

NIST Cybersecurity Framework and Tandem Mapping

Introduction

On February 12, 2014, the National Institute of Standards and Technology released the Framework for Improving Critical Infrastructure Cybersecurity. The framework was updated to Version 1.1 in April 2018. The *Framework Core* includes five functions that pertain to cybersecurity risk management. Each function contains multiple categories and subcategories.

Functions	● Identify		
	● Protect		
	● Detect		
	● Respond		
	● Recover		

This mapping is for information purposes only. It serves to identify areas in Tandem where NIST cybersecurity topics are addressed and does not guarantee that a business using the Tandem software meets each NIST standard. However, the Tandem references throughout this document can be used to determine whether your organization’s controls and documentation fulfill the corresponding NIST standards.

NIST Category	NIST Subcategory	Tandem References
<p>● Identify</p> <p>Asset Management (ID.AM): The data, personnel, devices, systems, and facilities that enable the organization to achieve business purposes are identified and managed consistent with their relative importance to business objectives and the organization's risk strategy.</p>	<p>ID.AM-1: Physical devices and systems within the organization are inventoried</p>	<p>Business Continuity Plan: Systems / Equipment</p> <p>Policies:</p> <ul style="list-style-type: none"> IT Asset Management Network Diagrams
	<p>ID.AM-2: Software platforms and applications within the organization are inventoried</p>	<p>Business Continuity Plan: Software</p> <p>Policies: IT Asset Management</p>
	<p>ID.AM-3: Organizational communication and data flows are mapped</p>	<p>Policies: Network Diagrams</p> <p>Risk Assessment: Information Security Risk Assessment Data Flow</p>
	<p>ID.AM-4: External information systems are catalogued</p>	<p>Business Continuity Plan:</p> <ul style="list-style-type: none"> Systems / Equipment Software <p>Policies:</p> <ul style="list-style-type: none"> IT Asset Management Network Diagrams
	<p>ID.AM-5: Resources (e.g., hardware, devices, data, and software) are prioritized based on their classification, criticality, and business value</p>	<p>Business Continuity Plan:</p> <ul style="list-style-type: none"> Systems / Equipment Software <p>Risk Assessment:</p> <ul style="list-style-type: none"> Data Types Data Classifications Information Assets <p>Vendor Management: Services</p>

NIST Category	NIST Subcategory	Tandem References
	<p>ID.AM-6: Cybersecurity roles and responsibilities for the entire workforce and third-party stakeholders (e.g., suppliers, customers, partners) are established</p>	<p>See the Responsibility Reports in the following modules:</p> <ul style="list-style-type: none"> • Business Continuity Plan • Cybersecurity • Policies • Risk Assessment • Vendor Management <p>Incident Response Plan: Roles & Responsibilities Information Security Program Document Resource</p>
<p>● Identify</p> <p>Business Environment (ID.BE): The organization’s mission, objectives, stakeholders, and activities are understood and prioritized; this information is used to inform cybersecurity roles, responsibilities, and risk management decisions.</p>	<p>ID.BE-1: The organization’s role in the supply chain is identified and communicated</p>	<p>Business Continuity Plan: Business Impact Analysis:</p>
	<p>ID.BE-2: The organization’s place in critical infrastructure and its industry sector is identified and communicated</p>	<p>Business Continuity Plan Risk Assessment Considering Critical Infrastructure Knowledge Base Article</p>
	<p>ID.BE-3: Priorities for organizational mission, objectives, and activities are established and communicated</p>	<p>Business Continuity Plan: Policy</p>
	<p>ID.BE-4: Dependencies and critical functions for delivery of critical services are established</p>	<p>Business Continuity Plan:</p> <ul style="list-style-type: none"> • Business Impact Analysis • Business Process Dependency Report

