#Data Handling and Information Sharing Guide

This guide is designed to help protect Ministry of Justice (MoJ) information held on MoJ IT systems, by providing guidance on how it should be handled and shared in a safe and secure manner.

##Overview

##Introduction

The [Government Functional Standard - GovS 007: Security](https://www.gov.uk/government/publications/government-functional-standard-govs-007-security) identifies mandatory requirements about the value and classification of information assets. To comply with these requirements, the MoJ needs to ensure that:

Where information is shared for business purposes, departments and agencies **SHALL** ensure the receiving party understands the obligations and protects the assets appropriately.

and

All staff handling sensitive government assets are briefed about how legislation (particularly regarding Freedom of Information and Data Protection) specifically relates to their role, including the potential disciplinary or criminal penalties that may result from failure to comply with security policies. Appropriate management structures **SHALL** be in place to ensure the proper handling, control and (if appropriate) managed disclosure of sensitive assets.

The policy on data handling and information sharing is covered in the Information Classification and Handling Policy, whilst this document sets out the MoJ guidance sharing information within the MoJ and externally with other Government departments and 3rd parties.

**Note:** Other guidance might refer to information classified as being IL3 REST\*. This is an older classification standard. In general, IL3 REST\* is approximately equivalent to OFFICIAL with the SENSITIVE handling caveat, often written as OFFICIAL-SENSITIVE. While this approximate correspondance might be helpful, you should always review classification where older terms are used, to ensure that the correct current classification is used.

##Scope

This document provides guidance on handling or sharing information stored on MoJ IT systems, or exchanged electronically within the MoJ, or with external parties.

The MoJ [Cyber Assistance Team](mailto:CyberConsultancy@digital.justice.gov.uk) can help you with more guidance on the handling of protectively marked data.

This guide is split into three sections:

* [Handling data](#handling-data-on-moj-it-systems) on MoJ IT systems.
* [Information sharing](#information-sharing).
* [Reporting data loss](#reporting-data-loss).

**Note:** This document provides guidance for handling and sharing of information and data up to and including OFFICIAL and OFFICIAL-SENSITIVE, or the older Impact Level (IL) 3. Where information attracts a high protective marking or IL, advice **SHALL** be sought from the MoJ [Operational Security Team](mailto:OperationalSecurityTeam@justice.gov.uk) and the MoJ Chief Information Security Office (CISO).

##Handling data on MoJ IT systems

This section covers how data **SHALL** be handled on MoJ IT systems, this includes both:

* Data in transit.
* Data at rest.

For the purposes of this guide, the term “sensitive” data or information refers to data or information which attracts a handling caveat of SENSITIVE.

##Ownership of information

All MoJ information is assigned an individual who has overall responsibility for the various handling aspects including:

* Registration.
* Labelling.
* Storage.
* Any transfers.
* Setting a retention period.
* Deleting, destroying or returning data and media.
* Ensuring that any applicable legal, regulatory or contractual obligations are adhered to.

This individual is the Information Asset Owner (IAO). The IAO **SHALL** ensure that information for which they are responsible for is appropriately handled, and where there is a business requirement to share it with a 3rd party, that it is shared in a safe and secure manner.

##Electronic data transfer and storage

Data **SHALL** be stored only on managed accredited networks, with transfers onto remote access laptops or other mobile devices or media minimised. No sensitive data should be stored solely on non-networked devices or media unless specifically approved by the IAO.

##Data in transit

The term “data in transit” covers all electronic moves or transfers of data from one IT system to another, where either the sender or the recipient system is an MoJ IT system. This includes the electronic movement of data using either a system-to-system connection such as CJSE, or removable media such as a [USB mass storage device](#usb-mass-storage-device).

##Secure network (system-to-system electronic transfer)

The MoJ preference for transferring data is to use a secure accredited government network whether that is a MoJ owner network (e.g. DISC, ONMI, Quantum or MINT) or the Government Secure Intranet (GSi).

As these networks can support data up to and including OFFICIAL-SENSITIVE, a base level of assurance is provided. However, consideration will need to be given to the following factors to ascertain if any additional security controls are required:

* The amount of data being transferred.
* Frequency.
* Any “need-to-know” considerations.

Any additional controls **SHALL** be captured on the DMF (see [Data Movement Form](#data-movement-form-dmf), where advice should be obtained from the MoJ Chief Information Security Office (CISO) when required.

##USB mass storage device

If using a secure network is not feasible, the next preferred option is to use an encrypted removable media, such as an approved USB mass storage device.

For more information, see the [Removable Media](removable-media.md) guidance.

The type of device selected is normally dependant on the sensitivity of the data and the amount of data being transferred. Advice **SHALL** be sought from the Operational Security Team: [OperationalSecurityTeam@justice.gov.uk](mailto:OperationalSecurityTeam@justice.gov.uk), or CISO on the best option to use when completing the DMF (see [Data Movement Form](#data-movement-form-dmf)).

##Optical media

The use of optical media (i.e. CD/DVD) is not recommended for data transfer.

