Guidance for an inventory of electronic record collections: A toolkit

Standards for the management of Government records
Contents

1: Summary
   Purpose of the toolkit and relationship with 2004 targets and FoI
   Benefits
   Reading guide
   Corporate support and organisational context
   Scope of the inventory
   Methodology: how to construct the inventory
   Relationship with Information Asset Registers (IAR)
   Mapping the inventory
   Using the inventory
   Annexes

2: Introduction - providing a context
   Guidance from the PRO
   Why do we need an inventory of electronic records collection?
   What are the benefits?
   Relationship with the 2004 target
   Relationship with Freedom of Information (FoI)
   Intended audience

3: Corporate support and organisational context
   Corporate support and involvement
   Commitment from senior management
   Aims and objectives
   Using the IAR to create the inventory
   Creating an inventory without an IAR

4: Scope of the inventory
   Context and extent of application
   What an inventory should contain
   What is an electronic record collection
   What to include
   Documenting record collections in unmanaged environments
   What to exclude
5: **Methodology - how to construct an inventory**
   - Planning
   - Timetable
   - Communication
   - Information categories needed for the inventory of electronic record collections
   - Role of an information survey
   - Keeping the inventory up to date
   - Use of a decision chart
   - The role of a checklist

6: **Mapping the Inventory**
   - Information categories required for an inventory
   - Table of metadata elements required for an inventory

7: **Using the inventory**
   - Determining retention and disposition
   - Duplicated records: paper versus electronic
   - Planning for the transfer of electronic record collections to the PRO
   - Planning for electronic records management

8: **Annex A - Checklist for action**

9: **Annex B - Sample inventory form**

10: **Annex C - Decision charts**

11: **References**
1: Summary

1.1 This section is provided as a high level summary and guide on the use and contents of this toolkit. It is aimed for the use of Departmental Record Officers (DROs) and other personnel charged with record management responsibilities to meet the 2004 milestone, which follows. A detailed introduction is given at section 2 but the key points are summarised below.

1.2 The toolkit is designed so that an inventory of electronic record collections can be developed in a clearly defined manner, and be in operation by December 2000 as a milestone towards meeting the Modernising Government 2004 requirement. The relevant milestone concerning the inventory is:

An up-to-date and comprehensive inventory of record collections covering any electronic records or potential electronic records should be developed by the end of December 2000.

1.3 It will also assist departments to meet the pending obligation under the Freedom of Information (FOI) legislation to undertake a information survey or record audit.

1.4 The inventory should provide a platform for later development: firstly as an appraisal tool, but also as a basis for developing an electronic file plan for use within an electronic records management system (ERMS) – that is, the inventory can contribute to the evolution of an ERMS filing structure. Electronic information should no longer be routinely disregarded in favour of paper printout. Printing to paper as a means of disposing of the electronic copy will no longer be an acceptable option after 2004. Where electronic documents exist, and form part of a coherent collection, they should now be regarded as part of the corporate record collection and included in the inventory even where a paper copy was previously regarded as the definitive record.

1.5 When possible, for electronic documents which are undifferentiated and are held in wholly unmanaged and unstructured environments, brief details should be noted in the inventory, where there is a possibility that they may prove to have value as records and require action later.

1.6 Specific outputs from the creation of the inventory should include the following two benefits:

• identification of existing electronic records that should be subject to appraisal
• provision of a platform for developing an electronic file-plan.
1.7 From an inventory, DROs will be able to ascertain what electronic records collections are held by their departments. This should include their volume, their physical condition, their environmental condition, their location, and their contextual and reference activity. An inventory is essential when planning for future records management and dispositions, as it will provide the information needed for informed records management requirements, appraisal and the development of retention schedules.

1.8 Since this toolkit is only one piece of a range of guidance, it is recommended that the higher level guidance on inventories issued earlier is read first. (see Reference section on Management, Appraisal and Preservation of Electronic Records, Vol. 2: Procedures).

1.9 It is suggested that the reader first studies this summary to understand the structure and purpose of this document then goes to the section on methodology. To assist in the implementation of this toolkit a checklist has been included at Annex A together with a sample inventory form at Annex B and a decision chart at Annex C.

1.10 Section 3 provides a list of the required processes with explanatory text and guidance. The processes covered in this section cover the following activities:
- corporate support and involvement at 3.1
- commitment from senior management at 3.2
- aims and objectives at 3.4
- using the Information Asset Register (IAR) as a base for creating the inventory at 3.5.

1.11 Section 4 provides guidance on the scope and contents of an inventory together with an explanation of what constitutes an electronic record collection. It discusses what should be included and excluded. There is also guidance on the documenting of record collections in unmanaged environments.
Methodology: how to construct the inventory

1.12 This section deals with aspects of developing and maintaining an inventory, covering:

- planning at 5.1
- timetable at 5.2
- communication at 5.5
- information categories needed for the inventory of electronic record collections at 5.8
- role of an information survey 5.9
- keeping the inventory up to date at 5.13
- use of decision chart to determine the most effective approach at 5.15
- the role of a checklist to map the required activities at 5.17.