NIST Category	NIST Subcategory	Tandem References
	ID.BE-5: Resilience requirements to support delivery of critical services are established	Business Continuity Plan: <ul style="list-style-type: none"> • Business Impact Analysis • Criticality Levels / Maximum Tolerable Downtimes (MTD) • Recovery Time Objectives (RTOs) • Recovery Point Objectives (RPOs)
● Identify Governance (ID.GV): The policies, procedures, and processes to manage and monitor the organization's regulatory, legal, risk, environmental, and operational requirements are understood and inform the management of cybersecurity risk.	ID.GV-1: Organizational cybersecurity policy is established and communicated	Policies
	ID.GV-2: Cybersecurity roles and responsibilities are coordinated and aligned with internal roles and external partners	See the Responsibility Reports in the following modules: <ul style="list-style-type: none"> • Business Continuity Plan • Cybersecurity • Policies • Risk Assessment • Vendor Management Incident Response Plan (Roles & Responsibilities)
	ID.GV-3: Legal and regulatory requirements regarding cybersecurity, including privacy and civil liberties obligations, are understood and managed	Policies: Information Sharing and Regulatory Monitoring
	ID.GV-4: Governance and risk management processes address cybersecurity risks	Risk Assessment: Risk Management Plan

NIST Category	NIST Subcategory	Tandem References
<p>● Identify</p> <p>Risk Assessment (ID.RA): The organization understands the cybersecurity risk to organizational operations (including mission, functions, image, or reputation), organizational assets, and individuals.</p>	<p>ID.RA-1: Asset vulnerabilities are identified and documented</p>	<p>Risk Assessment:</p> <ul style="list-style-type: none"> Information Assets Asset-Based Risk Assessments <p>Policies:</p> <ul style="list-style-type: none"> IT Asset Management Vulnerability and Patch Management <p>Audit Management</p>
	<p>ID.RA-2: Cyber threat intelligence is received from information sharing forums and sources</p>	<p>Policies: Information Sharing and Regulatory Monitoring</p> <p>Risk Assessment: Controls: Information Sharing Forum</p>
	<p>ID.RA-3: Threats, both internal and external, are identified and documented</p>	<p>Risk Assessment: Threats</p>
	<p>ID.RA-4: Potential business impacts and likelihoods are identified</p>	<p>Risk Assessment:</p> <ul style="list-style-type: none"> Threat Potential Impacts BCP Risk Matrix <p>Business Continuity Plan: Business Impact Analysis</p>
	<p>ID.RA-5: Threats, vulnerabilities, likelihoods, and impacts are used to determine risk</p>	<p>Risk Assessment: Threat Likelihood, Potential Damage, and Risk</p> <p>Addressing Vulnerabilities in the Risk Assessment Knowledge Base Article</p>
	<p>ID.RA-6: Risk responses are identified and prioritized</p>	<p>Risk Assessment: Risk Management Plan</p>
<p>● Identify</p> <p>Risk Management Strategy (ID.RM): The organization's</p>	<p>ID.RM-1: Risk management processes are established, managed, and agreed to by organizational stakeholders</p>	<p>Risk Assessment:</p> <ul style="list-style-type: none"> Revision/Approval Log Risk Management Plan

NIST Category	NIST Subcategory	Tandem References
<p>priorities, constraints, risk tolerances, and assumptions are established and used to support operational risk decisions.</p>	<p>ID.RM-2: Organizational risk tolerance is determined and clearly expressed</p>	<p>Cybersecurity Assessment Tool:</p> <ul style="list-style-type: none"> • Risk Appetite Statement • Target Risk Levels <p>Risk Assessment: Risk Management Plan</p>
	<p>ID.RM-3: The organization's determination of risk tolerance is informed by its role in critical infrastructure and sector specific risk analysis</p>	<p>Risk Assessment: Risk Management Plan</p> <p>Considering Critical Infrastructure Knowledge Base Article</p>
<p>● Identify</p> <p>Supply Chain Risk Management (ID.SC): The organization's priorities, constraints, risk tolerances, and assumptions are established and used to support risk decisions associated with managing supply chain risk. The organization has established and implemented the processes to identify, assess and manage supply chain risks.</p>	<p>ID.SC-1: Cyber supply chain risk management processes are identified, established, assessed, managed, and agreed to by organizational stakeholders</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Cloud Computing • Third-Party Secure Application Development • Vendor Management <p>Risk Assessment:</p> <ul style="list-style-type: none"> • Information Security Risk Assessment Questionnaire • Threats: Supply Chain Attack • Controls: Code Review, Hardware Inspection, Vendor Contract, Vendor Management Program, Vulnerability Scans, etc. <p>Vendor Management</p>
	<p>ID.SC-2: Suppliers and third party partners of information systems, components, and services are identified, prioritized, and assessed using a Cyber Supply Chain Risk Assessment process</p>	<p>Vendor Management</p>

