Board Information Technology Policy
IT Security Incident Reporting Policy

Board Policy 2023-03

Effective Date
March 16, 2023

Category
Security

Scheduled
Review - Annually

Any reference to the Commonwealth in this policy includes the Pennsylvania Municipal Retirement Board, the Pennsylvania Municipal Retirement System (PMRS) and PMRS' contractors and consultants

1. Purpose

This Information Technology Policy (ITP) establishes the policies, procedures and standards related to reporting and managing of Cyber Security Incidents.

2. Scope

This ITP applies to all offices, departments, boards, commissions, and councils under the Governor's jurisdiction (hereinafter referred to as "agencies"). Agencies not under the Governor's jurisdiction are strongly encouraged to follow this ITP.

Third-party vendors, licensors, contractors, or suppliers shall meet the policy requirements of this ITP that are applicable to the products and services provided to the Commonwealth.

3. Background

The Pennsylvania *Breach of Personal Information Notification Act*, Act of December 22, 2005, P.L. 474, No. 94, as amended, 73 P.S. §§ 2301—2329 (P.L. 474, No. 94, 2005), requires notification to affected individuals in instances where personal information has been compromised. This security incident reporting and escalation policy enables the enterprise to respond effectively to security incidents, such as a personal information breach, by clearly detailing the roles and responsibilities of all the parties involved. It provides a precise path for reporting, escalating, auditing and remediating security incidents. Proper reporting and management of Cyber Security Incidents is critical to secure and protect the Commonwealth of Pennsylvania's critical Information Technology (IT) business processes and assets from cyber-crime or cyber-terrorism.

4.   Policy

The Office of Administration, Office for Information Technology, Enterprise Information Security Office (OA/OIT/EISO) is responsible for coordinating and leading the cyber incident response when a Cyber Security Incident involves: the enterprise, an agency, multiple agencies, and entities such as business partners who have access to Commonwealth's network and data repositories. In addition, OA/OIT/EISO is responsible for the Commonwealth's cyber security readiness, threat analysis, and remediation efforts.

The following IT security incident scenario table provides the responsibilities for OA/OIT/EISO, Agency Information Security Officers (ISO), and Agency Chief Information Officers (CIO).

Scenario	OA/OIT/EISO	Enterprise	DC/Agency ISO
Proactively identify potential cyber security threats and take precautions before they can cause potential harm to the Commonwealth's IT infrastructure.	X	X	
Proactively identify potential cyber security threats and take precautions before they can cause potential harm to the agency's IT infrastructure.		X	X
Set and alert the agencies of the current cyber security threat posture.	X		
Coordinate the recovery of Commonwealth network operations, telecommunications, and IT applications and databases.	X		
Provide assistance to agencies in helping remediate issues caused by Cyber Security Incidents.	X		
Prepare and educate Commonwealth agencies, and employees as to the dangers of cyber security threats and how to reduce their risk exposure.	X	X	
Coordinate remediation efforts with local government representatives through the Pennsylvania Sharing and Advisory Committee (PA-ISAC) to exchange policy and operational information necessary to respond to and recover from Cyber Security Incidents	X		
Conduct cyber security Forensic Analysis in investigating and gathering of information related to cyber threats and attacks.	X		
Work with third-party security providers to ensure they respond to and address Cyber Security Incidents reported to them.	X	X	
Track the status of ongoing investigations and provide reports to agency CIOs, ISOs, and OA executive staff.	X		
Appoint an agency ISO and a secondary point of contact (POC) for Cyber Security Incident reporting and handling. Provide OA/OIT/EISO those POCs information.			X
Collaborate with business unit management to declare an outage for affected systems.	X	X	X
Act as the primary POC for Cyber Security Incident response for the agency.		X	
Report incidents bi-directionally from OA/OIT/EISO via the Commonwealth reporting system. Automated SIEM process should be used where available.	X	X	

Incident Response and Countermeasures

Following the immediate response to a security incident, different countermeasures may be taken, depending on the type and severity of the incident and the value of the affected assets. As part of an incident response, the Commonwealth CISO and/or agency ISOs may prescribe the necessary incident management steps, which may include, but are not necessarily limited to, disconnecting a system from the network, confiscating hardware for evidence, or providing information for investigative purposes and choosing one or more of the following actions:

• **Information gathering:** Depending on the nature of the security event, it may be necessary to examine the situation, enhance logging capabilities, copy documents, back up temporary files, and set up alarms or change threshold values.

• **Configuration changes:** In many cases, configuration changes, including the installation of software patches, reconfiguration of hardware devices or policy revisions will be necessary following a security incident.