1.13 This section is augmented by the provision of a checklist, sample inventory form and a decision chart in Annexes A, B, and C at the end of this toolkit.

Relationship with Information Asset Registers (IAR)

1.14 The records inventory will also complement a department’s (IAR) required by HMSO’s Inforoute initiative (see http://www.inforoute.hmso.gov.uk/ for more information.) Where an IAR exists, or is being prepared, it may be possible to co-ordinate the building of an inventory and IAR through a single information survey. The work to gather information for both these tools can be done together.

1.15 The inventory will be more comprehensive in many cases. Where work on compiling the IAR has not begun it may be easier to develop the inventory as the initial step and then use the data captured within the inventory to provide the basis for the IAR.

Mapping the inventory

1.16 Section 6 provides a table of the metadata categories or elements required for an inventory together with a description and an explanation of its purpose. For convenience these elements are then mapped against the relevant metadata fields for an IAR. Of the 18 categories many can be mapped against those required for an IAR. Two categories concern review and disposition and DROs will need to confer with their relevant PRO Client Manager to determine their resolution.

Using the inventory

1.17 This section describes how the inventory can be further developed and the activities it can be used to support.

Annexes

1.18 Three annexes are also provided. These comprise a checklist for action, a sample inventory form and two decision charts; where appropriate they are referenced in the main body of the document.
2: Introduction – providing a context

Guidance from the PRO

2.1 The Public Record Office produces guidance covering a wide range of topics to meet the needs for organisations and individuals. The series produced by the Records Management Department at the PRO on the Management, Appraisal and Preservation of Electronic Records starting with Vol. 1: Principles and Vol. 2: Procedures, is now being complemented by tool-kits. These are intended to provide practical guidance on how to implement these principles and procedures. This toolkit is provided as an extension of the existing guidance on inventories given in chapter 4 of Management, appraisal and preservation of electronic records, Vol. 2: Procedures, pp. 57 - 67. It is intended to facilitate the creation of inventories by Departmental Record Officers (DROs) within their own departments and agencies.

Why do we need an inventory of electronic record collections?

2.2 An inventory of records collections, appraisal strategies and plans enable the organisation to understand what electronic records exist of what types (including overlap and/or duplication that exists between paper or hybrid hard-copy and electronic collections) and what priorities, time-scales and methods to use to appraise them. It enables the development of filing structures which cover both paper files and the electronic groupings of records and cross references between them where they cover the same topics.

2.3 An inventory of electronic record collections can have a significant impact in an organisation and is considered to be one of the primary tools for management of electronic records of all types. It should provide a comprehensive list of all the collections of records which an organisation holds and will form the basis for both physical and intellectual management decisions. An inventory will also assist departments to fulfil their future obligations under the forthcoming Freedom of Information (FoI) legislation to conduct an information survey or record audit.

2.4 Inventories should document all of a department's electronic record collections and record that information in a structured form to facilitate the following activities:

• identify collections of electronic records so that they can be managed effectively
• locate collections of electronic records within a managed environment, so that they can be physically accessed, organised and intellectually controlled
• relate electronic records to departmental functions and to business systems architecture
• audit existing electronic records for compliance with the corporate electronic records policy
• assist with the planning of an appraisal strategy.
What are the benefits?

2.5 The inventory should concentrate on logical collections of records grouped by business function or subject matter, rather than physical location. When fully functional it can be used as a reference tool in case of system change and migration, policy change in information management strategy, organisational or business change or changes in the legal or regulatory environment.

2.6 The inventory will directly assist departments to meet the 2004 milestone to develop appraisal and preservation plans. This milestone requires departments to evaluate electronic records that should be kept and bring them into a managed environment for maintenance, access and preservation by September 2001.

2.7 An inventory is essential when planning for future record disposal, as it will provide the information needed for informed appraisal and the development of retention schedules.

2.8 The inventory should also provide the information required to feed into the development of a basic file plan which will be a key element when developing the requirements for corporate electronic records management (ERM). This will distinguish those electronic objects which should now be regarded as corporate electronic records as opposed to electronic documents whose primary record has until now been a paper copy. The relevant 2004 milestone is to develop detailed requirements for corporate ERM by March 2002. Possession of an inventory will assist DROs to take the lead in planning and overseeing their departmental electronic records management programme.

Relationship with the 2004 target

2.9 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. In particular, the toolkits seek to support the timetable and the work needed to meet the requirements contained within the milestone framework, which central government departments are being asked to adhere to en route to this target. These milestones are the final dates for actions to be completed so that the 2004 target may be achievable.

2.10 The relevant milestone concerning the inventory is:

An up-to-date and comprehensive inventory of record collections covering any electronic records or potential electronic records should be developed by the end of December 2000.
2.11 The milestones to produce an inventory of records collections, appraisal strategies and plans are intended to enable the organisation to understand what electronic records exist of what types, and what priorities, time-scales and methods will be used to appraise them. Inevitably many collections of records will be a hybrid constituted of both paper and electronic records. It is essential that there are filing structures which cover both, and that there are cross references between the paper files and the electronic groupings of records on the same topics.

