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DIRKS – A Strategic Approach to Managing Business Information

STEP B – ANALYSIS OF BUSINESS ACTIVITY

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B.1 WHAT IS AN ANALYSIS OF BUSINESS ACTIVITY?

The purpose of Step B is to develop a conceptual model of what your organisation does and how it does it by examining its business activities and processes. This analysis will provide the core foundation for the development of recordkeeping tools and will contribute to the decisions made regarding the creation, capture, control, storage, disposal and access of records in subsequent steps. This is particularly important in an electronic business environment where the connection between an organisation and its records is logical, rather than physical, in nature.

This step provides advice on how to undertake and document the business analysis in a systematic and meaningful way and to make best use of its results. To complete Step B you need to:

- collect information from documentary sources and interviews (Section B.4.1);
- analyse the work performed by the organisation (Section B.4);
- identify and document each business function, activity and transaction (Section B.4.2);
- develop a business classification scheme based on a hierarchy of business functions, activities and transactions (Section B.4.3); and
- validate the analysis of the organisation's business activity with senior management (Section B.4.7).

B.2 BENEFITS OF ANALYSING YOUR BUSINESS ACTIVITY

The analysis of business activity provides the core conceptual basis for developing recordkeeping tools. At the end of Step B you will have:

- an understanding of the relationship between your organisation's business and the records that are a by-product and evidence of its activities; and
- a foundation for developing tools and other mechanisms to establish corporate control over recordkeeping, including thesaurus development, preparation of disposal authorities, identification and specification of recordkeeping requirements, and the formal assignment of recordkeeping responsibilities.

This will be documented in:

- the function source document (Appendix 7) detailing your organisation's functions, activities and transactions; and
- a business classification scheme that shows the organisation's functions, activities and transactions in a hierarchical relationship.

The business classification scheme is used to link records to their business context. This is a key requirement for making and capturing 'full and accurate' records. The scheme, in conjunction with the recordkeeping requirements identified in Step C, provides the basis for developing two crucial records management tools:

- A thesaurus of terms or records classification scheme to control the language for titling and indexing records in a specific business context. Such classification tools can be used alone or can be supplemented by other indexing and retrieval tools. Further information on classification tools is provided in Part 1, Section 6 – Pathways for using DIRKS.
- A disposal authority that defines the retention periods and consequent disposal actions for various classes of records. Further information on the preparation of disposal authorities is provided in Appendix 8 – Procedures for developing a records disposal authority in the Commonwealth.

B.3 RESOURCES AND PREREQUISITES

Analysing your organisation's business activity is a rigorous and resource-intensive process. You must undertake this step if you intend to develop classification tools (such as a functions thesaurus or records classification scheme) or a functions-based records disposal authority for current recordkeeping purposes. These recordkeeping products are also required for later steps in the DIRKS process, notably design (Step F – Design of a recordkeeping system) and implementation (Step G – Implementation of a recordkeeping system).

Before starting Step B you should:

- have a general understanding of your organisation and the contexts in which it operates (Step A);
- have a general appreciation of the organisation's recordkeeping strengths and weaknesses (Step A);
- obtain managerial support to undertake the analysis of business activity; and
- determine whether your organisation has previously analysed and documented its business activities and processes.

In order to conduct the analysis of business activity you will need:

- access to internal and external documentary sources and information gathered through the interview process (these sources of information may also have been used in Step A); and
- personnel with analytical skills (including a familiarity with modelling techniques), oral and written communication skills and a broad knowledge of the organisation – such personnel may be drawn from

within your own organisation or engaged as consultants to undertake the project on your organisation's behalf.

Step B may be carried out concurrently with parts of Step C – Identification of recordkeeping requirements as the same sources are used. Ensure that you are also familiar with Step C before commencing Step B. You will find that during your research to identify functions, activities and transactions, recordkeeping requirements are also identified. A single template, Appendix 7 – Function source document or the DIRKS documentation database, can be used to record your findings for Steps B and C.

B.4 DOING AN ANALYSIS OF BUSINESS ACTIVITY

The objective of this step is to establish a model, or representation, of the business activities carried out by your organisation. While varying approaches can be used to develop this model, it should be noted that the analysis is an iterative process with the development of a final product usually being the result of many revisions.

Two types of analysis are useful for identifying functions, activities and transactions. *Hierarchical analysis* involves a top-down approach of identifying what your organisation does and breaking it down into a series of logical parts and sub-parts. *Process analysis* is a bottom-up approach of examining in more detail how your organisation does its business. [1] The recommended approach outlined below draws on both types of analysis.

