

Security Standard – Security Incident Management (SS-014)



Department
for Work &
Pensions

Chief Security Office

Date: 26/10/2023

This Security Incident Management Security Standard is part of a suite of standards, designed to promote consistency across the Department for Work and Pensions (DWP), and supplier base with regards to the implementation and management of security controls. For the purposes of this standard, the term DWP and Authority are used interchangeably.

Technical security standards form part of the DWP Digital Blueprint which is a living body of security principles, architectural patterns, code of practice, practices and radars, that aim to support Product Delivery Units (PDUs) and suppliers in delivering the DWP and HMG Digital Strategy. Security standards and policies considered appropriate for public viewing are published here:

<https://www.gov.uk/government/publications/dwp-procurement-security-policies-and-standards>

Technical security standards cross-refer to each other where needed, so can be confidently used together. They contain both mandatory and advisory elements, described in consistent language (see table below).

Table 1 – Terms

| Term | Intention |
|---------------|---|
| must | denotes a requirement: a mandatory element. |
| should | should denotes a recommendation: an advisory element. |
| may | denotes approval. |
| might | denotes a possibility. |
| can | denotes both capability and possibility. |
| is/are | is/are denotes a description. |

1. Contents

1. Contents..... **3**
2. Revision History **4**
3. Approval History..... **5**
4. Compliance **5**
5. Exceptions Process **5**
6. Audience **6**
7. Accessibility Requirements..... **6**
8. Introduction..... **6**
9. Purpose **7**
10. Scope..... **8**
11. Minimum Technical Security Measures..... **9**
 11.1 Plan and prepare against security incidents 9
 11.2 Security incident detection and identification 10
 11.3 Collection and Preservation of Evidence by contracted Suppliers 12
 11.4 Security Incident Response, Mitigation and Reporting 15
 11.5 Security Incident Recovery and Remediation 17
 11.6 Post Security Incident Review 18
 11.7 Legal and Regulatory Requirements 18
12 Appendices **19**
 Appendix A – Security Outcomes 19
 Appendix B Internal References 21
 Appendix C External References 21
 Appendix D Abbreviations 22
 Appendix E Definition of Terms 22
 Appendix F Accessibility artefacts 22

2. Revision History

| Version | Author | Description | Date |
|---------|--------|--|------------|
| 1.0 | | First published version | 26/05/2017 |
| 2.0 | | <p>Full update in line with current best practices and standards;</p> <ul style="list-style-type: none"> Updated Intro, purpose, audience, scope; added reference to CIS v8 security controls Added NIST CSF references <p>11.1.1 & 11.1.2 Required details of the security incident management plan; annual testing</p> <p>11.2.2 Security Incident referral form embedded</p> <p>11.2.5 Contact telephone number added</p> <p>11.3.2 NPCC ref added</p> <p>11.3.3 DFIR professionals; cloud platform requirements</p> <p>11.3.5 power down, remove from network</p> <p>11.3.7 Full Disk Encryption; Encryption standard</p> <p>11.3.8 Annually; DWP Information Mgmt. Policy</p> <p>11.3.9 Hash algorithms added; work on copies, original evidence only with authorisation</p> <p>11.3.11 NPCC guidelines; contacting NCSC/notifying DWP</p> <p>11.3.14 Anti-tampering measures; Added ref to Privileged User Standard</p> <p>11.4.2 Supplier reporting requirements</p> <p>11.4.3 Collation and analysis of security incidents</p> <p>11.4.4 Security incident response requirements</p> <p>11.5.1 Security incident recovery requirements</p> <p>11.6.2 DFIR professionals; SIRT TRUST & VERIFY</p> <p>11.7 Legal & Regulatory requirements</p> | 26/10/2023 |

3. Approval History

| Version | Name | Role | Date |
|---------|------|------------------------|------------|
| 1.0 | | Chief Security Officer | 26/05/2017 |
| 2.0 | | Chief Security Officer | 26/10/2023 |

This document will be reviewed for continued completeness, relevancy and accuracy within 1 year of being granted “final” status, and at yearly intervals thereafter.

4. Compliance

Compliance with this standard will be verified through various methods, including but not limited to;

- controls tests performed by first-line teams and by 2nd line activities (e.g. security testing teams)
- security assurance activities to ensure that Architectural Design and delivery are appropriate and aligned to applicable Authority Security Standards. [See Security Assurance Strategy – Ref. A].
- independent external audit

Results of these will be fed back to the appropriate Authority Risk and System Owners.

