Redaction Toolkit:

Editing exempt information from paper and electronic documents prior to release

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1. Purpose of this toolkit

1.1 This toolkit has been produced to provide guidance on editing exempt material from information held by public bodies. Its purpose is to promote good records management practice across the public sector and to assist in the implementation of the Freedom of Information Act. Under the Act, authorities are required to supply information to anyone that requests it unless an exemption applies, and even then, there is a further requirement, in most cases, to consider whether the public interest lies in providing the information or maintaining the exemption.

The guidance also covers the release of records for reasons other than Freedom of Information, for example under Parliamentary business. In some of these cases redaction may be necessary.

1.2 The Procedures for Closure on Transfer advises departments to consider the redaction of public records on transfer if this means parts of records can be released.

While this applies only to public records being transferred to The National Archives, it nonetheless serves as a general reminder of one of the basic features of the Act, namely the right of access is to information not records or documents.

1.3 The guidance covers a number of redaction methods for presenting information in hard copy (see Appendix 1). It examines several processes, but does not recommend any overall, as it is for each authority to decide which best applies to its organisational demands and the resources it has available.

1.4 It also provides general advice and guidance on technical issues related to the preservation and management of electronic records. It provides detailed guidance on methods for securely redacting electronic records of all types (see Appendix 2).

2. Who is this guidance for?

2.1 This toolkit is aimed at all authorities subject to the Freedom of Information Act (FOIA), Data Protection (DP) legislation and Environmental Information Regulations (EIRs), from central Government departments to local, police, health and education authorities.

2.2 If you are unsure whether your organisation is affected by FOI, there is a list in Schedule I to the Act.

3. What is redaction?

3.1 Redaction is the separation of disclosable from non-disclosable information by blocking out individual words, sentences or paragraphs or the removal of whole pages or sections prior to the release of the document. In the paper environment some organisations will know redaction as extracts when whole pages are removed, or deletions where only a section of text is affected.
4. Principles of redaction

4.1 Always carry out redaction on a copy of the original record, whether paper or electronic, never on the record itself. This ensures that while the redacted information is permanently removed from the copy of the record (which can then be made accessible) the original text remains in the original record. Redaction should never result in the complete removal of text or information from a record.

4.2 Redaction is carried out in order to edit exempt details from a document. Use it when one or two individual words, a sentence or paragraph, a name, address or signature needs to be removed.

4.3 If so much information has to be withheld that a document becomes nonsensical, the entire document should be withheld. In the case of paper documents the same principle should apply to individual pages.

4.4 When undertaking redaction, reviewers should consider whether any other factors are important for the understanding of the material. For example, if colour makes meaning clear in a paper document, a redacted colour copy should be released.

4.5 Redaction should be performed or overseen by staff that are knowledgeable about the records and can determine what material is exempt. If those identifying such material do not carry out the redaction themselves, their instructions must be specific - so for example: ‘Memo dated …, paragraph no…, line starting… and ending…’ and so on.

4.6 Under FOI, applicants may request information presented in electronic form. For paper documents, this will usually mean scanning the redacted version of the material. If, however, the level of resources required to do the scanning would make this unduly onerous, the FOIA allows the organisation to set aside the applicant's stated preference on the grounds of practicability (S 11).

The Act also permits that a summary of the document can be prepared. If a large percentage of the document needs to be redacted, this option may be worth considering as a more viable alternative to redaction.

4.7 Organisations should bear in mind that exemption decisions will be subject to appeal. For more information, see the Code of Practice under Section 45 of the FOI Act.
5. Identifying material for redaction

5.1 All organisations should have staff able to identify information that may be exempt under the Freedom of Information Act and the Environmental Information Regulations. Ideally they should have a good knowledge of the records being reviewed for release.

5.2 All staff should be aware of the categories of information that should not be released under Data Protection legislation.

Guidance on exemptions is available from the Office of the Information Commissioner.

5.3 To comply fully with requests for information, redact exempt material only. A whole sentence or paragraph should not be removed if only one or two words are nondisclosable, unless release would place the missing words in context and make their content or meaning clear.

In the case of electronic records close examination of the internal bit stream of the file can reveal the length of the redacted content. Take great care to ensure that the nondisclosable material cannot be deduced. This may mean disguising the size and shape of the redacted content. This is especially the case where the non-disclosable information appears in several locations within the file, and where there is an increased chance of deciphering such redacted content using a combination of location pattern, bit length and the associated unredacted text.

5.4 Reviewers should consider that earlier statements in a document might suggest the content of removed material. For example, if a paragraph refers to reports from overt sources, and the following paragraph refers to reports from covert sources, as well as removing the words ‘covert sources’, ‘overt sources’ would also need to be removed or the meaning of the missing words from the second paragraph could be inferred.