2.12 In order to do this departments need to gain control of existing electronic records and to bring them into a managed environment. The first step is to construct an inventory of all electronic records that already exist within the organisation. By adoption of consistent documentation and procedures electronic records, and electronic documents which may need to be treated as records, should then be managed as formal records.

2.13 The creation of an inventory will also assist departments to meet their obligations under the forthcoming FoI legislation. The draft *Lord Chancellor’s Code of Practice on the Management of Records under Freedom of Information, version 21a (21 June 2000)* states:

*A prerequisite for achieving effective record keeping systems is the information survey or record audit. This gives an objective view of an authority’s records and their relationships to organisational functions, it helps to determine what is required to install and maintain a records management programme, and promotes control of the records.*

2.14 This toolkit is designed to assist Departmental Record Officers and other personnel charged with record management responsibilities to meet the 2004 milestone referred to above.

2.15 There will be other people in the organisation who are required to support the development of the inventory and use it once it is up and running. They will need to take this knowledge forward within the organisation and use it to inform the organisation’s corporate policy and procedures. Note: there is a separate toolkit covering the implementation of a Corporate Policy on Electronic Records (see Reference section at p31).

2.16 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.
2.17 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 – see the References section for more information.
3: Corporate support and organisational context

Corporate support and involvement

3.1 The construction and maintenance of an inventory of this nature should, wherever possible, be seen as a corporate responsibility, in pursuit of which the records manager will take a leading role supported by other information professionals. Setting the building and maintenance of an inventory as a goal in corporate electronic records and electronic document policy will help to build this corporate responsibility. The inventory will be important not only for records management but also as a tool for managing data protection and freedom of information processes. The department should seek to build alliances between DROs, information managers and information systems specialists as well as the Data Protection Officer and FoI authority in order to co-ordinate organisational responsibilities for the management of information – ideally, by bringing all these roles together under the same organisational umbrella.

Commitment from senior management

3.2 Written authority from senior management for the survey to be conducted and advance warning to staff of the organisation will assist the production of an effective information survey. The document should make reference to the following issues:

- making reference to the value and importance of managing electronic records as an aspect of corporate policy
- explanation of the role of the inventory for the organisation
- how long it will take and which branches are expected to contribute.

3.3 Consideration should also be given to establishing a requirement to designate nominated post-holders within each branch who will provide a liaison point on electronic record issues.

Aims and objectives

3.4 The objective of the survey should be to gather only the information required to meet the needs for which an inventory is needed. These should include the following objectives:

- provide a survey of the existing electronic records situation
- locate and describe the organisation’s electronic record holdings
- identify obsolete electronic records
- determine storage needs for active and inactive electronic records
- identify vital and archival electronic records, indicating need for their ongoing care
- raise awareness within the organisation of the importance of electronic records management
- lead to electronic record keeping improvements that increase efficiency
- lead to the development of a needs assessment for future actions
- provide the foundation of a written records management plan with a determination of priorities and stages of actions, assuring the continuing improvement of records management practices.

Guidance for an inventory of record collections:
3.5 Ideally the inventory of electronic records collection should be created first and form the foundation of subsequent catalogues and registers of information assets. However, it seems likely that the Cabinet Office sponsored exercise to create an Information Asset Register (IAR) will either predate or coincide with the need to create an inventory by end December 2000. Departments will be understandably reluctant to undertake two separate audits so close together and where work on an IAR has begun it is recommended that departments should use the information held in the IAR to form the basis of a records inventory. However the latter has a wider scope covering all the organisation’s significant records, including those collections for which information may not be put on to the IAR – for example, personnel records, un-anonymised citizen records for tax returns and memberships, commercial-in-confidence information.

3.6 Information Asset Registers are required by HMSO from all departments to support the Inforoute initiative. Inforoute is the new gateway to information held by UK Government departments. Inforoute will provide direct access to the Government’s Information Asset Register (IAR). An IAR is a database of an organisation’s information assets. The Government’s IAR is an amalgamation of the IARs being created by each Government department, agency, quango and other bodies. For further information see the Inforoute website at http://www.inforoute.hmso.gov.uk/

3.7 Where an IAR is not available DROs are advised to consult the inventory of systems developed for the Year 2000 compliance programme. This inventory is unlikely to detail the electronic record collections that each system contains, and may not necessarily be up-to-date, but it will indicate which branch of the organisation is the system owner. It is then suggested that each system owner is asked to list the various collections that exist on the system giving the title, description and purpose. It should then be possible to ascertain which of these are genuine record collections as opposed to collections of data. For guidance on what constitutes a record collection see 4.3 through to 4.7 of this toolkit.
4: Scope of the inventory

4.1 A typical inventory will list the following elements for each record collection:
   • the business function that the records represent
   • the groups who create, use and manage the records
   • retention, scheduling and disposal decisions
   • classification/filing, access modes and protective markings
   • physical software, hardware and media characteristics.

4.2 Once the record collections are documented in this manner this information can then be used to incorporate electronic records management into existing systems and to link them with the detailed departmental e-business plans envisaged in the 2004 milestones.