5. Exceptions Process

In this document the term “**must**” is used in bold letters to indicate a mandatory security measure. Any exceptions to the application of this standard, or where specific security measures cannot be adhered to, **must** be presented to the Authority. This **must** be carried out prior to deployment and managed through the design caveats or exception process.

Such exception requests will invoke the Risk Management process to clarify the potential impact of any deviation to the configuration detailed in this standard.

Exceptions to the standard **must** be maintained on a risk register for accountability, traceability, and security governance reporting to senior management.

6. Audience

This document is intended for, but not necessarily limited to, technical architects, engineers, developers, security teams, project teams, including suppliers engaged in the design, development, implementation and operation of systems, services and applications.

7. Accessibility Requirements

Users of this standard **must** consider accessibility design requirements as appropriate. Further information on accessibility standards can be found in Appendix F.

8. Introduction

This Security Incident Management Security Standard defines the minimum security measures that **must** be implemented for use within the Authority.

ISO/IEC27035-1 2016 defines an information *security event* as “an occurrence indicating a possible breach of information security or failure of controls” and *security incident* as “one or multiple related and identified information security events that meet established criteria and can harm an organisation’s asset or compromises its operations.”

The Authority recognises a security incident as *“Any circumstance that has arisen contrary to policy and that has the potential to compromise His Majesty’s Government (HMG) assets. Assets include people, property or information. The circumstance may include actions that were actual or suspected; accidental, deliberate or attempted.”*

As this standard only provides minimum measures, they **should** be exceeded as appropriate depending on the threats and risks that need to be addressed, the sensitivity of the data, and in keeping with latest security enhancements.

The security measures are derived from industry best practice i.e. guidance published by NIST, CIS and OWASP (see Appendix C for full list external references) and support the implementation of appropriate security controls as selected by the Authority or our third party providers, such as the CIS Critical Security Controls v8 controls set. [see External References]

Every effort has been made to ensure the security measures are vendor and technology agnostic as far as possible; this is to ensure greater applicability of the standard regardless of the technologies used. The security measures **may** be implemented in different ways, depending on the technology choices and business requirements in question.

The aim of this standard is to ensure that:

- A security incident management framework is established, including specialist individuals (or teams), information, and tools required by the Authority 's security incident management process.
- Security incidents must be identified, responded to, recovered from, and followed up using an approved security incident management process, in a timely fashion.
- Collaborative working and data sharing are utilised to support response activity throughout the lifecycle of a security incident to protect the Authority and its Arms Length Bodies e.g., sharing information about attack vectors, Indicators Of Compromise (IOCs), Tactics, Techniques and Procedures (TTPs) at the earliest opportunity and without the need for a Non Disclosure Agreement (NDA).
- The Authority applies a risk-focused approach to security incident management. It is accepted that systems and services must have a proportionate and appropriate level of security management. This standard aims to assist in the reduction of impact from security incidents on employees, customers, citizens, information assets and other Authority assets and thereby reduce the likelihood of potential reputational damage to the Department.
- Ensure that security incidents are managed consistently across the Authority and by third party providers where applicable.
- Support the achievement of security outcomes described in Appendix A.

Technical security standards ultimately support the achievement of security outcomes sought by the Authority. They set the expectations for what needs to be done to achieve them and why, and provide an objective, measurable statement of the Authority's existing security posture in a number of important areas. The outcomes are based on the official NIST sub-categories where possible to ensure close alignment with the NIST Cyber Security Framework (CSF), and are enabled by the implementation of controls from the CIS Critical Security Controls v8 controls set. [see External References]. Those relevant to the subject of each standard can be found in Appendix A of every technical security standard.

9. Purpose

The purpose of this standard is to ensure that Authority systems and services are designed, configured, deployed, and managed consistently to protect against typical threats at the OFFICIAL tier.

This standard also serves to provide a baseline in which assurance and compliance activities can be carried out, so that the Authority can be assured that security obligations are being met or exceeded.

10. Scope

This standard is to cover systems handling data within the Government Security Classification Policy (GSCP). All of the Authority's Security Incident Management implementations falling within this category will be subject to the requirements specified within this security standard. The requirements will be applied to new and existing installations.

