## **Commonwealth of Massachusetts**

Executive Office of Technology Services and Security (EOTSS) Enterprise Risk Management Office



# **Enterprise Information Security Policy**

Document Name: Enterprise Information Security	Effective Date: October 15th, 2018
Document ID: IS.000	Last Revised Date: September 27, 2023

#### Table of contents

1. I	Purp	ose2	2		
2. /	Autho	ority2	2		
3. \$	Scop	e2	2		
4. I	Resp	onsibility2	2		
5. (	Com	pliance	3		
6. I	6. Information Security objectives				
7. (	Com	munications	3		
8. I	Repo	orting requirements	1		
9. I	Polic	y Statements	1		
ç	9.1	Organization of Information Security	1		
ç	9.2	Acceptable Use	1		
ç	9.3	Access Management			
ç	9.4	Asset Management	1		
g	9.5	Business Continuity and Disaster Recovery	5		
ç	9.6	Communication and Network Security Management	5		
ç	9.7	Compliance	5		
ç	9.8	Cryptographic Management	5		
ç	9.9	Information Security Incident Management	5		
ç	9.10	Information Security Risk Management	5		
ç	9.11	Logging and Event Monitoring	5		
ç	9.12	Operations Management	5		
ç	9.13	Physical and Environment Security6	3		
ç	9.14	Secure System and Software Life Cycle Management	3		
ç	9.15	Third-party Information Security6	3		
ç	9.16	Vulnerability Management6	3		

10. Policy Framework Coverage	. 6
11. Document Change Control	. 8

### **1. PURPOSE**

1.1. The Commonwealth of Massachusetts. ("the Commonwealth") collects, manages, and stores *information* on a regular basis in order to support business operations. The Commonwealth is committed to preserving the confidentiality, integrity, and availability of its *information assets*\*.

The Commonwealth must protect its *information assets*, provide for the integrity of business processes and records, and comply with applicable laws and regulations.

This document, the *Enterprise Information Security Policy* (hereafter, "the Policy"), documents the responsibilities of all Commonwealth Executive Offices and Agencies within the Executive Branch and reinforces Leadership's commitment, establishes high-level functions of an *information* security program, and outlines *information* security requirements to safeguard *information assets* and assist the Commonwealth to achieve its strategic objectives.

### **2. AUTHORITY**

2.1. M.G.L. Ch. 7d provides that "Notwithstanding any general or special law, rule, regulation, executive order, policy or procedure to the contrary, all executive department agencies shall, and other state agencies may, adhere to the policies, procedures and objectives established by the Executive Office of Technology Services and Security (EOTSS) with respect to activities concerning information technology."

### 3. SCOPE

3.1. This document applies to the use of *information*, *information systems*, electronic and computing devices, *applications*, and network resources used to conduct business on behalf of the Commonwealth. The document applies to the Executive Branch including all executive offices, boards, commissions, agencies, departments, divisions, councils, bureaus, and offices within an executive office, hereinafter referred to as Commonwealth Agencies and Offices. Other Commonwealth entities that voluntarily use or participate in services provided by the Executive Office of Technology Services and Security, (EOTSS), such as mass.gov, must agree to comply with this document, with respect to those services, as a condition of use. Commonwealth Agencies and Offices are required to implement *procedures* that ensure their *personnel*, including vendors, contractors, and consultants, comply with requirements in regard to safeguard *information* owned or entrusted to the Commonwealth.

### **4.** RESPONSIBILITY

4.1. The Enterprise Risk Management Office is responsible for the development and ongoing maintenance of this *policy*.

Enterprise Information Security Page 2 of 8

- 4.2. The Enterprise Risk Management Office is responsible for compliance with this policy and may enlist other offices to assist in the enforcement of this *policy*.
- 4.3. Any inquiries or comments regarding this *policy* must be submitted to the Enterprise Risk Management Office by sending an email to <u>ERM@mass.gov</u>.
- 4.4. Additional information regarding this document and its related *policy* and *standards* can be found at <u>https://www.mass.gov/cybersecurity/policies</u>.