NIST Category	NIST Subcategory	Tandem References
	<p>ID.SC-3: Contracts with suppliers and third-party partners are used to implement appropriate measures designed to meet the objectives of an organization’s cybersecurity program and Cyber Supply Chain Risk Management Plan</p>	<p>Vendor Management</p> <p>Risk Assessment:</p> <ul style="list-style-type: none"> • Risk Management Plan • Controls: Vendor Contracts
	<p>ID.SC-4: Suppliers and third-party partners are routinely assessed using audits, test results, or other forms of evaluations to confirm they are meeting their contractual obligations</p>	<p>Vendor Management:</p> <ul style="list-style-type: none"> • SOC Report Review • Security Testing Review <p>Risk Assessment: Controls: Review Security Testing Reports</p>
	<p>ID.SC-5: Response and recovery planning and testing are conducted with suppliers and third-party providers</p>	<p>Business Continuity Plan: Exercises & Tests</p> <p>Incident Management: Exercises & Tests</p> <p>Vendor Management</p>
<p>● Protect</p> <p>Identity Management, Authentication and Access Control (PR.AC): Access to physical and logical assets and associated facilities is limited to authorized users, processes, and devices, and is managed consistent with the assessed risk of authorized access to authorized activities and transactions.</p>	<p>PR.AC-1: Identities and credentials are managed for authorized devices, users, and processes</p>	<p>Policies: User Authentication</p>
	<p>PR.AC-2: Physical access to assets is managed and protected</p>	<p>Policies: Physical Security of Sensitive Information</p> <p>Risk Assessment: Controls: Physical Access Controls</p>
	<p>PR.AC-3: Remote access is managed</p>	<p>Policies: Remote Access</p> <p>Risk Assessment: Controls: Logical Access Controls</p>
	<p>PR.AC-4: Access permissions are managed, incorporating the principles of least privilege and separation of duties</p>	<p>Policies: Access Control</p> <p>Risk Assessment: Controls: Logical Access Controls</p>

NIST Category	NIST Subcategory	Tandem References
	<p>PR.AC-5: Network integrity is protected (e.g., network segregation, network segmentation)</p>	<p>Policies:</p> <ul style="list-style-type: none"> • ATM Security • Cloud Computing • Data Backup • Demilitarized Zone • Firewall • Virtual System Technology • Wireless Network Access <p>Risk Assessment: Controls: Logical Access Controls</p>
	<p>PR.AC-6: Identities are proofed and bound to credentials, and asserted in interactions</p>	<p>Policies: User Authentication</p>
<p>● Protect</p> <p>Awareness and Training (PR.AT): The organization's personnel and partners are provided cybersecurity awareness education and are trained to perform their cybersecurity-related duties and responsibilities consistent with related policies, procedures, and agreements.</p>	<p>PR.AT-1: All users are informed and trained</p>	<p>Policies: Employee Security Awareness Training</p> <p>Phishing</p> <p>Training:</p> <ul style="list-style-type: none"> • Acceptable Use Policy Training • Identity Theft Prevention Program (Red Flag) Training • Phishing Training • Security Awareness Training <p>Risk Assessment:</p> <ul style="list-style-type: none"> • Controls: <ul style="list-style-type: none"> ○ Employee Training ○ Employee Security Awareness Training