In order to conduct an analysis of your organisation's business activity you will need to identify:

- your organisation's goals and the strategies to achieve these goals;
- the broad functions the organisation undertakes to support its goals and strategies;
- the activities that contribute to the fulfilment of the organisation's functions; and
- the groups of recurring transactions or processes that make up each of these activities.

If your organisation has been analysed for other purposes it may be possible to draw on the results of such work, rather than starting from scratch. Projects that may involve an analysis of business activity include:

- business process re-engineering;
- imaging and work flow automation;
- development of a records titling thesaurus or classification tool;
- activity-based costing or management;
- quality accreditation; and
- systems implementation.

If the analysis arising from such projects is available, you will need to consider how, why and when the projects were undertaken to determine whether their findings are applicable for recordkeeping purposes.

You may already have an existing classification scheme developed to support an organisational thesaurus or related classification tools. This step is an opportunity to review that scheme to ensure it is still current and relevant for recordkeeping. If you wish to use terms from an existing classification scheme it will be necessary to research the basis of this scheme to judge its relevance and to assist with Step C.

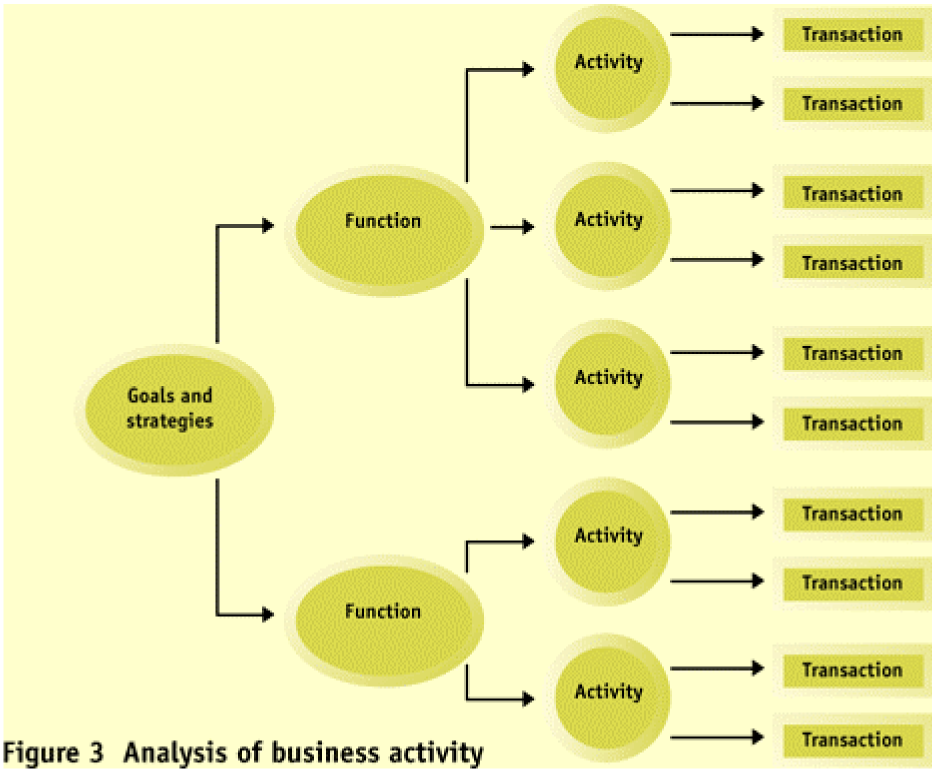

Figure 3 Analysis of business activity

B.4.1 Collect information from documentary sources and interviews

Use the register of sources (question 22 in Appendix 5 – Organisation context document) compiled in Step A as a starting place for your research. Many of these sources will be pertinent to the analysis of your organisation's business activity. These include internally generated sources such as mission statements, corporate plans, annual reports, organisational charts, policy statements, procedure manuals, information systems documentation, records and forms, as well as external sources such as legislation, regulations, instructions and circulars. Legislation is a particularly important source for this step as it can indicate when your organisation has a legal responsibility to perform particular functions, activities or tasks. For further information about documentary sources, see Appendix 1 – Guide to documentary sources. Although you will refer to many of the same sources during Steps

A, B and C, it is important to note that you are seeking different information from the sources and working towards different outcomes for each step.