The security control requirements laid out in this standard are product agnostic and applicable for all information systems that are provisioned for Authority use.

The scope of this standard covers the Authority's requirement for the identification, management and resolution of security incidents across:

- a) IT infrastructure, including hardware, firmware, middleware and network devices;
- b) operating systems;
- c) applications;
- d) network appliances (anything connected to the corporate network not included above);
- e) all environments (i.e. Production, Pre-Production, Test and Development).

This standard does not replace any legal or regulatory requirements.

This standard applies to all contractual agreements for the provision of computing and networking services for the Authority and these statements supplement all currently applicable contractual agreements to Authority computing and networking services, including those provided through managed services.

This standard also applies to:

- Authority employees using, designing, implementing and running new and current IT solutions or systems (i.e. infrastructure, applications, end user devices);
- all contracted third-party suppliers, who may be required to provide or assist in the timely identification, investigation, and remediation of security incidents in business applications, systems, equipment, and devices to ensure the appropriate levels of assurance for the confidentiality, integrity, and availability of the Authority's assets, including data;
- all Authority data, and any data that the Authority is processing for other data controllers;
- all Authority employees - who should understand their responsibilities in using the Authority's information assets including its systems;
- Authority Contracted suppliers that handle/access/process Authority Data.

Any queries regarding the security measures laid out in this standard **should** be sent to the Authority.

11. Minimum Technical Security Measures

The following section defines the minimum security measures that **must** be implemented to achieve the security outcomes described in Appendix A. For ease of reference, the official NIST sub-category ID is provided against each security measure e.g. PR.PT-3, to indicate which outcome(s) it contributes towards. Refer to Appendix A for full description of outcomes.

11.1 Plan and prepare against security incidents


The primary objective of this section is to pre-empt, control and manage the occurrence of security incidents. The measures below will help to reduce the likelihood and impact of security incidents.

| Reference | Minimum Technical Security Measures | NIST ID |
|-----------|---|---------|
| 11.1.1 | <p>A detailed security incident management plan must exist, which includes;</p> <ul style="list-style-type: none"> • communication methods (as well as any out-of-band methods) and information disclosure; • contact details for relevant parties, such as business managers, operational specialists, technical experts and external suppliers; • service owners and/or suppliers must produce supporting information (e.g. event logs) within an agreed timeframe and acceptable format; • service owners, internal Authority teams, and/or suppliers must provide security-related event logs (e.g. those produced by applications, systems, network devices and security products); • details about affected business environments (e.g. processes, operations and applications); • technical details (e.g. network diagrams, system configurations and external network connections); • threat intelligence and the results of threat analysis <p>The security management plan, its process and procedures must be tested at least annually.</p> | PR.IP-9 |

| | | |
|--------|---|--------------------|
| 11.1.2 | <p>The security incident management plan must also define:</p> <ul style="list-style-type: none"> • severity ratings, detailing the level and scale of disruption to critical business processes (e.g. disruption to single user, multiple users, minor systems or major systems); • impact ratings, detailing how a compromise of the confidentiality, integrity or availability of information could have an impact on the Authority, or citizens where relevant; • priority ratings, identifying how quickly the incident must be resolved based on relevant criteria (e.g. whether the affected system is customer or internet facing, severity rating, dependencies of critical systems, whether it's an easy or quick fix, and strategic importance of the affected systems). | PR.IP-9 DE.AE-5 |
| 11.1.3 | <p>Security awareness training must be provided to all Supplier employees as part of induction and also as part of annual refresh security training program. Additional training must be provided to personnel who are involved in security incident management to ensure that their roles and responsibilities are clear and understood.</p> | PR.AT-1 PR.AT-3 |

11.2 Security incident detection and identification

| Reference | Minimum Technical Security Measures | NIST ID |
|-----------|--|---------|
| 11.2.1 | <p>All employees must be familiar with the Authority's "Reporting Security Incidents" process referenced from the Authority's Information Management Policy [Ref. B] and Acceptable Use Policy [Ref. C] to understand what constitutes a potential security incident, how to report a security incident, and what actions they must and must not take themselves.</p> | RS.CO-1 |
| 11.2.2 | <p>All security incidents identified by a Supplier having access to the Authority's data, information and system must be notified to the Authority as quickly as possible via the "Security Incident referral form", attached below. This must include security incidents that are likely to have an impact on the Authority (employees/citizens; Authority assets; Authority reputation).</p> | RS.CO-2 |

