
- (b) Reviewed and updated on no less than an annual basis, or as business/technology changes require modifications to the CDPP, to ensure proper coverage for applicable statutory, regulatory and contractual requirements;
- (c) Enforced by ACME personnel through "business as usual" secure practices in the form of Standardized Operating Procedures (SOP) that shall be developed, enforced and maintained at the control operator level; and
- (d) Enforced through ACME's supply chain in the form of contractual requirements with those third-parties that have the ability to directly or indirectly influence the confidentiality, integrity and/or availability of ACME's technology assets and/or sensitive/regulated data.

<u>Guidelines</u>: An organization's cybersecurity policies create the roadmap for implementing cybersecurity and privacy measures to protect its most valuable assets. All personnel should be aware of the sensitivity of data and their responsibilities for protecting it.

It is important to update policies and procedures as needed to address changes in processes, technologies, and business objectives. Without cybersecurity and privacy policies, individuals will make their own value decisions on the controls that are required within the organization which may result in the organization neither meeting its statutory, regulatory and/or contractual obligations, nor being able to adequately protect its technology and data in a consistent manner.

GOV-03: PERIODIC REVIEW & UPDATE OF CYBERSECURITY & PRIVACY PROGRAM

<u>Control Objective</u>: The organization reviews the cybersecurity and privacy program, including policies, standards and procedures, at planned intervals or if significant changes occur to ensure their continuing suitability, adequacy and effectiveness. ⁹

<u>Standard</u>: ACME's business leadership (or other accountable business role or function) must review the Cybersecurity & Data Protection Program (CDPP) at planned intervals or as a result of changes to the organization (e.g., mergers, acquisitions, partnerships, new products, etc.) to ensure its continuing alignment with the security strategy, risk posture, effectiveness, accuracy, relevance and applicability to statutory, regulatory and/or contractual compliance obligations.

<u>Guidelines</u>: Updates to the CDPP will be announced to employees via management updates or email announcements. Changes will be noted in the <u>Record of Changes</u> to highlight the pertinent changes from the previous policies, procedures, standards and guidelines.

GOV-04: Assigned Cybersecurity & Privacy Responsibilities

<u>Control Objective</u>: The organization assigns a qualified individual with the mission and resources to centrally-manage, coordinate, develop, implement and maintain an enterprise-wide cybersecurity and privacy program.¹⁰

<u>Standard</u>: Executive and line management must take formal action to support cybersecurity through clearly-documented direction and commitment and must ensure the action has been assigned. The overall authority and responsibility for managing the cybersecurity program are delegated to ACME's Chief Information Security Officer (CISO) and he/she must perform or delegate the following security management responsibilities:

(a) Establish, document and distribute security policies and procedures;

⁸ ISO 27001-2013: 4.3, 5.2, 7.5.1, 7.5.2, 7.5.3 | ISO 27002-2022: 5.1, 5.37 | NIST SP 800-53 R5: PM-1 | NIST CSF: ID.GV-1 | NIST SP 800-171A: 3.4.9[a], 3.9.2[a]

⁹ ISO 27001-2013: 6.1.1, 7.4 | ISO 27002-2022: 5.1, 5.37 | NIST SP 800-53 R5: PM-1

¹⁰ ISO 27001-2013: 5.3 | ISO 27002-2022: 5.2 | NIST SP 800-53 R5: PL-9, PM-2, PM-6, PM-29 | NIST CSF: ID.AM-6

CHANGE MANAGEMENT (CHG) POLICY & STANDARDS

<u>Management Intent</u>: The purpose of the Change Management (CHG) policy is for both technology and business leadership to proactively manage change. Without properly documented and implemented change controls, security features could be inadvertently or deliberately omitted or rendered inoperable, processing irregularities could occur or malicious code could be introduced. This includes the assessment, authorization and monitoring of technical changes across the enterprise.

<u>Policy</u>: ACME shall implement and maintain appropriate change management practices to reduce the risk associated with unauthorized or improper change. ACME requires active stakeholder involvement to ensure changes are appropriately tested, validated and documented before implementing any change on a production network.

<u>Supporting Documentation</u>: This policy is supported by the following control objectives, standards and guidelines.

