



# IT Security Policy



*"Listening Learning Delivering"*



# IT Security Policy

## Document Location

This document will be held on the IT Services – Policy Documents EDMS Location.

## Revision History

**Date of this revision:** February 2018

**Date of next revision:**

Revision date	Previous revision date	Summary of Changes	Version Number
		First draft	1.0
15 <sup>th</sup> April 2009		Data Protection requirements reviewed and links to other policies	1.1
9 <sup>th</sup> Dec 2009		Review following feedback from PDG and Cllr Bob Russell	1.2
10 <sup>th</sup> Dec 2009		Updated to reflect changes required for Government Connects and GSCx including new section 11 and 13.	1.3
4 <sup>th</sup> June 2010		Updated to reflect new job roles e.g. head of service and input from JCNG.	1.4
Feb 2012		Annual Review – No significant change	1.4
Sept 2016		Change to password complexity	11.7
Feb 2018	Sept 2016	Reviewed and Updated for 2018 topology and strategic direction	2.0

# IT Security Policy

## Contents

Document Location .....	2
Revision History .....	2
Section 1. Policy .....	5
1.1 The IT Security Policy .....	5
1.2. How the Policy is set out .....	7
1.3. Controls applicable .....	7
1.4 Application of the policy .....	8
1.5 Annual Review of Policies .....	8
Section 2. IT Security Organisation .....	9
2.1. Management Information Security Forum .....	9
2.2. Allocation of IT security responsibilities .....	9
2.3. Specification, Procurement and Installation of IT facilities must be technically approved & authorised .....	10
2.4. Security of third party access .....	10
2.5 Specialist Security Partner.....	11
Section 3. Asset Classification and Control.....	12
3.1. Accountability for assets (including system software) .....	12
3.2. Information Classification Policy .....	13
Section 4. Employee responsibilities for IT Security .....	13
4.1. IT Security in job descriptions.....	13
4.2. IT Security Education & Training .....	13
4.3. IT Incident Reporting Policy .....	13
4.4. Breaches of the IT Security Policy .....	13
Section 5. Physical and Environmental Security.....	14
5.1. Secure Areas.....	14
5.2. Security of Core Computer Rooms.....	14
5.3. Work Station/PC Computer Security (including laptops).....	15
5.4. Security of Equipment off premises .....	15
5.5 Output Media .....	16
Section 6. Computer and network management.....	17
6.1. Documented operating procedures .....	17
6.2. Segregation of duties .....	17
6.3. External contractor management .....	18
6.4. Operational change control.....	18
6.5. Protection from malicious software (Virus Controls) .....	18
6.6. Vulnerability and Patch Management .....	19
6.7. Data backup Policy .....	20
6.8. Specification of Communications Networking Standards .....	20
6.10. Disposal of hardware .....	21
6.11 Monitoring and Logging.....	21

# IT Security Policy

Section 7. System Access Controls .....	23
7.1. Documented Access Control policy .....	23
7.2. Employees/Officers and Members rights of Inspection of data/documents ..	23
Section 8. System Development and Maintenance .....	24
8.1. Security Requirements, Analysis and Specification .....	24
8.2. Information Records Requirement .....	24
8.3. Controls of Operational systems/software.....	24
8.4. Review of Operating System changes .....	24
8.5. Restrictions on changes to software packages.....	24
Section 9. Business Continuity Planning .....	25
9.1 Business Continuity .....	25
Section 10. Compliance and Audit.....	25
10.1. Controls of proprietary software copying (Licensing) .....	25
10.2. Safeguarding the Council's records .....	26
10.3. Data Protection Legislation .....	26
10.4. Prevention of misuse of IT facilities.....	26
10.5. Compliance with the IT Security Policy .....	26
10.6. System Audit Controls .....	27
10.7. Protection of System Audit tools.....	27
Section 11. Infrastructure Management .....	28
11.1. Security Hardening .....	28
11.2. Patch Management.....	28
11.4. Software out of support and maintenance.....	28
11.5. Ports .....	28
11.6. Administrator Privileges .....	29
11.7. Management of User accounts .....	29
Section 12. The Council's Disciplinary Process.....	30
12.1. Disciplinary Process .....	30
Section 13. Access to the GCSx Network.....	31
13.1. Government Connect Secure Extranet (GCSx).....	31
13.2 GCSx – Restricted Data.....	31
13.3. Baseline Personnel Security Standard.....	32
13.4 Access to RESTRICTED systems for remote users .....	32
APPENDIX A List of relevant legislation and policies.....	33
APPENDIX B List of output media.....	33

# IT Security Policy

## Section 1. Policy

### 1.1 IT Security Policy

Information security management has four basic components:

**Confidentiality:** protecting sensitive information from unauthorised disclosure.

**Integrity:** safeguarding the accuracy and completeness of information and computer software.

**Availability:** ensuring that information and vital services are available to users when required.

**Risk Management:** Correct assessment of the risks of handling data

Information takes several forms - it is stored on computers, transmitted across networks, held on paper, removable media and conversations. For security purposes, all forms of information must be protected. As such, IT systems can be the target of many serious threats including computer based fraud, sabotage, vandalism, theft, virus attack, fire combustion and its consequences, user negligence, and computer hacking.