NIST Category	NIST Subcategory	Tandem References
	<p>PR.AT-2: Privileged users understand their roles and responsibilities</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Acceptable Use • Employee Security Awareness Training • User Authentication <p>Risk Assessment:</p> <ul style="list-style-type: none"> • Controls: <ul style="list-style-type: none"> ○ Employee Training ○ Employee Security Awareness Training
	<p>PR.AT-3: Third-party stakeholders (e.g., suppliers, customers, partners) understand their roles and responsibilities</p>	<p>Incident Management: Roles & Responsibilities</p> <p>Policies: Vendor Management</p>
	<p>PR.AT-4: Senior executives understand their roles and responsibilities</p>	<p>Information Security Program Resource Document</p> <p>Incident Management: Roles & Responsibilities</p> <p>Policies: Employee Security Awareness Training</p>
	<p>PR.AT-5: Physical and cybersecurity personnel understand their roles and responsibilities</p>	<p>Information Security Program Resource Document</p> <p>Incident Management: Roles & Responsibilities</p> <p>Policies:</p> <ul style="list-style-type: none"> • Acceptable Use Policy • Employee Security Awareness Training Policy <p>Training: Security Awareness Training</p> <p>Risk Assessment:</p> <ul style="list-style-type: none"> • Controls: <ul style="list-style-type: none"> ○ Employee Training ○ Employee Security Awareness Training

NIST Category	NIST Subcategory	Tandem References
<p>● Protect</p> <p>Data Security (PR.DS): Information and records (data) are managed consistent with the organization's risk strategy to protect the confidentiality, integrity, and availability of information.</p>	<p>PR.DS-1: Data-at-rest is protected</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Data Backup • Data Storage • Electronic Imaging • Encryption • Intrusion Detection and Prevention • Malicious Software Protection • Mobile Devices • Physical Security of Sensitive Information • User Authentication • Vulnerability and Patch Management <p>Risk Assessment: Controls: Data Encryption</p>
	<p>PR.DS-2: Data-in-transit is protected</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Email Security • Encryption • Mobile Devices • Remote Access • Removable Media and Data Transfer <p>Risk Assessment: Controls: Data Encryption</p>
	<p>PR.DS-3: Assets are formally managed throughout removal, transfers, and disposition</p>	<p>Policies:</p> <ul style="list-style-type: none"> • IT Asset Management • Data Retention and Destruction <p>Risk Assessment: Information Assets</p>

NIST Category	NIST Subcategory	Tandem References
	<p>PR.DS-4: Adequate capacity to ensure availability is maintained</p>	<p>Business Continuity Plan</p> <p>Policies: Network Monitoring and Log Management</p> <p>Risk Assessment:</p> <ul style="list-style-type: none"> • Threats: Capacity Saturation • Controls: Capacity Monitoring
	<p>PR.DS-5: Protections against data leaks are implemented</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Acceptable Use Policy • Cloud Computing • Data Backup • Data Storage • Employee Security Awareness Training • Mobile Devices • Remote Access • Remote Work • Vulnerability and Patch Management <p>Risk Assessment:</p> <ul style="list-style-type: none"> • Threats: Data Loss • Controls: Data Loss Prevention (DLP) Program <p>Training: Security Awareness Training</p>

NIST Category	NIST Subcategory	Tandem References
	<p>PR.DS-6: Integrity checking mechanisms are used to verify software, firmware, and information integrity</p>	<p>Business Continuity Plan:</p> <ul style="list-style-type: none"> • Cyber Resilience Preparedness Control <p>Policies:</p> <ul style="list-style-type: none"> • Security Testing • Third-Party Secure Application Development • Vulnerability and Patch Management
	<p>PR.DS-7: The development and testing environment(s) are separate from the production environment</p>	<p>Policies: Third-Party Secure Application Development</p> <p>Risk Assessment: Controls: Secure Coding Techniques</p>
<p>● Protect</p> <p>Information Protection Processes and Procedures (PR.IP): Security policies (that address purpose, scope, roles, responsibilities, management commitment, and coordination among organizational entities), processes, and procedures are maintained and used to manage protection of information systems and assets.</p>	<p>PR.IP-1: A baseline configuration of information technology/industrial control systems is created and maintained incorporating security principles (e.g. concept of least functionality)</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Change Management • System Hardening <p>Risk Assessment:</p> <ul style="list-style-type: none"> • Change Management
	<p>PR.IP-2: A System Development Life Cycle to manage systems is implemented</p>	<p>Policies:</p> <ul style="list-style-type: none"> • IT Asset Management • Change Management • Third-Party Secure Application Development <p>Risk Assessment: Controls: Secure Coding Techniques</p>
	<p>PR.IP-3: Configuration change control processes are in place</p>	<p>Policies: Change Management</p> <p>Risk Assessment: Controls: Change Management</p>