CHG-01: CHANGE MANAGEMENT PROGRAM

Control Objective: The organization facilitates the implementation of change management controls.⁴⁹

<u>Standard</u>: ACME's Change Management Program requires data/process owners and asset custodians to test, validate and document changes to systems before implementing the changes on the production network. Changes for any production system, application and/or service must:

- (a) Be approved a ACME employee with the appropriate authority and knowledge to understand the impact of the change; and
- (b) Sufficiently document the following criteria to enable independent review:
 - 1. Reason for, and description of, the change;
 - 2. Documentation of security impact;
 - 3. Documented change approval by authorized parties;
 - 4. Functionality testing to verify the change:
 - i. Did not adversely impact the security of the network; and
 - ii. Performs as expected;
 - 5. For bespoke and custom software changes, all updates are tested for compliance with applicable statutory, regulatory and contractual obligations; and
 - 6. Procedures to address failures and return to a secure state;
- (c) Ensure all applicable statutory, regulatory and contractual requirements are confirmed to be in place on all new or changed systems and networks; and
- (d) As applicable, update affected documentation to include the changes to prevent inconsistencies between network documentation and the actual configuration.

<u>Guidelines</u>: Change management processes are initiated when deficiencies in the design or operating effectiveness of controls are identified during system operation and are monitored to meet the entity's commitments and system requirements as they relate to security, availability, processing integrity, confidentiality or privacy or any combination thereof.

Due to the constantly changing state of pre- production environments, they are often less secure than the production environment. Organizations must clearly understand which environments are test environments or development environments and how these environments interact on the level of networks and applications.

Pre-production environments include development, testing, User Acceptance Testing (UAT), etc. Even where production infrastructure is used to facilitate testing or development, production environments still need to be separated (logically or physically) from pre- production functionality such that vulnerabilities introduced as a result of pre-production activities do not adversely affect production systems.

CHG-02: CONFIGURATION CHANGE CONTROL

Control Objective: The organization governs the technical configuration change control processes.⁵⁰

 ⁴⁹ ISO 27002-2022: 8.19, 8.32 | NIST SP 800-53 R5: CM-3 | NIST SP 800-171 R2: 3.4.3 | NIST CSF: PR.IP-3
 ⁵⁰ ISO 27002-2022: 8.19, 8.32 | NIST SP 800-53 R5: CM-3, SA-8(31) | NIST CSF: PR.IP-3 | NIST SP 800-171 R2: 3.4.3 | NIST SP 800-171A: 3.4.3[a], 3.4.3[b], 3.4.3[c], 3.4.3[d]

<u>Standard</u>: Data/process owners and asset custodians must follow ACME's change control processes and procedures for all changes to system components:

- (a) Utilize separate environments for development/testing/staging and production;
- (b) Utilize a separation of duties between development/testing/staging and production environments;
- (c) Prohibit the use of production data (e.g., live PANs) for testing or development;
- (d) Remove test data and accounts before production systems become active/goes into production; and
- (e) Develop change control procedures for the implementation of security patches and software modifications, which includes, but is not limited to the following:
 - 1. Documentation of impact;
 - 2. Documented change approval by authorized parties; and
 - 3. Functionality testing to verify that the change does not adversely impact the security of the system;
- (f) Back-out procedures; and
- (g) Upon completion of significant change, all relevant compliance requirements must be implemented on all new or changed systems and networks and documentation updated as applicable.

<u>Guidelines</u>: Configuration change controls for organizational systems involve the systematic proposal, justification, implementation, testing, review and disposition of changes to the systems, including system upgrades and modifications. Configuration change control includes changes to baseline configurations for components and configuration items of systems, changes to configuration settings for information technology products (e.g., operating systems, applications, firewalls, routers and mobile devices), unscheduled/unauthorized changes and changes to remediate vulnerabilities.

CHG-02.2: CONFIGURATION CHANGE CONTROL | TEST, VALIDATE & DOCUMENT CHANGES

<u>Control Objective</u>: The organization tests and documents proposed changes in a non-production environment before changes are implemented in a production environment.⁵¹

<u>Standard</u>: Where technically feasible, data/process owners and asset custodians must test and validate configuration changes in a test environment, prior to deploying the change in the production environment.