With increased legislative requirements, such as the new GDPR legislation in May 2018 being placed upon the Council and the deployment of more flexible ways of working, this release of the Security Policy deals with a number of new challenges that need to be accounted for in this latest release.

The Chief Executive and the Management Team remain committed in ensuring that effective IT Security Management Controls are in place across the organisation at all times. The controls are set at an appropriate level taking into account the organisation's risk profile, its obligations to comply with regulatory and legal requirements and best practice, as well as meeting the expectations of the public and all of the Council's other stakeholders.

# IT Security Policy

The IT Security Policy ensures business continuity and minimises business damage by preventing and diminishing the impact of security incidents. The policy enables information to be shared, but ensures the protection of that information and related IT assets.

The nominated officer for Information Security matters within the Council is the IT Service Manager (herein referred to as the service manager) who is ultimately responsible for identifying and mitigating security risks to the Council as a whole. However, as further explained in Section 2 (IT Security Organisation) many other staff also have important responsibilities to discharge under this policy set, and everyone impacted by these policies is required to understand their role in ensuring compliance.

It is the Information Security Policy that ensures that :

- Information security is considered a fundamental, integral part of all of the Council's operations
- All breaches of information security, actual or suspected, are reported, investigated, documented and acted upon
- Accuracy, completeness and segregation of client data is assured
- Integrity of client data is maintained and protected from attack
- Client data is protected from unauthorised access by employees or other clients of the Council, or third parties
- That where client data is accessed by employees or other clients of the Council, or third parties that access to this information is required
- Access is only in accordance with the policy
- Confidentiality of client data from unauthorised disclosure is assured
- Business continuity plans are implemented to support business needs
- Appropriate information security training is given to staff
- Regulatory and legislative requirements are met
- Staff are encouraged to suggest improvements to the security procedures

# IT Security Policy

## 1.2. How the Policy is set out

The IT Security Policy is divided into sections that provide a set of controls based on current security measures in use throughout the Council and supported by IT Services, along with industry recognised security protocols.

There are a number of supporting policies that are referenced from the main Information Security Policy. These are:

- Information Backup Policy (and supporting Procedure)
- Incident Management Policy
- Acceptable Use of IT Policy
- Home Working policy
- Data Protection Policy

## 1.3. Controls applicable

Some controls are not applicable to every IT environment and should be used selectively. However, a decision about non applicability may only be made by the service manager, and the default position (in the absence of an explicit statement of exception by the service manager) is that all controls apply to all environments.

As specified above most of these controls are in use by IT Services in their 'day-to-day' technical support to the Council's computer system users and are accepted as "good practice" subject to limiting factors such as legislative, environmental and technological constraints.

# IT Security Policy

## 1.4 Application of the policy

The policy applies to:

- All employees and elected members of the Council
- All employees and agents of other organisations who directly or indirectly support or use the Council's Information Systems
- All temporary or agency staff directly or indirectly employed by the Council
- All users having access of any kind to the Council's systems, resources and/or networks

This IT Security Policy is intended to be a living document, which will be updated as and when necessary. Sections and appendices can be added to reflect new or amended procedures and guidelines when determined.

The policies and controls documented in the IT Security Policy will be supplemented by detailed procedures and standards that will form part of the Council's overall information security management system. These will be published from time to time and made available to on a "need to know" basis by the service manager.

All such procedures and standards published under the auspices of the IT Security Policy will be deemed to form a part of the IT Security Policy, and breaches of those procedures and standards will be regarded as breaches of the IT Security Policy itself.

## 1.5 Annual Review of Policies

The IT Security Policy will be reviewed at least annually by the IT Security Group (see section 2 regarding this body). The purpose of the review will be to ensure that the IT Security Policy continues to meet the needs of the Council (particularly taking into account any changes to the Council's infrastructure, business processes or risk profile since the last review), and that the right balance is being struck between security, usability and cost. Input into the review process will be obtained from a number of sources including the IT service, user representatives, head of services and service managers.

# IT Security Policy

## Section 2. IT Security Organisation

### 2.1. Management Information Security Forum

Security is a responsibility of everyone associated with the Council.

A high level of involvement by senior officers throughout the Authority is necessary to ensure that there is clear direction and visible management support for the IT Security Policy, Business Risks and associated Security Initiatives/Strategy.