#### **5. COMPLIANCE**

5.1 Compliance with this document is mandatory for the Executive Branch including all executive offices, boards, commissions, agencies, departments, divisions, councils, and bureaus, hereinafter referred to as Commonwealth Agencies and Offices. Violations are subject to disciplinary action in accordance with applicable employment and collective bargaining agreements, up to and including the termination of their employment and/or assignment with the Commonwealth.

### 6. INFORMATION SECURITY OBJECTIVES

The goal of the *Information* Security Program is to manage *risk* within the Commonwealth and achieve its *information* security objectives through the establishment of supporting *policies*, *processes*, and functions. The *information* security objectives of the Commonwealth are:

- 6.1 Enable organizational strategy through the protection of *data* and non-public *information*.
- 6.2 Comply with applicable laws, regulations, and contractual obligations with relevant *stakeholders*.
- 6.3 Establish a governance structure to effectively and efficiently manage *information* security *risk*.
- 6.4 Manage identified security *risks* to an acceptable (i.e., *risk tolerance*) level through design, implementation, and maintenance *risk* remediation plans.
- 6.5 Establish a culture of accountability and increasing the level of awareness of all *personnel* in order to meet *information* security requirements.
- 6.6 Establish responsibility and accountability for *information* security *policies* and governance across the Commonwealth.

The Commonwealth is committed to continually improving the *Information* Security Program to help ensure that its applicable *information* security objectives are met, and it is able to adapt to changes in the cyber threat landscape and account for evolving organizational, legal, and regulatory requirements.

#### **7. COMMUNICATIONS**

The Commonwealth's Information Security **policies** and **standards** are publicly available on the mass.gov web site. EOTSS will inform Commonwealth agencies when **policies** or **standards** are created, or when major revisions are published.

### 8. REPORTING REQUIREMENTS

#### 8.1 Policy Violations

Compliance with this document is mandatory for all Commonwealth Agencies and Offices. Violation of this **policy** may cause irreparable injury to the Commonwealth of Massachusetts. Violations are subject to disciplinary action in accordance with applicable employment and collective bargaining agreements, up to and including the termination of their employment and/or assignment with the Commonwealth.

8.2 Reporting of Policy Violations

Any violation of this **policy** should be reported to a supervisor and/or the **Information Security Team**. **Information** security **incidents** (e.g., **security breaches**) will follow the reporting requirements outlined in IS.009 Information Security Incident Management Standard.

8.3 Exceptions from Policy

In the event that any Commonwealth Agency, Office, or other party is unable to adhere to the requirements of this *policy*, an *exception* request must be submitted to, and approved by the *Commonwealth CISO*, or his or her designee. *Exception* requests must be requested online through ServiceNow, <u>https://www.mass.gov.service-now.com</u>.

An **exception** may be granted only if the benefits of the **exception** outweigh the increased **risks** for the approved length of the **exception**, as determined by the **Commonwealth CISO**, or his or her designee. Compliance progress will be validated at the **exception** expiration date. **Exceptions** may be closed if the agreed-upon solution has been implemented and the **exception** has been resolved. An extension may be requested if more time is required to implement the long-term solution by completing an extension request. **Exceptions** will be for a limited time and will be narrow in scope.

### **9. POLICY STATEMENTS**

9.1 Organization of Information Security

Each organization subject to these policies will develop, maintain, and implement **policies**, **procedures**, **guidelines**, and **standards** (PSGPs) to establish and govern the Commonwealth's **information** security program to safeguard the confidentiality, integrity, and availability of its **information assets**, as directed by the Commonwealth's technology leadership.

9.2 Acceptable Use

**Personnel** are the first line of defense and have a shared responsibility to safeguard **information** owned or entrusted to the Commonwealth.

9.3 Access Management

Access will be managed throughout the account lifecycle from the initial identification of a **user** to the granting, modifying, and revoking of **user** access privileges to confirm that **information assets** are protected from unauthorized access. Accounts will be provisioned using the least privilege access principle. Access privileges will be monitored and reviewed periodically commensurate with their **risk** classification. Passwords must meet the Commonwealth's complexity requirements and must be changed on a regular basis.