| | | |
|--------|---|---------|
| | <p>The form should contain as much information as possible. The Authority will validate the reported incident. Suppliers must then email (without delay) to <u>SECURITYINCIDENT.RESPONSETEAM-SIRT-@DWP.GOV.UK</u> . The Department also articulates (with direction), that if very serious, then contact the Department directly.</p>  <p>Security Incident Response Team Refer</p> | |
| 11.2.3 | <p>The detection and reporting of system security events or existence of information security vulnerability must be automated where possible. Automated detection capabilities include network-based and host based Intrusion Detection and Prevention systems (IDPS), anti-virus software and log analysers.</p> | DE.DP-4 |
| 11.2.4 | <p>All security incident identified by the Authority as medium or higher must be actioned and attract a full Authority response. The risk rating is used by the Authority to determine the proportionate follow up action to be taken.</p> <p>All low rated security incidents must be actioned at the most appropriate management level.</p> | RS.AN-4 |
| 11.2.5 | <p>All security incidents identified out of normal office hours must follow the Authority’s Security Incident Management Process – Out of Hours. If known or suspected to be serious, then contact the Authority directly.</p> | RS.CO-2 |
| 11.2.6 | <p>All activities, results and related decisions must be logged and available for review. An independent third party should be able to review those processes, if required.</p> | PR.PT-1 |

11.3 Collection and Preservation of Evidence by contracted Suppliers

| Reference | Minimum Technical Security Measures | NIST ID |
|-----------|--|---------|
| 11.3.1 | All digital evidence must have a security data classification. If for any reason the security classification of the digital evidence is not determined at the time of acquisition, then the default level must be comparable to the classification level of OFFICIAL-SENSITIVE until correctly classified. The digital evidence could be re-classified following initial response and triage. | ID.AM-5 |
| 11.3.2 | The Authority’s Information Management Policy [Ref. B] and Forensic Readiness Policy [Ref. C], and general forensic procedures (such as National Police Chiefs’ Council [NPCC] Good Practice Guide for Digital Evidence – see External References) must be followed while collecting, storing and preserving the evidence. | RS.AN-3 |
| 11.3.3 | <p>All digital evidence must only be collected by digital forensic & incident response (DFIR) professionals, and never by system administrators or other privileged users.</p> <ul style="list-style-type: none"> • Authority cloud teams and DFIR teams must engage and have strategies in place for data acquisition on Authority cloud platforms. • A separate cloud security incident management process must be established, to include cloud security incident management plans, which must be developed and tested. • Cloud security incident management plans must include procedures for the use of cloud-native and third-party Digital Forensic Incident Response (DFIR) tools, which can be deployed on cloud environments to isolate, acquire, parse, and analyse evidence. | RS.AN-3 |
| 11.3.4 | All actions taken in the collection and preservation of the evidence must be logged, preserved and available for review. An audit trail or other record of processes applied to digital evidence must be created and preserved. An independent third party must be able to review those processes, if required. | RS.AN-3 |

| | | |
|---------------|--|----------------------------|
| <p>11.3.5</p> | <p>All digital evidence must be labelled to preserve the chain of custody. The chain of custody must be completed when an investigator assumes physical control of digital electronic artefacts (and any incorporated storage devices). Storage devices must be powered down / power source removed, and the device removed from the network if connected.</p> <p>The following information regarding the collection must be logged:</p> <ul style="list-style-type: none"> • Description of the evidence • Time and Date the evidence was gathered • Exact location of the evidence from where it was gathered • Name of the person collecting the evidence • Relevant circumstances surrounding the collection • Any controls taken in consideration • Any analysis performed on the digital evidence • Disposition methods of evidence, where applicable • Transfer details, as per 11.3.7 | <p>RS.AN-3</p> |
| <p>11.3.6</p> | <p>Each person who handles the evidence must sign the chain of custody log indicating the time they took the responsibility for the evidence and the time they handed off to the next person in the chain of custody. This information must be continuously shared with the Authority.</p> | <p>RS.AN-3</p> |
| <p>11.3.7</p> | <p>All digital evidence and the log of imaging and copying process must be stored in a physical secure location and with Full Disk Encryption in line with SS-007 Use of Cryptography security standard [Ref. F].</p> | <p>PR.DS-1</p> |
| <p>11.3.8</p> | <p>All digital evidence preserved securely must be monitored at least annually. All digital evidence must be reviewed, stored and destroyed in accordance with the Authority's Information Management policy.</p> | <p>PR.DS-3 PR.IP-6</p> |
| <p>11.3.9</p> | <p>All investigation and analysis of digital evidence must be performed on the copy, and not on the original evidence. Forensic tool must be used to make forensic images or copies. The hash value (SHA1 and SHA256) of the forensic image must be verified with the original evidence to gain assurance that the evidence has not be changed by an analysis.</p> | <p>RS.AN-3</p> |