In addition to the documentary sources, you should also consult personnel associated with the functions and activities you are investigating, both to gain information and to verify your other research. Consultation can occur in a variety of ways, including the use of questionnaires, interviews and focus groups. For further information about conducting interviews, see Appendix 2 – Guide to interviews. Interviews with middle management can provide higher-level contextual information about functions. Focus groups or interviews with action officers may help with identifying activities and analysing transactions.

Use the Acts of Parliament, Statutory rules and Other sources templates provided in Appendix 4 – Source identification forms, or design your own templates to document the sources that you have consulted in this step. If you are using new sources that were not used in Step A, including additional interviews or focus groups, remember to add them to the register of sources prepared in Step A.

B.4.2 Identify and document each business function, activity and transaction

The analytical process starts with a 'big picture' view of your organisation's business activity and breaks it down into more detailed parts. These component parts (or 'entities') are referred to in descending order as the organisation's functions, activities and transactions.

- Functions are 'the largest unit of business activity in an organisation'. [2] They represent the major responsibilities that are *managed* by the organisation to fulfil its goals. Functions are high-level aggregates of the organisation's activities.
- Activities are the major tasks *performed* by the organisation to accomplish each of its functions. Several activities may be associated with each function.
- Transactions are 'the smallest unit of business activity'. [3] They should be tasks, not subjects or record types. Transactions will help define the scope or boundaries of activities and provide the basis for identifying, in detail in Step C, the records that are required to meet the business needs of the organisation. The identification of transactions will also help in the formulation of the records description part of a records disposal authority.

The following example shows the relationship between these entities.

- **Function**
  Publication – the function of having works, irrespective of format, issued for sale or general distribution internally or to the public.
- **Activity**
  Drafting – the activities associated with preparing preliminary drafts

or outlines of addresses, reports, plans, sketches, etc prior to publication.

- **Transaction(s)**
  Create draft copies of publications, website and/or intranet text with associated metadata; distribute drafts for comment; file comments made on these drafts.

There are also many higher level functions that exist outside the boundaries of your organisation, known as 'ambient' functions. [4] These ambient functions provide the broader social context in which an organisation's business functions are performed. You may or may not wish to map your organisation's functions to the ambient functions. If you do so, you should use the Australian Governments' Interactive Functions Thesaurus (AGIFT), a national cross-jurisdictional thesaurus of government functions.

The following steps are a recommended approach to identifying your organisation's functions, activities and transactions. Each step may be revisited many times.

- Use the sources to identify broad statements of your organisation's purpose, goals and strategies. Look at the organisation's charter, mission and objectives to get an overview. Consider what makes the organisation unique.
- Conceptualise the broad functions of the organisation. Functions are generally not based on organisational structures because they are more stable than administrative units, which are often amalgamated or devolved in restructures. Functions can also be dispersed across structural components of an organisation. After identifying your organisation's functions, check that each is of a similar complexity and does not fit within another function. Notice if functions overlap. Test against the organisational structure to ensure all aspects of the organisation's business are covered.
- Use the sources to identify the component activities within each function. As with functions, check that each activity is of a similar complexity and does not fit within another activity. Notice if activities overlap. An activity should be based on a cohesive grouping of transactions producing a singular outcome. For example, the transactions under the activity of policy may be draft policy, circulate for comments, receive comments, finalise policy, seek approval, and promulgate the policy. It is a cohesive group that results in the production of a policy. Activities should not be based on how records are currently kept, eg as a case, project or event file. Such files might comprise many activities and represent a legitimate way to maintain the record, but the analysis of business activities should represent the component parts.
- Identify the transactions associated with each activity. This can be done through written sources, workshops and interviews or by analysing work processes – examining in detail the process involved in

carrying out work. Identifying the transactions will assist in testing and finalising the boundaries of activities. For further information on documenting transactions from Keyword AAA activities, see Appendix 15 – Guidelines for using selected generic activities from Keyword AAA in agency business classification schemes.

- Test your preliminary analysis in interviews and workshops with relevant staff members. Revisit the top-level functions and refine them and their scope notes in the light of subsequent analysis.
- Revisit and refine the remaining levels of the hierarchy.

Although this analysis involves a 'top-down' approach, it is not essential that you finalise the highest level of the hierarchy before moving on to its lower levels. Indeed, identifying transactions will help define the boundaries of activities and therefore the scope of functions. The examination of sources will often provide information that is relevant to a number of levels and you should expect to revisit each level several times in order to refine and enhance the model.