A forum known as the "IT Security Group" consisting of the IT Service Manager and the Chief Information Security Officer (CISO) will meet on a regular basis, at intervals no greater than every six months, to address the following: -

- Allocation of IT security responsibilities
- Specification, procurement and installation of IT facilities
- Security of third party access
- Specialised security partner
- Analyse reports to security issues
- Demands/ requirements of the new GDPR Legislation

The CISO is typically an Officer from within the IT Services Team who has the role within their terms of reference/ job description.

The IT Security Group can also draw on other resources from across the council i.e. the PPMO as needed. The Group will also be joined by the new Data Protection Officer (DPO)/ Information Manager who is due to be recruited in 2018.

### 2.2. Allocation of IT Security Responsibilities

The security of an information system is the responsibility of the "owner" of that system (typically a Service Area). Owners of information systems may delegate their security authority to an individual or group, but they remain ultimately accountable for ensuring that adequate security protection is implemented.

The role of the IT service is to advise, monitor and police this owner responsibility. In order to avoid any misunderstanding about this responsibility, it is essential that the areas for which the IT service manager, specific operational service managers and/or groups are responsible be clearly defined by way of an agreed protocol.

# IT Security Policy

## 2.3. Specification, Procurement and Installation of IT facilities must be technically approved & authorised

Any new IT facilities, software or databases must be approved by IT, the service manager and appropriate operational managers so as to ensure that the installation of equipment is for a clear business purpose, will provide an adequate level of physical security protection and will not adversely affect the security of any of the Council's existing business infrastructure.

Business approval - Each installation must have both IT and the operational service manager's approval authorising its purpose and use. Approval must also be sought from the service manager and/or a senior designated security forum officer responsible for the related security environment to ensure that it complies with the relevant security policies and requirements. See Appendix A for a list of these legislative policies.

Technical approval - It is essential that all devices connected to the Council's LANs (Local Area Networks) and WANs (Wide Area Networks) infrastructures are of an approved type and specification, as supported by IT Services.

## 2.4. Security of Third Party Access

Access to the Council's IT facilities by third parties might present a security risk. Where there is a business need for such access, the security implications must be assessed and suitable control requirements set out. These controls must be agreed and defined in a specific contract with the third party.

Arrangements involving third party access to the Authority's IT facilities must also be based on a formal contract containing (or referring to) the IT Security Policy and all of the necessary security conditions to ensure compliance.

Where it is necessary for a third party organisation to be granted remote access to the Council's IT infrastructure, this is a decision that must be approved by the IT service manager.

Where third parties are accessing protectively marked data they will be asked to sign a non-disclosure agreement.

Prior to authorising the IT service to establish the remote access, the service manager will ensure that:

- there is a clear business need for the third party access to be granted
- the access method does not represent a significant risk to the Council

# IT Security Policy

- there is a written agreement in place with the third party to control and manage the access
- Where possible the access is time constrained
- Access by third parties is reviewed

The service manager will monitor the ongoing business need for the third party access, and will ensure that it is terminated as soon as it is no longer required.

## 2.5 Specialist Security Partner

Given the specialist nature of IT Security and the requirement of external objective audit, the service manager through the CISO involve a specialist external security partner to audit and assess IT Security at the Council, and to advise on and assist in the implementation of improvements to the security regime as appropriate. This partner will typically be a Government GCHQ approved CLAS (CESG Listed Advisor Scheme) consultant.

The Council shall ensure that its state of security consistently complies with all necessary standards, is managed and implemented in accordance with this Policy, and that any security incidents requiring external assistance are dealt with rapidly and competently.

The framework for the activities of the Security Partner is as follows:

### Regular Activities

- Network software vulnerability and AV currency checks
- IT Health Check (PSN Audit)
- Penetration test (internal and external)

### Ad Hoc Activities

- Advising on security technologies, and assisting (where appropriate) in their implementation and support
- Advising on new threats to the Council's IT infrastructure
- Specialist training of staff on security issues
- Specialist testing of introduction of new technologies

# IT Security Policy

## Section 3. Asset Classification and Control

### 3.1. Accountability for Assets (including System Software)

All items of IT equipment owned or operated by the Council are hardware assets of the Council.

All items of software owned or licensed by the Council are software assets of the Council.

The contents of all databases, electronic mailboxes, word processing documents, spreadsheets, web pages, data files, configuration files and other information systems created by officers, members and third parties in the course of their duties are information assets of the Council.

All hardware assets, software assets and information assets of the Council (collectively referred to as "IT Assets") must be accounted for and have a nominated owner.

An inventory will be maintained of hardware and software assets and each asset clearly identified via an approved asset register/licensing database with appropriate controls clearly defined and designated for that purpose. This inventory will be centrally managed by the IT service area.

It is the responsibility of the service manager that the inventory is regularly checked. It is the responsibility of the nominated owner/user to ensure that any changes to configuration, usage or location are approved by IT prior to commencement.

