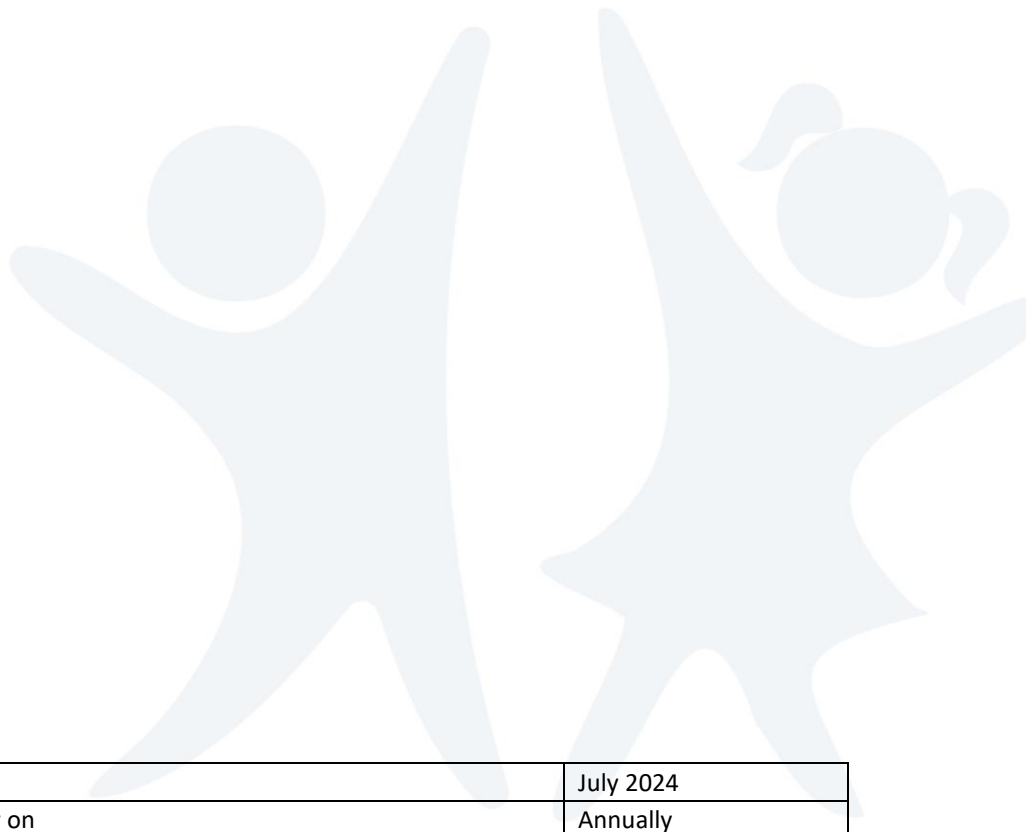


# Cyber Security Policy



Date adopted by the MAT	July 2024
This policy is scheduled for review on	Annually

## Contents

Statement of intent .....	3
Legal framework .....	3
Types of security breach and causes .....	3
Unauthorised removal of data – .....	4
Damage to physical systems – .....	4
Unauthorised damage to data – .....	4
Roles and responsibilities .....	4
The MAT & Directors will be responsible for: .....	4
The headteacher will be responsible for: .....	5
The DPO will be responsible for: .....	5
The ICT Admin will be responsible for: .....	5
The Headteacher will be responsible for:.....	6
The DSL will be responsible for: .....	6
Secure configuration .....	6
The ICT Admin will: .....	8
Network security.....	8
Centralised firewall deployment .....	8
Malware prevention .....	9
User privileges and passwords .....	10
Monitoring usage .....	12
Removable media controls .....	12
Home working and remote learning.....	13
Backing up data.....	15
Avoiding phishing attacks .....	16
User training and awareness .....	17
Cyber-security incidents .....	18
Assessment of risks.....	20
Consideration of further notification.....	21
Evaluation .....	22

## Statement of intent

Manor Multi Academy is committed to maintaining the confidentiality, integrity and availability of its information and ensuring that the details of the finances, operations and individuals within the MAT / school are only accessible to the appropriate individuals. It is, therefore, important to implement appropriate levels of access, uphold high standards of security, take suitable precautions, and have systems and procedures in place that support this.

Manor MAT recognises, however, that breaches in security can occur, with most breaches caused by human error. The MAT / school will ensure all staff are aware of how to minimise this risk. In addition, because most information is stored online or on electronic devices that can be vulnerable to cyber-attacks, the MAT / school will ensure there are procedures in place to prevent attacks occurring. To minimise both risks, it is necessary to have a contingency plan containing a procedure to minimise the potential negative impacts of any security breach, to alert the relevant authorities, and to take steps to help prevent a repeat occurrence.