| | | |
|---------|--|---------|
| | <p>Additional images or copies should be made if required (for example, if evidence on the copy or image is destroyed due to forensic work, a fresh copy of the original media should be made to continue with the forensics analysis). Only working on copies preserves the integrity of the evidence.</p> <p>The decision to access original evidence should be made carefully, considering the potential risks and legal requirements, ensure it remains admissible in legal proceedings.</p> <p>Authority validation/authorisation must be obtained prior to working on original evidence.</p> | |
| 11.3.10 | <p>All imaging and copying processes must keep the proof of the processes carried out for audit purposes.</p> | PR.PT-1 |
| 11.3.11 | <p>All high and very high rated security incidents involving actionable crime must be reported to law enforcement agencies via appropriate channels. Law enforcement should be involved in the acquisition stage, but where this is not possible evidence collected by Authority digital forensics employees (or their Suppliers) should be collected in accordance with the NPCC guidelines and Chain of Custody maintained. In some case, the security data classification or evidence of an actionable crime is only known after the initial response and analysis. In those circumstances to ensure continuity is maintained, Chain of Custody and records of acquisition and analysis should be passed to the relevant law enforcement agency.</p> <p>Depending upon the nature of the incident, for all high and very high rated security incidents where malicious activity is identified, and assistance from NCSC is required this can be requested of the Authority via the measures described above. Alternatively, suppliers may contact NCSC directly, but they must still inform the Authority immediately.</p> <p>To ensure continuity is maintained, Chain of custody and records of acquisition and analysis should be passed to the NCSC via the Authority where necessary.</p> <p>In all circumstances, legal advice must be sought from the Authority's legal team before informing regulatory and/or law enforcement agencies.</p> | RS.AN-3 |
| 11.3.12 | <p>All relevant and available network activity logs (such as IDPS logs, network flow data captured by a flow monitoring system, packet captures collected during an incident, firewall and other network devices logs) must be collected and correlated from disparate sources to support network forensic analysis.</p> | DE.AE-3 |

| | | |
|---------|--|---------|
| 11.3.13 | All relevant and available logs from application or database servers must be investigated to identify signs of any malicious activity. | DE.AE-2 |
| 11.3.14 | Any forensic report must be retained as per the Authority's Information Management Policy. The summary of findings must be shared with SIRT as per the security incident process. The digital forensic team may carry out a technical report after the closure of security incident solely for lessons learnt purposes. The technical report must be retained by the Authority and stored in a secured location with appropriate anti-tampering measures, and clear role-based access controls in line with SS001 pt.2 Privileged User Access Security Standard [Ref. E]. | RS.AN-3 |

11.4 Security Incident Response, Mitigation and Reporting

| Reference | Minimum Technical Security Measures | NIST ID |
|-----------|---|--------------------|
| 11.4.1 | All efforts must be undertaken to limit the effect or scope of an incident. Depending upon the nature of incident, the Authority would recommend taking containment steps on the affected system(s) to prevent any further damage to the system or the data on it. These steps would depend on the nature of the compromise/malware, and whether there is the need for preserving evidence. | RS.MI-1 |
| 11.4.2 | A summary of the findings (including incident type and category, information affected and events leading up to incidents) must be documented and maintained on a continuous basis, using a consistent approach in a report circulated to the key stakeholders at the earliest opportunity, based on the severity rating of the security incident. All reports documenting high rated and very high rated security incidents from a Supplier must be informed to the Authority. There is an expectation for the Supplier to provide its own report into what happened; why; and what it is doing to ensure doesn't happen again etc. (And to provide any findings from its own internal investigation to the Authority). | RS.CO-2 RS.CO-3 |