It is the responsibility of each asset owner to ensure that access to the assets for which they are responsible is controlled and managed in accordance with this Policy (and in particular section 7).

# IT Security Policy

## 3.2. Information Classification Policy

The majority of data/ information processed by the Council is not protectively marked (Classified). Following a review by the UK Government Cabinet Office and it's security services in 2014, a major shake up in the way information is classified took place which removed the UK RESTRICTED protective marking and simplified the guidance. It is therefore highly unlikely that an Officer of the Council will ever need to process above the "OFFICIAL" level of marking if at all.

The Council no longer has a separate protective marking policy but follows the guidance produced by the Cabinet Office above. Links to this can be found from the IT Services Page on our intranet, Monty.

## Section 4. Employee Responsibilities for IT Security

### 4.1. IT Security in Job Descriptions

IT Security must be addressed at the recruitment stage and included in ALL new employee job descriptions, contracts and induction courses. Job descriptions should define IT security roles and responsibilities where appropriate.

This should include any general responsibilities for implementing or maintaining the IT Security Policy, outside that required by all employees, as well as any specific responsibilities for the protection of particular systems or for the execution of the IT security processes.

### 4.2. IT Security Education & Training

As part of all induction courses the Council's policies on IT security must be covered and agreed.

### 4.3. IT Incident Reporting Policy

This policy describes the policy for reporting and managing security incidents.

### 4.4. Breaches of the IT Security Policy

Breaches of the IT Security Policy will be dealt with in accordance with the Councils formal Disciplinary Process.

# IT Security Policy

## Section 5. Physical and Environmental Security

### 5.1. Secure Areas

IT facilities supporting critical or sensitive business activities must be housed in secure areas protected from unauthorised access, damage and interference. They must be protected by a defined security perimeter, with appropriate entry controls and security barriers and any specific environmental conditions recommended by the manufacturer/supplier.

Where this provision is not available an action plan will be drawn up and implemented to reduce the risk.

### 5.2. Security of Core Computer Rooms

Locations housing IT facilities that support business critical activities will require a higher level of physical security protection. The selection and design must take into account the possibility of all risks: fire, flood, explosion, civil unrest, electrical interference and other forms of natural or man made disaster.

Access to the core computer rooms shall be restricted.

It is acknowledged that on occasions it may be necessary for visitors to access the secure server room temporarily (e.g. technicians from third parties who supply hardware or software to the Council, security auditors, etc.). Visitors to the computer room shall be supervised at all times.

Each location should be assessed from a risk point of view and approached independently.

The computer rooms shall contain at least the following environmental control features:

- Air conditioning
- Environmental Monitoring
- Smoke detectors
- Secure power supply system
- Fire suppression system
- Emergency power off switches
- Fire extinguisher
- Un-interruptible Power Supply

# IT Security Policy

Procedures will be developed for the use of these control features and monitored.

## 5.3. Work Station/PC Computer Security (including Laptops and Mobile Devices)

All work station/PC equipment must be afforded a level of security that is determined by :

- Information/data stored on the equipment (from a data loss point of view)
- Replication or replacement risk
- Location and accessibility
- Portability
- Service value
- The hardware asset value

## 5.4. Security of Equipment Off Premises

IT equipment used outside the Authority's premises, for approved business activities (including laptops), is subject to at least an equivalent degree of IT security protection, as the above work station/PC and/or office equipment security protocols.

Special care must be taken to protect mobile devices (laptops, mobile phones, USB keys, PDAs etc.), due to the relative ease with which these may be stolen. Users of such devices will observe the following rules:

- Never leave them unattended in a public place
- Do not loan mobile devices to friends or family members
- Never leave equipment in a parked car or near a window
- Take reasonable steps to secure equipment away at night if left in the office or home

# IT Security Policy

## 5.5 Output Media

Output media (see Appendix B) containing personal data or system details must not be left where unauthorised persons can read them. Sensitive information must be labelled appropriately and only given to people who are authorised to receive it. Personal and sensitive data should be correctly disposed of (e.g. blue confidential waste sacks, shredding, incineration).

The principles of the Data Protection Act/ GDPR will be followed when managing output media. Destruction of personal data should be carried out in a secure manner to provide assurance that it cannot be retrieved by some unauthorised person following deletion or disposal.

# IT Security Policy

## Section 6. Computer and Network Management

### 6.1. Documented operating procedures

Operating procedures and detailed instructions must be in place for all operational computer systems, to ensure their correct and secure operation. Documented procedures are also required for any systems development, maintenance and testing, especially where it involves cross-functional activities with other groups.