4.3 An inventory of electronic record collections needs to be comprehensive. It needs to include both those collections where some or all of the output has been printed to paper but also quasi-collections which have never been printed to paper, even where the organisation’s policy required this.

4.4 It should be borne in mind that while in the past the paper printout has been seen as the definitive version of the record, the electronic version is now likely to become the record of instance if departments are to meet all the milestones required to meet the 2004 target. Adherence to the principle that only the hard copy placed on registered files can be regarded as the true record is unlikely to be sustainable as departments move towards full electronic records management. Previous decisions to disregard electronic records in favour of hard copy printout should be revisited.

4.5 Once the record collections are documented in this manner this information can then be used to:
   • apply records management to existing collections
   • incorporate electronic records management into strategic plan and detailed requirements for corporate electronic records management (ERM) (September 2001/March 2002)
   • co-ordinate existing electronic records management requirements with new e-business systems.

4.6 An inventory should also provide cross-references to relevant series of registered files and the supporting retention and disposition schedules. This in turn will identify where hybrid record collections of paper and electronic documents exist and facilitate their management and disposal.
4.7 All electronic records collections which the department is thought to hold should be included in the inventory of record collections. This includes:

- records collections, whether or not they have been previously been of interest to the PRO when in paper or electronic form
- electronic records which are normally printed to paper and held in a paper record-keeping system
- records which are held in a separate electronic record-keeping system
- source records which have been copied to separate electronic record-keeping systems.

4.8 The term record collection is used to indicate a grouping of records with similar characteristics that can be managed together as a whole group. The management of a record collection will include making decisions for the group as a whole on filing or indexing, on scheduling and selection, and on requirements for migration and preservation. A sensible grouping of electronic records will vary enormously between departments operating under different technological conditions and arrangements, and there is little stable terminology in this area. However, it is most important to be careful in thinking through how the term is used and to apply the definition in a consistent and predictable manner.

4.9 A managed electronic records environment exists when records can be organised and indexed (by whatever mechanism) for management and retrieval in logical groups which reflect the context of creation and use.

4.10 An assembly or collection of electronic records is a group of records which are related in some meaningful way, and which have been purposefully brought together within a managed environment. While not definitive, some examples are:

- a named high level Windows folder (which may itself contain sub-folders), containing electronic documents such as word processed texts, spreadsheets, presentations and e-mails that are related to each other in some way, and which is part of an organised structure of Windows folders on a local area network (note that it should not be necessary to document every single folder on any one drive)
- a ‘virtual’ folder of similar documents (or pointers to documents) within an electronic document management system, which is part of an organised schema of virtual folders, and may contain subsidiary folders
- a set of electronic documents (in a broad sense) which share a common file reference, where this is a searchable element of the document metadata and is part of a wider file referencing scheme or corporate file plan
• a set of documents which have been indexed under the same heading or thesaurus term, where the heading or term has been selected from a predetermined and consistent listing, and can be used predictably within a search strategy to retrieve all records allocated to this term
• a significant database or dataset
• a collection of interlinked hypertext documents on an Intranet, which might include text, image, sound or video, and which are viewed as a logical group even though located in different physical storage.

4.11 Where electronic records are found to exist within an unorganised or unmanaged environment, they should be noted in the inventory as far as possible and arrangements made to bring them into the managed environment. An unmanaged environment might be:
• documents residing in general purpose folders on a network drive that have no discernible intellectual organisation or method of arrangement
• documents placed in folders on the local hard drive of an individual or workgroup, where the organisation is not meaningful to others or does not relate in an understandable way to some corporate-wide scheme.

4.12 When determining whether to include them in the inventory, consideration needs to be given to the purpose and content of the collections and the nature and frequency of use by the owners and end users. In some instances a collection of documents may be so chaotic that only the creator could access the material. If this is the case, and the material is duplicated elsewhere, it may be appropriate to exclude the collection from the inventory. The critical measures for inclusion are the importance placed on the collection by the users, its source, and the availability of duplicates elsewhere.

4.13 There is no prescriptive guidance about the level at which such descriptions should be targeted, but the level should be no lower than folder (directory) and often will be pitched at groups of folders one or more levels up the hierarchy.

4.14 A set of electronic documents which is brought together simply by use of search mechanisms working on the contents or uncontrolled indexing of a document collection does not form an organised assembly of electronic records. By its nature, this mechanism cannot be used to ensure complete recall of all, and only those records, which are relevant.
However, before a final decision is taken these collections should be reviewed to see if there is a way in which various documents which are currently scattered in unorganised drives with many others could be drawn together into more usable themed collections. This would assist in creating a more managed environment and such themed collections should be candidates for inclusion within the inventory.
5: Methodology – how to construct an inventory

Planning

5.1 Many of the difficulties associated with introducing new records management procedures can be overcome by careful planning of the information survey. This planning should include:

• scoping the extent of the survey and developing a plan and timetable
• communication strategy
• developing a survey instrument
• data collection and completion of forms.