| | | |
|---------------|--|--|
| <p>11.4.3</p> | <p>Information about security incidents must be collated and reviewed regularly, to help:</p> <ul style="list-style-type: none"> • determine patterns and trends of security incidents • understand the costs and impacts associated with incidents • assess the operational implications (e.g. the effect on the safety, reliability and availability of benefit payment systems) • identify common factors that have influenced incidents (typically by performing a root cause analysis) • determine the effectiveness of controls (e.g. which controls are better at preventing, detecting and delaying incidents or minimising the business impact of incidents) • reduce the likelihood, frequency or impact of future similar incidents • provide a comparison of internal and external incident information • improve future information risk assessments and security audits. | <p>RS.IM-1 RS.IM-2</p> |
| <p>11.4.4</p> | <p>The response to information security incidents must include:</p> <ul style="list-style-type: none"> • analysing available information, such as system, network and technical logs; • handling necessary evidence (e.g. collecting it in accordance with legal constraints and protecting it against unauthorised tampering); • investigating the cause of information security incidents, supported by specialists, such as experts in forensics and cyber incident response; • containing the information security incident (e.g. by making changes to access control systems, increasing network capacity, terminating or diverting network connections, or shutting down systems) • eradicating the cause of the information security incident • logging all actions taken • invoking crisis management or business continuity plans when a serious incident takes place. | <p>RS.AN-1 RS.AN-3 RS.MI-1 RS.MI-2</p> |

11.5 Security Incident Recovery and Remediation

| Reference | Minimum Technical Security Measures | NIST ID |
|-----------|--|--------------------|
| 11.5.1 | <p>Recovery from security incidents must involve (if appropriate):</p> <ul style="list-style-type: none"> • postponing any planned changes to network or IT infrastructure (e.g. upgrading to a new operating system), sometimes referred to as a change freeze; • rebuilding systems or networks (and supporting IT facilities) to a previously known secure state; • restoring from information that has not been compromised by the information security incident; • enabling any transactions in progress at the point of failure to either be completed (e.g. rolled forward) or removed (e.g. using auto roll-back techniques); • verifying data being restored is accurate and complete; • closure of the information security incident. | RC.RP-1 |
| 11.5.2 | <p>Compromised systems must be restored to normal operation. This may include for example restoring systems from clean backups, rebuilding systems from scratch, replacing compromised files with clean versions, installing patches, changing passwords or tightening network perimeter security.</p> <p>Compromised systems when rebuilt from scratch must be configured effectively and must be secured to a known good condition.</p> | RC.RP-1 |
| 11.5.3 | <p>Once the cause of the incident is established, corrective action must be taken and additional controls introduced to prevent the same course of events happening again in the future. This action includes closing any vulnerability that existed and was exploited during the incident.</p> | RC.IM-1 RC.IM-2 |

11.6 Post Security Incident Review

| Reference | Minimum Technical Security Measures | NIST ID |
|-----------|---|--------------------|
| 11.6.1 | Post security incident/lessons learnt review meetings of security incidents must be completed within two weeks of the security incident resolution. | RS.IM-1 RC.IM-1 |
| 11.6.2 | Root-cause analysis must be performed by DFIR professionals and validated to identify the root cause of the security incident and confirm how the security incident happened including who and what is at risk. SIRT operates under the TRUST and VERIFY model. | RS.IM-1 RC.IM-1 |
| 11.6.3 | Security incidents must be re-classified based on the actual impact. | RS.AN-2 |
| 11.6.4 | The report of security incidents must be regularly reviewed as part of the information security management lifecycle to identify changes in the threat environment that might request for amendments to the security incident management plan, security risk assessment, security policy and or security standards and procedures. | RS.IM-1 RC.IM-1 |

11.7 Legal and Regulatory Requirements

| Reference | Minimum Technical Security Measures | NIST ID |
|-----------|---|---------|
| 11.7.1 | <p>Relevant legal and regulatory requirements must be identified and met during security incident response, which include:</p> <ul style="list-style-type: none"> • security-related laws and regulations relevant to the incident • any specific compliance requirements (e.g. retaining information for further investigation or submitting breach notifications to affected individuals and relevant authorities) • incident reporting timescales (e.g. timeframe in which a data breach must be reported to regulatory bodies). | ID.GV-3 |

12 Appendices

Appendix A – Security Outcomes

The minimum security measures defined in this standard contribute to the achievement of security outcomes described in the table below. For consistency, the official NIST Sub-category IDs have been carried through to the standards.