As a minimum, system documentation should include the following:

- Start up and close down procedures
- Inter dependencies with other parts of the IT infrastructure
- Support contacts
- Back up procedures
- System recovery procedures
- Relevant operating procedures
- Admin username and access

### 6.2. Segregation of Duties

In order to reduce the opportunity for unauthorised modification or misuse of data, where possible the same staff should not carry out the following functions:

- IT Administrators
- System Administration
- Database Administration
- System Users

Where possible, the authorisation, performance and subsequent checking of a particular activity should be performed by different personnel (although it is accepted that this can give rise to practical difficulties in some situations – however these need to be formally recognised). Managers should be alert to the issue of segregation of duties and use reasonable endeavours to ensure that different personnel are involved in different phases of particular activities that could be used to perpetrate fraud or undermine the Council's security regime.

# IT Security Policy

It is recognised that due to capacity issue this segregation of duties cannot always be carried out. Other risk controls should be implemented in these situations.

## 6.3. External Contractor Management

The use of external contractors/companies to manage application and system software introduces a number of potential security exposures - such as compromise, damage, or loss of data. These risks must be identified in advance and appropriate measures agreed with the contractor and incorporated within their contract of employment/engagement. These measures must be no less stringent than those applied "in-house".

## 6.4. Operational Change Control

The Council has formal change control management responsibilities and procedures in place to ensure satisfactory control of all changes to equipment, software and procedures.

## 6.5. Protection from Malicious Software (Virus Controls)

It is essential to ensure that the Council network remains virus free, and that any penetration by any virus (or other malicious software) is immediately detected and the threat is contained and dealt with before any damage can occur. This is achieved through a multi tiered approach to the threat:

- Ensuring current anti virus software is always in place right across all Council Information Technology Assets
- Ensuring that all users of Council Information Technology Assets follow straightforward procedures to reduce the risk of viruses accidentally being let in to the organisation
- Ensuring that the vulnerabilities that viruses generally exploit are not present anywhere on the Council network
- Ensuring that appropriate processes are in place to minimise loss and deal effectively with viruses that are detected
- Effective and on-going training/ risk familiarisation is carried out across our User population recognising that our Users are our last line of defence

Council approved standard anti-virus software shall be installed on all of Council's servers, workstations, personal computers, laptops and notebooks, and automatic scanning for viruses shall be activated whenever such equipment is in use.

Irrespective of medium, (for example: CDs, USB keys and/or email attachments) the input of any software or data into the Council network shall pass through the

## **IT Security Policy**

Council's anti-virus controls so as to minimise the risk of viruses entering the Council network.

If a virus does enter the Council network then this shall be dealt with effectively and promptly by IT Services so as to minimise risk to the organisation.

Additionally, all users of Council IT Assets have a personal responsibility to play their part in protecting the Council network against malicious software.

In particular, users are responsible for ensuring that:

- They do not inadvertently introduce a virus from an external source into the Council network
- When using Council IT Assets, the equipment that they are using is running anti-virus software with up to date file definitions
- The use of output media (see Appendix B) is particularly susceptible to virus and as such IT should be informed when any such media is used that may have been used outside of the authorities network.
- They report any suspicious incidents immediately by (in the first instance) contacting the IT Helpdesk
- They follow any instructions received from the IT service regarding dealing with a virus threat.

### **6.6. Vulnerability and Patch Management**

The IT service is responsible for keeping abreast of identifications of new vulnerabilities that could impact Council Information Technology Assets and for implementing patches accordingly.

Where possible, software will be used to automatically deploy updates to Council Information Technology Assets.

Where automatic systems are not available periodic checks will be conducted to ensure that new vulnerability threats are identified and dealt with in a timely manner.

Where the responsible individuals make a determination that there is a potential impact associated with a new vulnerability they shall immediately contact the IT Service Manager/ CISO and determine an action plan.

# IT Security Policy

The action plan will typically comprise:

- Risk assessment and testing
- Implication for other IT infrastructure
- (If required) further research and verification with a trusted external information security advisor who is familiar with the Council network
- Implement a patch on all IT Assets potentially impacted by the vulnerability.

Patch implementation shall be conducted taking into account the need to minimize system downtime whilst still ensuring implementation of patches to all potentially impacted machines in a timely manner.

## 6.7. Data Backup Policy

The Data Backup policy describes in more detail the provision of data backup.

This policy is designed to protect data in the organization to be sure it is not lost and can be recovered in the event of equipment failure, intentional destruction, accidental loss or disaster.

## 6.8. Specification of Communications Networking Standards

In order to maintain acceptable levels of wide and local area network integrity and performance it will be necessary for all system elements to be of a standard approved by IT, in line with the IT Strategy.

Total responsibility lies with IT for any network installations planned to connect with the corporate network.

Secure configuration of the infrastructure is critical to Council's information security regime. Configuration practices should reflect the need for security to be set at an appropriate level given the Council's risk profile, regulatory and legal requirements and user needs. Security practices must also strike a balance between reducing risk and allowing business processes to function.