##Data at rest on MoJ-issued laptops

“Data at rest” is a term used to refer to all data in computer storage. This excludes data that is traversing a network, or temporarily residing in computer memory to be read or updated. The protection of data at rest is achieved by encrypting the hard disk. MoJ-issued laptops use an approved whole disk encryption product. This allows data to be safely stored.

##Disposal and decommissioning

Sensitive data **SHALL NOT** be kept for longer than is needed. The IAO **SHALL** check for compliance, including any mandatory retention period.

Physical media containing sensitive data **SHALL** be disposed of securely, even if that data is encrypted. The reason is that an attacker could potentially make unlimited attempts to crack the encryption used if the media comes into their possession.

Further information on disposal and decommissioning can be found in the [Secure Disposal of IT Equipment](secure-disposal-of-it-equipment.md) guidance.

##Information sharing

##General principles

Where there is a business need to transfer sensitive data, it **SHALL** be appropriately secured or encrypted using an approved mechanism prior to electronic transmission or export to removable media devices.

Transferring sensitive data with the appropriate security controls may be achieved by:

* Transmission over a secure network that is accredited to carry such data, either in clear (where this has been formally approved by Information Assurance and the IAO), or encrypted.
* Transmission over an unprotected network, employing encryption of sufficient strength to mitigate any communication security risks identified.
* Physical transportation of storage media using encryption of sufficient strength to mitigate the security risks associated with the information being transferred in addition to the physical and procedural measures required to protect the media itself.

**Note:** Only the minimum amount of sensitive data necessary to meet the business requirement should be transferred and not the entire data set.

The sender **SHALL** ensure that any data shared can be adequately secured by the recipient. The sensitivity of data **SHALL** never be downgraded in order to send it over inadequately protected channels, or to send it to a recipient who does not have an appropriate facility to protect it after it arrives.

##Sharing sensitive information

MoJ staff, including contractors and agency staff, **SHALL** make sure they observe the following measures when sharing sensitive information:

* Check that all recipients are authorised and cleared to receive sensitive information before sending it to them.
* Ensure that the confidentiality of the sensitive information is protected during transit, for example by encrypting the data.
* Ensure copies of sensitive information are not kept beyond when they are actually required, for example by keeping information “just in case” it might be needed in the future.

All MoJ staff **SHALL** avoid exposing sensitive data to unnecessary risks, in particular by observing all aspects of MoJ [Acceptable Use](acceptable-use.md).

Authorisation **SHALL** be sought from the IAO before sensitive information can be moved or shared with a 3rd party. The authorisation itself is captured within the [Data Movement Form](#data-movement-form-dmf). the following sub-sections provide guidance on particular types of information sharing common across the MoJ, and to help you complete a DMF.

##Internally within the MoJ

Information marked up to and including OFFICIAL-SENSITIVE can be transferred in bulk within an MoJ IT system or domain such as DOM1, without additional controls required to preserve the confidentiality of that information.

Where information is transferred between MoJ IT systems or domains, additional controls might be required to:

* Ensure the information is routed correctly to preserve its confidentiality.
* Maintain the integrity of the data in transit to guard against inadvertent, accidental or deliberate modification.
* Ensure the exchange cannot be repudiated by either party, for example, be enabling proof of sending or proof of receipt.

Information transferred between two MoJ IT systems requires a completed and authorised [Data Movement Form](#data-movement-form-dmf) using one of the [data in transit](#data-in-transit) options.

##Information sharing with another HMG department

Information shared with another government department **SHALL** be transferred to an assured system. This means the system **SHALL** be assured to the same level as the data being transferred. The transfer **SHALL** take place using one of the [data in transit](#data-in-transit) options. The preference is for information to be transferred using a secure network. However, for low frequency bulk transfers of data, MoJ approved removable media might be more suitable. A completed and authorised [Data Movement Form](#data-movement-form-dmf) is required.

##Information sharing with external 3rd parties

Any transfer of sensitive data to a 3rd party, including sub-contractors or service providers, **SHALL** be authorised by the relevant IAO. An appropriate contract, [Data Movement Form](#data-movement-form-dmf), and Non-disclosure Agreement (NDA) **SHALL** be in place prior to the transfer.

Where the information is OFFICIAL-SENSITIVE, it **SHALL** be transferred to an assured system, assured to the same level as the data being transferred, provided by the external 3rd party, using one of the [data in transit](#data-in-transit) options.

Any transfer to a 3rd party **SHALL** be undertaken with appropriate security controls in place, using the guidance from this document, and seeking advice from Information Assurance and the MoJ CISO as required.

##Sharing across an unsecured network

Sensitive data **SHALL** be encrypted prior to being transmitted over an unsecured network such as the Internet. The encrypted data may then be sent via file transfer or as an email attachment.

Ideally, both sender and recipient should check the integrity of data before and after transmission. This includes checking for malicious content, and for evidence of tampering during transit.

##Using commercial encryption products for low sensitivity information

Where there is a business requirement to do so, sensitive information may be shared with a 3rd party using a commercial grade encryption product such as SecureZip. Further information on the use of SecureZip can be found in [Using SecureZIP](#using-securezip).