• **Forensics:** In certain cases, it may be required to conduct digital forensics on the affected IT resources to identify root cause and/or prevent an infection from spreading across the network. In certain cases, where criminal activity is suspected or confirmed, law enforcement authorities may be notified. In any case, all available evidence collected via digital forensics must be made tamper-resistant and the chain of custody of all such evidence must be maintained throughout the forensics investigative process.

Note: In the event, an affected asset or assets must be isolated and excluded from regular service to prevent further security incidents, business unit management will be engaged by the agency CIO or ISO to declare an outage and invoke their disaster recovery plan, or continuity of operations plan.

Information Sharing with External Partners

Information specific to a Cyber Security Incident, such as but not limited to Indicators of Compromise (IOCs), shall not be shared with any external partners until after remediation of the incident has taken place. Sharing of this information can cause further harm to the Commonwealth if the vulnerability/risk has not been remediated.

5. Procedures

All Agencies shall follow the incident response process outlined in the Incident Response Process Document, which can be found on IT Central https://itcentral.pa.gov/Security/Services/Incident Response Plan.pdf, when responding to or determining whether a Cyber Security Incident exists.

Incident Response Process

In the event a Cyber Security Incident has been suspected or confirmed, the agency ISO shall evaluate the Cyber Security Incident according to the following IT Security Incident Reporting Process:

Security Incident Category 1 (Critical/High)

Description / Criteria	1. The agency or EISO has determined there is/was an active attack on an agency system or network (e.g., denial of service or rapidly spreading malicious code); and/or 2. The agency or EISO has determined that other organizations' systems are affected, such as business partners or outside organizations; and/or 3. The agency or EISO has determined that the data involved is in the category of Sensitive Security or Protected as defined in ITP-SEC019.
Alerting Requirement	The agency ISO or designate is responsible for reporting the incident to the Pennsylvania Computer Security Incident Response Team (PA-CSIRT) within thirty (30) minutes of detection. The following information, at a minimum, is required when reporting the incident: • Agency name and business unit; • The point of contact name and phone number; and • Brief description of intrusion and damages (real or anticipated). Notification can take the form of a phone call to the PA-CSIRT Incident Response Hotline at 1-877-55CSIRT (1-877-552-7478) or online at: https://grc.pa.gov/RSAarcher/apps/ArcherApp/Home.aspx#home
Incident Reporting Requirements	Within **1 hour** of detection, the agency ISO or designate is responsible for submitting the incident information online at: https://grc.pa.gov/RSAarcher/apps/ArcherApp/Home.aspx#home
Incident Remediation / Closure	Critical incidents need to be remediated/closed within **5 business days** of being reported to OA/OIT/EISO. Incidents that cannot be remediated/closed during this timeframe need to have **weekly status updates** entered into the incident tracking system until the incident can be closed.

Security Incident Category 2 (Medium)

Description / Criteria	1. The agency or EISO has determined that the data involved is in the category of Privileged as defined in ITP-SEC019; and/or
	2. The incident has an impact or potential impact of:
	  • financial loss,
	  • loss or compromise of data,
	  • violation of legislation/regulation,
	  • damage to the integrity or delivery of critical goods, services or information; and/or
	3. The agency has been unable to resolve the incident; and/or
	4. The vulnerability that caused the incident has not been determined or mitigated.

Alerting Requirement	The agency ISO or designate will be responsible for reporting the incident to the PA-CSIRT within **1 hour** of detection. The following information, at a minimum, is required when reporting the incident: • Agency name and business unit; • The point of contact name and phone number; and • Brief description of intrusion and damages (real or anticipated). Notification can take the form of a phone call to the PA-CSIRT Incident Response Hotline at 1-877-55CSIRT (1-877-552-7478) or online at: https://grc.pa.gov/RSAarcher/apps/ArcherApp/Home.aspx#home
Incident Reporting Requirements	Within **4 hours** of detection, the agency ISO or designate is responsible for submitting the incident information online at: https://grc.pa.gov/RSAarcher/apps/ArcherApp/Home.aspx#home
Incident Remediation / Closure	Medium incidents need to be remediated/closed within **15 business days** of being reported to OA/OIT/EISO. Incidents that cannot be remediated/closed during this timeframe need to have **biweekly status updates** entered into the incident tracking system until the incident can be closed.