Configuration shall reflect the following core security principles:

- Defence in depth: Systems should be configured securely to level of best practice
- Security as a Priority: The security of the system will be not be compromised as a principle
- Principle of least privilege: Users and systems should only be given as much access as they need to do the job
- A system is only as secure as the weakest link.

# IT Security Policy

- Consideration if the information should not be available over the computer network

The Council's IT infrastructure will be segmented such that there are clear divisions between the internal network and the other unknown and or external traffic. A firewall shall separate the internal network from the zones carrying unknown traffic.

## 6.10. Disposal of Hardware

When a hardware asset is decommissioned, the IT service shall ensure that all information stored on decommissioned hardware and output media (See Appendix B) is irretrievably destroyed, in order to protect the confidentiality of the data they contain. This may mean physical destruction or low level reformatting of hard drives; the precise mechanism will be dictated by the nature of the device being decommissioned but using best practice (e.g. number of overwrites).

## 6.11 Monitoring and Logging

Logging involves the collection of event data on devices within the IT infrastructure. Logging processes also encompass the analysis of logging data, the alerting of the IT service to unusual and suspicious activity, and appropriate storage of log files.

As well as alerting the IT service to suspicious activity within the IT infrastructure, logs provide an audit function that allows the IT service to review compliance with security policies (e.g. access control).

The Council's logging process will cover the following components of the IT infrastructure:

- Internal servers
- Network devices including Firewalls and Routers

Logging processes will be managed at an individual device level in order to ensure that they are not overwritten and are kept to a manageable size.

- Log files must be automatically rotated so that files are not overwritten
- Log files must be kept locally for a minimum of 90 days
- Log files entries must be time stamped

All relevant Windows event logs generated are to be collected in a centralised location and stored on a secure server. Logs collected on the centralised system should be kept for a minimum of 6 months.

## IT Security Policy

The logs on the centralised server are to be monitored for anomalous events using appropriate software tools. Anomalous activity includes, but is not restricted to the following events:

- Port-scan attacks or repeated login attempts
- Access policy violations
- Suspicious traffic activity, for example large number of connection events to a web server
- Failed file and object access attempts

In addition, logs should be monitored for 'normal' activity of a significant nature. Examples include:

- Changes to system security configuration
- System shutdowns and restarts
- Privileged operations
- Access to files classified as Secret
- User and group changes in Active Directory

Log entries should be categorised in order to determine the severity of the event, and to aid filtering and auditing of log files. At a minimum the categories should include Informational, Warning and Error.

Logs will be reviewed on a regular basis for

- Unusual or anomalous events
- Events that have a 'serious' categorisation - e.g. errors or critical events
- Violation of security principals such as segregation of duty and least privilege
- Violations of the Access Controls policy

# **IT Security Policy**

## **Section 7. System Access Controls**

### **7.1. Documented Access Control policy**

The Council is committed to implementing and maintaining strong access controls to prevent unauthorised access to its systems and data, whilst simultaneously ensuring that all users have levels of access consistent with their needs in order to carry out their duties efficiently.

An Access Control Policy has been created and is a supporting document to this Policy.

### **7.2 Employees/Officers and Members rights of Inspection of Data/Documents**

The Council has strict rules, in-line with both legislative and Council policies, governing the access to documents by its employees and members. These rules apply just as much to those held in electronic form as they do for those held in paper form.

Council employees and members are also governed by the Data Protection Act/ GDPR legislation. Full details are in the data protection policy.

# IT Security Policy

## Section 8. System Development and Maintenance

### 8.1. Security Requirements, Analysis and Specification

The service manager is required to analyse the security requirements of all systems at the time the system specification/business case are made. These must also be considered when evaluating software packages and when any configuration changes are made.

### 8.2. Information Records Requirement

When specifying, implementing or reconfiguring systems it is important to take into account the Council's information records management policies.

### 8.3. Controls of Operational systems/software

In order to minimise the corruption of information systems, strict controls are necessary over the implementation of any changes. Change control procedures must be in place to ensure that security and control procedures are not compromised. In all such cases appropriate agreements/approvals, along with correct procedural approaches must be granted before any changes can be implemented that may impact on other business critical systems. When an operational service system needs to be closed down during normal office hours a proper impact assessment needs to take place and agreement made with key stakeholders.

### 8.4. Review of Operating System changes

It is often necessary to change operating systems (e.g. new release, software upgrade etc.). Before changes are made, the necessary checks must be made to ensure that there is no adverse impact on security.

### 8.5. Restrictions on changes to software packages

Where modification to software packages is essential an impact assessment, at an appropriate management level, must be made to ensure that there is no adverse impact on security.

Version control and a record of all patches applied will be maintained and appropriate licenses have been logged and granted. In addition full documentation should be supplied.

### 8.6. Auditing and Logging

Where systems allow auditing and logging of user activity should be enabled and set at an appropriate level auditing or logging.

