

# EDRM System Implementation Toolkit

## Stage 4: Feasibility study and options review

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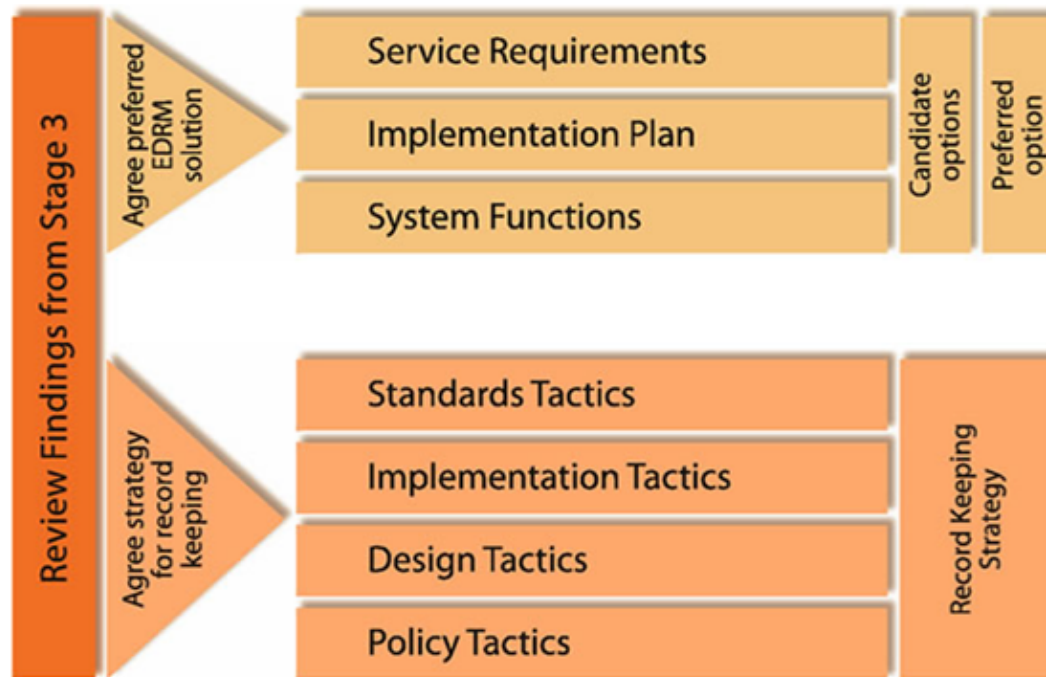
# Stage 4: Feasibility study and options review

## Reason for stage

This stage is designed to help the project team to identify the most appropriate policies, procedures, standards and system modules to implement to improve upon and remedy the weaknesses identified in stage three, step four of the toolkit (survey of existing systems) and ensure that their education organisation meets the record keeping requirements identified in stage three, step three of the toolkit.

## Definition of stage

Stage four takes you through the feasibility or options review stage.



Firstly you need to review the different record keeping strategy options available to you and decide the preferred strategy for your education organisation to ensure your education organisation meets its record keeping requirements.

Secondly you need to review the different options for implementing an EDRM solution and decide on the preferred solution for your education organisation.

The main focus of this toolkit is on selecting the preferred EDRM solution for your education organisation. However, it is difficult to achieve that if you have not agreed the preferred overall records management strategy for your education organisation. That is why stage four also guides you through at a high level the record keeping strategy options. From stage five onwards the scope of this toolkit is limited to implementing the EDRM solution selected at the end of this stage.

Stage four is therefore divided up into two steps.

Step one looks at the different record keeping strategy options available to your education organisation to meet its record keeping requirements. This includes the most appropriate policies, procedures, standards and system modules. At the end of the step you need to have agreed and defined the preferred strategy for your education organisation.

Step two looks in more detail at one key aspect of the strategy and the focus of the remainder of this toolkit – the EDRM solution. Step two builds on the data provided in stage one and the data gathered in stage three and reviews the different options for implementing an EDRM solution and how you can decide on the preferred solution for your education organisation. At the end of the step you need to have agreed on the preferred EDRM solution for your education organisation.

## Objectives of stage

The key objective for stage four is that after reading it the EDRM project team will be able to decide whether or not they have considered all the options that should be reviewed at the feasibility stage and selected the best option for their education organisation.

This stage takes you through the feasibility or options review stage. Firstly you need to review the different record keeping strategy options available to you and decide the preferred strategy for your education organisation. Secondly you need to review the different options for developing an EDRM solution and decide on the preferred solution for your education organisation. The main focus of this toolkit is on selecting the preferred EDRM solution for your education organisation. However, it is difficult to achieve that if you have not agreed the preferred overall records management strategy for your education organisation. That is why this stage also guides you through at a high level the record keeping strategy options. From stage five onwards the scope of this toolkit is limited to implementing the EDRM solution selected at the end of this stage.