## Legal framework

This policy has due regard to all relevant legislation and guidance including, but not limited to, the following:

- Computer Misuse Act 1990
- The UK General Data Protection Regulation (UK GDPR)
- Data Protection Act 2018
- National Cyber Security Centre (N.D.) ‘Cyber Essentials’
- ICO (2022) ‘Guide to the General Data Protection Regulation (GDPR)’
- ESFA (2023) ‘Academy trust handbook 2023’
- (DfE) (2023) ‘Meeting digital and technology standards in MAT / schools and colleges’

This policy operates in conjunction with the following MAT / school policies:

- Online Safety Policy
- Data Protection Policy
- Disciplinary Policy and Procedure
- Behaviour Policy
- Social Media Policy
- Cyber Response and Recovery Plan

## Types of security breach and causes

**Unauthorised use without damage to data** – involves unauthorised persons accessing data on the MAT / school system, e.g. ‘hackers’, who may read the data or copy it, but who do not actually damage the data in terms of altering or deleting it. This

includes unauthorised people within the MAT / school, e.g. MAT / schools where pupils access systems that staff have left open and/or logged in, or where staff access data beyond their authorisation, as can occur in MAT / schools where all staff are given admin-level access for ease.

**Unauthorised removal of data** – involves an authorised person accessing data, who removes the data to pass it on to another person who is not authorised to view it, e.g. a staff member with authorised access who passes the data on to a friend without authorised access. This is also known as data theft. The data may be forwarded or deleted altogether.

**Damage to physical systems** – involves damage to the hardware in the MAT / MAT / school 's ICT system, which may result in data being inaccessible to the MAT / school and/or becoming accessible to unauthorised persons.

**Unauthorised damage to data** – involves an unauthorised person causing damage to data, either by altering or deleting it. Data may also be damaged by a virus attack, rather than a specific individual.

Breaches in security may be caused by the actions of individuals, and may be accidental, malicious or the result of negligence:

- Accidental breaches can occur as a result of human error or insufficient training for staff, so they are unaware of the procedures to follow
- Malicious breaches can occur as a result of a hacker wishing to cause damage to the MAT / school through accessing and altering, sharing or removing data
- Breaches caused by negligence can occur as a result of a staff member knowingly disregarding MAT / school policies and procedures or allowing pupils to access data without authorisation and/or supervision
- Breaches in security may also be caused by system issues, which could involve incorrect installation, configuration problems or operational errors:
- The incorrect installation of antivirus software and/or use of outdated software can make the MAT / school software more vulnerable to a virus
- Incorrect firewall settings being applied, e.g. unrestricted access to the MAT / school network, can allow unauthorised individuals to access the MAT / school system
- Operational errors, such as confusion between back-up copies of data, can cause the most recent data to be overwritten

## Roles and responsibilities

The MAT & Directors will be responsible for:

- Ensuring the MAT / school has appropriate cyber-security measures in place.

- Ensuring the MAT / school has an appropriate approach to managing data breaches in place.
- Supporting the Headteacher and other relevant staff in the delivery of this policy.
- Ensuring the MAT / school meets the relevant cyber-security standards.
- Ensuring at least one member of the board completes basic cyber-security training.

### The Headteacher will be responsible for:

- Ensuring all staff members and pupils are aware of their responsibilities in relation to this policy.
- Ensuring appropriate user access procedures are in place.
- Responding to alerts for access to inappropriate content in line with the Online Safety Policy.
- Organising training for staff members in conjunction with the online safety officer and DPO.
- Ensuring a log of cyber-security incidents is maintained.
- Appointing a cyber recovery team who is responsible for implementing the MAT / school's procedures in the event of a cyber-security incident.

### The DPO will be responsible for:

- The overall monitoring and management of data security.
- Deciding which strategies are required for managing the risks posed by internet use.
- Leading on the MAT / school's response to incidents of data security breaches, including leading the cyber recovery team.
- Assessing the risks to the MAT / school in the event of a cyber-security breach.
- Determining which organisations and individuals need to be notified following a data security breach, and ensuring they are notified.
- Working with the ICT Admin, online safety officer and Headteacher after a data security breach to determine where weaknesses lie and improve security measures.
- Organising training for staff members on data security, network security and preventing breaches.
- Monitoring and reviewing the effectiveness of this policy, alongside the Headteacher, and communicating any changes to staff members.

### The ICT Admin will be responsible for:

- Maintaining an inventory / register of all ICT hardware and software currently in use at the MAT / school.
- Ensuring any out-of-date software is removed from the MAT / school systems.
- Implementing effective firewalls to enhance network security and ensuring that these are monitored regularly.
- Installing, monitoring and reviewing filtering systems for the MAT / school network.

- Setting up user privileges in line with recommendations from the CEO / Headteacher.
- Maintaining an up-to-date and secure inventory of all usernames and passwords (if required)
- Removing any inactive users from the MAT / school system and ensuring that this is always up to date or prevent access for users that require disabling.
- Installing appropriate security software on staff personal devices where the Headteacher has permitted for them to be used for work purposes.
- Performing a back-up of all electronic data held by the MAT / school, ensuring detailed records of findings are kept.
- Ensuring all MAT / school-owned devices have secure malware / anti-virus protection and are regularly updated.
- Recording any alerts for access to inappropriate content and notifying the headteacher.