# IT Security Policy

## Section 9. Business Continuity Planning

### 9.1 Business Continuity

Inevitably services may fail on occasions and the duty for the Council/IT is to resume business continuity immediately, whilst reviewing the reasons for this failure of service and making appropriate changes where necessary.

Business Continuity (BC) planning involves identifying and reducing the risks from deliberate or accidental threats to all the Council's vital services. IT currently have appropriate disaster recovery (DR)/BC procedures and plans developed to enable IT operations to be maintained/ resumed following failure or damage of vital services or facilities.

The procedures and plans will be tested and reviewed on an ongoing basis.

The Council's Business Continuity procedure describes in more detail the process and procedures that are in place.

## Section 10. Compliance and Audit

### 10.1. Controls of Proprietary Software Copying (Licensing)

Proprietary software products are usually supplied under a licence agreement that limits the use of the product to a specified or a number of specified machines or users and may limit the copying to that of source back up copies only.

Copyright infringements can lead to legal action and criminal proceedings against the Council and individual employees/Members concerned.

It is the Council's policy in-line with this Policy to ensure compliance with all legal obligations and to further ensure that no copyright material is copied without the owner's consent.

The service manager is responsible for all such copyright material and monitors, controls, and further maintains a register/database of all copyrighted licenses accordingly.

A regular audit is performed by the service manager of this database

It is the responsibility of the service manager and designated IT personnel, along with employee responsibilities to ensure that this software license inventory is regularly checked. It is the responsibility of the owners (heads of service areas or delegated security officers) of the IT equipment on which the software is running to ensure that appropriate licences are registered on the IT asset register/database.

# IT Security Policy

## 10.2. Safeguarding the Council's Records

Some records are needed to meet statutory requirements and must be securely retained. It is however appropriate to destroy records that have been retained beyond the statutory retention time, in a secure manner in line with this Policy and adopted procedures there-in.

## 10.3. Data Protection Legislation

Personal information on living individuals who can be identified from information that is stored in any format is subject to The Data Protection Act 1998 and the GDPR as of May 25<sup>th</sup> 2018. The Council's Data Protection Policy should be used for further information.

This policy fully supports the Data Protection Act/ GDPR and will ensure that IT systems used to store personal and sensitive data are on a need to know basis, and authorised by the service manager to ensure lawful processing of personal data.

There will be specific training for IT staff and to raise the awareness of the implications of the Data Protection Act/ GDPR.

Destruction of personal data will be carried out in a secure manner to provide assurance that it cannot be retrieved by some unauthorised person following deletion or disposal.

It is the responsibility of the owner of the data to notify the Data Protection Officer (DPO) of any proposals to keep personal information on a computer and/or a paper based system and to ensure compliance with the principles laid down in the legislation.

The service manager will also advise on the IT Security considerations as laid down by the Act.

For further information please refer to the service manager or the Data Protection Officer.

## 10.4. Prevention of Misuse of IT Facilities

All of the Council's IT facilities are provided primarily for business purposes only and covered in the acceptable use policy.

## 10.5. Compliance with the IT Security Policy

Owners of all Council information must hold regular reviews of the compliance of their systems in order to meet the Council's IT Security Policy, Standards and other security legislative and non-legislative requirements.

# **IT Security Policy**

## **10.6. System Audit Controls**

IT Security and Audit requirements/activities involving checks etc. on Council operational systems must be carefully planned and agreed to minimise the risk of disruption to normal business working practices.

## **10.7. Protection of System Audit tools**

Any IT Security and Audit tools, Computer Assisted Audit Techniques software and/or data etc., must be safeguarded to prevent any possible misuse or compromise.

# IT Security Policy

## Section 11. Infrastructure Management

### 11.1. Security Hardening

All IT infrastructure, to include servers and workstations, will be approached from a view of security hardening using best practice.

This will include :

- Ensuring that only the required services are running on the machine
- Software is up to date and patches have been applied
- Anti-virus is up to date and centrally managed
- Where possible personal firewalls will be enabled
- Only the applications that a user requires is installed for use
- Local accounts not required are removed where possible

### 11.2. Patch Management

A patch management scheme has been developed to ensure that proper patch management is carried out on the IT infrastructure. This will take a risk management approach to ensure that patches are applied as soon as possible whilst balancing this with risks if the patch installation process fails.

This patch management scheme will include incremental patches as well as cumulative service packs.

Suppliers web sites will be pro-actively monitored, and where possible email alerts used or other automatic systems, to ensure that patches are made available to install as soon as possible.

### 11.4. Software out of Support and Maintenance

Where software has been identified as being out of support and maintenance and therefore not providing any patches an action plan should be created to manage this situation using a risk management approach.

### 11.5. Ports

A list of ports that are used should be created on a per application basis. Personal firewalls will be configured to only allow these defined ports to be opened for the applications on an individual machine.

