PUBLIC RECORD OFFICE

The National Archives

Evaluating information assets:

appraising the inventory of electronic records

1 Summary

This toolkit is provided to help departments make an initial evaluation of the content of their inventories of electronic record collections developed as part of the Information Age Government strategy which requires all newly created public records to be electronically stored and retrieved by 2004. The strategy requires departments to undertake appropriate action to meet specific milestones at designated dates.

An earlier milestone required departments to develop an up-to-date and comprehensive inventory of records collections by December 2000 covering any electronic records or potential electronic records. Departments should now be planning to meet the strategic milestone to evaluate the electronic record collections listed in their inventories by September 2001. This toolkit has been produced to explain what now needs to be done to meet the target.

In order to comply with the milestone departments need to evaluate the contents of their inventories of electronic records to determine value and correct disposal[1], in order to:

- bring those electronic records that are valuable and still required for business and other reasons, into a managed environment
- apply a departmental digital preservation strategy to them as a part of that managed environment.

Electronic records which are evaluated as no longer having departmental value should be submitted for formal appraisal, in conjunction with the relevant PRO Client Manager, to determine whether they fall within the PRO selection criteria. This should be done before any action (or lack of action) is taken on records so identified. Records which are brought into a managed environment at this stage will be submitted for appraisal later, at the appropriate point in their lifecycle. No records should be destroyed without first consulting the relevant PRO Client Manager.

This toolkit will help departments develop three main products which will facilitate the actions listed above:

- guidance for records managers on best practice in evaluating electronic record collections recorded in departmental inventories
- a schedule of electronic records listed in the inventory which should be preserved in their current location, or migrated to a formal electronic records management system
- a schedule of electronic records to which a departmental preservation strategy must be applied.

Successful evaluation will identify those record collections which need to be both managed and sustained over time in order to fulfil the business and operational needs of the organisation. If the content of a record collection falls within the Public Record Office (PRO) selection policy, this will override all other considerations in determining fitness for permanent preservation. Departments should contact the PRO

[1] Disposal refers to the action that may be undertaken once the records are no longer required for operational purposes. They can then be disposed of by deletion/destruction after an appropriate retention period to ensure the wider business interest is supported. They may also merit permanent preservation and transfer to the PRO and will require appraisal once disposal is deemed appropriate. The decision to preserve permanently will need to take account of the PRO Acquisition and Disposition policies and any existing Operational Selection Policy (OSP).

to confirm the status of the collection and jointly determine an appropriate timetable for transfer.

The *Route map and milestones to achieve electronic record management by 2004* gives further information on the Information Age Government strategy and the milestones towards 2004. It can be accessed on the PRO web-site at:

http://www.pro.gov.uk/recordsmanagement/eros/ROUTE%20MAP%207.pdf

2 Introduction

2.1 Aims and intended use

This toolkit is one of a set that offers practical guidance for public record bodies so that they are better placed to meet the 2004 target for electronic records within the Information Age Government strategy. This states that by 2004 all newly created public records will be electronically stored and retrieved. The toolkits support the work needed to meet the interim milestones, which central government departments are being asked to adhere to en route to this target. These milestones are the dates by which actions must to be completed to achieve the 2004 target.

Departments were required to develop an up-to-date and comprehensive inventory of records collections covering any electronic records or potential electronic records by the end of December 2000. Departments now need to evaluate the contents of these inventories to determine value and correct disposal, in order to prioritise action on:

- bringing those electronic records that are valuable and still required for business and other reasons, into a managed environment;
- applying a departmental digital preservation strategy to them as a part of that managed environment.

The toolkit intended as practical advice for departments who must - as part of their route to 2004 - begin to manage their currently unstructured and unmanaged electronic records. Evaluation of existing electronic records will help departments identify information flows and eliminate unnecessary duplication. If existing electronic records are not evaluated, material in inventories will remain unmanaged and unsustainable. The toolkit will help departments make an initial assessment of the value of the electronic records to plan future action; it is not intended to be a comprehensive guide to appraising electronic records for lasting historical value. Criteria for selecting records for historical purposes can be found in the PRO's acquisition and disposition policies and in the more detailed operational selection policies. No records should be destroyed without reference to these documents and all records no longer required for business purposes are subject to the formal appraisal process to determine whether they fall within the PRO selection criteria.

As well as helping departments evaluate existing information assets, the results of the evaluation will be valuable for building an electronic file plan – developing structure and allocating disposal schedules – which will be necessary in implementing full electronic records management.

The toolkit is intended to provide guidance on best practice but not to be completely prescriptive. Departments should determine an approach which is most appropriate for their own circumstances. Electronic record collections listed in the inventory are unlikely to be held by electronic record and document management systems (ERDM) - records held in such systems will be actively managed by the software application already. A separate toolkit will be developed covering the development of filing structures for electronic record and document management systems.

This toolkit should be used in conjunction with the guidance in two other related publications *Guidance for an inventory of electronic record collections* and *Strategies for maintenance and preservation of electronic records in government departments* (forthcoming).

2.2 Relationship with the 2004 target

In order to ensure full and reliable electronic records management departments need to plan for informed and consistent evaluation and decision-making to determine how long electronic records should be kept and how they should ultimately be disposed of. The route-map and milestones towards electronic records management by 2004 requires departments to bring existing records under control. The relevant milestone concerning appraisal is:

- *To evaluate electronic records that should be kept and bring them into a managed environment for maintenance, access and preservation by September 2001.*

An inventory of records collections together with an evaluation strategy will enable an organisation to understand what electronic records exist, of what types and of what value, and to determine the actions and resource implications needed to maintain those with continuing value. Inevitably, many collections will be of a hybrid type, constituted of both paper and electronic records. It is essential that organising structures cover both, and that there are cross-references between the paper files and the electronic groupings of records on the same topics.