<u>Guidelines</u>: When operating platforms are changed, mission-critical (SC1) and business-critical (SC2) technology assets should be reviewed and tested to ensure there is no adverse impact on organizational operations or security. If it is not technically or logistically feasible to test a configuration change, compensating control should be identified and implemented in order to mitigate any negative impact to the production environment from an adverse change event. Compensating controls can include, but is not limited to:

- Images of systems;
- Backups of configurations;
- Viable back out plan;
- After-hours implementation; and
- Pilot/test group rollouts.

⁵¹ ISO 27002-2022: 8.19, 8.32 | NIST SP 800-53 R5: CM-3(2), CM-3(7), SA-8(31) | NIST SP 800-171 R2: NFO - CM-3(2)



THIRD-PARTY MANAGEMENT (TPM) POLICY & STANDARDS

<u>Management Intent</u>: The purpose of the Third-Party Management (TPM) policy is to ensure that cybersecurity and privacy risks associated with third-parties are minimized or avoided.

<u>Policy</u>: ACME shall implement and maintain industry-recognized Supply Chain Risk Management (SCRM) practices to strengthen the security and resilience of its third-party provider ecosystem. ACME's approach to SCRM requires transparency, so third-party provider inventories and risk assessments shall be generated to understand risks associated with dependencies, conflicts of interest, security practices and criticality considerations. As third-party providers' technology and processes evolve over time, ACME shall ensure the appropriate levels of due diligence and due care are applied to validate that necessary cybersecurity and privacy controls exist and are effective. Through sound procurement and contract management practices, ACME shall cultivate a secure third-party provider ecosystem that is conducive to security and resilience.

<u>Supporting Documentation</u>: This policy is supported by the following control objectives, standards and guidelines.

TPM-01: THIRD-PARTY MANAGEMENT

Control Objective: The organization facilitates the implementation of third-party management controls.³¹⁴

Standard: ACME must maintain a secure supply chain and requires:

- (a) Third-Party Service Providers (TSP) to be contractually bound to comply with ACME's applicable cybersecurity and privacy requirements; and
- (b) Data/process owners and asset custodians must maintain and implement procedures to manage TSP that includes, but is not limited to:
 - 1. Maintaining a list of service providers;
 - Maintaining a written agreement that includes an acknowledgment that the service providers are responsible for the security of sensitive/regulated data the service providers possess or otherwise store, process or transmit on behalf of ACME or to the extent that they could impact the security of ACME;
 - 3. Ensures there is an established process for engaging service providers, including proper due diligence prior to engagement;
 - 4. Maintaining a program to monitor service providers' compliance status at least annually; and
 - 5. Maintaining information about which requirements are managed by each service provider and which are managed by ACME.

<u>Guidelines</u>: If the entity shares sensitive/regulated data with service providers (e.g., backup tape storage facilities, web hosting companies or security service providers), the process of due diligence should include:

- Direct observations;
- Reviews of policies and procedures; and
- Reviews of supporting documentation.

TPM-01.1: THIRD-PARTY MANAGEMENT | THIRD-PARTY INVENTORIES

<u>Control Objective</u>: The organization maintains a current, accurate and complete list of Third-Party Service Providers (TSP) that can potentially impact the Confidentiality, Integrity, Availability and/or Safety (CIAS) of the organization's systems, applications, services and data.³¹⁵

<u>Standard</u>: ACME's Chief Information Officer (CIO), or the CIO's designated representative(s), must develop and implement a thirdparty governance capability that maintains:

- (a) A current, accurate and complete list of ACME's Third-Party Service Providers (TSP);
- (b) A description for each of the services provided; and
- (c) The stakeholder(s) who are responsible for each TSP, on a contract basis.

<u>Guidelines</u>: Maintaining a list of all TSPs identifies where potential risk extends outside the organization and defines the organization's extended attack surface.