Security Incident Category 3 (Low)

Description / Criteria	1. The agency or EISO has determined that the data involved is in the category of Prerequisite-Required as defined in ITP-SEC019 and/or is publicly available; and/or 2. The agency has contained or resolved the incident.
Alerting Requirement	The agency ISO or designate will be responsible for reporting the incident to the PA-CSIRT within **1 hour** of detection. The following information, at a minimum, is required when reporting the incident: • Agency name and business unit; • The point of contact name and phone number; and • Brief description of intrusion and damages (real or anticipated). Notification can take the form of a phone call to the PA-CSIRT Incident Response Hotline at 1-877-55CSIRT (1-877-552-7478) or online at: https://grc.pa.gov/RSAarcher/apps/ArcherApp/Home.aspx#home
Incident Reporting Requirements	Within **8 hours** of detection, the agency ISO or designate is responsible for submitting the incident information online at: https://grc.pa.gov/RSAarcher/apps/ArcherApp/Home.aspx#home
Incident Remediation / Closure	Low incidents need to be remediated/closed within **20 business days** of being reported to OA/OIT/EISO. Incidents that cannot be remediated/closed during this timeframe need to have **monthly status updates** entered into the incident tracking system until the incident can be closed.

6. Responsibilities

7.1 **Agencies shall** adhere to the policy and procedures of this ITP and put in place processes for ensuring that all users of agency systems are aware of the procedures and the importance of reporting security incidents, threats, or malfunctions that may have an impact on the security of agency information.

7.2 **Third-party vendors, licensors, contractors, or suppliers** creating custom applications on behalf of Commonwealth entities shall comply with the requirements as outlined in this ITP.

7. Related ITPs/Other References

- Definitions of associated terms of this policy are published on the Office of Administration's public portal: http://www.oa.pa.gov/Policies/Pages/Glossary.aspx

- Commonwealth policies, including Executive Orders, Management Directives, and IT Policies are published on the Office of Administration's public portal: http://www.oa.pa.gov/Policies/Pages/default.aspx

- Management Directive 205.34 Amended Commonwealth of Pennsylvania Information Technology Acceptable Use Policy

- Management Directive 205.34 Amended – *Commonwealth of Pennsylvania Information Technology Acceptable Use Policy*

- ITP-SEC000 – *Information Security Policy*

- ITP-SEC016 – *Commonwealth of Pennsylvania Information Security Officer Policy*

- ITP-SEC019 – *Policy and Procedures for Protecting Commonwealth Electronic Data*

- ITP-SEC021 – *Security Information and Event Management Policy*

- ITP-SEC025 – *Proper Use and Disclosure of Personally Identifiable Information (PII)*

- ITP-SYM006 – *Commonwealth IT Resources Patching Policy*

- OPD-SEC000B – *Security Requirements for Third Party Vendors*

- Incident Response Process Document - https://itcentral.pa.gov/Security/Services/Incident Response Plan.pdf (Limited Access)

8. Authority

Executive Order 2016-06 *Enterprise Information Technology Governance*

9. Publication Version Control

It is the Authorized User's responsibility to ensure they have the latest version of this publication, which appears on https://itcentral.pa.gov for Commonwealth personnel and on the Office of Administration public portal: http://www.oa.pa.gov/Policies/Pages/default.aspx. Questions regarding this publication are to be directed to RA-ITCentral@pa.gov.

10. Exemption from this Policy

In the event an agency chooses to seek an exemption from the guidance within this ITP, a request for a policy waiver is to be submitted via the enterprise IT policy waiver process. Refer to ITP-BUS004 *IT Policy Waiver Review Process* for guidance.

This chart contains a history of this publication's revisions. Redline documents detail the revisions and are available to CWOPA users only.

Version	Date	Purpose of Revision	Redline Link
Original	08/02/2012	Base Document	N/A
Revision	05/01/2013	Consolidated OPD- SEC022A, OPD-SEC24B, STD-SEC024C into base policy	N/A
Revision	04/02/2014	ITP Reformat	N/A
Revision	03/09/2017	• Added/Revised Definitions • Clarified and moved EISO, Agency CIO and Agency ISO responsibilities into scenario table in Policy section • Removed Computer Incident Response Technology Standard section • Revised the data category types to align with ITP-SEC019 in the Procedures section Added Security Breach Checklist reference	N/A
Revision	03/30/2017	Updated category tables language for clarity	N/A
Revision	06/25/2020	• Added language to include required use of IRP. • Removed Objective section • Updated Exemption section to remove reference to COPPAR Reformatted	N/A
Revision	02/16/2021	• Minor revisions • Added definitions for PA Computer Security Incident Response Team and PA Information Sharing and Analysis Center	N/A
Revision	07/16/2021	• Updated link to IRP • Added language for third party vendors • Updated policy references	N/A
Revision	03/25/2022	• Definition added for IOCs, section added on information sharing with external partners. • Links added to policy references. • Replaced definitions with links to glossary where applicable	Revised IT Policy Redline <03/25/2022>

Adopted by the Pennsylvania Municipal Retirement Board, March 16, 2023

Barry L. Sherman
Barry Sherman, Chair