#### 9.4 Asset Management Enterprise Information Security Page **4** of **8**

Establish an *information system* classification schema to promote a consistent approach to *risk* management, business continuity and disaster recovery for *information assets*. Agencies will maintain an *asset* inventory and establish a program to manage the *asset* life cycle (i.e., procurement through end-of-support/end-of-life). Agencies will implement security *controls* to protect *endpoints* and mobile devices from *malware* and *information* leakage.

9.5 Business Continuity and Disaster Recovery

Protect mission-critical *information assets*, processes, and facilities from the effects of major failures or disasters by developing and implementing a business continuity strategy that is consistent with organizational objectives and priorities. Back up critical *data*, such as *confidential information*, and strive to prevent disasters and implement timely recovery from disasters as well as continue critical organizational functions during a disaster or major disruption while maintaining confidentiality.

9.6 Communication and Network Security Management

Implement network security *controls* such as firewalls, intrusion prevention/detection systems (IPS/IDS), virtual private networks (VPNs) and segmentation techniques so that the Commonwealth protects its *information assets* from compromise both from external and internal actors.

9.7 Compliance

Establish a compliance framework that will enable the Commonwealth to comply with all relevant legislative, regulatory, statutory, and contractual requirements related to *information* security.

9.8 Cryptographic Management

Define requirements for encrypting **data** at rest, **data** in transit and **data** in use, commensurate with the **information** classification of the **information** requiring protection. Maintain **cryptographic keys** to preserve the integrity of cryptographic **controls**. Use of **encryption controls** will be determined after a **risk** assessment is performed.

9.9 Information Security Incident Management

Establish a program to effectively detect, respond and resolve incidents that affect the security of the Commonwealth's *information assets*, including establishing a Security Incident Response Team (SIRT) to manage the incident response process. Develop incident response procedures/plans and identify relevant stakeholders (both internal and external). Test incident response plans periodically for relevancy.

9.10 Information Security Risk Management

Identify and analyze *information* security *risks* that could compromise the confidentiality, integrity, or availability of the Commonwealth's *information assets*, and mitigate them to an acceptable level to meet organizational objectives and compliance requirements. All relevant statutory, regulatory, and contractual requirements that include security and privacy *controls*, and the Commonwealth's approach to meet these requirements must be explicitly defined, documented, and kept up to date.

9.11 Logging and Event Monitoring

Develop and implement a *process* to monitor and review activity on *information systems*. So that *information system* problems are identified and corrected, and operator *logs*, and fault logging are enabled, collected, and reviewed. The Commonwealth must comply with all relevant legal, regulatory, and contractual requirements applicable to logging and *event* monitoring.

9.12 Operations Management

Enterprise Information Security Page 5 of 8

Develop and document standard operating *procedures*, change management, configuration management, capacity management and release management *processes* for technology environments. Back up *information* in a secure manner to enable the organization to restore its operational activities after a planned or unplanned interruption of service.

Establish *standards* to support the secure implementation of *applications* and services in public and private cloud environments, including *Software* as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (laaS).

9.13 Physical and Environment Security

Enforce physical security *controls* to manage access to *information assets*. Physically protect facilities with safeguards to protect *information assets* against environmental hazards.

9.14 Secure System and Software Life Cycle Management

Perform *information* security reviews throughout all phases of the system and *software* management lifecycle to ensure *risks* are properly identified, addressed, and mitigated in a timely and cost-efficient manner. Configure systems using security hardening standards and review configurations periodically.

9.15 Third-party Information Security

Establish a process to perform initial and ongoing due diligence of *third parties* that enter into formal business arrangements with Commonwealth agencies. Contractual agreements between *third parties* and Commonwealth agencies must address baseline *information* security clauses, including, but not limited to, the right to audit and adhere to *data* protection requirements.

9.16 Vulnerability Management

Implement security *controls* to manage and monitor *risks* to the Commonwealth's *information* technology environment. *Vulnerability* management *personnel* must be able to identify and respond to *vulnerabilities* within established and predictable timeframes. *Vulnerability* management activities must be reported to management periodically.