NIST Category	NIST Subcategory	Tandem References
	<p>PR.IP-4: Backups of information are conducted, maintained, and tested</p>	<p>Policies: Data Backup</p> <p>Business Continuity Plan:</p> <ul style="list-style-type: none"> • Backup Profiles • Exercises & Tests <p>Risk Assessment: Controls: Data Backup</p>
	<p>PR.IP-5: Policy and regulations regarding the physical operating environment for organizational assets are met</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Physical Security of Sensitive Information • Remote Work • Security Testing
	<p>PR.IP-6: Data is destroyed according to policy</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Acceptable Use Policy • Data Retention and Destruction • Remote Work • Security Testing <p>Risk Assessment: Controls: Data retention and Destruction Procedures</p>
	<p>PR.IP-7: Protection processes are improved</p>	<p>Policies: Security Committee</p>
	<p>PR.IP-8: Effectiveness of protection technologies is shared</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Information Sharing and Regulatory Monitoring • Security Committee • Security Testing <p>Risk Assessment: Controls: Information Sharing Forum</p>

NIST Category	NIST Subcategory	Tandem References
	<p>PR.IP-9: Response plans (Incident Response and Business Continuity) and recovery plans (Incident Recovery and Disaster Recovery) are in place and managed</p>	<p>Business Continuity Plan Incident Management Policies: Incident Management Risk Assessment:</p> <ul style="list-style-type: none"> • Controls: <ul style="list-style-type: none"> ○ Business Continuity Plan ○ Incident Response Plan
	<p>PR.IP-10: Response and recovery plans are tested</p>	<p>Business Continuity Plan: Exercises & Tests Incident Management: Exercises & Tests Risk Assessment: Controls: BCP/DR Testing</p>
	<p>PR.IP-11: Cybersecurity is included in human resources practices (e.g., deprovisioning, personnel screening)</p>	<p>Business Continuity Plan: Cross Training Matrix Policies:</p> <ul style="list-style-type: none"> • Access Control • Personnel Security <p>Risk Assessment:</p> <ul style="list-style-type: none"> • Controls <ul style="list-style-type: none"> ○ Access Control ○ Background Checks ○ Employee Termination Procedures
	<p>PR.IP-12: A vulnerability management plan is developed and implemented</p>	<p>Policies: Vulnerability and Patch Management Risk Assessment: Controls: Vulnerability Scans Addressing Vulnerabilities in the Risk Assessment Knowledge Base Article</p>