# IT Security Policy

## 11.6. Administrator Privileges

Users should not be given/ using administrative privileges to carry out their normal work activities. Where administrative privileges are required to run applications the supplier of the software will be contacted and a resolution sought to allow the application to run as a non-administrator.

Alternatively solutions will be implemented that reduce the risk of security problems – for instance only the application with higher privileges.

## 11.7. Management of Users Accounts

The Council will maintain a list of all users access to the councils network. These users will have specific requirements that must be met :

- Each user must be allocated a unique user name to logon to their machine
- All users must meet the following password complexity for access to the network
  - minimum of nine characters;
  - contain at least one of each of the following characters, upper or lower case, numbers and special characters;
  - changed a minimum of every 90 days
  - not reused within 5 password changes
  - not contain any part of your user name
- Applications which have username and passwords should, where possible, use the same password complexity as above.

# **IT Security Policy**

## **Section 12. The Council's Disciplinary Process**

### **12.1. Disciplinary Process**

In all cases breaches of this Policy will be dealt with in accordance with the Council's disciplinary procedures process.

This process is a deterrent to employees who might be inclined to disregard the IT security procedures covered by this policy and ensures a correct and fair treatment for those who are suspected of committing serious or persistent breaches of IT security.

Members are also responsible within this document for their breaches of the Policy and a standard process exists that would allow a serious breach to be escalated.

For further information please refer to the Council's disciplinary processes and procedures.

# IT Security Policy

## Section 13. Access to the GCSx Network

### 13.1. Government Connect Secure Extranet (GCSx)

The Government Connect Secure Extranet (GCSx) is the network used to access the DWP systems and in particular access to the Customer Information System (CIS).

In order to maintain this access a number of security measures will be required.

The Council is fully committed to achieving and maintaining the compliance required to connect to the Government Connect Secure Extranet (GCSx).

The Memorandum of Understanding between the Department for Work and Pensions (DWP) and the Council sets out the framework and operating policy through which the Council will access benefits data for the administration of Housing Benefit and Council Tax Benefit. This data will be available via DWP's Customer Information System. It will include access to DWP benefits data and Her Majesty's Revenue and Customs' tax credit data.

In order to access the GCSx network, compliance is measured through a formal document called the Code of Connection (CoCo).

### 13.2 GCSx – Sensitive Data

The Council is defining OFFICIAL - SENSITIVE information is where either information that :

- links an identifiable individual with information that, if released, would put them at significant risk of harm or distress

or

- Any source of information relating to 1000 or more individuals that is not in the public domain, even if the information is not likely to cause harm or distress

For the purposes of the Code of Connection the scope of OFFICIAL - SENSITIVE is limited to the Housing Benefit and Council Tax Benefit system. This scope will be reviewed in accordance with any change of use to the GCSx.

# IT Security Policy

## 13.3. Baseline Personnel Security Standard

Each user of the network connected to GCSX who has regular access to OFFICIAL - SENSITIVE information or information that originates from the GSi must be at least cleared to the 'Baseline Personnel Security Standard' (BPSS).

This includes

- Proof of Identity,
- Nationality,
- Employment History,
- Requirement to disclose any unspent convictions

## 13.4 Access to OFFICIAL - SENSITIVE Data for Remote Users

Access for users using remote methods to connect to systems with OFFICIAL - SENSITIVE data is specifically prohibited unless this has been approved by the IT service manager.

Remote methods includes access from home machines, access from laptops used on external networks and any other access from outside of the current network. Access from outside the United Kingdom is, by definition, specifically prohibited.

Where access is provided on an agreed basis then two-factor authentication methods will be used. This also applies to IT Staff who may have access to remotely manage and monitor systems. Where third parties are accessing OFFICIAL - SENSITIVE data then they will be asked to sign a non-disclosure agreement.

# IT Security Policy

## APPENDIX A List of relevant legislation and policies

- Data Protection Act 1998/ GDPR
- Copyright, Designs and Patents Act 1988
- Computer Misuse Act 1990
- Health & Safety Act (Display Screen Equipment) Regulations 1992
- Trade Marks Act 1994
- Human Rights Act 1998
- Public Interest Disclosure Act
- Regulation of Investigatory Powers Act 2000
- Obscene Publications Act 1959 & 1964
- Freedom of Information Act 2000
- Telecommunications (Lawful Business Practice) (Interception of Communications) Regulations 2000
- Local Government Act 1972
- Local Government (Records) Act 1962
- Public Records Act 1958 and 1967
- Local Government (Access to Information) Act 1985

## APPENDIX B List of output media

- Paper including output reports, program listings and test data
- Optical Media (CDRom /DVD)
- Removable hard disks
- Solid state media (e.g USB sticks, memory sticks)
- Removable drives
- Tape storages