Table 1 – List of Security Outcomes Mapping

| NIST Ref | Security Outcome (sub-category) | Related Security measure |
|----------|---|--------------------------|
| ID.AM-5 | Resources (e.g., hardware, devices, data, time, personnel, and software) are prioritized based on their classification, criticality, and business value | 11.3.1 |
| ID.GV-3 | Legal and regulatory requirements regarding cybersecurity, including privacy and civil liberties obligations, are understood and managed | 11.7.1 |
| PR.AT-1 | All users are informed and trained | 11.1.3 |
| PR.AT-3 | Third-party stakeholders (e.g., suppliers, customers, partners) understand their roles and responsibilities | 11.1.3 |
| PR.DS-1 | Data-at-rest is protected | 11.3.7 |
| PR.DS-3 | Assets are formally managed throughout removal, transfers, and disposition | 11.3.8 |
| PR.IP-6 | Data is destroyed according to policy | 11.3.8 |
| PR.IP-9 | Response plans (Incident Response and Business Continuity) and recovery plans (Incident Recovery and Disaster Recovery) are in place and managed | 11.1.1, 11.1.2 |
| PR.PT-1 | Audit/log records are determined, documented, implemented, and reviewed in accordance with policy | 11.2.6, 11.3.10 |

| | | |
|---------|--|--|
| DE.AE-2 | Detected events are analysed to understand attack targets and methods | 11.3.13 |
| DE.AE-3 | Event data are collected and correlated from multiple sources and sensors | 11.3.12 |
| DE.AE-5 | Incident alert thresholds are established | 11.1.2 |
| DE.DP-4 | Event detection information is communicated | 11.2.3 |
| RS.CO-1 | Personnel know their roles and order of operations when a response is needed | 11.2.1 |
| RS.CO-2 | Incidents are reported consistent with established criteria | 11.2.2, 11.2.5, 11.4.2 |
| RS.CO-3 | Information is shared consistent with response plans | 11.4.2 |
| RS.AN-1 | Notifications from detection systems are investigated | 11.4.4 |
| RS.AN-2 | The impact of the incident is understood | 11.6.3 |
| RS.AN-3 | Forensics are performed | 11.3.2, 11.3.3, 11.3.4, 11.3.5, 11.3.6, 11.3.9, 11.3.11, 11.3.14, 11.4.4 |
| RS.AN-4 | Incidents are categorized consistent with response plans | 11.2.4 |
| RS.MI-1 | Incidents are contained | 11.4.1, 11.4.4 |
| RS.MI-2 | Incidents are mitigated | 11.4.4 |
| RS.IM-1 | Response plans incorporate lessons learned | 11.4.3, 11.6.1, 11.6.2, 11.6.4 |
| RS.IM-2 | Response strategies are updated | 11.4.3 |
| RC.RP-1 | Recovery plan is executed during or after a cybersecurity incident | 11.5.1, 11.5.2 |

| | | |
|---------|--|--------------------------------|
| RC.IM-1 | Recovery plans incorporate lessons learned | 11.5.3, 11.6.1, 11.6.2, 11.6.4 |
| RC.IM-2 | Recovery strategies are updated | 11.5.3 |

Appendix B Internal References

Below, is a list of internal documents that **should** be read in conjunction with this standard.

Table 2 – Internal References

| Ref | Document | Publicly Available* |
|-----|--|---------------------|
| A | Security Assurance Strategy | No |
| B | Information Management Policy | Yes |
| C | Acceptable Use Policy | Yes |
| D | DWP Forensic Readiness Policy | Yes |
| E | SS-001 pt.2 Privileged User Access Security Standard | Yes |
| F | SS-007 Use of Cryptography security standard | Yes |
| | | |
| | | |
| | | |

*Requests to access non-publicly available documents **should** be made to the Authority.

Appendix C External References

The following publications and guidance were considered in the development of this standard and **should** be referred to for further guidance.

Table 3 – External References

| External Documents List |
|--|
| CIS Critical Security Controls v8 controls set |
| National Police Chiefs’ Council (NPCC) Good Practice Guide for Digital Evidence, March 2012 |
| NIST Computer Security Incident Handling Guide Special Publication 800-61 Revision 2 August 2012 |
| CESG Security Incident Management (GPG24) Issue No: 1.2, October 2015 |