2.3 Toolkit products

There are three main products which can be produced from this toolkit:

- guidance for records managers on best practice in evaluating electronic record collections recorded in departmental inventories
- a schedule of electronic records listed in the inventory which should be preserved in their current location, or migrated to a formal electronic records management system
- a schedule of electronic records to which a departmental preservation strategy must be applied.

2.4 Records no longer required for business purposes

Electronic record collections which are no longer required by the department should, in all cases, be:

- brought to the attention of the relevant PRO Client Manager
- submitted for appraisal by the normal mechanisms
- retained until a confirmed decision is taken on disposal

2.5 Audience

This toolkit is designed to help Departmental Record Officers and others charged with record management responsibilities to meet the 2004 target. There will be other stakeholders in the organisation who will participate in the assessment of electronic record collections, from an operational, business or IT perspective All concerned should ensure consistency with the organisation's corporate policy and procedures, and general working practices.

The guidance is intended primarily for those working in central government; the principles will also be relevant in local government and throughout the public sector. Throughout this document the term 'department' should be taken to apply to any public sector organisation, including all departments, agencies and other organisations across government. Familiarity with the concepts of records as used in central government is assumed.

3 Benefits

3.1 Purpose of evaluation mechanisms

A systematic and planned approach to the management of records within an organisation, from the moment they are created to their ultimate disposal, ensures that an organisation can:

- control both the quality and quantity of the information that it generates
- maintain that information in a manner that effectively serves its needs, those of Government and of the citizen
- dispose of the information efficiently when it is no longer required.

The evaluation methods described in this toolkit are restricted to considering records for continuing business value. This does not replace full appraisal, which should always be applied to those records no longer required for departmental needs. Additionally, it does not preclude the need to design mechanisms for structured retention and disposal into new systems.

Effective evaluation mechanisms ensure that information is held for as long as it is required for business or other needs, and support informed disposal. This in turn will help departments meet their obligation under the Data Protection Act 1998 s4(4) *to comply with the data protection principles in relation to all personal data under their control* and the requirement of the Lord Chancellor's Code of Practice on the Management of Records under Freedom of Information, (currently in draft version 21a, 21 June 2000) *to have in place systems for managing appraisal and for recording the disposal decisions made.*

3.2 Departmental business needs

Effective management of unstructured and poorly organised material listed in the electronic records inventory will:

- help to ensure that the organisation retains the operational business information which it needs
- develop an effective corporate memory base of past decisions, actions and outcomes
- help support requirements for legal admissibility and accountability.

3.3 Freedom of information (FOI)

Evaluation of electronic record collections will (partially but not completely) help departments meet their obligations under FoI legislation. The Lord Chancellor's Code of Practice on the Management of Records under Freedom of Information, (version 21a, 21 June 2000) states that:

- *It is particularly important under FOI that the disposal of records - which is here defined as the point in their lifecycle when they are either transferred to an archives or destroyed - is undertaken in accordance with clearly established policies which have been formally adopted by authorities and which are enforced by properly authorised staff.*
- *In order to make their disposal policies work effectively and for those to which the FOI Act applies to provide the information required under FOI legislation, organisations need to have in place systems for managing appraisal and for recording the disposal decisions made.*

3.4 Data Protection

Data protection is subject to the overriding principle that personal data processed for any purpose or purposes should not be kept for longer than is necessary for that purpose or those purposes. This principle does not preclude long-term retention of personal data for continuing operational purposes or permanent retention for archival purposes. However, in order to meet this requirement, the issue of appropriate retention periods has to be addressed. Identifying and applying retention periods forms part of the evaluation process and will help departments to comply with the Data Protection Act.

3.5 Advantages of early evaluation

The timeframe in which effective action to evaluate and preserve access to electronic records can be taken is shorter than with conventional records, due to:

- the pace of technological change in the systems which create, store and access records
- the instability of the media on which records are held
- the danger of technological obsolescence.

Early evaluation avoids the risk of records becoming incomplete or unreliable, or changes in information technology systems causing the loss or degradation of records, which have not been migrated to a new system with sufficient forethought. This evaluation should be done at the most within five years of creation of the earliest records within a system; and ideally, an initial assessment of the records likely to be created within a new system can be conducted at the time of system design and installation.

As with conventional records, electronic records will fall into broad categories:

- many electronic records will only have an ephemeral value and will not need to be kept in the long term
- others will need to kept for legal and business reasons
- some will be needed for operational reasons and the administration of the department in the longer term
- a proportion will need to be safeguarded for eventual transfer to the Public Record Office.

While ensuring that records of longer-term value are safeguarded by migration into replacement systems, early assessment will also enable the identification of records with only short-term value. It is desirable to avoid migrating such records to a new system unnecessarily, offering cost savings as a return. The criteria set out in PRO selection policies will need to be applied to any such records before irreversible decisions are taken.

Consistent assessment of records listed in the inventory will provide a basis for a longer-term approach to the development of retention and disposal schedules that will apply following implementation of an electronic records management system.

Where a recommendation to dispose of or destroy a record collection has been made, this should still be formally confirmed at the appointed disposal date to ensure that the original recommendation is still valid and also to determine whether they fall within the PRO selection criteria. This will avoid destroying material where the value of the information to the organisation has changed and where a longer retention period or even permanent preservation would now be merited.

4 Preparing for the evaluation process

4.1 Strategies

An evaluation strategy aims to:

- identify and evaluate records which are organisational information assets
- bring into managed control – by migrating into an EDRMS, or by subjecting to a preservation regime under the current arrangements – those records which have continuing or permanent value.

The first priority is to prepare a strategy. In order to develop this it is necessary to:

- identify which record categories should be evaluated first, and why
- develop a strategic plan which covers:
  - a mechanism for conducting evaluation appropriate to the circumstances in which records are kept
  - a mechanism for recording and prioritising actions to be taken on the records.