### The Headteacher will be responsible for:

- Organising training and resources for staff on online safeguarding risks and preventative measures.
- Taking responsibility for online safety within the MAT / school and promoting online safety measures to parents.
- Ensuring the relevant policies and procedures are in place to protect pupils from harm, including the Online Safety Policy.
- Monitoring online safety incidents which could result in data breaches and reporting these to the DPO.
- Acting as the named point of contact within the MAT / school on all online safety issues.
- Liaising with relevant members of staff on online safety matters, e.g. the DPO and ICT Admin.

### The DSL will be responsible for:

- Assessing whether there is a safeguarding aspect to any cyber-security incident and considering whether any referrals need to be made.

### All staff members will be responsible for:

- Understanding their responsibilities in regard to this policy.
- Undertaking the appropriate training.
- Ensuring they are aware of when new updates become available and how to safely install them.

## Secure configuration

An inventory will be kept of all ICT hardware and software currently in use at the MAT / school, including mobile phones and other personal devices provided by the MAT /

school. The inventory will be stored in the MAT / school office and will be audited on a termly basis to ensure it is up to date. Any changes to the ICT hardware or software will be documented using the inventory and will be authorised by the ICT Admin before use.

All systems will be audited on a termly basis by the ICT Admin to ensure the software is up to date. Any new versions of software or new security patches will be added to systems, ensuring that they do not affect network security, and will be recorded in the inventory. Any software that is out-of-date or reaches its 'end of life' will be removed from systems, e.g. when suppliers end their support for outdated products, meaning that the product is not able to fulfil its purpose anymore.

All hardware, software and operating systems will require passwords from individual users. Passwords will be changed on an annual basis to prevent access to facilities which could compromise network security. The MAT / school believes that locking down hardware, such as through the use of strong passwords, is an effective way to prevent access to facilities by unauthorised users. Passwords will need to adhere to a specific character length, use special characters, and not be obvious or easy to guess, in line with the MAT / school 's policy on passwords.

The MAT / school will refer to the five security controls outlined in the National Cyber Security Centre's (NCSC's) 'Cyber Essentials'. These are:

- Firewalls – Firewalls function as a barrier between internal networks and the internet. They will be installed on any device that can access the internet, particularly where staff are using public or otherwise insecure Wi-Fi.
- Secure configuration – The default configurations on devices and software are often as open as possible to ensure ease of use, but they also provide more access points for unauthorised users. The MAT / school will disable or remove any unnecessary functions and change default passwords to reduce the risk of a security breach.
- Access control – The more people have access to data, the larger the chance of a security breach. The MAT / school will ensure that access is given on a 'need-to-know' basis to help protect data. All accounts will be protected with strong passwords, and where necessary, two-factor authorisation.
- Malware protection – The MAT / school will protect itself from malware by installing antivirus and anti-malware software and using techniques such as whitelisting (a cyber-security strategy under which a user can only take actions on their computer that an administrator has explicitly allowed in advance) and sandboxes (an isolated virtual machine in which potentially unsafe software code can execute without affecting network resources or local applications).
- Patch management – The MAT / school will install software updates as soon as they are available to minimise the time frame in which vulnerabilities can be exploited. If the manufacturer stops offering support for the software, the MAT / school will replace it with a more up-to-date alternative.

## The ICT Admin will:

- Protect all devices on every network with a correctly configured boundary, or software firewall, or a device that performs the same function.
- Change the default administrator password or disable remote access on each firewall.
- Protect access to the firewall's administrative interface with multi-factor authentication (MFA), or a small, specified IP-allow list combined with a managed password or prevent access from the internet entirely.
- Keep firewall firmware up to date.
- Check monitoring logs to help detect suspicious activity.
- Block inbound unauthenticated connections by default.
- Document reasons why particular inbound traffic has been permitted through the firewall.
- Review reasons why particular inbound traffic has been permitted through the firewall often, change the rules when access is no longer needed.
- Enable a software firewall for devices used on untrusted networks, like public wi-fi.

## Network security

In line with the UK GDPR, the MAT / school will appropriately test, assess, and evaluate any security measures put in place on a termly basis to ensure these measures remain effective.

The MAT / school will employ firewalls in order to prevent unauthorised access to the systems.

## Centralised firewall deployment

The MAT / school's firewall will be deployed as a centralised deployment, which means the broadband service connects to a firewall that is located within a data centre or other major network location.

As the MAT / school's firewall is managed locally by a third party, the firewall management service will be thoroughly investigated by the ICT Admin to ensure that:

- Any changes and updates that are logged by authorised users within the MAT / school are undertaken efficiently by the provider to maintain operational effectiveness.
- Patches and fixes are applied quickly to ensure that the network security is not compromised.
- 

The MAT / school will consider installing additional firewalls on the servers in addition to the third-party service as a means of extra network protection. This decision will be



made by the DPO, taking into account the level of security currently provided and any incidents that have occurred.