³¹⁴ ISO 27002-2022: 5.19, 5.20, 8.30 | NIST SP 800-53 R5: SA-4, SR-1 | NIST CSF: ID.BE-1, ID.SC-1 | NIST SP 800-171 R2: NFO - SA-4 | FAR: 52.204-21(c)

³¹⁵ ISO 27002-2022: 5.19

APPENDIX A - CROSSWALK MAPPING TO ISO 27001-27002 CONTROLS

The Cybersecurity & Data Protection Program (CDPP) leverages its structure and nomenclature from the Secure Controls Framework (SCF) to provide crosswalk mapping to:

- ISO 27001:2013
- ISO 27001:2022
- ISO 27002:2013
- ISO 27002:2013

The complete SCF is downloadable for free from <u>https://securecontrolsframework.com/</u> but this version of the CDPP only provides coverage for ISO 27001/27002 controls, as shown in the crosswalk mapping below:

SCF Domain	SCF Control	SCF Control #	Secure Controls Framework (SCF) Control Description	CDPP Standard #	ISO 27001 v2013	ISO 27001 v2022	ISO 27002 v2013	ISO 27002 v2022
Cybersecurity & Privacy Governance	Digital Security Governance Program	GOV-01	Mechanisms exist to facilitate the implementation of cybersecurity and privacy governance controls.	GOV-01	4.3 4.4 5.1 6.1.1	$\begin{array}{c} 4.4\\ 5.1\\ 5.1(a)\\ 5.1(b)\\ 5.1(c)\\ 5.1(c)\\ 5.1(d)\\ 5.1(e)\\ 5.1(f)\\ 5.1(g)\\ 5.1(h)\\ 6.1\\ 6.1.1\\ 6.1.1(a)\\ 6.1.1(a)\\ 6.1.1(b)\\ 6.1.1(b)\\ 6.1.1(c)\\ 6.1.1(d)\\ 6.1.1(e)(1)\\ 6.1.1(e)(2)\\ 8.1\\ 10.1\end{array}$	5.1 5.1.1	5.1 5.4 5.37
Cybersecurity & Privacy Governance	Steering Committee & Program Oversight	GOV-01.1	Mechanisms exist to coordinate cybersecurity, privacy and business alignment through a steering committee or advisory board, comprised of key cybersecurity, privacy and business executives, which meets formally and on a regular basis.	GOV-01.1	4.3 5.1 6.2 7.4 9.3 10.2	4.4 5.3 5.3(a) 9.3 9.3.1 9.3.2(a) 9.3.2(b) 9.3.2(c) 9.3.2(d) 9.3.2(d)(1) 9.3.2(d)(2) 9.3.2(d)(2) 9.3.2(d)(3) 9.3.2(d)(4) 9.3.2(e) 9.3.2(f) 9.3.2(g) 9.3.3 10.1		
Cybersecurity & Privacy Governance	Status Reporting To Governing Body	GOV-01.2	Mechanisms exist to provide governance oversight reporting and recommendations to those entrusted to make executive decisions about matters considered material to the organization's cybersecurity and privacy program.	GOV-01.2		7.4 7.4(a) 7.4(b) 7.4(c) 7.4(d) 9.1 9.1(a) 9.1(b) 9.1(c) 9.1(c) 9.1(d) 9.1(e)		



- SUPPLEMENTAL DOCUMENTATION -

CYBERSECURITY & DATA PROTECTION PROGRAM (CDPP)

ANNEXES, TEMPLATES & REFERENCES

Version 2023.2





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ANNEX 1: DATA CLASSIFICATION & HANDLING GUIDELINES

DATA CLASSIFICATION

Information assets are assigned a sensitivity level based on the appropriate audience for the information. If the information has been previously classified by regulatory, legal, contractual, or company directive, then that classification will take precedence. The sensitivity level then guides the selection of protective measures to secure the information. All data are to be assigned one of the following seven (7) sensitivity levels:



Classification		Data Sensitivity Description
Controlled Unclassified Information	Definition	CUI-Restricted information is U.S. Government regulated data that is highly-sensitive business information and the level of protection is dictated externally by both NIST SP 800-171 and Cybersecurity Maturity Model Certification (CMMC) requirements. CUI-Restricted information must be limited to only authorized employees, contractors and business partners with a specific business need.
(CUI) - Restricted	Potential Impact of Loss	 SIGNIFICANT DAMAGE would occur if CUI-Restricted information were to become available to unauthorized parties either internal or external to [Company Name]. Impact could include negatively affecting [Company Name]'s competitive position, violating statutory, regulatory and/or contractual requirements and damaging the company's reputation.
Sensitive Personal Data	Definition	Sensitive Personal Data (sPD) is a subset of Personal Data (PD) that is highly-sensitive information about individuals (e.g., consumers, clients and/or employees) and the level of protection is dictated externally by statutory, regulatory and/or contractual requirements. sPD Restricted information must be limited to what is authorized in the Privacy Notice for how and where the sPD is authorized to be stored, processed and/or transmitted.
(sPD) Restricted	Potential Impact of Loss	 <u>SIGNIFICANT DAMAGE</u> would occur if sPD Restricted information were to become available to unauthorized parties either internal or external to [Company Name]. Impact could include negatively affecting [Company Name]'s competitive position, violating statutory, regulatory and/or contractual requirements, damaging the company's reputation and posing a risk to identified individuals (e.g., identity theft, stalking, harassment, etc.).
Personal Data (PD) Restricted	Definition	Personal Data (PD) Restricted that is information that can identify an individual (e.g., consumers, clients and/or employees) and the level of protection is dictated externally by statutory, regulatory and/or contractual requirements. The difference between sPD Restricted and PD Restricted is that PD Restricted information is publicly-available information (e.g., social media, news, court filings, etc.). PD Restricted information must be limited to what is authorized in the Privacy Notice for how and where the PD Restricted is authorized to be stored, processed and/or transmitted, unless it is publicly-available information.



	Potential Impact of Loss	• MODERATE DAMAGE would occur if PD Restricted information were to become available to unauthorized parties either internal or external to [Company Name]. • Impact could include negatively affecting [Company Name]'s competitive position, violating statutory, regulatory and/or contractual requirements and damaging the company's reputation.
	Definition	Restricted information is highly-valuable, highly-sensitive business information and the level of protection is generally dictated externally by statutory, regulatory and/or contractual requirements. Restricted information must be limited to only authorized employees, contractors and business partners with a specific business need.
Restricted	Potential Impact of Loss	 <u>SIGNIFICANT DAMAGE</u> would occur if Restricted information were to become available to unauthorized parties either internal or external to [Company Name]. Impact could include negatively affecting [Company Name]'s competitive position, violating regulatory requirements, damaging the company's reputation, violating contractual requirements and posing an identity theft risk.
	Definition	Confidential information is highly-valuable, sensitive business information and the level of protection is dictated internally by [Company Name].
Confidential	Potential Impact of Loss	 MODERATE DAMAGE would occur if Confidential information were to become available to unauthorized parties either internal or external to [Company Name]. Impact could include negatively affecting [Company Name]'s competitive position, damaging the company's reputation and violating contractual requirements.
	Definition	Internal Use information is information originated or owned by [Company Name] or entrusted to it by others. Internal Use information may be shared with authorized employees, contractors and business partners who have a business need, but may not be released to the general public, due to the negative impact it might have on the company's business interests.
Internal Use	Potential Impact of Loss	 MINIMAL or NO DAMAGE would occur if Internal Use information were to become available to unauthorized parties either internal or external to [Company Name]. Impact could include damaging the company's reputation and violating contractual requirements.
	Definition	Public information is information that has been approved for release to the general public and is freely shareable both internally and externally.
Public	Potential Impact of Loss	 NO DAMAGE would occur if Public information were to become available to parties either internal or external to [Company Name]. Impact would not be damaging or a risk to business operations.



DATA HANDLING GUIDELINES

Note: For U.S. Government regulated data, the following requirements supersede [Company Name] data handling guidelines:

- For **Federal Contract Information (FCI)**, the following sources are authoritative for FCI data handing:
 - 48 CFR § 52.204-21 (basic safeguarding for Covered Contractor Information Systems (CCIS))
- For **Controlled Unclassified Information (CUI)**, the following sources are authoritative for CUI data handing:
 - o 32 CFR § 2002
 - DoD Instruction 5200.48
 - NIST SP 800-171 rev2