## Step One – agreeing a strategy for record keeping

You are referred to the DIRKS Manual, Step E – Strategies for record keeping for a detailed review of exactly what a record keeping strategy is and what options you need to consider.

Your record keeping strategy should include developing or adopting policies and procedures; developing or adopting standards and implementing new system components or complete new systems and practices. The key is that the strategy ensures that your education organisation meets its record keeping requirements and meets the business objectives set for the project.

You are referred to the JISC infoNet [records management infoKit](#) for a generic records management policy.

The DIRKS manual states that to complete step E you need to have completed four tasks:

- Investigate the broad range of tactics available to satisfy record keeping requirements
- Identify appropriate tactics to satisfy your organisation's record keeping requirements
- Assess factors that may support or hinder the adoption of these tactics in your education organisation
- Adopt an overall design strategy to bring the tactics to fruition

The overall result of this step should be an agreed planned and systematic approach to the creation, capture, maintenance, use and preservation of records in your education organisation that will achieve the following objectives laid down in the DIRKS manual in step E:

- Provide the basis for good record keeping practices throughout your education organisation
- Assist with the design or redesign of your education organisation's record keeping and information systems
- Contribute or respond to related education organisation al objectives (business process re-engineering; e business; streamlined administration; compliance; space savings etc)

The DIRKS manual defines two key deliverables from this step:

- A documented range of tactics that satisfy your organisation's record keeping requirements and meet organisational constraints and
- A report for senior management recommending an overall strategy to improve record keeping in your education organisation

Obviously you cannot conduct this step unless you have gone through stages one, two and three of the toolkit beforehand. Also if you are completing the tasks listed in the stages in a roughly chronological manner then you should have already drawn up a corporate classification scheme and a retention schedule and you should have created an audit of records held and documented existing record keeping procedures in detail. Hence key parts of your records management strategy will already have been completed. What we are considering here is how to use the tools created to date and the information gathered to date to achieve further improvements in record keeping and meet the specific record keeping requirements and the specific business objectives agreed for this project by your education organisation.

The DIRKS manual usefully identifies four broad approaches that can help an organisation satisfy its record keeping requirements. These are:

- Policy tactics – principles, statements, instructions and other corporate instruments
- Design based tactics – the definition and specification of system functionality and the development or selection of technological solution;
- Implementation – specific tactics – practical user-oriented solutions
- Standards development and compliance tactics

Such tactics can be applied separately but are usually needed in combination to meet an education organisation's requirements. As indicated above this toolkit is primarily focused on successfully implementing an EDRM solution so the second approach is singled out and covered in much more detail in step two below. This step continues to consider all four approaches at a high level.

## Policy tactics

Policy tactics are vital and involve establishing and promoting record keeping principles effectively so that they positively influence records management practice within the education organisation. Such policies or business rules should be documented in corporate policies, instructions, regulations etc and should be promoted as part of new staff induction courses.

The DIRKS manual provides a list of sixteen principles, statements and instructions that may be included in policy documents etc.

An education organisation's records management policy should cover the following topics

- Purpose of policy
- Policy statement
- Definition of a record
- Scope of the policy
- Policy implementation and communication
- Responsibilities for records throughout the education organisation
- Policy relating to electronic records
- Records management and business activities
- Records management system and process requirements
- Relevant legislation and standards relating to records management

The policy should be supported by more detailed standards and procedures documented in a records management guide, by functions provided in the records management system/s operated by the education organisation and by a programme of staff training and communication.

The International Standard ISO 15489 states that "Records management responsibilities and authorities should be defined and assigned and promulgated throughout the organisation so that, where a specific need to create and capture records is identified, it should be clear who is responsible for taking the necessary action".

The National Archives have produced a model "Corporate policy on electronic records". The aims set out for the policy are to:

- Provide clear guidance on what electronic records are and why they need to be kept
- Explain how good ERM will serve major needs of the department
- Set out generic principles and policies on specific aspects which form the basis of implementation
- Define responsibilities for records throughout the organisation

## Design tactics

The DIRKS manual makes the point that as most education organisations purchase common commercially available software, design tactics can be employed to build record keeping functionality around and between such applications. They provide a list of functional specifications that may be incorporated into a system design or considered when purchasing off-the-shelf applications.

If you are planning to implement a corporate EDRM solution then most of the design focus needs to go on ensuring that this solution will provide you with all the functions you need to support your education organisation's record keeping requirements.

We are fortunate that the National Archives has produced a standard set of functional requirements for Electronic Records Management systems which cover all the electronic records management requirements you could have plus some of the active document capture and management requirements you may have. The latest version of the National Archives requirements was produced in 2002 and is available to download from their [web site](#).