5.5 Reviewers should also check records for other copies of the same documents so that they carry out redaction consistently. They should check indexes to ensure that they do not contain details of the redacted material.

6. Keeping records of redaction work

6.1 Once reviewers have identified redactions, agreed with any other interested parties, decisions need to be recorded. For some organisations, simply keeping a copy of the released copy of a document may be enough, with a note explaining the reasons for redaction.

6.2 If multiple requests are made for the same information, this will also show what decisions have been made in prior requests. If more detailed records of decisions are required, this can be done on a standard form recording as much of the following information as is relevant:

An identifying reference, registered file number, case file number or electronic document reference. This identifier can be anything that suits the organisation concerned, but must
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enable easy identification and retrieval of the document. The format chosen should be used consistently

Precise details of the material removed. This need not describe the content, but should show which section of the document has been withheld - for example, ‘paragraph 2 of page 4’. However, if only one or two words are being withheld, these details must be exact to enable precise identification. This might be achieved by keeping a copy of the original document, with the details to be redacted highlighted, as well as the redacted version.

The reason for non-disclosure of the information. If one or more FOI exemptions apply, these should all be noted, along with the particular reasons that apply in each case.

Any comments made by reviewers and other organisations or individuals consulted.

There are sample forms for recording decisions at Appendix 3 of this toolkit.

Once this has been done, the document can be redacted.

7. Redaction for transfer to The National Archives

7.1 Public record bodies transferring records to The National Archives or a place of deposit (another archives office authorised to hold public records), whilst using the same redaction processes as for any organisation, must nevertheless bear other factors in mind.

7.2 Record decisions in detail - the transferring department needs to be able to track and retrieve any material withheld from The National Archives under Section 3(4) of the Public Records Act 1958. The fact that material has been extracted will be shown on The National Archives online catalogue in the form of items giving the identifying reference (but not details of the material itself) and in most cases the justification for redaction. This may increase the likelihood of an FOI request being made against it. It is therefore all the more essential that such material can be identified and retrieved.

7.3 Once reviewers have identified material for redaction, a record of decisions should be kept showing:

- an identifying reference such as a National Archives reference, registered file number, case file number or electronic document reference
- precise details of the material removed (this need not describe the content, but should clarify which section of the document has been withheld – for example ‘paragraph 2 of page 4’. However, if only one or two words are being withheld, these details must be exact to enable precise identification)

- The reason for non-disclosure of the information. If one or more FOI exemptions apply, they should all be noted, along with the particular reasons they apply in this case.

- The reason for withholding the information from The National Archives, if applicable (retention under S 3(4) of the Public Records Act); in other words, the criterion and the reason it applies.
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- Any comments made by reviewers and other organisations or individuals consulted, bearing in mind that records may be the subject of further requests

7.4 If the reviewer passes the record on for redaction, this form can also serve as a method of conveying redaction instructions. Retain the record of decisions until the full record is transferred to The National Archives or released.

**Paper records**

7.5 Once redaction is complete, mark the redacted copy placed on the file showing under what authority the redaction has been effected – for example ‘Retained under S 3(4) of the Public Records Act’ or ‘Closed under FOI Exemption S 42’.

Departments redacting a significant volume of material may find it beneficial to procure stamps for this purpose. Alternatively, providing they cannot easily be removed, attach good quality labels, showing the same information.

7.6 Redacted sheets within a larger document can be more readily identified if photocopied onto brightly coloured paper (green or blue for instance). Although not mandatory, it will make it clear to departmental staff using the record for administrative purposes in future that further redacted information had been withheld at the time of transfer and will be available elsewhere. It also makes it easier to locate the relevant page at The National Archives when the full version is released and replaced in the original file.

7.7 The closed extract should be tagged into an acid-free folder with its The National Archives item reference clearly marked on the front – DEFE 19/143/1 and so on. Store in a secure cabinet or room.

**Electronic records**

7.8 The Information Management and Practice department coordinate the transfer of electronic records to The National Archives, assisted by the Digital Preservation department. For up to date information and guidance on digital record transfers, see: [Digital records transfer - The National Archives](#)

8. Transfer of closed extracts to The National Archives or places of deposit (unredacted originals)

8.1 Redactions closed under FOI exemptions should be transferred to The National Archives once the Advisory Council on National Records and Archives has agreed the exemptions.