Handling Controls	CUI - RESTRICTED	sPD - RESTRICTED	PD - RESTRICTED	RESTRICTED	CONFIDENTIA L	INTERNAL USE	PUBLIC
Non- Disclosure Agreement (NDA)	NDA is required prior to access by non- employees.	NDA is required prior to access by non- employees.	NDA is required prior to access by non- employees.	NDA is required prior to access by non- employees.	NDA is recommende d prior to access by non- employees.	No NDA requirements	No NDA requirement s
Internal Network Transmissio n (wired & wireless)	 Encryption is required Instant Messaging is prohibited FTP is prohibited Logical access must use multi- factor authentication 	Encryption is required Instant Messaging is prohibited FTP is prohibited	Encryption is required Instant Messaging is prohibited FTP is prohibited	Encryption is required Instant Messaging is prohibited FTP is prohibited	 Encryption is recommende d Instant Messaging is prohibited FTP is prohibited 	No special requirements	No special requirement s
External Network Transmissio n (wired & wireless)	 Encryption is required Instant Messaging is prohibited FTP is prohibited Logical access must use multi- factor authentication Remote access must use multi-factor authentication 	 Encryption is required Instant Messaging is prohibited FTP is prohibited Remote access should be used only when necessary and only with VPN and multi- factor authentication 	 Encryption is required Instant Messaging is prohibited FTP is prohibited 	 Encryption is required Instant Messaging is prohibited FTP is prohibited Remote access should be used only when necessary and only with VPN and multi- factor authentication 	 Encryption is required Instant Messaging is prohibited FTP is prohibited 	• Encryption is recommende d	No special requirement s

ANNEX 2: DATA CLASSIFICATION EXAMPLES

The table below shows examples of common data instances that are already classified to simplify the process. This list is not inclusive of all types of data, but it establishes a baseline for what constitutes data sensitivity levels and will adjust to accommodate new types or changes to data sensitivity levels, when necessary.

IMPORTANT: You are instructed to classify data more sensitive than this guide, if you feel that is warranted by the content.

Data Class	Sensitive Data Elements	Public	Internal Use	Confidential	Restricted	PD - Restricted	sPD - Restricted	CUI - Restricted
Ξţζ	Social Security Number (SSN)						Х	
Ident	Employer Identification Number (EIN)						Х	
	Driver's License (DL) Number						X	
ank	Financial Account Number						Х	
Jnic	Payment Card Number (credit or debit)						Х	
t Can l	Government-Issued Identification (e.g., passport, permanent resident card, etc.)						x	
Tha	Geolocation Information (e.g., precise geographic location and/or history)						Х	
ata -	Race / Ethnicity						Х	
	Religious Affiliation						X	
ona	Union Membership						X	
ers	Philosophical Beliefs						Х	
Non-Public Consumer, Client or Employee Personal Data That Can Uniquely Identify An Individual	Private Communications (e.g., contents of private mail, emails and text messages)						х	
Ar	Genetic Information						Х	
	Biometrics						Х	
nt o	Health Infor <mark>ma</mark> tion						Х	
Clie	Sexual Orientation						Х	
er, (Birth Date						X	
En 1	First & Last Name						Х	
ons	Age						X	
	Phone Number						X	
ld u	Home Address						X	
-u	Gender						Х	
ž	Email Address						X	
or	Geolocation Information (e.g., precise geographic location and/or history)					Х		
	Race / Ethnicity					Х		
Clie at C	Religious Affiliation					Х		
a Th	Union Membership					Х		
Sum Data	Philosophical Beliefs					Х		
Publicly Available Consumer, Client Employee Personal Data That Can Uniquely Identify An Individual	Private Communications (e.g., contents of private mail, emails and text messages)					x		
Pers Ide	Health Information					Х		
vai ee F ely	Sexual Orientation					x		
Iy A Joy iqu	Birth Date					х		
Emp Un	First & Last Name					х		
Pu _	Age					X		

ANNEX 4: BASELINE SECURITY CATEGORIZATION GUIDELINES

Assets and services are categorized by two primary attributes: (a) the potential impact they pose from misuse and (b) the data classification level of the data processed, stored or transmitted by the asset or process. These two attributes combine to establish a basis for controls that should be assigned to that system or asset. <u>This basis is called an Assurance Level (AL)</u>.

DATA SENSITIVITY

This is straightforward where the data sensitivity rating represents the highest data classification of the data processed, stored or transmitted by the asset or process

SAFETY & CRITICALITY

One component of assessing risk is to understand the criticality of systems and data. By having a clear understanding of the Safety & Criticality Level (SC) for an asset, system, application, service or data, determining potential impact will be more accurate.

There are four (4) SC levels:

- 1. Mission Critical (SC1);
- 2. Business Critical (SC2);
- 3. Non-Critical (SC3); and
- 4. Business Supporting (SC4).

MISSION CRITICAL (SC1)

Mission Critical (SC1) assets handle information that is determined to be vital to the operations or mission effectiveness of [Company Name].