The MAT and MAT / schools will be aware that security standards may change over time with changing cyber threats, and that the security of every device on the network is reviewed regularly.

To ensure that the network is as secure as possible, the MAT / school will:

- Keep a live register, list, or diagram of all the network devices.
- Avoid leaving network devices in unlocked or unattended locations.
- Remove or disable unused user accounts, including guest and unused administrator accounts.
- Change default device passwords.
- Require 2 factor authentication for users to access sensitive MAT / school data or network data.
- Remove or disable all unnecessary software according to your organisational need.
- Disable any auto-run features that allow file execution.
- Set up filtering and monitoring services to work with the network's security features enabled.
- Immediately change passwords which have been compromised or suspected of compromise.
- Protect against a brute-force attack on all passwords by allowing no more than 5 guesses in five minutes or locking devices after no more than 5 unsuccessful attempts.
- Unlicensed hardware or software will never be used by the MAT / school.
- All unpatched or unsupported hardware or software will be replaced by the ICT Admin. Where it is not possible to replace these devices, they will have their access to the internet removed so that scanning tools cannot find weaknesses.

## Malware prevention

The MAT / school understands that malware can be damaging for network security and may enter the network through a variety of means, such as email attachments, social media, malicious websites or removable media controls.

The ICT Admin will ensure that all MAT / school devices have secure malware protection and undergo regular malware scans in line with specific requirements. The ICT Admin will update malware protection on a daily/weekly basis to ensure it is up-to-date and can react to changing threats. Malware protection will also be updated in the event of any attacks to the MAT / school's hardware and software.

Staff will follow procedures for filtering and monitoring to keep pupils safe as set out in the Online Safety Policy. The MAT / school's filtering provider will be:

- A member of Internet Watch Foundation (IWF)
- Signed up to Counter-Terrorism Internet Referral Unit list (CTIRU)
- Effective at blocking access to illegal content

The filtering system will be able to identify technologies and techniques that allow users to get around the filtering such as VPNs and proxy services and block them and provide alerts when any web content has been blocked. Filtering of websites will ensure that access to websites with known malware are blocked immediately and reported to the ICT Admin.

The MAT / school will use mail security technology, which will detect and block any malware that is transmitted by email. This will also detect any spam or other messages which are designed to exploit users. The ICT Admin will review the mail security technology on a termly basis to ensure it is kept up-to-date and effective.

Staff members are only permitted to download apps on any MAT / school -owned device from manufacturer-approved stores and with prior approval from ICT Admin. Where apps are installed, the ICT Admin will keep up to date with any updates, ensuring staff are informed of when updates are ready and how to install them.

The MAT / school will use anti-malware software that:

- Is set up to scan files upon access, when downloaded, opened, or accessed from a network folder.
- Scans web pages as they are accessed.
- Prevents access to potentially malicious websites, unless risk-assessed, authorised and documented against a specific business requirement.

## User privileges and passwords

The MAT / school understands that controlling what users have access to is important for promoting network security and data protection. User privileges will be differentiated, e.g. pupils will have different access to data and the network than members of staff, whose access will also be role-based. The Headteacher will clearly define what users have access to and will communicate this to the ICT Admin, ensuring that a record is kept. The ICT Admin will ensure that user accounts are set up to allow users access to the facilities required, in line with the Headteacher's instructions, whilst minimising the potential for deliberate or accidental attacks on the network.

All users will be required to change their passwords at any time / or if they become known to other individuals, in line with the 'Secure configuration' section of this policy. Pupils are responsible for remembering their passwords; however, the ICT Admin will have an up-to-date record of all usernames and passwords and will be able to reset them if necessary. The record of all usernames and passwords is stored securely. Only the ICT Admin has access to this full inventory but is shared on a class-by-class basis

with relevant teachers. Multi-factor authentication (multiple different methods of verifying the user's identity) should be used wherever possible.

The master user account accessed by the ICT Admin and DPO is subject to a two-factor authentication for logins. This account requires two different methods to provide identity before logging in: a password and a verification code sent to another MAT / school-owned device which must be entered following the password. The master user account is used as the 'administrator' which allows designated users to make changes that will affect other users' accounts in the MAT / school, such as changing security settings, monitoring usage, and installing software and hardware.

A multi-user account will be created for visitors to the MAT / school, such as volunteers, and access will be filtered as per the Headteacher's instructions. Usernames and passwords for this account will be changed on a termly basis and will be provided as required.

Automated user provisioning systems will be employed in order to automatically delete inactive users or users who have left the MAT / school. The ICT Admin will manage this provision to ensure that all users that should be deleted are, and that they do not have access to the system.

Password strength will be enforced at a system level – the MAT / school will use a deny list for automatic blocking of common passwords and passwords must contain a minimum of eight characters, including capital letter, number and symbol. The MAT / school will implement a user account creation, approval and removal process which is part of the MAT / school joining and leaving protocols.

User accounts and access privileges will be appropriately controlled, and only authorised individuals will have an account which enables them to access, alter, disclose or delete personal data. Users will have a separate account for routine business if their main account:

- Is an administrative account.
- Enables the execution of software that makes significant system or security changes.
- Can make changes to the operating system.
- Can create new accounts.
- Can change the privileges of existing accounts.