In the case of paper records, this should be done ideally at the same time as the transfer of the parent piece; the extract file should be boxed separately. If this is not possible due to pending consideration by the Advisory Council, the extract may remain with the department until the Advisory Council has completed this task.
9. Storage of retained extracts

9.1 Place retained paper extracts in an acid-free folder marked with their catalogue item reference as required for transfer to The National Archives. It might be useful to attach a copy of the redacted access version for future reference. This will particularly aid FOI requests, as it will allow reviewers to see at a glance the redacted material being applied for.

9.2 Keep these extract folders in an organised system to enable easy recovery in the event of an FOI request. For example, file records from each National Archives class together, ordering by year and either The National Archives or departmental reference within that, or noting a shelf location on an extract tracking system.

9.3 Keep retained electronic (unredacted) documents in a secure area of the electronic file plan or local area network. They should be accessible only to designated staff (for example the Freedom of Information Officer and Departmental Record Officer).

10. Tracking of retained redactions

10.1 Public record bodies need to know what information they hold, including what has been retained under S 3(4) of the Public Records Act, and they need to be able to retrieve it easily to ensure compliance with FOI and EIRs.

10.2 Ideally departments and agencies should have some method of recording their retained paper and electronic extracts, showing some or all of the following information:

- The National Archives reference of the parent piece from which the extract has been removed, FO 371/148909 and so on. The extract itself should be given an item number that corresponds to The National Archives’ catalogue entry for the extract (such as FO 371/148909/1)
  - the former departmental file reference
  - the reason for retention
  - the date for re-review

Create a brief description of the extract’s subject matter for use in keyword searches. This will be an effective aid in answering requests for information efficiently. Records managers should be aware that records of redaction decisions are likely to be the subject of FOI requests themselves, and as such, should word these descriptions carefully. However, the essential aspect of this is that the details must allow the information to be located and retrieved. If a request for these records is made, exemptions can be applied to them if necessary.
Databases and spreadsheets are an obvious method for storing, tracking and interrogating such information. They also provide easy methods for monitoring re-review dates.

However, remember that when selecting a particular format or software for this purpose, they should pay particular consideration to the potentially long time span such information may be required.

Simpler methods of recording, and simpler formats (csv, for instance), are likely to have a longer life span than more complex software solutions, and therefore may be a more cost effective means of managing this information over time.

Whichever format or software is chosen to manage this information, it must have a facility to show all re-review dates as they become current. This type of tracking system can also serve as a reminder for departmental re-review of closed material held by The National Archives. When setting re-review dates, departments should bear in mind that some exemptions are time limited.

11. Further information

11.1 More information is available from the Information Management and Practice department at The National Archives. The links in this guidance also provide further suggestions.

You may find the following helpful:

- Preparation of records for transfer to The National Archives and approved places of deposit: Preparing records for transfer to The National Archives

- Cataloguing guidelines: Cataloguing paper records: guidance for government departments (nationalarchives.gov.uk)

- Retention scheduling - Complaints records: Records Management retention scheduling 7. Complaints records (nationalarchives.gov.uk)

Redaction toolkit for paper and electronic documents

Appendix 1

Redaction of documents in hard copy

Always carry out redaction on a copy, leaving all the information contained in the original document intact.

There is a range of redaction methods, and any may be used effectively according to what best suits the organisation concerned. This may depend on issues such as the structure and content of the document, the degree of confidentiality, and the cost and time available.

Whichever method is employed, the end result must ensure that the redacted material cannot be seen or guessed due to incomplete redaction. This means checking to make certain that words cannot be made out when the document is held up to light or that the ends, top or bottom of text are not visible.

Methods of redaction

Cover-up tape

The simplest form of redaction is to use a high quality cover-up tape that can be placed on the original documents over the areas to be redacted, taking care that no parts of words are showing. By making a photocopy of the redacted text, an access version is produced ready for presentation.

The tape is white, and acts in much the same way as if using correction fluid, but can be reused several times. It is available in 1/6 inch for a 10-12 font typewritten line, 1/3 inch for two typewritten lines and 1 inch for general corrections.

Blacking/whiting out

Another simple solution is to photocopy the original document and use a black marker pen to block out the sensitive material. The redacted version should then be photocopied again to produce an access version. The further photocopy is necessary as information redacted using marker pen can be read when held up to light.

The same process can be employed substituting a good quality correction fluid for marker pen. Ensure that no redacted text is visible before making the second photocopy, which again is necessary as correction fluid can be easily removed.