The impact of a SC1 system, or its data, being unavailable includes, but is not limited to:

- <u>Enterprise-wide business stoppage with significant revenue impact</u> can be anything that creates a significant impact on [Company Name]'s ability to perform its mission;
- Public, wide-spread damage to [Company Name]'s reputation;
- Direct, negative & long-term impact on customer satisfaction; and
- Risk to human health or the environment.

Examples of SC1 systems, applications and services include, but are not limited to:

- Enterprise Resource Management (ERM) system (e.g., SAP)
- Active Directory (AD)
- Ability to process Point of Sale (PoS) or eCommerce payments

BUSINESS CRITICAL (SC2)

Business Critical (SC2) assets handle information that is important to the support of [Company Name]'s primary operations.

The impact of a SC2 system, or its data, being unavailable includes, but is not limited to:

- <u>Enterprise-wide delay or degradation in providing important support services</u> that may seriously impact mission effectiveness or the ability to operate;
- Department-level business stoppage with direct or indirect revenue impact; and
- Direct, negative & <u>short-term impact on customer satisfaction</u>.

Examples of SC2 systems, applications and services include, but are not limited to:

- Email (e.g., Exchange)
- Payroll systems
- Corporate website functionality
- Corporate mobile device application functionality
- HVAC systems
- Customer support / call center functionality

Non-Critical (SC3)

Non-Critical (SC3) assets handle information that is necessary for the conduct of day-to-day business, but they are not mission critical in the short-term.

INTERNAL USE

The impact of a SC3 system, or its data, being unavailable includes, but is not limited to:

- Widespread delays or degradation of services or routine activities;
- Widespread employee productivity degradation;
- Indirect revenue impact; and
- Indirect negative customer satisfaction.

Examples of SC3 systems, applications and services include, but are not limited to:

- Test / Development / Staging environment
- Security Incident Event Monitor (SIEM) / log collector
- Internal / Intranet web functionality

BUSINESS SUPPORTING (SC4)

Business Supporting (SC4) assets are the least important category of systems and handle information that is used in the conduct of routine, day-to-day business. SC4 systems are not mission-critical in the short or long term.

The impact of a SC4 system, or its data, being unavailable includes, but is not limited to:

- Localized employee productivity degradation;
- Localized delays or degradation of services or routine activities;
- No revenue impact; and
- No impact on customer satisfaction.

Examples of SC4 systems, applications and services include, but are not limited to:

- Team-level metrics reporting
- Team-level productivity or reporting tools

Where the data sensitivity and SC levels meet are considered the Assurance Levels (AL). The AL represents the "level of effort" that is needed to properly ensure the Confidentiality, Integrity, Availability and Safety (CIAS) of the asset or process.

Asset Categorization Matrix		Data Sensitivity								
		CUI - RESTRICTED	sPD - RESTRICTED	PD - RESTRICTED	RESTRICTED	CONFIDENTIAL	INTERNAL USE	PUBLIC		
Safety & Criticality	SC1 Mission Critical	Enhanced	Enhanced	Enhanced	Enhanced	Enhanced	Enhanced	Enhanced		
	SC2 Business Critical	Enhanced	Enhanced	Enhanced	Enhanced	Enhanced	Basic	Basic		
	SC3 Non-Critical	Enhanced	Enhanced	Basic	Enhanced	Basic	Basic	Basic		
	SC4 Business Supporting	Enhanced	Enhanced	Basic	Enhanced	Basic	Basic	Basic		

Figure 1: Asset Categorization Risk Matrix

BASIC ASSURANCE REQUIREMENTS

- The minimum level of controls is <u>defined as industry-recognized leading practices</u> (e.g., PCI DSS, NIST SP 800-53, ISO 27002, etc.).
- For security controls in Basic assurance projects or initiatives, the focus is on the digital security controls being in place with the expectation that no obvious errors exist and that as flaws are discovered they are addressed in a timely manner.

ENHANCED ASSURANCE REQUIREMENTS

- The minimum level of controls is <u>defined as exceeding industry-recognized leading practices</u> (e.g., DLP, FIM, DAM, etc.).
- For security controls in Enhanced Assurance projects, it is essentially the Standard Assurance level that is expanded to require more robust Cybersecurity capabilities that are commensurate with the value of the project to [Company Name].