The MAT / school will consider using multi-factor authentication, particularly for accounts that have access to sensitive or personal data. The ICT Admin will review the password system on a termly basis to ensure it is working at the required level.

## Monitoring usage

Monitoring user activity is important for the early detection of attacks and incidents, as well as inappropriate usage by pupils or staff. The MAT / school will inform all pupils and staff that their usage will be monitored, as well as how it is being monitored and why, in accordance with the MAT / school's Online Safety Policy.

If a user accesses inappropriate content or a threat is detected, an alert will be sent to the ICT Admin. Alerts will also be sent for unauthorised and accidental access. Alerts will identify the user, the activity that prompted the alert, and the information or service the user was attempting to access. The ICT Admin will record any alerts using an incident log and will report this to the DPO. The DPO will then inform the Headteacher and online safety officer as appropriate. All incidents will be responded to in accordance with the 'Data security breach incidents' section of this policy, and as outlined in the Online Safety Policy.

The ICT Admin will ensure that websites are filtered on a weekly basis for inappropriate and malicious content. Any member of staff or pupil that accesses inappropriate or malicious content will be recorded in accordance with the monitoring process in the 'Data security breach incidents' section of this policy.

All data gathered by monitoring usage will be kept on a secure shared drive for easy access when required. This data may be used as a method of evidence for supporting a not-yet-discovered breach of network security. In addition, the data may be used to ensure the MAT / school is protected and all software is up to date.

## Removable media controls

The MAT / school understands that pupils and staff may need to access the MAT / school network from outside the MAT / school premises. Effective security management will be established to prevent access to, or leakage of, data, as well as any possible risk of malware.

The ICT Admin will encrypt all MAT / school-owned devices for personal use, such as laptops, mobile phones and tablets, to ensure that they are password or pin protected. If any portable devices are lost, this will prevent unauthorised access to personal data. USB sticks are restricted from copying data from the system to a removable device. Before distributing any MAT / school -owned devices, the ICT Admin will ensure that manufacturers' default passwords have been changed. A set password will be chosen, and the staff member will be prompted to change the password once using the device. The ICT Admin will check MAT / school-owned devices on an annual basis to detect any unchanged default passwords.

When using laptops, tablets and other portable devices, the Headteacher will determine the limitations for access to the network, as described in the 'Network security' section of this policy.

Staff who use MAT / school-owned laptops, tablets and other portable devices will use them for work purposes only, whether on or off the MAT / school premises. Staff are allowed to connect to Wi-Fi hotspots, such as in coffee shops, when using any MAT / school-owned laptops, tablets or other devices, as the device security configuration, monitoring and filtering follows the device at all times.

The ICT Admin officer will use encryption to filter the use of websites on MAT / school-owned devices in order to prevent inappropriate use and external threats which may compromise network security when bringing the device back onto the premises. The MAT / school uses built-in device tracking technology where possible to ensure that lost or stolen MAT / school -owned devices can be retrieved.

All data will be held on systems centrally in order to reduce the need for the creation of multiple copies, and/or the need to transfer data using removable media controls. The Wi-Fi network at the MAT / school will be password protected and guest access will only be given out as required. Staff and pupils are not permitted to use the Wi-Fi for their personal devices, such as mobile phones or tablets, unless agreed prior to usage although they are allowed to connect to the Guest WiFi. The Guest Wi-Fi network will be available for visitors at the MAT / school to limit their access to MAT / school networks and any other applications which it is not necessary for them to access.

## Home working and remote learning

Staff and pupils will adhere to data protection legislation and the MAT / school's related policies when working remotely. Staff will receive annual training regarding what to do if a data protection issue arises from any home working or remote learning. Wherever possible, personal data will not be taken home by staff members for the purposes of home working, due to the risk of data being lost or the occurrence of a data breach.

Staff and pupils may be required to use their own devices for the duration of the remote working or learning period. Any user on a personal device will need to access the MAT / school system through a web based secure login. Using a shared personal or household device for MAT / school purposes should be avoided where possible; however, the MAT / school understands that this may not always be possible.

Staff and pupils are not permitted to let their family members or friends use any MAT / school equipment, in order to protect the confidentiality of any personal data held on the device. Any staff member found to have shared personal data without authorisation will be disciplined in line with the Disciplinary Policy and Procedure. This may also result in a data breach that the MAT / school would need to record and potentially report to the ICO.

Staff who require access to personal data to enable them to work from home will first seek approval from the Headteacher, and it will be ensured that the appropriate

security measures are in place by the ICT Admin and the DPO, e.g. secure passwords and anti-virus software.

Staff will be informed that caution should be exercised while accessing personal data if an unauthorised person is in the same room. If a member of staff needs to leave their device unattended, the device should be locked. MAT / school devices will automatically lock after one minute of inactivity to avoid an unauthorised person gaining access to the device. Where staff are using a personal device, they will be advised that a similar function should be implemented.