NIST Category	NIST Subcategory	Tandem References
<p>● Protect</p> <p>Maintenance (PR.MA): Maintenance and repairs of industrial control and information system components are performed consistent with policies and procedures.</p>	<p>PR.MA-1: Maintenance and repair of organizational assets are performed and logged, with approved and controlled tools</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Change Management • Vulnerability and Patch Management <p>Risk Assessment: Controls: Change Management</p>
	<p>PR.MA-2: Remote maintenance of organizational assets is approved, logged, and performed in a manner that prevents unauthorized access</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Remote Access • Vendor Management <p>Vendor Management</p>
<p>● Protect</p> <p>Protective Technology (PR.PT): Technical security solutions are managed to ensure the security and resilience of systems and assets, consistent with related policies, procedures, and agreements.</p>	<p>PR.PT-1: Audit/log records are determined, documented, implemented, and reviewed in accordance with policy</p>	<p>Policies: Network Monitoring and Log Management</p>
	<p>PR.PT-2: Removable media is protected and its use restricted according to policy</p>	<p>Policies: Removable Media and Data Transfer</p> <p>Risk Assessment: Information Security Risk Assessment Questionnaire</p>
	<p>PR.PT-3: Access to systems and assets is controlled, incorporating the principle of least functionality</p>	<p>Policies: Access Control</p> <p>Risk Assessment:</p> <ul style="list-style-type: none"> • Controls: <ul style="list-style-type: none"> ○ Physical Access Controls ○ Logical Access Controls
	<p>PR.PT-4: Communications and control networks are protected</p>	<p>Business Continuity Plan: Preparedness Controls</p> <p>Policies:</p> <ul style="list-style-type: none"> • Voice over Internet Protocol • Wireless Network Access <p>Vendor Management</p>

NIST Category	NIST Subcategory	Tandem References
	<p>PR.PT-5: Mechanisms (e.g. failsafe, load balancing, hot swap) are implemented to achieve resilience requirements in normal and adverse situations</p>	<p>Business Continuity Plan:</p> <ul style="list-style-type: none"> • Preparedness Controls • Backup Profiles • Exercises & Tests • System/Equipment Recovery
<p>● Detect</p> <p>Anomalies and Events (DE.AE): Anomalous activity is detected and the potential impact of events is understood.</p>	<p>DE.AE-1: A baseline of network operations and expected data flows for users and systems is established and managed</p>	<p>Policies:</p> <ul style="list-style-type: none"> • Intrusion Detection and Prevention • Network Monitoring and Log Management <p>Risk Assessment: Information Security Risk Assessment Data Flows</p>
	<p>DE.AE-2: Detected events are analyzed to understand attack targets and methods</p>	<p>Incident Management:</p> <ul style="list-style-type: none"> • Incident Handling Process: Detection • Action Plans <p>Policies:</p> <ul style="list-style-type: none"> • Intrusion Detection and Prevention • Malicious Software Protection • Network Monitoring and Log Management
	<p>DE.AE-3: Event data are collected and correlated from multiple sources and sensors</p>	<p>Incident Management: Action Plans</p> <p>Policies:</p> <ul style="list-style-type: none"> • Intrusion Detection and Prevention • Network Monitoring and Log Management
	<p>DE.AE-4: Impact of events is determined</p>	<p>Incident Management: Severity Levels</p> <p>Policies: Intrusion Detection and Prevention</p>

NIST Category	NIST Subcategory	Tandem References
	<p>DE.AE-5: Incident alert thresholds are established</p>	<p>Incident Management:</p> <ul style="list-style-type: none"> Incident Handling Process: Detection Additional Documentation: Internal Communication <p>Policies:</p> <ul style="list-style-type: none"> Incident Management Intrusion Detection and Prevention
<p>● Detect</p> <p>Security Continuous Monitoring (DE.CM): The information system and assets are monitored to identify cybersecurity events and verify the effectiveness of protective measures.</p>	<p>DE.CM-1: The network is monitored to detect potential cybersecurity events</p>	<p>Incident Management: Incident Handling Process: Detection</p> <p>Policies:</p> <ul style="list-style-type: none"> Firewall Intrusion Detection and Prevention Malicious Software Protection Network Monitoring and Log Management
	<p>DE.CM-2: The physical environment is monitored to detect potential cybersecurity events</p>	<p>Incident Management: Incident Handling Process: Detection</p> <p>Policies: Physical Security of Sensitive Information</p>
	<p>DE.CM-3: Personnel activity is monitored to detect potential cybersecurity events</p>	<p>Incident Management: Incident Handling Process: Detection</p> <p>Policies:</p> <ul style="list-style-type: none"> Acceptable Use Policy Network Monitoring and Log Management Personnel Security