**Note:** File encryption does not protect the name of the file. This could reveal clues as to the nature and importance of the encrypted data. Encrypted files should be given innocuous names for transmission. If the data is contained in numerous small files, these should be collected together into a single archive (“zip”) file. This archive should then be encrypted. Each file or archive should be sent separately, rather than attaching multiple encrypted files to a single e-mail.

##Sharing information above OFFICIAL

Where there is a business requirement to share information classified higher than OFFICIAL, advice **SHALL** be sought from the Operational Security Team: [OperationalSecurityTeam@justice.gov.uk](mailto:OperationalSecurityTeam@justice.gov.uk) or CISO prior to completing a [Data Movement Form](#data-movement-form-dmf).

##Data Movement Form (DMF)

The Data Movement Form (DMF) is available on the [MoJ Intranet](./gs/data-movement-form.docx).

The purpose of the DMF is to ensure that the movement of information assets is secure, and in compliance with the [Government Functional Standard - GovS 007: Security](https://www.gov.uk/government/publications/government-functional-standard-govs-007-security).

Failure to fulfil or comply with the controls and measures identified within the DMF will lead to unnecessary risk or exposure for the MoJ, or the relevant Information Asset Owner (IAO), or the Senior Information Risk Owner (SIRO).

A DMF **SHALL** be completed, and approval received from the [Operational Security Team](mailto:OperationalSecurityTeam@justice.gov.uk), for the following scenarios:

* Data is being moved or shared by using a physical storage device to transfer the information. An example is where you use a “memory stick”, a USB drive, a storage array, or some other removable media. The DMF in this scenario focuses on the data being moved or shared.
* Data is being moved or shared by electronic (network) communication, where the movement is from an MoJ IT system to an external party. An example is using secure file transfer or approved email to transfer the information. The DMF in this scenario focuses on the data being moved or shared.
* An asset (a “data bearing asset”) is being moved to, or transported by, an external party. This might be as a result of an office move, or because the asset is being decommissioned. The asset might contain or process MoJ information. Examples of data bearing assets include laptops, servers, multi-functional devices, and any other data bearing peripherals. The DMF in this scenario focuses on the asset being moved or transported, rather than the MoJ information that the asset might contain or process.

A DMF **SHALL** be submitted to the [Operational Security Team](mailto:OperationalSecurityTeam@justice.gov.uk) for information purposes, in the following scenarios:

* Data is being moved or shared by electronic (network) communication, where the movement is entirely within or between MoJ IT systems.
* Data is being moved in full compliance with the already-approved service design and operation specification and procedures.
* An asset (a “data bearing asset”) is being moved but remains within the MoJ or its supplier-provided and MoJ-approved facilities at all times.

**Note:** In the informational scenarios, a DMF is only expected the first time a data movement or sharing takes place. Subsequent, repeat instances of the movement or sharing, do not require a re-submission of the DMF. For example, when setting up a backup process as part of an approved service design, a DMF is created and submitted to the [Operational Security Team](mailto:OperationalSecurityTeam@justice.gov.uk) for information purposes, but does not need to be re-created or re-submitted for each backup occurrence. If the implementation or process for the data movement or sharing changes, for example a new new backup technology or process is deployed, then a fresh informational DMF is required.

In any case of doubt, it is always advisable to complete a DMF and await approval or other feedback from the [Operational Security Team](mailto:OperationalSecurityTeam@justice.gov.uk).

##Using SecureZIP

SecureZip is a compression and encryption product which can be used to encrypt sensitive data for use in removable media and e-mail based information transfers.

**Note:** SecureZip can produce “self-extracting” encrypted files that are executable programs which are likely to be blocked by network firewalls or e-mail content checkers.

The general rules for transmitting a password to a recipient are:

* Never transfer the password with the encrypted file, or even over the same communication channel. Use an alternative method, for example if an encrypted file is sent by email, communicate the password or key via SMS text message, letter, fax or phone call.
* Transfer the encrypted data file first. Only send the password or key after the recipient has confirmed receipt of the file.
* Avoid detailing the purpose of a password when it is sent.
* Avoid re-using passwords and demonstrate good security discipline to 3rd parties by creating a completely new password or phrase for each transmission.

More guidance on password best practices is [available](passwords.md).

##General enquiries, including theft and loss

**DOM1/Quantum - Technology Service Desk**

* Tel: 0800 917 5148

**Note:** The previous itservicedesk@justice.gov.uk email address is no longer being monitored.

**Digital & Technology - Digital Service Desk**

* Email: [servicedesk@digital.justice.gov.uk](mailto:servicedesk@digital.justice.gov.uk)
* Slack: #digitalservicedesk

**HMPPS Information & security:**

* Email: [informationmgmtsecurity@justice.gov.uk](mailto:informationmgmtsecurity@justice.gov.uk)
* Tel: 0203 334 0324

##Feedback

If you have any questions or comments about this guidance, such as suggestions for improvements, please contact: [IT policy content](mailto:itpolicycontent@digital.justice.gov.uk).