The strategy should address evaluation of records from the following perspectives:

- an organisational, or process-oriented perspective, primarily concerned with the business context and operational needs of the department
- a functional perspective, identifying the main business functions, activities, and transactions which produce records
- a subject, or documentation-oriented perspective, related to the thematic content of records.

Any records, which are not, required following the above evaluation will need to be appraised against:

- the Public Record Office acquisition and selection policies, on which decisions for permanent preservation should be based.

This process is not described in this toolkit; further guidance is available from the PRO

The metadata elements in departmental inventories of electronic record collections, which describe the provenance, subject, thematic, or documentation role of the record collections, should be used to help assess the degree to which records meet these criteria.

4.2 Prioritising the work – use of plans and timetables

An evaluation plan will include a timetable that clearly assigns responsibility for all activities, and estimates the schedule for undertaking the actual assessment of each electronic record collection. The scope and complexity of this plan will vary from one organisation to another. Each task should be clearly explained with an estimate of the effort required and the completion deadline. The plan should also include a schedule of which departments and units will be consulted, by whom, and when.

A checklist of the required actions together with time-scales and the identity of the person responsible is a useful planning tool and it will also help in the monitoring of progress against the overall target.

4.3 Communication strategy

Where a need for additional information is identified it will be necessary to communicate to all the data owners and users of these electronic record collections that their help will be needed. Where necessary, senior management support should be sought to ensure compliance, in the context of progress towards the 2004 target.

The potential benefits for ordinary users should also be identified and promulgated. This will help make the process a valued and meaningful exercise to the staff and managers consulted, during the process, by emphasising that internal benefits will accrue. These include:

- higher quality information
- better information management
- more efficient and effective use of the available storage capacity
- sustained accessibility to corporate information.

4.4 Sources of information

Inventory of electronic record collections

The toolkit *Guidance for an inventory of electronic record collections* provides guidance on how to develop an inventory. It includes a table of the metadata elements required together with a description and an explanation of their purpose. These elements should have been captured for all listed electronic record collections and should be used to source the information required to make an initial evaluation (see section 5).

Information Asset Register and Year 2000 Register

Where an inventory is not sufficiently complete it may be possible to capture some of the information required from the organisation's Information Asset Register (IAR). This register is unlikely to provide full coverage of all electronic record collections in an organisation, and may not necessarily be up-to-date, but it will indicate which branch of the organisation is the system owner. The data owners should be able to provide most of the information.

Alternatively departments may be able to use their Year 2000 register to capture a base level of information and use that to undertake the necessary research.

Information from data owners

A further resource is the data owners and users who will often possess valid information and insights, which may not be formally documented within the electronic record collection.

Existing paper records

In many instances evaluation of electronic record collections will need to take account of related collections of paper records. These records may document the reason and purpose behind the establishment of a system and may include key interpretative information. Management of paper in preference to electronic records should be the exception not the default. A view will need to be taken about the future disposal of related collections, to ensure consistency and to avoid continued preservation of duplicates.

4.5 Evaluation options

For electronic records, a document-by-document review is very time-consuming and resource-intensive and is unlikely to be cost effective. While the contents of a paper folder can easily be scanned through physical examination, opening and scrolling through electronic documents is far more cumbersome, unless some specific support for browsing has been built into the system. Evaluation of this kind of material can be undertaken:

- by the DRO working at the collection level, and with information given in the inventory
- by document originators or desk officers
- with some form of software support.

The first option will be able to take advantage of information listed in the inventory of record collections, and will be most likely to integrate well with existing records management practices. The second option is both onerous and time consuming and it is unlikely to be cost effective. The third option is possible but at present, most commonly available software support is limited to simple keyword searching and retrieval, and is unlikely to be effective beyond grouping similar titled documents together (in which circumstances, naming conventions will clearly be useful). Free text searching for specific terms is also a possibility but can lead to a disproportionate and misleading number of hits if the search criteria are too broad. While more sophisticated forms of software support - concept agents, analytical search engines, textual visualisation tools - that may help with this area are emerging they are unlikely to be widely available.

In evaluating electronic records collections reference should be made to the following documents (where these exist):

- documentation on the purpose of the original system
- the original business case
- project initiation documents

Evaluation decisions should be confirmed by the PRO Client Manager.

4.6 Evaluation of poorly structured collections

Many electronic records listed in departmental inventories may exist with little organisation or structure linking them together in meaningful collections or groupings. Evaluation will therefore be difficult. This will be the case where, for instance:

- electronic documents are held on a shared local network drive with little or no systematic organisation or structure in the filing or folder hierarchy
- files and folders are created directly by end users with no established naming conventions, resulting in names that are ambiguous, mysterious or misleading
- electronic documents are held in a document management system that relies upon search technology alone to bring together sets of related records.

Poor structuring prevents the development of collections of records which can be managed as a group, and the easy allocation of individual documents to such collections on creation by the end user. In such circumstances much of the context of an electronic record will be lost. If individual documents are considered in isolation from their original context, consistent evaluation will not be possible.

Some techniques that can help evaluation at the file/directory level are:

- using standard file manipulation tools to provide a basic analysis of document characteristics
- pre-sorting documents within the disk directory according to various characteristics
- sorting documents by date order to help assess patterns of activity within a relevant date range
- sorting by creator application (such as text document, spreadsheet, etc) to indicate activity that has generated particular presentational patterns
- further information concerning the identity of the creator and subject matter can also be found by examining the properties of individual documents.

5 Methodology for evaluation

Plan to conduct an evaluation of inventory contents by:

- identifying the business functions that have generated the records and the IT systems which have physically produced the records
- assessing the characteristics of storage and structure
- assessing the technical environment of the record collection
- assessing content and use
- mapping value and resource implications
- determining an appropriate outcome for each electronic record collection
- submitting those not required for departmental needs to formal appraisal

First, identify a core business function or other area of primary interest. Second, identify collections of records listed in the inventory which fall within this area, and for each collection of records:

- map any record flows into and out of this collection, and to or from other collections, using information in the inventory
- identify any duplicated or related records or any subsets of the records in both electronic and non-electronic format, and link these to decisions made on the record collection under consideration
- apply departmental business needs to assess continuing value
- record the results in the inventory
- where possible, apply retention and disposal scheduling to these and any duplicates/subsets
- consider requirements for permanent preservation, and conduct a sampling exercise if necessary
- record any future actions which need to be taken, including future migration needs.