NIST Category	NIST Subcategory	Tandem References
	DE.CM-4: Malicious code is detected	Incident Management: <ul style="list-style-type: none"> Incident Handling Process: Detection Action Plans: Malicious Code Policies: Malicious Software Protection
	DE.CM-5: Unauthorized mobile code is detected	Incident Management: <ul style="list-style-type: none"> Incident Handling Process: Detection Action Plans: Malicious Code Policies: Malicious Software Protection
	DE.CM-6: External service provider activity is monitored to detect potential cybersecurity events	Incident Management: <ul style="list-style-type: none"> Incident Handling Process: Detection Action Plans: Third Party Policies: Vendor Management Vendor Management
	DE.CM-7: Monitoring for unauthorized personnel, connections, devices, and software is performed	Incident Management: Incident Handling Process: Detection Policies: <ul style="list-style-type: none"> IT Asset Management Network Monitoring and Log Management Physical Security of Sensitive Information Security Testing
● Detect Detection Processes (DE.DP): Detection processes and procedures are maintained and tested to	DE.DP-1: Roles and responsibilities for detection are well defined to ensure accountability	Incident Management: Roles & Responsibilities Policies: <ul style="list-style-type: none"> Incident Management Intrusion Detection and Prevention

NIST Category	NIST Subcategory	Tandem References
ensure awareness of anomalous events.	DE.DP-2: Detection activities comply with all applicable requirements	Incident Management: Incident Handling Process: Detection Policies: Intrusion Detection and Prevention
	DE.DP-3: Detection processes are tested	Incident Management: Exercises & Tests Policies: Security Testing
	DE.DP-4: Event detection information is communicated	Incident Management: Additional Documentation: Internal Communication Policies: <ul style="list-style-type: none"> • Incident Management • Intrusion Detection and Prevention • Security Committee
	DE.DP-5: Detection processes are continuously improved	Incident Management: Incident Handling Process: Postmortem Policies: <ul style="list-style-type: none"> • Security Committee • Intrusion Detection and Prevention
<p>● Respond</p> <p>Response Planning (RS.RP): Response processes and procedures are executed and maintained, to ensure response to detected cybersecurity events.</p>	RS.RP-1: Response plan is executed during or after an incident	Incident Management Policies: Incident Management

NIST Category	NIST Subcategory	Tandem References
<p>● Respond</p> <p>Communications (RS.CO): Response activities are coordinated with internal and external stakeholders (e.g. external support from law enforcement agencies).</p>	<p>RS.CO-1: Personnel know their roles and order of operations when a response is needed</p>	<p>Incident Management</p> <ul style="list-style-type: none"> • Roles & Responsibilities • Incident Handlers • Action Plans <p>Policies: Incident Management</p>
	<p>RS.CO-2: Incidents are reported consistent with established criteria</p>	<p>Incident Management:</p> <ul style="list-style-type: none"> • Categories • Severity Levels • Additional Documentation: Internal Communication <p>Policies: Incident Management</p>
	<p>RS.CO-3: Information is shared consistent with response plans</p>	<p>Incident Management: Additional Documentation</p> <ul style="list-style-type: none"> • Customer / Member Communication • Internal Communication • Third-Party Communication <p>Policies:</p> <ul style="list-style-type: none"> • Incident Management • Information Sharing and Regulatory Monitoring
	<p>RS.CO-4: Coordination with stakeholders occurs consistent with response plans</p>	<p>Incident Management:</p> <ul style="list-style-type: none"> • Roles & Responsibilities • Additional Documentation <ul style="list-style-type: none"> ○ Internal Communication ○ Third-Party Communication <p>Policies: Incident Management</p>