The options available to you when reviewing your requirements for an EDRM solution are reviewed in detail in [step two](#) below.

## Implementation tactics

This refers to the way in which you as a project team need to ensure that the record keeping policies and systems you develop and procure and install are actually adopted and used by staff in your education organisation. No matter how well written your policies are and no matter how powerful your new EDRM system is, unless you have developed and promoted sound corporate record keeping procedures and practices and they have been accepted and followed by the staff then you may still fail to meet your education organisation's record keeping requirements and your other key business objectives.

Traditionally with paper-based registry systems you would have had an agreed procedure which called on staff to contact the registry when they needed to start a new folder on a new topic. Provided they did so then the registry staff would set up the folder and log it on the registry software and check it out to the user. Provided the user filed all their papers into the folder and checked the folder back in to the registry when it became inactive then the system worked and the policy was being implemented. In order to ensure it worked there was a need for training so that new staff understood how the system was designed to work and ideally there should have been sufficient resources so registry staff could proactively promote the service to staff and check on staff who were thought to be setting up their own folders and not getting them registered on the system.

Similarly with electronic document and records management systems there is a strong need for agreed practices and procedures and implementation tactics to ensure staff follow them. In certain transaction applications the application or the workflow software can be designed to enforce the agreed record keeping procedures. Staff are prompted to index the documents and carry out the required tasks and as a result the documents will be declared as records and placed in the relevant electronic folders and assigned retention schedules. Examples of such applications would include invoice processing, registering students and setting up database records and electronic folders for each student etc.

In other cases when dealing with more ad hoc people-centric processes there are more difficult system design and procedural issues to resolve. How do you ensure that staff file e-mails or Word documents into the right electronic folder on your EDRM system? Some education organisations will train the users on how best to use the system and provide them with initial floor walking support while they are starting to use it but then will leave it up to the users to use the system how they see fit. There will be controls on who can set up new folders – usually the records management contact for that Department/unit and staff will be provided with procedures to follow to request that a new folder be set up for them or a folder part closed and a new folder part opened etc. However, it is then the user's responsibility to decide which documents and e-mails they file in which folders.

For some education organisations there is a need for tighter controls. They opt to configure their systems so that the only way a user can save a Word document is to save the document into a folder on the EDRM system. They close off local drives and they prevent users setting up personal folders and enforce a policy where all documents created in working hours have to be filed in a public folder on the system. While such a procedure might be acceptable in some administration departments in some education organisations it would clearly not be desirable to impose such a tight regime on all academic staff.

An excellent example of an area where policies need to be agreed and then systems and procedures adopted to support them is the management of e-mails. If the policy is that staff are responsible for deciding which e-mails and attachments comprise valuable records and for filing them in the correct electronic folders then they can use their client e-mail and EDRM solution to view incoming e-mails and either save them into the relevant folder on the EDRM system or mark them for deletion from their e-mail inbox. If the policy is that for corporate accountability reasons all e-mails must be archived and kept for a minimum period of time irrespective of the value which staff place on them then the education organisation may need to implement a dual approach where selected e-mails and attachments are saved into folders on the EDRM system by staff and fully indexed and assigned retention schedules and all remaining e-mails are archived on an e-mail archiving solution with minimal metadata for an agreed period.

Key implementation tactics include:

- Change management procedures (see [stage 2, step 3](#))
- Published records management procedures to support published records management policy
- Documented records management responsibilities built into job descriptions, induction training office procedures and business process guides
- Records management training courses
- Agreed corporate procedures for the capture and management of e-mails and attachments
- Guidance on setting access controls to documents and records
- Published functions based classification scheme
- Published functions based retention schedules
- Documented procedures for the management and control of access to paper record stores

# Standards tactics

The fourth vital tactic is to ensure that you follow established standards when designing and implementing your solution. These can be grouped into two broad areas – functional or best practice standards and technical standards. We briefly review each in turn.

## Functional standards

In stage two we advocated following a standard project management methodology based on the JISC infoKit. Such a methodology should impose consistency and standards in all aspects of the project. EDRM will be a new concept to many staff and it is vital that all stakeholders, internal staff, consultants, suppliers etc involved in the project use a standard methodology and as far as possible standard terms, standard documentation and standard training materials so the whole project provides a consistent message to its customers.

This is not easily achieved in an industry where marketing pressures result in an ever-changing set of acronyms and titles. However, by establishing a glossary of terms and a set of document templates and a consistent set of promotional and training materials you can do a lot to ensure you enforce consistency and avoid confusion.

This toolkit will give you a standard set of stages and steps to follow when planning your project in stage two and when promoting the project, the plan and the timetable for completion.