You may wish to conduct interviews early in the process or, alternatively, prepare a detailed analysis using documentary sources before conducting workshops to further refine and test the analysis. It is useful to have at least a rough outline of functions, to generate discussion, before holding workshops or interviews.

It is possible that you will identify activities during your examination of sources that are not carried out in practice by the organisation. These activities should be documented, including reasons why they are not being fulfilled.

B.4.2.1 Assigning terms to functions and activities

As part of your analysis it will be necessary to choose terms that can represent the functions and activities you have identified. To some extent, the choice of terms will depend on the way in which you have defined the entity types, such as function, activity or transaction. In some cases the terminology will be very specific to your organisation's business (such as 'regulating government recordkeeping') while, in other cases, the terminology may be specific to your industry sector rather than your particular business (for example 'mineral development'). Care should be taken to choose terms that are relevant to your organisation.

To avoid confusion, you should describe your organisation's *unique* business functions using terms that are different from the terms used in Keyword AAA to describe administrative functions common to many organisations. This will enable you to create an unambiguous and integrated business classification scheme by merging the terms describing your specific business functions with the terms in Keyword AAA describing generic functions. Although you may choose activity terms that appear in Keyword AAA, you must adopt the same scope note or definition of the term. If the Keyword AAA scope note is not appropriate, you should rename your organisation's unique activity. See Appendix 6 – Practical advice for using Keyword AAA terms in agency business classification schemes.

B.4.2.2 Defining the scope of functions and activities

It is necessary to define the boundaries or scope of each function or activity and define the relationships between described entities, making sure that the entities at the same level do not overlap. The scope notes will start as quite tentative statements or even dot points, and then be revised as you refine your definition of each entity. Scope notes for both functions and activities should always reflect the subordinate components. A function should be defined by the activities that it comprises and activities by the transactions that form it. To avoid confusion, it is usual to start a function scope note with 'The function of…' and an activity scope note with 'The activities associated with…'. Keyword AAA can be used as a model when preparing scope notes. Scope notes should not include references to specific record types, for example 'application forms'.

Each entity should be defined by its scope rather the term assigned to it, as words mean different things to different people. Activities also need to be understood in conjunction with the function they are linked to. For example, the National Archives Administrative Functions Disposal Authority (AFDA) allows the activity descriptor 'Data administration' to be used under both the 'Information management' and 'Technology and telecommunications' functions.

The scope note describes 'Data administration' as the 'activities associated with maintaining and using the data that is held in a system, either automated or manual. Includes the maintenance of data dictionaries.' However, the functional context (scope) enables a clear delineation between those activities related to:

- copying information from one medium to another, such as scanning paper documents into an electronic system, or copying documents from a floppy disk to a CD-ROM ('Information management'); and
- migrating data between electronic systems and from one electronic medium to another ('Technology and telecommunications').

B.4.2.3 Assigning dates to functions and activities

Dates should be assigned to your functions and activities. These dates establish a time frame, which will be useful for the development and application of the linked recordkeeping tools of the thesaurus and the functional disposal authority.

A start date, whether for a function or activity, must be supported by an appropriate source, such as legislation, published histories, interview, early annual reports or the records themselves. Your research must also establish that there have been no changes to how the function and related activities have been carried over the entire date range you have allocated. For example, if a piece of legislation has been used to establish a start date for an activity and this legislation has been amended many times you will need to research the changes. The results of this research may indicate that you need to introduce a new activity, or in Step C identify different disposal classes for the records that were generated in different periods of time.

If early sources are hard to find and it is a low risk function or activity, it may be safe to assume that the analysis will apply to earlier years. For example, it is hard to think of a time where the activity 'Meetings' would not be relevant. An awareness of Australian history can help in identifying if a function may be of greater public interest for particular points in time. For example, records created during World War II may be of greater interest than records created at other times. These historical events may also indicate changes in whether or how a function was performed.

B.4.3 Develop a business classification scheme

A business classification scheme (BCS) is a hierarchical model of the relationship between your organisation's functions, activities and transactions. The relationships between the entities at the same level and between levels should be explained.

The functions, activities and transactions identified through your analysis of business activity should be represented in a BCS, including scope notes and date ranges. Indicate whether activity terms are from Keyword AAA or are organisation-specific, to assist with any future changes. Functions should be listed alphabetically and activities alphabetically under each function. Transactions should also be listed. The BCS can also include links and 'see' references to explain the logical structure and the relationship between entities. This will assist in the development of a thesaurus.