Timetable

5.2 A successful inventory plan should include a timetable that clearly assigns responsibility for all activities, estimates the schedule for developing the inventory for each area, and allows time to evaluate the inventory and develop a program plan. The scope and complexity of this plan will vary from one organisation to another. Each task should be clearly explained with a completion deadline included. The plan should also include a schedule of which departments and units will be inventoried, by whom, and when. It would also be prudent to include estimates of the man-hours needed to complete each task.

5.3 The time-scale for creating the inventory is governed by the 2004 milestone. The timetable for creating the inventory should if practical aim to complete the initial inventory by December 2000. The relevant milestone states:

An up-to-date and comprehensive inventory of record collections covering any electronic records or potential electronic records should be developed by the end of December 2000.

5.4 This is the latest date for establishing a basic inventory mechanism and tool; the inventory should be further developed and extended in the following period.

Communication

5.5 A logical first step would be to contact all managers and staff to explain the inventory process and how they will benefit. This should include the nature of the survey, its objectives, how it will affect their work and when it will begin. It should be explained that the purpose of the inventory is to help them manage their information and not to criticise current methods. It may also be necessary to provide explanatory briefings with key staff. They should understand that they will need to reference all their electronic record collections. It would also be prudent to explain to them that they will have to participate in a periodic review of the inventory to identify new or omitted electronic record collections to ensure the inventory remains up to date.
5.6 In order to obtain commitment to this process it would be prudent to stress some of the benefits the organisation will gain from this process. An indication of some of the benefits is given at 2.5.

5.7 It would also be prudent to inform all the managers and staff of progress by issuing regular reports or a newsletter. When the inventory is complete they should be advised of the disposition decisions concerning the future disposal of their electronic record collections.

5.8 A comprehensive inventory of electronic record collections makes use of 18 elements of information. These elements are identified in the table at 6.6. Many of these elements are in common with the those required for an IAR. That leaves two categories, which will need to be identified: Disposition (Retention period and Disposal action) will require DROs to work with their PRO Client Manager and the relevant business unit to determine the appropriate retention period and whether or not the material should be marked for ultimate transfer to the PRO, NDAD or, if appropriate, another specialist archive.

5.9 Even where an IAR already exists it will probably be necessary to undertake some form of survey to establish other information such as the review period and future disposition of the record collection. A sample form has been provided at Annex B that covers all the information elements required for a comprehensive survey of electronic record collections.

5.10 There are two ways of undertaking an information survey – physical observation by a dedicated team or by completion of a questionnaire directly by user branches. The appropriate method will depend on the resource available and the nature and culture of the organisation. In either case a survey form or questionnaire will be needed before work can begin. The information elements required for an inventory, together with a description and their purpose, are given in the table at 6.6.

5.11 A physical survey requires staff to visit operational areas, look at the systems, ask questions and complete a standard survey form. It requires a manpower resource to form the team and needs to be carefully planned and executed with a minimum of disruption. Three main actions form the key to a successful survey. These are:

- look at all the records collections on the system
- ask questions until understanding is complete
- record the information for future analysis.
5.12 The use of questionnaires relies on the individuals in the business units completing them accurately and in a timely manner. Careful consideration should be given before deciding whether the use of a questionnaire will provide results comprehensive enough to enable the crucial decisions to be made. Although a well-constructed questionnaire which produces a high percentage response can be a sound, cost effective approach to gathering information, greater coverage is likely to be achieved through physical observation. In some instances a mixture of the two approaches may be appropriate.

5.13 Once a high level inventory is complete it will then be possible to add any additional information required by the DRO. It is crucial that the inventory is kept up to date. Arrangements should be set in place to remind managers of current holdings together with their review dates. This is to ensure the information remains valid but also to identify any new electronic record holdings that may have been omitted when the inventory was compiled, or that have been created since.

5.14 It is strongly recommended that the information gathered should be held in a form, which will allow additional information requirements to be added to the inventory. A relational database is probably the most appropriate method, from which reports can be generated as required. Where few electronic record collections exist a spreadsheet may also be an effective approach. Whatever approach is adopted must be both extendable and accessible.

5.15 To determine what approach is most appropriate use of a decision chart is recommended. Two sample decision charts have been attached at Annex C. The first chart is intended to assist DROs where an IAR exists or is in the process of being assembled. However utilisation of the IAR is unlikely to provide all the information required for the inventory and it is anticipated that some form of survey will still be required. The decision chart tracks the various steps. Where a requirement for further information is identified which cannot be easily answered by the data owner, it cross refers to the second decision chart which tracks the steps and options required to undertake a separate information survey.

5.16 The second chart addresses those circumstances where it is not possible to use the IAR for inventory capture and where the alternative approach of a comprehensive information survey is required.
The role of a checklist

5.17 A checklist of the required actions, together with time-scales and the identity of the relevant personnel, is a useful planning tool and it will also assist in the monitoring of progress against the overall target. A sample checklist is given at Annex A. To facilitate use a reference is given alongside each activity, which cross-refers to the relevant guidance in this toolkit.
6: Mapping the inventory

6.1 The table, which follows at 6.6, lists the metadata elements required for the inventory together with a textual description, and an indication of the purpose for tracking this information. It also maps the inventory metadata element against the relevant IAR metadata field. It should be possible to compile and populate the inventory in conjunction with referencing the specific IAR metadata fields.