Personal data should only be transferred to a home device if this is necessary for the member of staff to carry out their role. When sending confidential information, staff must never save confidential information to a personal or household device. Data that is transferred from a work to a home device will be encrypted so that if any data is lost, stolen or subject to unauthorised access, it will remain safe until it can be recovered.

To ensure reasonable precautions are taken when managing data, staff will avoid:

- Keeping personal data on unencrypted hard drives.
- Sending work emails to and from personal email addresses.
- Leaving logged-in devices and files unattended.
- Using shared home devices where other household members can access personal data.
- Using an unsecured Wi-Fi network.

Staff working from home will be encouraged and enabled to go paperless, where possible, as paper files cannot be protected digitally and may be misplaced. If sensitive data is taken off the MAT / school premises to allow staff to work from home, it will be transported in a lockable bag or container. The MAT / school's procedures for taking data off the MAT / school premises will apply to both paper-based and electronic data. When taking physical copies of data, e.g. paper documents and MAT / school-owned devices, off the MAT / school premises, staff will sign out the documents at the MAT / school office. The physical data will be signed back in when staff return it.

Pupils are not permitted to use MAT / school-owned devices or software for activities that do not pertain to their online education, e.g. use of social media, gaming, streaming or viewing content that is not applicable to their curriculum. Pupils are not permitted to download any software onto MAT / school devices, unless instructed to and approved by their teacher.

Pupils will not alter the passwords or encryptions protecting MAT / school documents and systems put in place by the MAT / school. Pupils will not alter or disable any security measures that are installed on MAT / school devices, e.g. firewalls, malware prevention or anti-virus software. Pupils will not share any confidential and/or personal information made accessible to them, or with anyone who is not authorised to view that information.

Pupils that do not use MAT / school devices or software in accordance with this policy will be disciplined in line with the Behavioural Policy.

Pupils must report any technical issues to their teacher as soon as possible. Parents and pupils will be encouraged to contact the online safety officer if they wish to report any concerns regarding online safety.

Any devices that are used by staff and pupils for remote working and learning will be assessed by the ICT Admin prior to being taken to the home setting, using the following checks:

- System security check – the security of the network and information systems
- Data security check – the security of the data held within the systems
- Online security check – the security of any online service or system, e.g. the MAT / school website
- Device security check – the security of the personal device, including any ‘bring your own device’ systems

The ICT Admin will provide staff and pupils with details and instructions for accessing the MAT / school network that they will be using throughout the duration of the remote working and learning period.

In the event that a staff member or pupil decides to leave the MAT / school permanently, all data in any form will be returned on or before their last day as well as all technology allocated to them and any door access ID cards.

## Backing up data

The ICT Admin performs a back-up of all electronic data held by the MAT / school on a daily basis, and the date of the back-up is recorded using a live log. Each back-up is retained for no longer than necessary before being deleted. The ICT Admin performs a check of back-up systems on a regular basis of any data that has changed since the previous back-up.

The ICT Admin will ensure that there are at least three backup copies of important data, on at least two separate locations – all of which will remain off-site, e.g. cloud backups. The number of devices with access to back up data will be kept to an absolute minimum.

The MAT / school will follow the NCSC’s guidance on backing up data where necessary, including:

- Identifying what essential data needs to be backed up.
- Storing backed-up data in a separate location to the original data.
- Using cloud solutions to store backed-up data.
- Referring to the NCSC’s Cloud Security Guidance.

- Ensuring that backing up data is regularly practised and tested.

The MAT has a cloud first approach, and any local services left will be replaced where possible with cloud solutions, including accessing files, documents and shared folders. Where cloud solutions are used, the MAT / school will confirm its ICT provider ensures that data is portable and allows for:

- Secure encrypted transfer.
- Data export to an open standard or commonly used format.
- Data links through secure, documented application programming interfaces (APIs).
- A timely process for data transfer in an open standard or neutral format if the MAT / school ends the contract.
- Easy and secure access from a range of devices.

Back-ups are cloud-based and run each day transiently and are continuously on-going for all data, email, Teams groups and sharepoint information. Upon completion of back-ups, data is stored on the providers cloud system, which is only accessed by ICT Admin and 2 factor password-protected. Data will be replicated and stored in accordance with the MAT / school's Data Protection Policy. Only authorised personnel will be able to access back-ups of the MAT / school's data.

The MAT / school will ensure that offline or 'cold' back-ups are secured. This can be done by only digitally connecting the back-up to live systems when necessary, and never having all offline back-ups connected at the same time.

The MAT / school's back-up strategy will be tested and checked on a termly basis.

## Avoiding phishing attacks

The ICT Admin will configure all staff accounts using the principle of 'least privilege' – staff members are only provided with as much rights as are required to perform their jobs.

Designated individuals who have access to the master user account will avoid browsing the web or checking emails whilst using this account. Two-factor authentication is used on any important accounts, such as all employed staff, directors, or any key accounts, such as the Headteacher's or SBM's accounts.