The layout of the business classification scheme can make it easier to see if there are any inconsistencies or overlaps in your analysis. You should ensure that:

- an appropriate unit of business activity is selected as the basis for each function;
- each function and activity has a defined scope;
- the scope of each function mutually excludes the other functions (including any common administrative functions covered by Keyword AAA); and
- the combined functions account for all of the business the organisation carries out.

The number of levels featured in your business classification scheme will depend on the complexity of the various functions undertaken by your organisation.

Part of a sample business classification scheme is shown in Table 1. It is based on a fictitious organisation.

Table 1 Example of a business classification scheme

Organisation: Department of Research

Function	Activity
Experiment design Ref No: F1 Date range: 1960– The function of designing experiments to test scientific hypotheses. Includes the activities of research, design development, testing and review.	**Design development** Ref No: A1 Date range:1960– The activity of developing designs to test particular hypotheses. Includes evaluating designs and assessing the feasibility of using particular methods. (Organisation BCS) **Design research** Ref No: A2 Date range: 1960– The activity of researching experiment designs. It includes identifying and evaluating current practices. (Organisation BCS) **Design review** Ref No: A3 Date range: 1960– The activity of reviewing experiment designs for completed experiments. Includes evaluating the design in relation to the reliability of experimental data produced. (Organisation BCS) **Design testing** Ref No: A4 Date range: 1960– The activity of testing experiment designs. It includes developing the procedures for checking the rigour of the final design in being able to meet the requirements of the experiment. (Organisation BCS)

B.4.4 Stakeholders

As part of analysing the broad legal and social context in the preliminary investigation (Step A), organisational stakeholders were identified. Link these stakeholders to the relevant function or activity and include any stakeholders who have been subsequently identified through the business analysis. External stakeholders that participate in the work of the organisation, for example individual clients, client organisations or other Commonwealth agencies will be revealed through the analysis of activities and transactions. Other stakeholders may be linked at the functional rather than activity level, for example, an external consultative group.

In addition to external stakeholders, particular parts of the organisation may have an interest in the function. These internal stakeholders should be identified. They will include those areas responsible for carrying out the function and activities, but may include other areas. For example, within the National Archives, the Public and Reader Services Branch is an important stakeholder in the appraisal function. Even though the Branch is not involved in appraisal work, the outcome of this work affects what will be available to the public in the future, which is its area of responsibility.

Stakeholders are identified at this point as they often have interests in records and can be a source of recordkeeping requirements in Step C. They can also have an impact on the way work is performed within an organisation. An example of this is when consultation with stakeholder groups becomes part of routine work processes. In Step B we are examining the stakeholder’s interest in the function and activity, that is, in the work performed. In Step C this interest will be examined in relation to the records generated by this work.

B.4.5 Assess risk

The risk connected to a function or activity is the risk of events occurring that expose the organisation to adverse consequences. This could include not being able to justify a decision or not knowing what decision was made. Consequences of these events could include financial loss, public embarrassment or unacceptable delays. Good recordkeeping can often help reduce these risks. Assessing risk at the functional level assists in prioritising areas for future analysis and identifying organisational areas that perform the function as requiring more stringent recordkeeping practices and training.

Some areas of risk were identified in the preliminary investigation. Link these risk areas to the relevant function or activity. Source analysis during this stage may have revealed other areas of risk, for example, legislation may carry strong penalties for non-compliance in particular areas, or risks may have been identified in workshops with staff. Use the recordkeeping risk analysis guidelines to assess the risks of carrying out each function. How detailed the process will be will depend on your organisational culture with respect to risk, whether recent organisational risk assessments have been done, and whether research indicates there is likely to be a high level of risk. (See Appendix 11 – Risk analysis in DIRKS.)

B.4.6 Record your findings

The BCS is a representation of the functions, activities and transactions carried out by your organisation. For future steps and to justify your identification of entities, it is also necessary to record your analysis of the functions, activities and transactions. You should include information on:

- legislation or other sources that underpin the functions and activities;
- risks associated with each function and activity;
- stakeholders that have an interest in the function or activity;
- business sections that are responsible for or carry out aspects of the function; and
- changes to the function through time.

Appendix 7 – Function source document, or the DIRKS documentation database provide useful templates to record your findings.

The information gathered, including information on stakeholders and sources of authority, provide a basis for determining recordkeeping requirements in Step C.