5.1 Assessing storage and structure

Assessment requires:

- knowledge of the business and user needs
- awareness of the legal and security requirements
- understanding of the context in which the records reside and the contribution they make to the corporate memory.

A well-developed inventory of electronic record collections should provide information for this but you should also draw upon other information where available and approach users for knowledge where documentation is insufficient.

Characteristics of the way that records have been generated and stored which can help to assess of the value of the records are:

- authenticity – are the documents as stored the ones used in the first place?
- version control – has any mechanism been used to manage the different versions of a document and can this be preserved with the documents as a record?
- audit trails – can the history of documents from creation through to archiving be traced?
- can the documents held in computer file store be mapped onto a corporate records structure, possibly as represented by paper based registered files?
- has only one copy of a document been preserved in each case and, if not, can the primary version readily be identified?
- has the designed file structure been adhered to or are files distributed in an idiosyncratic fashion?
- have features been used such as dynamic dates that might undermine the value of the documents as records?

5.2 Determining the status of a record collection

The matrix below can be used to identify the status of each record collection; it will give an initial indication of the degree to which the records can be said to be actively managed and to what extent the records possess a logical or formal information structure.

	Little or no records management	High degree of records management
Highly structured records	Structured records with low degree of formal records management	Records collections demonstrating centrally approved structures and naming conventions
Little or no structure to record collection	Unmanaged and unstructured collections	Unstructured collections with corporate thesaurus or indexing processes

Fig. 1: Mapping records structure against records management

Record collections that fall into the bottom left hand box of the matrix on the previous page will comprise documents that have very little structure and a low level of records management. An example of this would be:

- a shared drive where documents are saved without any order or folder structure.

Such collections may be unlikely to merit retention by the organisation beyond 1 to 2 years but the business roles they service require clarification before a recommendation is made for retention or disposal.

The bottom right hand box of the matrix should list collections with little structure but a marked degree of record management. An example of this would be:

- electronic documents or e-mails held in a structure, which need not necessarily be in a hierarchical arrangement but could use a thesaurus of concepts or functional terms. They may demonstrate a consistent indexing structure, which allows for consistency in information access and retrieval: for example, by removing the need to anticipate and search on all keywords, which may have been used by the record creators.

Such collections will need careful consideration as although there may be little structure the content may be of greater significance to the organisation than might appear to be the case if the assessment was based solely on the presence of a hierarchical structure. The business purposes served by these records will need careful examination before the retention period is determined.

The top left hand box will indicate collections with a high degree of structure but little formal records management in terms of nomenclature or retention schedules. Examples of these include:

- databases with a high degree of structure and documentation or where they exist electronic documents held in a proprietary electronic document management system (EDM).

Such collections may well merit retention for a longer period as they represent a corporate resource and some of the databases may merit permanent preservation.

Records which fall into the top right hand box will show a high degree of structure and a clear degree of formal records management in terms of the naming conventions, types of document saved and access permissions. An example of this would be:

- a shared drive dedicated to a particular group of users, where the folder names may reflect corporate filing systems or an alternative system agreed with the DRO. Such drives will often have centrally agreed filing policies and access permissions such as the use of read only attributes to prevent casual deletion. They may also demonstrate centrally approved naming conventions for documents and e-mails.

Such collections have a high probable need for continued retention and maintenance by the organisation as they represent a corporate resource.

5.3 Assessing the technical environment

The technical environment of the record collections will need to be assessed, as a decision to maintain the records within a preservation regime, migrate them into a managed EDRMS, or to defer disposal for a scheduled period will have technical and procedural consequences. Valuable records need to be safeguarded and reliably accessible until they are no longer required or transferred to an archive such as the PRO.

The questions that need to be asked at this point are

- what hardware platform is required to access the record?
- what software application is required to access the record?
- what are the software formats?
- what are the technical consequences of continued retention?
- what options exist for migration to a standard format?

5.4 Assessing content and use

Mapping the position of each record collection on the matrix on page 15 will determine which record collections are considered to be both managed and to possesses some degree of internal structure. The following questions should be asked relating to content and use:

- what is the provenance of these records – who created them and for what purpose?
- which parts of the organisation, in addition to the creator, have used them subsequently and why?
- what are the legal and operational requirements, which must be satisfied by record keeping for the business activity to which these records relate?
- are there any other electronic records that should be kept for accountability or other specific reasons, which are related to these records?
- are there any related paper records, in hybrid electronic/paper collections, which should be treated alongside these electronic records?
- are the records in this collection created (in whole or part) by information flows from another source?
- do the records in this collection contribute (in whole or part) to the information contained in records in another collection?
- what are the relationships within and between these records and other record series?
- what are the perceived purposes of the creator/data owner, which would be served by long-term preservation of the records?
- what security classifications, caveats and other constraints on access apply?

For each department, the appropriate balance between these (and other more specialised) aspects will vary according to the local situation. Much can be gained, working within the resources available, by drawing on systems portfolios, business information systems charts and procedure manuals to develop an understanding of the roles and relationships of electronic record collections.

5.5 Mapping value and resource implications

One way of making an initial assessment of a record collection is to identify both its current value to the business and the related resource requirements needed to sustain it. Sections 5.6 and 5.7 provide a method to evaluate both the value of the collection and the resource implications of maintaining it. This process produces a pattern or information profile, which can help provide an indicative assessment of the status of a record collection.