6.2 The inventory metadata fields are also consistent with those identified by the Functional Requirements for Electronic Records Management Systems project, published in volume 2: Reference Document. This document can be accessed at: http://www.pro.gov.uk/recordsmanagement/eros/invest/reference.pdf. When departments start procurement of compliant systems they should be able to use the information held in a departmental inventory to map their future ERMS informational requirements.

6.3 This table is intended to:
• identify the metadata elements required for an inventory
• describe the scope and purpose of each element
• where possible map inventory metadata elements against those required for an IAR.

6.4 As a semi-structured management tool, an inventory will contain entries for both:
• collections of electronic records of different physical types, such as a folder containing various word processed documents, spreadsheets, all on a common topic
• collections of electronic records all of the same type, such as a dataset.

6.5 Since different types of entries are listed together, not all fields will be relevant to all entries. Mandatory metadata elements are marked with an (M).
### Table 6.6: Metadata elements

<table>
<thead>
<tr>
<th>No.</th>
<th>Inventory element</th>
<th>Description</th>
<th>Purpose</th>
<th>Relevant IAR metadata field</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Record collection/folder title (M)</td>
<td>Title by which the record collection is commonly identified, such as a folder name, collection name or database name.</td>
<td>To make ready identification of the record collection.</td>
<td>Title</td>
</tr>
<tr>
<td>2.</td>
<td>Record collection ID number</td>
<td>An alphanumeric identification number or code, which can be used to uniquely identify the record collection in the inventory.</td>
<td>To make a unique identification of the record collection.</td>
<td>IARN/identifier/database acronym</td>
</tr>
<tr>
<td>3.</td>
<td>Alternative title/file reference code</td>
<td>A file reference code, which locates the record collection within a wider corporate filing structure; or the folder to sub-folder pathway which physically locates a collection within a computer system; or a database acronym.</td>
<td>To assist mapping of the record collection onto the organised filing structure of the organisation, in reaction to other record collections.</td>
<td>Title</td>
</tr>
<tr>
<td>4.</td>
<td>Originator</td>
<td>The work-group, section, or other end-users who create the records in the course of their work; this may or may not be the same group which uses the records for business purpose.</td>
<td>To assist mapping of the record collection onto the functional and organisational structure of the organisation, and identify responsibilities for creation and capture.</td>
<td>Creator</td>
</tr>
<tr>
<td>5.</td>
<td>Subject terms</td>
<td>Relevant subject terms from a controlled vocabulary or thesaurus used, or uncontrolled keywords, which have been allocated to this collection as a whole. This should be terms that would be used when seeking this information resource.</td>
<td>To locate the record collections within a subject classification or other scheme, and assist retrieval.</td>
<td>Subject</td>
</tr>
<tr>
<td>6.</td>
<td>Description</td>
<td>Brief description of the record collection, showing role and purpose of the record collection which is not captured elsewhere in the entry, and any other important intellectual or physical characteristics. This field may include background and uses of the information. Ideally this should be two or three sentences, but accuracy is more important than the length.</td>
<td>To include any further necessary information to distinguish the nature of the record collection at a broad level.</td>
<td>Description</td>
</tr>
<tr>
<td>7.</td>
<td>Open date (M)</td>
<td>The date on which the record collection was opened, or the creation date of the earliest document/record it contains.</td>
<td>To determine the date range of the record collection.</td>
<td>Date</td>
</tr>
<tr>
<td>No.</td>
<td>Inventory element</td>
<td>Description</td>
<td>Purpose</td>
<td>Relevant IAR metadata field</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>8.</td>
<td>Close date</td>
<td>The date on which the record collection was deemed closed, or the date of the last document/record it contains</td>
<td>To determine the date range of the record collection</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Cut-off date</td>
<td>The regular date used to separate parts of a continuing record collection for management purposes (for example, the end of the financial year, annually, calendar year, quarterly, monthly, weekly)</td>
<td>To systematically determine parts of a record collection segmented for management and processing</td>
<td>Date</td>
</tr>
<tr>
<td>10.</td>
<td>Relations: Links to paper files</td>
<td>File reference code or other identifying link to parts of the record collection which are held in paper form, for: • record collections which are partially held in both forms • record collections which may or may not have been printed to paper files</td>
<td>To identify paper material which constitutes part of this record; and to enable identification of duplicated and/or missing material</td>
<td>Relation</td>
</tr>
<tr>
<td>11.</td>
<td>Source: Link to electronic files</td>
<td>Identification of other record collections from which records in this collection are copied or moved – the larger collections of which this is a subset.</td>
<td>To map inputs into this record collection from other record collections</td>
<td>Source</td>
</tr>
<tr>
<td>12.</td>
<td>Owner</td>
<td>The work-group, section, or other end-users who manage or control the record collection; the custodian or responsible person for ensuring quality, coverage, accuracy, etc.; the person or body which controls access or distribution</td>
<td>To identify responsibilities for the maintenance and preservation of the record collection.</td>
<td>Publisher (Contact/distributor)</td>
</tr>
<tr>
<td>13.</td>
<td>Physical location (M)</td>
<td>Identifying current physical location of the record collection, e.g. computer system on which held, data archive storage, network location</td>
<td>To enable identification of the location record collections</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Physical formats</td>
<td>Application types (hardware and software) in which records are created and held in this collection, either directly by an end-user or by extraction from a larger set of electronic information.</td>
<td>To enable system audit and support migration and longer-term preservation</td>
<td>Format</td>
</tr>
<tr>
<td>15.</td>
<td>Access constraints business groups</td>
<td>Any restrictions on use of the records (for example under data protection), access constraints on user groups, exemptions, etc</td>
<td>To determine access rules which apply</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Inventory element</td>
<td>Description</td>
<td>Purpose</td>
<td>Relevant IAR metadata field</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>16</td>
<td>Protective markings</td>
<td>Security protective marking given to entire record collection, or identification that a security marking applies to elements of the assembly.</td>
<td>To determine access rule which apply.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Business function(s)</td>
<td>The business function which requires the records for its own business purposes, and determines the length of time they need to be retained for accountability, legal or operational reasons. Secondary business functions, which also make formal use of the records, should be noted here also.</td>
<td>To assist mapping of the record collection onto the functional structure of the organisation, and identify responsibilities for determining business requirements for the records.</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Disposition: Retention period</td>
<td>Scheduling information on time periods and event conditions of retention for this record collection, within the department or agency.</td>
<td>To enable systematic scheduling of electronic record collections</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disposal action</td>
<td>Scheduling information on characteristics and conditions of disposal for this assembly, including potential transfer to the PRO or to NDAD, or eventual destruction.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**IAR information not covered above:** Contributor; Type (genre); Coverage; Rights; Audience
7: Using the inventory