NIST Category	NIST Subcategory	Tandem References
	RS.CO-5: Voluntary information sharing occurs with external stakeholders to achieve broader cybersecurity situational awareness	Incident Management: Additional Documentation: Third-Party Communication Policies: Information Sharing and Regulatory Monitoring
<p>● Respond</p> <p>Analysis (RS.AN): Analysis is conducted to ensure adequate response and support recovery activities.</p>	RS.AN-1: Notifications from detection systems are investigated	Incident Management: Incident Handling Process: Detection Policies <ul style="list-style-type: none"> • Incident Management • Intrusion Detection and Prevention
	RS.AN-2: The impact of the incident is understood	Incident Management: <ul style="list-style-type: none"> • Incident Handling Process: Analysis • Severity Levels Policies: Incident Management
	RS.AN-3: Forensics are performed	Incident Management <ul style="list-style-type: none"> • Incident Handling Process: Analysis • Additional Documentation: Evidence Policies: Incident Management
	RS.AN-4: Incidents are categorized consistent with response plans	Incident Management: Categories Policies: Incident Management
<p>● Respond</p> <p>Mitigation (RS.MI): Activities are performed to prevent expansion of an event,</p>	RS.MI-1: Incidents are contained	Incident Management: Incident Handling Process: Containment Policies: Incident Management
	RS.MI-2: Incidents are mitigated	Incident Management: Incident Handling Process: Eradication and Recovery Policies: Incident Management

NIST Category	NIST Subcategory	Tandem References
mitigate its effects, and resolve the incident.	RS.MI-3: Newly identified vulnerabilities are mitigated or documented as accepted risks	Incident Management: Incident Handling Process: Postmortem Risk Assessment
<p>● Respond</p> <p>Improvements (RS.IM): Organizational response activities are improved by incorporating lessons learned from current and previous detection/response activities.</p>	RS.IM-1: Response plans incorporate lessons learned	Incident Management: Incident Handling Process: Postmortem Policies: Incident Management
	RS.IM-2: Response strategies are updated	Incident Management: <ul style="list-style-type: none"> • Incident Handling Process: Postmortem • Action Plans Policies: <ul style="list-style-type: none"> • Incident Management • Security Committee
<p>● Recover</p> <p>Recovery Planning (RC.RP): Recovery processes and procedures are executed and maintained to ensure restoration of systems or assets affected by cybersecurity events.</p>	RC.RP-1: Recovery plan is executed during or after a cybersecurity incident	Incident Management: Incident Handling Process: Recovery Business Continuity Plan Policies: Incident Management
<p>● Recover</p> <p>Improvements (RC.IM): Recovery planning and processes are improved by incorporating lessons learned into future activities.</p>	RC.IM-1: Recovery plans incorporate lessons learned	Incident Management: Incident Handling Process: Postmortem Business Continuity Plan: Exercises & Tests Policies: Incident Management
	RC.IM-2: Recovery strategies are updated	Incident Management: Incident Handling Process: Postmortem Business Continuity Plan Policies: Security Committee

NIST Category	NIST Subcategory	Tandem References
<p>● Recover</p> <p>Communications (RC.CO): Restoration activities are coordinated with internal and external parties (e.g. coordinating centers, Internet Service Providers, owners of attacking systems, victims, other CSIRTs, and vendors).</p>	<p>RC.CO-1: Public relations are managed</p>	<p>Incident Management: Additional Documentation:</p> <ul style="list-style-type: none"> • Customer / Member Communication • Internal Communication • Third-Party Communication <p>Business Continuity Plan:</p> <ul style="list-style-type: none"> • Emergency Checklist: Customer Communication • Preparedness Control: Customer Communication Plan
	<p>RC.CO-2: Reputation is repaired after an incident</p>	<p>Incident Management: Additional Documentation:</p> <ul style="list-style-type: none"> • Customer / Member Communication • Internal Communication • Third-Party Communication <p>Business Continuity Plan: Preparedness Controls:</p> <ul style="list-style-type: none"> • Customer Communication Plan • Employee Communication Plan
	<p>RC.CO-3: Recovery activities are communicated to internal and external stakeholders as well as executive and management teams</p>	<p>Incident Management: Additional Documentation:</p> <ul style="list-style-type: none"> • Customer / Member Communication • Internal Communication • Third-Party Communication <p>Business Continuity Plan:</p> <ul style="list-style-type: none"> • Call Trees • Employee Alerts Tool • Preparedness Control: Employee Communication Plan