The tables on pages 20 to 21 and 23 provide a step by step mapping process for each electronic record collection based on a valuation of each record collection and attributable resource requirements. The tables are intended as a framework to identify assessment factors which are relevant to an individual set of electronic records; they do not provide a simple answer, but will help to make evident the choices in balancing conflicting aspects in any particular case.

The valuation of a record collection is based on its content and business use and the relationships it may possess with other records. Resource implications are attributed according to prevailing access and technical constraints.

The guidance in sections 5.6 and 5.7 can only provide an indication of the likely status of each record collection. Clearly if a collection is critical to the business of the organisation but the resource implications are very high this collection will need further review and may be a candidate for urgent migration to a more appropriate software and hardware platform.

In using this process DROs will need to take account of the operational and legal context within which their organisation operates. Before determining the disposal decision they should first consult with the PRO Client Manager.

5.6 Assessing the value of records

Departments need to establish whether they have a continuing operational need for the records. In doing this they need to consider not only immediate, short-term need, but also longer-term accountability and legal issues, for example the need to explain why the department took a particular decision.

A record collection's relationship with other records is also a factor which can increase or decrease the value of the records to the department. When used in combination with other records the value of a collection may increase. The collection might also duplicate or overlap with another collection of records in such a way that the department only needs to keep one of the collections e.g. an electronic and a paper set of committee minutes and papers, or a collection of raw data and a report generated from it.

When considering the value of a record collection, departments should draw on the information identified in sections 5.4 and 0. *Table 1* and *2* which follow are intended to assist department in identifying the value of the records by giving a focus to these considerations. *Table 1* looks at:

- *Content and business use* which identifies the value of the material based on the record collection alone

and *Table 2* looks at:

- *Relationship with other records* which assesses the material in the context of other, related records

Annex A sets out how the metadata elements in the inventory of electronic records relate to the questions asked in *Tables 1* and *2*.

To establish the value of a collection of electronic records, the department should look at the pattern of responses to the questions asked in *Tables 1* and *2*. A medium or a high response to any of questions 1-5 constitutes strong grounds for preserving the records for the duration of that need provided that the resource implications are not excessive (see section 5.7). Records consistently rated as low/very low are either not required for continuing business purposes or are likely to merit preservation for a short period of time e.g. 1-2 years.

All electronic record collections not required for continuing business purposes must be appraised by the DRO to determine if the records should be selected for permanent preservation and transfer to the PRO in accordance with the PRO's Acquisition and Disposition Policies.

Table 1

Name of electronic record collection:				
Evaluation of the records	**Tick in the appropriate box below**			
	Very Low	**Low**	**Medium**	**High**
Content and Business use				
1. *To what extent is there a continuing operational requirement for this information for current business processes?*				
2. *To what extent are these records needed to document the business process/decisions taken/actions carried out for future operational use?*				
3. *How important is the user/creators continuing need for this information in the future?*				
4. *To what extent are these documents needed as records to fulfil legislative requirements?*				
5. *What implications for accountability arise from a decision to dispose of these documents?*				

Table 2

Name of electronic record collection:				
Evaluation of the records	**Tick in the appropriate box below**			
	Very Low	**Low**	**Medium**	**High**
Relationship to other records				
1. To what extent do the electronic documents in this collection support the interpretation and use of other records?				
2. What is the likelihood that keeping these documents would enable duplicate paper records to be destroyed?				
3. To what extent do these documents differ from paper records that will be kept for business purposes?				
4. What value do these documents add to a wider set of information?				
5. To what extent do these documents have a logical relationship to other record series that are being kept for business purposes?				
6. If these records are derived from a wider body of information, how much value do they add to the original information?				
7. If these records contain personal data, to what extent does use of it comply with the Data Protection Act?				

5.7 Assessing resource implications

Departments need to identify and quantify the resource implications required to maintain an existing record collection. Table 3 below is designed to help departments undertake this process by clarifying the overall resource requirement of continuing to maintain an individual record collection.

By completing Table 3 departments will be able to compare the value of the records to the business, established at section 5.6, with the resources required to maintain them. Extended or indefinite storage of electronic records does incur significant overheads and recommendations either to dispose of or retain an individual collection will be informed by this cost.

The table provides for a Yes/No answer. There is also scope to add comment where necessary. However if Yes is an appropriate answer there is provision to add a percentage figure in the column alongside to help quantify the resource requirement.

Records collections of low value to the business but with high resource implications will normally be marked for early disposal. However if the resource implications for continued retention are significant, and the value of the records to the business are also high, knowledge of the continuing overhead will help focus decisions to migrate the information to more accessible and less onerous technical solutions. Such decisions will ensure the continued survival of the records. Caution is advised when evaluating record collections with high resource implications; as such requirements should not of themselves determine a recommendation to dispose of a collection.

The results of this process will subsequently inform the development of appropriate preservation strategies, which are the subject of a companion *toolkit Strategies for maintenance and preservation of electronic records* (forthcoming).

Departmental inventories of electronic records should provide relevant information to answer these questions. Guidance on the information to be captured within an inventory was given in another companion toolkit *Guidance for an inventory of electronic record collections.*

Annex A in this publication will help focus responses to these questions by linking the relevant metadata elements within an inventory to the questions given in *Table 3* below, and indicating the nature of the information that should be provided to help answer each question.

Departments are reminded that all electronic record collections subject to disposal recommendations must be appraised by the DRO in accordance with the PRO Acquisition and Disposition policies to determine whether they should be permanently preserved and transferred to the PRO. The DRO should consult with the PRO Client Manager when taking such decisions.