Staff will use the following warning signs when considering whether a communication may be unusual:

- Is it from overseas?
- Is the spelling, grammar and punctuation poor?
- Is the design and quality what you would expect from a large organisation?
- Is it addressed to a 'valued customer', 'friend' or 'colleague'?
- Does it contain a veiled threat that asks the staff member to act urgently?



- Is it from a senior member of the MAT / school asking for a payment?
- Is it from a supplier advising of a change in bank account details for payment?
- Does it sound too good to be true? It is unlikely someone will want to give another individual money or access to another service for free.
- Is it from a generic email address, such as Gmail or Hotmail?

The ICT Admin will ensure that an appropriate email filtering system is used to identify which emails would be classed as junk or spam, applied in accordance with the 'Malware prevention' section of this policy. The ICT Admin will ensure that the filtering system is neither too strict nor too lenient, to allow the correct emails to be sent to the relevant folders.

To prevent anyone having access to unnecessary personal information, the DPO will ensure social media accounts and websites are reviewed on an annual basis, making sure that only necessary information is shared. The Headteacher and DPO will ensure the MAT Social Media Policy includes expectations for sharing of information and determines what is and is not appropriate to share. The Headteacher will ensure parents, pupils, staff and other members of the MAT / school community are aware of acceptable use of social media and the information they share about the MAT / school and themselves.

## User training and awareness

The DPO and Headteacher will arrange training for pupils and staff on a termly basis to ensure they are aware of how to use the network appropriately. This will cover identifying irregular methods of communication in order to help staff members spot requests that are out of the ordinary, such as receiving an invoice for a service not used, and who to contact if they notice anything unusual. Unusual communications could come in a variety of forms, e.g. emails, phone calls, text messages or social media messages.

The ICT Admins will arrange for staff and pupils to undertake the appropriate training relating to online safety issues. The DPO will also arrange training for pupils and staff on an annual basis on maintaining data security, preventing data breaches, and how to respond in the event of a data breach. Enhanced training for all staff members will be arranged by the DPO within two weeks following an attack, breach or significant update. Simulated training is an option. Through training, all pupils and staff will be aware of who they should inform first in the event that they suspect a security breach, and who they should inform if they suspect someone else is using their passwords.

Staff with access to the MAT / school's IT services will be required to undertake basic cyber-security training upon induction or as soon as possible which is refreshed every year. At least one member of the Directors will also take part in this training. The training will focus on the following:

- Phishing

- Password security
- Social engineering
- The dangers of removable storage media

All users will be made aware of the disciplinary procedures for the misuse of the network leading to malicious attacks, in accordance with the process detailed in the Behavioural Policy and the Disciplinary Policy and Procedure.

## Cyber-security incidents

All cyber-security incidents will be managed in line with the MAT / school's Cyber Response and Recovery Plan.

Any individual that discovers a cyber-security incident will report this immediately to the headteacher and the DPO.

When an incident is raised, the DPO will record the following information:

- Name of the individual who has raised the incident
- Description and date of the incident
- Description of any perceived impact
- Description and identification codes of any devices involved, e.g. MAT / school - owned laptop
- Location of the equipment involved.
- Contact details for the individual who discovered the incident
- Whether the incident needs to be reported to the relevant authorities, e.g. the ICO or police

The MAT / school's DPO will take the lead in investigating the incident, with assistance from the Digital Services team plus any other relevant staff required and will be allocated the appropriate time and resources to conduct this. The DPO, as quickly as reasonably possible, will ascertain the severity of the incident and determine if any personal data is involved or has been compromised. The DPO will oversee a full investigation and produce a comprehensive report. The cause of the incident, and whether it has been contained, will be identified – ensuring that the possibility of further loss or jeopardising of data is eliminated or restricted as much as possible.

If the DPO determines that the severity of the security breach is low, the incident will be managed in accordance with the following procedures:

- In the event of an internal breach, the incident is recorded using an incident log, and by identifying the user and the website or service they were trying to access
- The Headteacher will issue disciplinary sanctions to the pupil or member of staff who caused the breach, in accordance with the Behavioural Policy or Disciplinary Policy and Procedure

- The MAT / school will work with the third-party provider to provide an appropriate response to the attack, including any in-house changes
- The MAT / school will organise updated staff training following a breach
- Any further action which could be taken to recover lost or damaged data will be identified – this includes the physical recovery of data, as well as the use of back-ups

Where the security risk is high, the DPO will establish what steps need to be taken to prevent further data loss, which will require support from various MAT / school departments and staff. This action will include:

- Informing relevant staff of their roles and responsibilities in areas of the containment process.
- Taking systems offline.
- Retrieving any lost, stolen or otherwise unaccounted for data.
- Restricting access to systems entirely or to a small group.
- Backing up all existing data and storing it in a safe location.
- Reviewing basic security, including:
  - Changing passwords and login details on electronic equipment.
  - Ensuring access to places where electronic or hard data is kept is monitored and requires authorisation.