Policy ref.	Policy/Standard name	Topics covered
IS 001	Organization of Information Security	<ul> <li>Information Security Organization Structure</li> <li>Roles and Responsibilities</li> <li>Policy Framework</li> <li>Policy Life Cycle Management</li> </ul>
IS 002	Acceptable Use of Information Technology	
IS 003	Access Management	<ul> <li>User and System Access Management</li> <li>Account Management</li> <li>Password Management</li> </ul>

### **10. POLICY FRAMEWORK COVERAGE**

Policy ref.	Policy/Standard name	Topics covered
IS 004	Asset Management	<ul> <li>Information Asset Management</li> <li>Information Protection Requirements</li> <li>Information Classification</li> <li>Information System Classification</li> <li>Information Labeling and Handling</li> <li>Endpoint Security</li> <li>Information Disposal</li> <li>Mobile Device Management</li> </ul>
IS 005	Business Continuity and Disaster Recovery	<ul><li>Business Continuity</li><li>Disaster Recovery</li></ul>
IS 006	Communication and Network Security	<ul> <li>Network Security Management</li> <li>Remote Access Security Management</li> <li>Secure File Transfer</li> <li>Management of Third-party Network Access</li> </ul>
IS 007	Compliance	<ul> <li>Compliance with Policies, Standards, Guidelines, and Procedures</li> <li>Reporting Security Incidents and Violations</li> <li>Security Compliance Reviews</li> <li>External Attestation of Compliance</li> </ul>
IS 008	Cryptographic Management	<ul><li>Key Management</li><li>Approved Cryptography Techniques</li></ul>
IS 009	Information Security Incident Management	Information Security Incident Management
IS 010	Information Security Risk Management	<ul><li>Information Security Risk Management</li><li>Security Awareness and Training</li></ul>
IS 011	Logging and Event Monitoring	Logging and Event Monitoring
IS 012	Operations Management	<ul> <li>Standard Operating Procedures</li> <li>Change Management</li> <li>Configuration Management</li> <li>Capacity Management</li> <li>Release Management</li> <li>Data Backup and Restoration</li> <li>Cloud Computing</li> </ul>
IS 013	Physical and Environmental Security	<ul><li>Facility Controls and Secure Areas</li><li>Equipment and Other Media Security</li></ul>
IS 014	Secure System and Software Lifecycle Management	<ul> <li>Security in System and Software Life Cycle</li> <li>Security in SDLC Support Processes</li> <li>System Hardening</li> </ul>
IS 015	Third Party Information Security	<ul> <li>Contractual Security Risk Identification</li> <li>Third-party Selection</li> <li>Contractual Security Provisions</li> <li>Third-party Life Cycle Management</li> </ul>
IS 016	Vulnerability Management	Vulnerability and Patch Management
N/A	Glossary of Terms	N/A

Table 1 — Policy Structure

ersion No.	Revised by	Effective date	Description of changes
0.80	Jim Cusson	10/01/2017	Corrections and formatting
0.90	John Merto	12/18/2017	Minor corrections, wording
0.95	Sean Vinck	5.7.18	Minor corrections and formatting
0.96	Andrew Rudder	5/31/2018	Corrections and formatting
0.97	Anthony O'Neill	05/31/2018	Corrections and formatting
1.0	Dennis McDermitt	06/01/2018	Final pre-publication Review
1.0	Andrew Rudder	10/4/2018	Approved for Publication by: John Merto
1.1	Megan Perkins	7/15/2020	Annual Review; Minor corrections and formatting
1.2	Sean M. Hughes	11/04/2021	Annual Review
1.3	Sean M. Hughes	08/29/2022	Annual Review
1.4	Thomas E. McDermott	9/27/2023	Annual Review, Corrections and Updating
1.5	Anthony O'Neill	9/27/2023	Final Review

# **11. DOCUMENT CHANGE CONTROL**

The owner of this document is the **Commonwealth CISO** (or his or her designee). It is the responsibility of the **document owner** to maintain, update and communicate the content of this document. Questions regarding this document must be submitted to the **document owner** by sending an email to <u>ERM@mass.gov</u>.

#### 11.1 Annual Review

This *Enterprise Information Security Policy* must be reviewed and updated by the *document owner* on an annual basis or when significant policy or procedure changes necessitate an amendment.