Table 3

Assessing Resource Implications				
Name of electronic record collection:				
Required information	**No**	**Yes**	**%?**	**Comment**
1. Are these documents subject to security classification and/or protective markings?				
2. Are these documents subject to other operational access controls?				
3. Should the documents be reviewed for sensitivity?				
4. Are these records accessible via the current hardware / software platform?				
5. If accessed via their current platform, will the records continue to be accessible on this platform for the short term? (1 to 2 years)				
6. If accessed via their current platform, will the records continue to be accessible on this platform for the medium term? (3 to 5 years)				
7. What percentage of the records require migration in the short terms (1 to 2 years)to a different physical format to retain access?				
8. What percentage of the records require migration in the medium terms (3 to 5 years)to a different physical format to retain access?				
9. Are there specific difficulties in migration due to e.g. proprietary formats, non-standard design structures?				

Assessing Resource Implications				
Name of electronic record collection:				
Required information	**No**	**Yes**	**%?**	**Comment**
10. Should the records be sampled to verify technical decisions?				

6 Outcomes of assessment

6.1 Categories of outcome

During the records evaluation process the DRO should identify those categories of records whose value to the organisation can be reasonably predicted. This will include:

- those that require retention for a specified period for business needs, or on legal grounds
- all other records not required to be retained for business purposes.
- Final disposal should always be subject to confirmation by the DRO in order to validate the original recommendation in case the retention period either requires lengthening or changing to permanent preservation.

The evaluation process described here is more limited in scope, aiming to identify those records, which should be brought under managed control. A more formal records appraisal may need to be applied within this managed environment at a later date.

6.1.1 Having obtained an indicative valuation by using the table in section 5 the recommendation, where any action other than sustained maintenance is indicated, should be confirmed with the PRO Client Manager. The users should also be advised in case other considerations need to be taken into account before the decision is confirmed.

Two possible outcomes may flow from the first category: records required for continuing business needs. These are:

- maintain in the current location for a defined period
- plan to migrate into a formal EDRM system

6.2 Maintain in current location

Include outcomes in the inventory information and take planned measures to ensure preservation and continued access for the period required. Establish a retention period and disposal action at the end of this period. These will comprise one of the following actions:

- Destroy at end of period
- Review. Review will result in one of:
  - retain for xx period, then review/destroy
  - destroy now
  - retain for permanent preservation

This decision may be subject to further appraisal in due course.

6.3 Migrate to future EDRMS

Include outcomes in the inventory information and take planned measures to ensure preservation and continued access in the interim period before migration. Plan to map records in this category from the inventory to future electronic file plan categories as these are developed (including allocation of retention schedules).

6.4 Records no longer required for business use

Assess all material which falls into this category for potential permanent preservation and transfer to the PRO

6.5 Assessing requirements of the Public Record Office

If the contents of a record collection fall within the PRO selection policy, this will override all other considerations in determining fitness for permanent preservation

- are these electronic records likely to have long-term evidential value?
- are these electronic records likely to have future research value, bearing in mind the collection themes of the PRO selection policies?
- does an operational selection policy (OSP) exist which applies to this category of records?

The Public Record Office Acquisition and Disposition Policies provide a strategic framework on which to base decisions to select records for permanent preservation. Further information on the application of these policies and the role of the DRO is given on page 28.

Where they exist, departments will also have recourse to Operational Selection Policies (OSP). These describe how the overall acquisitions policy relates to the records of departments and agencies in detail, and they apply equally to electronic records as well as to conventional paper records.

In certain circumstances, appraisal of legacy systems may lead to an early transfer of electronic records into the Public Record Office for managed preservation, to avoid subsequent problems typically associated with old computer systems - that is, records in obsolete formats and lacking in documentation. Material, which falls into this category, will be difficult and expensive to migrate - if they remain readable at all - and may be lost to the public record. An early physical transfer to the PRO will not, in itself, affect the timescales controlling release of records to the public.

If retention prior to permanent preservation by the PRO or another archive is recommended establish a period for which the records will need to be retained in the department. If immediate destruction is recommended, identify and establish an appropriate destruction procedure.

6.6 Maintenance and continued accessibility

Where retention is recommended it will be necessary to determine the appropriate preservation strategy to ensure the continued accessibility of the records. For guidance on appropriate preservation regimes see the forthcoming companion toolkit *Strategies for maintenance and preservation of electronic records*.

Electronic records of continuing value will need to be migrated through successive upgrades of hardware and software retaining the full content and context. The appropriate approach will depend on the preservation options available within the department. Whichever approach is chosen it must provide for the continued accessibility of the record in a reliable form. The migration should include the records themselves together with record metadata, and any other contextual information, which affects the meaningfulness of the records and their relationship to each other.

The actual migration will be subject to a department's preservation strategy and it should be carried out in such a way as to maintain and demonstrate the authenticity and integrity of the electronic records themselves. Planning of such migration activities will provide the DRO with an opportunity to re-appraise the decisions on retention in those categories where only an initial disposal has been possible. This will reduce the likelihood of an unnecessary migration of records, which will later be destroyed.

It is recommended that the dates for the migration cycle proposed in the department's preservation plan are also additional check points for the future re-appraisal of the retained record collections.

As in best practice with paper records the users of such an electronic record-keeping system need to be aware that electronic records should not be kept longer than the official approved retention period; and that once allocated to an appropriate category, they will inherit the scheduling characteristics of that category. If users determine that the recommended retention period is inappropriate because, for example, the material is cited as a record of a precedent this should be communicated to the DRO and the original recommendation can then be reviewed.

6.7 Documenting the process

Documenting the appraisal process should conform to the guidance given at section 4.4 of the Records Management standard *Documentation of Records Work*.

The management of all corporate records should be subject to corporate rules and procedures, and electronic records are no exception to this; they should be organised, maintained, stored and protected according to this discipline. They may only be disposed of in accordance with established procedures and time-scales identified in departmental record management manuals and disposal schedules. It is impractical in most cases to adopt a document level approach and normally decisions would be made on groups of records (folders) or even on groups of folders. The decisions, once made, must be documented and preserved with the records themselves.