Where appropriate, e.g. if offences have been committed under the Computer Misuse Act 1990, the DPO will inform the police of the security breach. MAT / schools are required to report personal data breaches to the ICO if there is a likelihood of risk to people's rights and freedoms. If the DPO decides that risk is unlikely, the breach does not need to be reported; however, the MAT / school will need to justify this decision and document the breach. The DPO will notify the ICO within 72 hours of becoming aware of a breach where it is likely to result in a risk to the rights and freedoms of individuals. The UK GDPR recognises that it will not always be possible to investigate a breach fully within 72 hours. The information required can be provided in phases, as long as this is done without undue further delay.

In line with the UK GDPR, the following must be provided to the ICO when reporting a personal data breach:

- A description of the nature of the breach, including, where possible:
  - The categories and approximate number of individuals concerned
  - The categories and approximate number of personal data records concerned
- The name and contact details of the DPO
- A description of the likely consequences of the breach
- A description of the measures taken, or proposed to be taken, to deal with the breach
- A description of the measures taken to mitigate any possible adverse effects, where appropriate

The MAT / school will report a personal data breach via the ICO website. The MAT / school will also make use of the ICO's self-assessment tool to determine whether reporting a breach is a necessary next step.

Where a breach is likely to result in a significant risk to the rights and freedoms of individuals, the DPO will notify those concerned directly of the breach without undue delay.

Where the MAT / school has been subject to online fraud, scams or extortion, the DPO will also report this using the Action Fraud website.

The DPO and ICT Admin will test all systems to ensure they are functioning normally, and the incident will only be deemed 'resolved' when it has been assured that the MAT / school's systems are safe to use.

The trust is aware it must seek permission from the ESFA to pay any cyber-ransom demands in the event of a cyber-crime.

## Assessment of risks

The following questions will be considered by the DPO to fully and effectively assess the risks that the cyber-security breach has brought, and to help take the next appropriate steps. All relevant questions will be clearly and fully answered in the DPO's report, which should record:

- What type of, and how much, data is involved?
- How sensitive is the data? Sensitive data is defined in the UK GDPR; some data is sensitive because of its very personal nature (e.g. health records) while other data types are sensitive because of what might happen if it is misused (e.g. bank account details).
- Is it possible to identify what has happened to the data – has it been lost, stolen, deleted or tampered with?
- If the data has been lost or stolen, were there any protective measures in place to prevent this, such as data and device encryption?
- If the data has been compromised, have there been effective measures in place that have mitigated the impact of this, such as the creation of back-up tapes and spare copies?
- Has individuals' personal data been compromised – how many individuals are affected?
- Who are these individuals – are they pupils, staff, governors, volunteers, stakeholders, suppliers?
- Could their information be misused or manipulated in any way?
- Could harm come to individuals? This could include risks to the following:
  - Physical safety
  - Emotional wellbeing

- Reputation
- Finances
- Identity
- Private affairs becoming public
- Are there further implications beyond the risks to individuals? Is there a risk of loss of public confidence and/or damage to the MAT / school's reputation, or risk to the MAT / school's operations?
- Who could help or advise the MAT / school on the breach? Could the LA, external partners, authorities, or others provide effective support?
- Does the breach need to be reported to the ICO? If so, has it been successfully reported without undue delay?

If the DPO, or other persons involved in assessing the risks to the MAT / school, are not confident in the assessment of risk, they will seek advice from the ICO.

## Consideration of further notification

The DPO will consider whether there are any legal, contractual or regulatory requirements to notify individuals or organisations that may be affected or who will have an interest in data security.

The DPO will assess whether notification could help the individual(s) affected, and whether the individual(s) could act on the information provided to mitigate risks, e.g. by cancelling a credit card or changing a password. In line with the 'Data security breach incidents' section of this policy, if a large number of people are affected, or there are very serious consequences, the ICO will be informed.

The DPO will consider who to notify, what to tell them and how they will communicate the message, which may include:

- A description of how and when the breach occurred and what data was involved.
- Details of what has already been done to respond to the risks posed by the breach.
- Specific and clear advice on the steps they can take to protect themselves, and what the MAT / school is willing to do to help them.
- A way in which they can contact the MAT / school for further information or to ask questions about what has occurred.

The DPO will consider, as necessary, the need to notify any third parties, such as the police, insurers, professional bodies, funders, trade unions, website and/or system owners, banks and/or credit card companies, who can assist in helping or mitigating the impact on individuals.

## Evaluation

The DPO will document all the facts regarding the breach, its effects and the remedial action taken. This should be an evaluation of the breach, and what actions need to be taken forward.

The DPO will consider the data and contexts involved, establish the root of the breach, and where any present or future risks lie, taking into consideration whether the breach is a result of human or systematic error and see how a recurrence can be prevented.

The DPO and Headteacher will identify any weak points in existing security measures and procedures. The DPO will work with the ICT Admin to improve security procedures wherever required. The DPO and Headteacher will identify any weak points in levels of security awareness and training.

The DPO will report on findings and implement the recommendations of the report after analysis and discussion.