Scalpel

This is perhaps the most precise and secure method of redaction as the exempt material is physically removed, leaving no risk of text being visible in the released version. Make a photocopy of the original. Then cut the material to be redacted from this photocopy using an artist’s scalpel or similar tool, leaving a ‘doily’, which is then photocopied again to provide the redacted document.
Photocopier with redaction facilities

Photocopiers are available which, in addition to normal copying functions, also have facilities to automatically remove marked out areas on a document. They provide a secure method of redaction, as there is no possibility of the removed text being visible after copying. However, they are limited in their effectiveness as the programmes can, at present, only remove paragraphs and stand-alone areas of text such as addresses or signatures. They cannot reliably detect small areas of data such as sentences or individual words.

A photocopier of this nature would probably be cost-effective only for organisations carrying out a large volume of redaction, where savings on more conventional materials would outweigh the cost of investing in such a copier.

Appendix 2

Redaction of electronic records

1. This section discusses the technical aspects of redacting electronic records. Remember that when dealing with electronic records the general principles of redaction are the same as those described in section 4 Principles of redaction.

Issues in redacting electronic records

The redaction of born-digital records is an area of records management practice which raises unique issues and potential risks.

The simplest type of electronic record to redact is a plain text file, in which there is a one to one correspondence between bytes and displayable characters. Because of this direct correspondence, redacting these formats is simply a matter of deleting the displayed information - once the file is saved, the deleted information cannot be recovered.

However, the majority of electronic records created using office systems, such as Microsoft Office, are stored in proprietary, binary-encoded formats. Binary formats do not have this simple and direct correlation, and may contain significant information which is not displayed to the user, and the presence of which may therefore not be apparent. They may incorporate change histories, audit trails, or embedded metadata, by means of which deleted information can be recovered or simple redaction processes otherwise circumvented.

These formats are also usually the property of the software house which develops them, and these companies have typically regarded providing public documentation of these formats as against their commercial interests. As such, the mechanisms by which information is stored within these formats are often poorly understood. In addition, cryptographic and semantic analysis techniques can potentially be used to identify redacted information.
It is therefore essential that any redaction technique is secured to eliminate the possibility of redacted information being recovered.

**Approaches to redaction**

1. The redaction of electronic records should always be carried out in accordance with the following principles:
2. Never redact the original or master version of an electronic record - redaction must always be carried out on a new copy of the record, either in paper or electronic format.
3. Redaction must irreversibly remove the required information from the redacted copy of the record. The information must be completely removed from the bit stream, not simply from the displayable record.
4. The National Archives is unaware of any other methods or tools for the redaction of electronic records which have undergone open and transparent testing, beyond those described in this document. As a result, The National Archives can only recommend the methods of redaction as described below.
5. Carry out electronic redaction in a controlled and secure environment that provides access only to those trained and authorised to carry out redaction.
6. Delete all intermediary stages of the redaction process. Only the original record and the appropriately redacted copy should be retained.

A number of different approaches to electronic redaction are possible:

7. **Traditional redaction**

7.1 For electronic records, which can be printed as a hardcopy, traditional redaction techniques, as described in Appendix 1, can be applied. Either the record may be printed and redaction carried out on the printed copy, or the information may be redacted from an electronic copy, which is then printed. If the redacted copy is required in electronic format, this can be created by scanning the redacted paper copy into an appropriate format, such as Adobe Portable Document Format.

This approach is currently recommended by The National Archives, if it meets the business requirements of the organisation.

7. **Conversion**

7.2 An electronic record may be redacted through a combination of information deletion and conversion to a different format. Certain formats, such as plain ASCII text files, contain displayable information only. Conversion to this format will therefore eliminate any information that may be hidden in non-displayable portions of a bit stream.

7. **Roundtrip redaction**

7.3 The redacted record may be required to be made available in its original format, for example, to preserve complex formatting. In such cases, an extension of the conversion approach may be applicable. Roundtripping entails the conversion
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of the record to another format, followed by conversion back to the original format, such that the conversion process removes all evidence of the redacted information. Information deletion may be carried out either prior to conversion, or in the intermediary format.

This approach requires a thorough understanding of the formats and conversion processes involved, and the mechanisms by which information is transferred during conversion.

This is approach is currently recommended by The National Archives.

8. Current best practice

8.1 This section describes the redaction methods, which have been tested by The National Archives and are currently recommended for use with specific types of electronic record.

9. Electronically redacting documents

9.1 When redacting electronically, take great care over the choice of target format. It is crucial that no evidence of redacted information is retained in a redacted copy. Some binary formats may allow changes to be rolled back; consequently these formats should not be used for creating redacted copies.

The National Archives recommends using PDF as a format for redacted copies, but PDF files should be roundtripped via a simple image format to ensure removal of all evidence of previously redacted information. The recommended image format, Windows Bitmap (BMP), has been chosen because it contains no provision for storing metadata. There is therefore no means by which hidden information could be inserted into the image file. This format has been preferred over other image formats such as TIFF for this reason, since the TIFF format contains metadata not visible on screen.