B.4.7 Validate the analysis

It is important that you consult widely during your analysis of business activity and that you validate your findings. This will involve asking managers and operational staff to examine your business model to confirm that it is accurate and complete. It is essential that your model is meaningful to the organisation as it will be the basis of identifying key recordkeeping activities (including intellectual control and appraisal). The analysis and BCS should also be validated with senior management.

B.5 ISSUES

B.5.1 Defining the scope of your analysis

It is desirable to take an organisation-wide perspective when undertaking an analysis of business activity. In most cases, functions are carried out across a number of structural units within an organisation and records that document activities and transactions associated with these functions may be created in several different recordkeeping systems. For example, the policy and case records generated in relation to a function may be created in different offices using different recordkeeping systems (eg, a correspondence file system and a case management database). Taking a functional, rather than structural, approach to your analysis of business activity should provide a complete understanding of your organisation’s operations and result in more informed decision-making about the creation, control and appraisal of its records.

Taking a holistic approach in both Steps A and B will enable you to place your organisation's business activities in context and identify areas of high risk that may warrant priority in subsequent stages of the design and implementation process. These areas may correlate to particular recordkeeping systems, business activities or business units. Within the Commonwealth, many agencies carry out similar functions, or even parts of the same function. For example, the Civil Aviation Safety Authority and Airservices Australia work in the same area. Another example is the Australian Maritime Safety Authority, which coordinates the national search and rescue function that can involve such agencies as the Department of Defence and Australian Customs. If this is the case for your organisation, it may be useful to consult with related agencies when conducting your analysis in Step B and identifying recordkeeping requirements in Step C. You may be able to draw on analysis already undertaken by similar organisations. Such consultation will reduce duplication and enhance consistency in recordkeeping throughout the Commonwealth. Contact the National Archives for further advice on this.

It should not be necessary to spend time analysing 'housekeeping' functions, which are not unique to your organisation (such as financial management, occupational health and safety, personnel, and property management), unless you have a special role or responsibility for these functions. Such common administrative functions are defined in Keyword AAA and are covered by Administrative Functions Disposal Authorities (AFDA) produced by the National Archives of Australia. Nonetheless, you should refer to Keyword AAA once you have completed the analysis of your organisation's unique functions to ensure that all aspects of your organisation's business activity have been covered. (See Step A, Section A.5.1 – 'Housekeeping' functions.)

B.5.2 Defining the scale of functions and activities

Although the business classification scheme that is derived from hierarchical analysis is graded into three levels – functions, activities and transactions – the scale of these entities is relative rather than absolute. For example, Keyword AAA uses the separate functions of Personnel, Staff development and Occupational health and safety instead of a single, larger function such as Human resources. In most cases, the scale of each entity will be straightforward, but there may be occasions when you need to manipulate the scale to create a meaningful and practical business classification scheme.

B.5.3 Maintaining the currency of your analysis

Analysis of business activity can provide an effective and powerful tool for managing records. To ensure that your analysis remains relevant to your organisation's needs, it is prudent to build certain triggers into your recordkeeping system that will prompt you to periodically review its currency. Some of these triggers may include administrative change within the organisation, a government election, or a change in organisational responsibilities.

B.6 CHECKLIST

Before proceeding further check that you have:

- documented the sources you have used;
- documented your organisation's functions, activities and transactions;
- highlighted business-critical functions using risk assessment techniques;
- prepared a business classification scheme showing the organisation's functions, activities and transactions in a hierarchical relationship; and
- validated your findings with senior management.

B.7 WHAT'S NEXT?

After completing Step B you can move on to Step C – Identification of recordkeeping requirements. If you intend to develop a functions thesaurus, this can be done now, though an understanding of recordkeeping requirements (Step C) can be of use in developing a thesaurus.

Commonwealth organisations intending to develop a functions-based records disposal authority should check the National Archives documentation requirements for this stage in Appendix 8 – Procedures for developing a records disposal authority in the Commonwealth, before progressing with Step C.

ENDNOTES

1. For further information on analysis techniques see Martin E Modell, *A Professional's Guide to Systems Analysis*, 2nd edition, McGraw-Hill, 1996; and Edward Yourdon, *Modern Structured Analysis*, Prentice-Hall, 1989.
2. Australian Standard AS 4390–1996, *Records Management*, Part 1: General, Clause 4.15.
3. Australian Standard AS 4390–1996, *Records Management*, Part 1: General, Clause 4.27.
4. For further information on ambient functions see Chris Hurley, 'Ambient functions – abandoned children to zoos', *Archivaria*, vol. 40, Fall 1995, pp. 21–39.