Determining retention and disposition

7.1 The initial task upon compiling the inventory is to develop a plan for the appraisal of the record collections to determine the appropriate retention period and, where the records are not scheduled for eventual destruction, to determine the ultimate place of disposition – that is, Public Record Office, NDAD, other place of deposit.

7.2 This work should be undertaken by the DRO and qualified reviewers after consultation with the PRO Client Manager. Further guidance on appraisal of electronic records will be issued in Spring 2001.

Duplicated records: paper versus electronic

7.3 Once the inventory is complete it should be possible to identify where duplication exists. In some instances duplicate collections will exist in both paper and electronic form. The traditional approach has been to retain the paper as the record of instance and dispose of the electronic as soon as the immediate operational need has expired. Given the requirements of the 2004 target DROs should evaluate these duplicates carefully as it may now be more appropriate to regard the electronic collection as the main corporate record of this activity and re-schedule the disposal of the paper collection.

7.4 DROs should confer with the managers of the business units and the PRO Client manager to determine the appropriate decision. If electronic collections are to be regarded as the true and complete record of an activity it may be possible to dispose of the paper collection much earlier than was planned.

Planning for the transfer of electronic record collections to the PRO

7.5 Where electronic collections are scheduled for permanent preservation and transfer to the PRO, further thought needs to be given to the scheduling of transfers. Adherence to transfer at 25 years after creation would necessarily be appropriate in all cases and in many instances earlier and frequent transfers may become the rule. The PRO needs to be advised of such scheduling to plan future accessions.

Planning for electronic records management

7.6 The inventory will assist in the drafting of new corporate file plans as departments move toward acquiring ERM systems. In some cases whole collections may need to be imported and if these have been correctly scheduled importation within the ERM application will be facilitated.
# Annex A – Checklist for action

Checklist for an inventory of Electronic Record Collections:

<table>
<thead>
<tr>
<th>Action</th>
<th>Toolkit cross-ref</th>
<th>Responsible personnel</th>
<th>Planned start date</th>
<th>Planned end date</th>
<th>Actual start date</th>
<th>Actual end date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Incorporate the inventory as a corporate goal</td>
<td>3.1</td>
<td>PEFO/Chief Executive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Obtain written authority from senior management to conduct the survey</td>
<td>3.2</td>
<td>PEFO/Chief Executive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Confer with IAR team to confirm scope for co-operation</td>
<td>3.5</td>
<td>DRO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Use decision charts to determine methodology</td>
<td>5.15</td>
<td>DRO/PRO Client Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Establish an implementation plan and define timetable</td>
<td>5.3</td>
<td>DRO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Determine design of inventory database/spreadsheet</td>
<td>5.14</td>
<td>DRO/PRO Client Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Establish a communications strategy</td>
<td>5.5 – 5.7</td>
<td>DRO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Draft and issue official notification to staff</td>
<td>3.2</td>
<td>DRO/PEFO/Chief Executive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Determine if a separate information survey is required in addition to IAR</td>
<td>3.5</td>
<td>DRO/PRO Client Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Conduct information survey to capture material excluded from IAR or in place of the IAR</td>
<td>5.9 – 5.12</td>
<td>DRO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action</td>
<td>Toolkit cross-ref</td>
<td>Responsible personnel</td>
<td>Planned start date</td>
<td>Planned end date</td>
<td>Actual start date</td>
<td>Actual end date</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------</td>
<td>-----------------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>11. Determine if collections excluded from the IAR merit inclusion in the inventory</td>
<td>5.15 - 5.16</td>
<td>DRO/PRO Client Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Map IAR metadata entries to inventory</td>
<td>6.1 &amp; 6.6</td>
<td>DRO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Identify any queries and seek clarification</td>
<td>4.12</td>
<td>DRO/Business unit manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Determine review and disposition categories for each collection</td>
<td>7.1</td>
<td>DRO/PRO Client Manager/ Business unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Determine methodology for updating and maintaining the inventory</td>
<td>5.13</td>
<td>DRO/PRO Client Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Notify users of completion of inventory and disposition decisions</td>
<td>7.1</td>
<td>DRO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Notify users of requirement and methodology for updating the inventory</td>
<td>5.13</td>
<td>DRO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Annex B: Sample inventory form

### Inventory of record collections survey form

<table>
<thead>
<tr>
<th>Record collection</th>
<th>Alternative title/File reference code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Originator</th>
<th>Subject terms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Open date:</th>
<th>Closed date:</th>
<th>Cut-off date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical formats: (Application types which generate records in this collection)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Owner: (Who manages these records?)</th>
<th>Physical location: <em>(Which system stores these records?)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Access constraints</th>
<th>Protective markings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Links to paper files</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source: <em>(Are records transferred/copied from other systems, or scanned from paper?)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business function <em>(Which business function uses these records?)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disposition</th>
<th>Retention period</th>
<th>Disposal action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex C: Decision charts

Decision chart 1: Electronic records inventory mapped against an IAR

A record is a specific piece of information produced or received in the context or conduct or deletion of an institutional or individual activity, and that provides sufficient content, context and structure to provide evidence of an activity.

A managed record-keeping system exists where records can be organised and indexed, for management and retrieval in logical groups which reflect the context of creation and use, records should be scheduled and management processes be capable of audit.

A record is a specific piece of information produced or received in the context or conduct or deletion of an institutional or individual activity, and that provides sufficient content, context and structure to provide evidence of an activity.

Guidance for an inventory of record collections
Name and purpose of application system

Does this system produce records or potential records

Yes

Is this a record-keeping system?

Yes

Managed electronic environment

No

No further action

Are the records passed to a record-keeping system?

Yes

Are the records stored in another kind of electronic system?

Yes

Unmanaged electronic environment

No

Unmanaged records

Are the records maintained electronically?

Yes

Managed electronic environment

No

Managed paper environment

Are the records passed to a record-keeping system?

Check whether paper records exist and any prevailing disposal criteria

Yes

Managed electronic environment

No

Record collections should be listed in the inventory of record collections

A record is a specific piece of information produced or received in the initiation, conduct or closure of an institutional or individual activity, and that provides sufficient content, context and structure to provide evidence of an activity.

A managed record-keeping system exists when records can be organised and indexed, for management and retrieval in logical groups which reflect the context of creation and use - records should be scheduled and management processes be capable of audit.

Record collections should be listed in the inventory of record collections.

A record is a specific piece of information produced or received in the initiation, conduct or closure of an institutional or individual activity, and that provides sufficient content, context and structure to provide evidence of an activity.

A managed record-keeping system exists when records can be organised and indexed, for management and retrieval in logical groups which reflect the context of creation and use - records should be scheduled and management processes be capable of audit.

Record collections should be listed in the inventory of record collections.

Notes:

- Action should be taken to bring these records within a managed record-keeping environment, and subject them to appropriate control and scheduling. Records should be listed in the inventory of record collections.

- Records which may be of potential value (e.g. e-mail messages) appear to be being lost. Policies and procedures (and action) are needed to bring them within a managed record-keeping environment.

- Action needed
11: References

*Management, Appraisal and Preservation of Electronic Records*
Vol 1: Principles *
Vol 2: Procedures *
PRO
2nd Edition, 1999

*Corporate policy on electronic records*
PRO, 2000

*Data Protection Act 1998 – A Guide for Record Managers and Archivists*
PRO/Public Record Office Northern Ireland/The National Archives of Scotland. Published in association with the Office of the Data Protection Commissioner, 2000

*Information Age Government*

This is issued to support the e-government corporate strategy.

A detailed consideration of these milestones can be found on the PRO records management website: http://www.pro.gov.uk/recordsmanagement

The Modernising Government target states: ‘It is our aim that by 2004 all newly created public records will be electronically stored and retrieved.’

This is presented in the *Modernising Government* White Paper available from: http://www.citu.gov.uk/moderngov/whitepaper/4310.htm

Items marked * are available in the Records Management area of the Public Record Office Website: http://www.pro.gov.uk/recordsmanagement/eros/default.htm