NOTE: The National Archives does not recommend BMP as a long-term preservation format.

Redacting PDF documents

9.2 Redact documents already in PDF format using the following steps:

Make an electronic copy and open it in Adobe Acrobat (the full version, not Adobe Acrobat Reader). For PDF documents where the text is stored as text, use the Text Touch-UP tool in Adobe Acrobat to replace the redacted text with a redaction marker (such as [redacted]). However, for PDF documents where the text is stored as an image, the Text Touch-Up tool can’t be used. In these cases, and for graphics and images, use The Square Tool to redact this PDF by drawing black rectangles over text and images.
Roundtrip the resulting PDF file via the BMP image format as described below. If the redacted document is no more than a single page, users may prefer to leave the document as a bitmap image

**Roundtripping**

9.3 Take the following steps:

Convert the PDF file into a set of bitmap images (BMP files), one for each page of the document. Widely available graphics software (Adobe Photoshop Elements, or similar) can be used to perform this step:

Convert each of these image files back into a PDF file. Widely available graphics software (for example Adobe Photoshop Elements) can be used to perform this step:

Recombine the individual page PDF files to form a PDF containing all of the pages of the original document. Specialised software may be required to concatenate the individual PDF files – for example, Ghostscript, a PDF manipulation tool that is free to download

**Redacting word-processed documents**

9.4 This guidance applies to word-processed documents, including documents created using all versions of Microsoft Word, WordPerfect and OpenOffice Writer.

Electronically redact Office documents using the following steps:

Make an electronic copy and delete all restricted information, replacing it with the text string [redacted], so that redaction is apparent but the space cannot be used to identify the missing information

The redacted document is then ‘printed to PDF’ using PDF creation software such as Adobe Acrobat

Roundtrip the resulting PDF file via the BMP image format as described above. If the redacted document is no more than a single page, users may prefer to leave the document as a bitmap image

**Redacting spreadsheets**

9.5 This guidance applies to electronic spreadsheets, including documents created using all versions of Microsoft Excel, Lotus 1-2-3, and OpenOffice Calc.

Make an electronic copy and delete all restricted information, replacing it with the text string [redacted], so that redaction is apparent but the space cannot be used to identify the missing information. The most appropriate method of making an electronic copy of a spreadsheet file is to export the data to csv format. The redacted csv version can then be reimported into a new spreadsheet file, which satisfies the roundtripping procedure outlined above
For spreadsheets containing multiple sheets, export each individual sheet as a separate csv file and then redact it. Once the required data has been redacted, recombine the individual csv files into a single spreadsheet if required.

It is important to note that if the spreadsheet to be redacted contains macros, equations, graphs or other similar added content, such items are not supported in csv files. In this event, the manual redaction method described below may be more suitable.

**Conventional redaction methods**

10. In some circumstances, it may be preferable to redact an electronic office document by traditional methods, rather than electronically.

This guidance applies to word-processed documents and spreadsheet files as described above.

**Redact documents using the following steps:**

Either:

- print the document to paper
- redact the paper copy (using conventional methods for redacting paper records)
- if an electronic version of the redacted document is required, create this by scanning the redacted paper copy into an appropriate format, such as Adobe Portable Document Format

Or

- make an electronic copy, redact it by deleting all restricted information and replacing it with the text string [redacted], so that redaction is apparent but the space cannot be used to identify the missing information
- print the redacted document to paper
- if an electronic version of the redacted document is required, create this by scanning the redacted paper copy into an appropriate format, such as Adobe Portable Document Format

When redacting electronic formats, keep a record of decisions in the same way as with paper formats. See section 6 Keeping records of redaction work.

Save the redacted version of the record into an electronic records management system (ERMS) at the time of creation. This will automatically record the identity of the individual saving the document as well as the time and date. Recording the reason for redaction needs to be input manually.

Some ERMS solutions offer additional functionality whereby it is possible to create a rendition, which is a related instance of the original document. The rendition can be redacted and saved within the ERMS and its relationship to the original document will be recorded by the ERMS.
Appendix 3
Sample of simple form for recording redaction decisions

<table>
<thead>
<tr>
<th>Date of redaction</th>
<th>Document reference</th>
<th>Details of exempt material</th>
<th>Exemption applied</th>
<th>Justification for exemption</th>
<th>Reviewer’s comments</th>
<th>Any other comment</th>
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Example of form to record decisions and pass on information to document editors carrying out redaction

Editing requirements: Series_______ Piece_______

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