7 Resources, Roles and Responsibilities

7.1 Role of PRO

The Public Record Office (PRO), operating under the Public Records Acts 1958 and 1967, is responsible for safeguarding the public records and ensuring the selection of those worthy of preservation; for acquiring and preserving the records which ought to be kept; and for providing access to, and for encouraging and promoting the use of, the records.

7.2 Role of Acquisition and Disposition Policies

This toolkit will help departments make an initial assessment of the value of the electronic records to plan future action; it is not intended to be a comprehensive guide to appraising electronic records for lasting historical value. Criteria for selecting records for historical purposes can be found in the PRO's acquisition and disposition policies and in the more detailed operational selection policies. No records should be destroyed without reference to these documents and all records no longer required for business purposes are subject to the formal appraisal process to determine whether they fall within the PRO selection criteria.

The PRO provides advice and guidance to government departments and other public records bodies on its preferred approach to the selection of public records for permanent preservation. This guidance is set out in its acquisition and disposition policies. The acquisition policy sets out the values guiding the selection of public records for preservation by the Public Record Office. The disposition policy is a statement of principles for making decisions to offer public records to an archival institution other than the PRO. Together the two documents provide a comprehensive framework for the long-term distribution of selected and presented public records. The acquisition policy is available on the PRO's web-site at:

http://www.pro.gov.uk/recordsmanagement/acquisition/intro.htm

the disposition policy is available at

http://www.pro.gov.uk/recordsmanagement/dispositionpolicy/dispositionintro.htm

The application of these policies, together with any existing operational selection policies (OSP), extends to all public records irrespective of the physical medium. The appraisal of electronic records is subject to these policies as are any related records held on paper. Evaluation of electronic records has to be measured against these policies.

7.3 Role of Operational Selection Policies (OSPs)

The acquisition and disposition policies are implemented through the development of operational selection policies, which are detailed statements of appraisal plans as they apply to certain departments or to categories of records which are to be found in more than one department. Operational selection policies are developed by the PRO, working with departments and, where appropriate, in consultation with places of deposit and other archival institutions.

These policies articulate how the overall acquisitions policy bears on the records of departments and agencies in detail, and apply equally to electronic records as to conventional paper records. These should be taken account of when linking disposition schedules to a category of electronic record, or an element of the corporate filing plan. In cases of doubt, the DRO should consult their PRO Client Manager.

Where an OSP has been approved departments should refer to this document before determining the appraisal of their electronic record collections.

7.4 Role of the Departmental Record Officer

Selection and disposal of departmental records is the responsibility of the departments themselves. The PRO is responsible for coordinating the arrangements and for supervising the way in which they are carried out by departments. This principle is given statutory force by sections 3(1) and 3(2) of the Public Records Act 1958.

DROs must devise, promulgate, monitor and keep under review procedures intended to:

- secure the destruction of electronic records no longer required and the preservation of such records to be selected without review by means of retention and destruction lists.
- subject other electronic records to review to establish whether it has continuing value for administrative, legal or research purposes.

Subject to the guidance and supervision of the PRO, the evaluation and appraisal of departmental records remains the responsibility of the DROs and their staff. The PRO sets the standards for the selection or rejection of records for permanent preservation. Appraisal recommendations are then submitted to the PRO Client Manager for approval. In order to discharge this function for electronic record collections the role of the operational managers and “data owners” is especially important as they are best placed to explain the context in which these records are held and their relationship to the business of the organisation. They should also be best equipped to advise on the technical requirements that continued maintenance of the records will require.

7.5 Role of the PRO Client Managers

The PRO Client Managers should be consulted both during the planning and the implementation of the evaluation exercise. Electronic records which are evaluated as no longer having departmental value should then be submitted for formal appraisal, in conjunction with the relevant PRO Client Manager, to determine whether they fall within the PRO selection criteria. This should be done before any action (or lack of action) is taken on records so identified. Records which are brought into a managed environment at this stage will be submitted for appraisal later, at the appropriate point in their lifecycle. No records should be destroyed without first consulting the relevant PRO Client Manager.

The PRO client managers are responsible for guiding, supervising and coordinating the appraisal process in government departments in accordance with the Public Records Acts and the record management standards published by the Public Record Office.

Their role in the appraisal of electronic records is to ensure all relevant information was available before appraisal decisions were made and that they conform with the relevant statutes and standards. They will guide DROs through the process and confirm the validity of the appraisal recommendations before formally approving the disposition of the records.

7.6 Role of the PRO Records Review Panel

The Records Review Panel is an internal PRO body, which ensures there is consistency across government in the decisions taken to select public records for permanent preservation. Records selection issues are brought to the panel by PRO client managers.

Annex A: Using the inventory to evaluate the records and identify the resource implications

8 Annex A

Name & ID No of electronic record collection:		
Content and Business Use see Table 1 see page 20		
Evaluating the records and identifying the resource implications	**Inventory Metadata element**	**Purpose**
1. To what extent is there a continuing operational requirement for this information for current business processes?	8. Close Date	Systematically to determine parts of a record collection segmented for management and processing
	17 Business Functions	To determine the function, which requires the records for its own business purposes, and to determine the length of time they need to be retained for accountability, legal or operational reasons.
2. To what extent are these records needed to document the business process/decisions taken/actions carried out for future operational use?	5.Subject Terms	To locate the record collections within a subject classification or other scheme to identify other relevant material
	6.Description	To show role and purpose of the record collection This field may include background and uses of the information.
	17 Business Functions	To assist mapping of the record collection onto the functional structure of the organisation, and identify responsibilities for determining business requirements for the records

Name & ID No of electronic record collection:

Content and Business Use see Table 1 see page 20

Evaluating the records and identifying the resource implications	**Inventory Metadata element**	**Purpose**
3. How important is the user/creators continuing need for this information in the future?	6.Description	To show role and purpose of the record collection This field may include background and uses of the information.
	12.Owner	To identify responsibilities for the maintenance and preservation of the record collection
	17 Business Functions	To determine the function, which requires the records for its own business purposes, and to determine the length of time they need to be retained for accountability, legal or operational reasons.
4. To what extent are these documents needed as records to fulfill legislative requirements?	17 Business Functions	To determine the function, which requires the records for its own business purposes, and to determine the length of time they need to be retained for accountability, legal or operational reasons.
5. What implications for accountability arise from a decision to dispose of these documents?	17 Business Functions	To determine the function, which requires the records for its own business purposes, and to determine the length of time they need to be retained for accountability, legal or operational reasons.
	18.Disposition	To provide scheduling information on time periods and event conditions of retention for this record collection

Annex A: Using the inventory to evaluate the records and identify the resource implications

Name & ID No of electronic record collection:		
Relationship to Other Records Table 2 see page 21		
Evaluating the records and identifying the resource implications	**Inventory Metadata element**	**Purpose**
1. To what extent do the electronic documents in this collection support the interpretation and use of other records?	10 Relations	To identify links to parts of the record collection which are held in paper form, for record collections which are partially held in both forms
2. What is the likelihood that keeping these documents would enable duplicate paper records to be destroyed?	10 Relations	To identify paper material which constitutes part of this record; and to enable identification of duplicated and/or missing material
3. To what extent do these documents differ from paper records that will be kept for business purposes?	3. Alternative Title	To assist mapping of the record collection onto the organised filing structure of the organisation, in relation to other record collections
	11 Source	To identify other record collections from which records in this collection are copied or moved – the larger collections of which this is a subset

Name & ID No of electronic record collection:		
Relationship to Other Records Table 2 see page 21		
Evaluating the records and identifying the resource implications	**Inventory Metadata element**	**Purpose**
4. What value do these documents add to a wider set of information?	4 Originator	To assist mapping of the record collection onto the functional and organisational structure of the organisation
	5.Subject Terms	To locate the record collections within a subject classification or other scheme to identify other relevant material
	6.Description	To show role and purpose of the record collection This field may include background and uses of the information.
	10 Relations	To identify paper material which constitutes part of this record; and to enable identification of duplicated and/or missing material
	11 Source	To identify other record collections from which records in this collection are copied or moved the larger collections of which this is a subset
5. To what extent do these documents have a logical relationship to other record series that are being kept for business purposes?	10 Relations	To identify paper material which constitutes part of this record; and to enable identification of duplicated and/or missing material

Annex A: Using the inventory to evaluate the records and identify the resource implications

Name & ID No of electronic record collection:		
Relationship to Other Records Table 2 see page 21		
Evaluating the records and identifying the resource implications	**Inventory Metadata element**	**Purpose**
6. If these records are derived from a wider body of information, how much value do they add to the original information	4 Originator	To assist mapping of the record collection onto the functional and organisational structure of the organisation
	5.Subject Terms	To locate the record collections within a subject classification or other scheme to identify other relevant material
	6.Description	To show role and purpose of the record collection This field may include background and uses of the information.
	11 Source	To identify other record collections from which records in this collection are copied or moved the larger collections of which this is a subset
7. If these records contain personal data, to what extent does use of it comply with the Data Protection Act>	7 Open Date	To determine the date range of the record collection
	8 Close Date	To determine the date range of the record collection
	9 Cut-off Date	Systematically to determine parts of a record collection segmented for management and processing
	17 Business Functions	To determine the function, which requires the records for its own business purposes, and to determine the length of time they need to be retained for accountability, legal or operational reasons.

Name & ID No of electronic record collection:		
Assessing Resource Implications Table 3 see page 23		
Evaluating the records and identifying the resource implications	**Inventory Metadata element**	**Purpose**
1. Are these documents subject to security classification and/or protective markings	16 Protective Markings	To determine which protective markings which apply.
2. Are these documents subject to other operational access controls	12.Owner	To identify responsibilities for the maintenance and preservation of the record collection
	15 Access Constraints	To determine access rules which apply
3. Should these documents be reviewed for sensitivity?	18.Disposition	To provide scheduling information on time periods and event conditions of retention for this record collection
4. Are these records accessible via the current hardware/software platform?	13 Physical Location	To identify the current physical location of the record collection, e.g. computer system on which held, data archive storage, network location
	14 Physical Format(s)	To enable system audit and support migration and longer-term preservation

Annex A: Using the inventory to evaluate the records and identify the resource implications

Name & ID No of electronic record collection:

Assessing Resource Implications Table 3 **see page 23**

Evaluating the records and identifying the resource implications	**Inventory Metadata element**	**Purpose**
5. If accessed via the current platform, will the records continue to be accessible on this platform for the short term? (1 to 2 years)	12.Owner	To identify responsibilities for the maintenance and preservation of the record collection
6. If accessed via the current platform, will the records continue to be accessible on this platform for the medium term? (3 to 5 years)	12.Owner	To identify responsibilities for the maintenance and preservation of the record collection
7. What percentage of the records require migration in the short term (1 to 2 years) to a different physical format to retain access	14 Physical Format	To identify the hardware and software in which records are created and held in this collection to determine migration and longer-term preservation requirements

Name & ID No of electronic record collection:

Assessing Resource Implications Table 3 see page 23

Evaluating the records and identifying the resource implications	Inventory Metadata element	Purpose
8. What percentage of the records require migration in the medium term (3 to 5 years) to a different physical format to retain access	14 Physical Format	To identify the hardware and software in which records are created and held in this collection to determine migration and longer-term preservation requirements
9. Are there specific difficulties in migration due to e.g. proprietary formats, non -standard design structures?	14 Physical Format	To identify the hardware and software in which records are created and held in this collection to determine migration and longer-term preservation requirements
10. Should the records be sampled to verify technical decisions?	12.Owner	To identify responsibilities for the maintenance and preservation of the record collection
	18.Disposition	To provide scheduling information on time periods and event conditions of retention for this record collection