The National Archives 2002 Functional Requirements for ERMS defines all the key functional standards you will need to follow for ERM system functionality and most of the core high level document capture and document and content management functional standards. The TNA standard and the E Government Metadata Standard define the key metadata standards you need to follow as well. These need to be added to where required to meet your specific requirements. This process is reviewed in more detail in stage six.

The JISC infoNet Business Classification Scheme and Records Retention Schedule along with guidance authored by Elizabeth Parker provides a standard model to follow when conducting your analysis of business activity and developing your functions based classification scheme.

There are a number of other areas where standards or models of best practice need to be agreed in the education community. The first would be a thesaurus of terms that all can build on. The second would be a list of legislation impacting the record keeping obligations of education organisations.

## Technical standards

You also need to decide which technical standards your preferred EDRM solution should be built on and follow. If you have conducted your IT infrastructure review in stage three, step four then you will be in a good position to specify which desktop hardware and software and server hardware and software the solution must operate on, which applications the system must interface with and how, which e-mail and messaging systems it must work with, which databases the system must operate on and which business administration systems the solution must integrate with.

Technical standards should be defined to ensure the solution can:

- create or capture documents/content and associated metadata direct into standard formats
- convert electronic documents/content and metadata into standard formats
- support interoperability between disparate systems
- ensure the security of classified records, etc

The range of standards which any EDRM solution should comply with is reviewed in more detail in [stage six](#) below.

## Step Two – agreeing a preferred EDRM solution approach

There are five main questions that need to be answered in step two:

- What system functions must your solution support to meet your requirements?
- What is the preferred implementation plan?
- What services do you require to support your system implementation?
- What are the candidate options?
- What is the preferred option?

### System functions

In [stage one, step one](#) we reviewed what an EDRM system is – what it is designed to do and what variations of system exist with different acronyms and how they vary in scope and function. We provided a checklist of functions grouped under four headings:

Function	Description
1	Input
2	Management
3	Output
4	Collaboration/ Business process management

You are referred back to [stage one, step one](#) for a consideration of the detailed options. At stage one (link to start of stage 1) it is very difficult to know exactly what functions you need. You have not carried out all the necessary fact finding work.

At this stage after you have carried out your analysis of business activities and your review of existing systems in [stage three](#) you should be able to complete the checklist provided in [stage one](#) and decide the functions and facilities you need and hence whether you need an EDRM system or an Enterprise Content Management solution.

### Implementation plan

There is general consensus that if you are implementing a corporate system you need to develop a phased implementation plan. Even assuming that you have an agreed classification scheme and a core set of system functions to roll out you still have a number of labour intensive tasks to perform for each administrative department/school and each section/unit prior to them implementing the system. These are detailed in [stage two](#) on project management. You also have to make a business case for implementation and if your budget is limited you will have to procure the solution in phases with stop points or review points at the end of each phase.

The preferred approach is to break the implementation down into phases. The following is a model plan:

Phase
Specification

Model office/prototype
Pilot/s
Initial roll out
Secondary roll out
Corporate application development
Project closure and support

## Specification Phase

Phase one is a desk research activity carried out between the project team and the preferred supplier. Essentially it will involve taking the requirements provided in your Statement Of Requirements document (see [stage six](#)) and specifying exactly how these requirements will be met by the supplier using their software and services. The result will be a specification of the core solution to be provided and demonstrated and tested in phase two. Crucially it should also include a specification of how the system is to be tested in phase two and the criteria for acceptance.

## Model office/prototype

Phase two is not a live solution. It involves the supplier implementing the core solution in a test bed or model office scenario. This usually involves up to six PCs on a dedicated network with scanning and printing facilities. It serves two functions.

The first is that it provides a facility where the project team can test the system with the supplier and agree whether it meets all the specified requirements or not. Out of that will come some changes to be made by the supplier to correct areas where the initial solution did not meet the requirements or some changes requested by the user to add functions not requested originally or modify functions.

The second is that it provides a facility where the solution can be demonstrated to users prior to the pilot in their unit or the roll out in phase four. The options here usually relate to how big is the model office, how long should it run for and how many users should be invited to use the facility?

## Pilot/s

The third phase is the pilot phase. The obvious questions include:

- how many pilots do you run?
- which areas do you run them in?
- how many users should you support in a pilot?
- what contingency do you provide to the users?
- how long do you run the pilot for?
- how do you move from pilot to live running?

You have tested and accepted the core functions provided for the model office. The objectives of the pilots are to test the solution in a live environment and this will include user acceptability tests; tests relating to the integration of the system with the business applications used in that area and tests on the performance and resilience of the system.

The first question is how many pilots to run. Anything more than one will involve a considerable amount of effort to manage – particularly if the two pilots are to run in parallel. On the other hand if you are implementing a corporate solution you want to test the full range of functions and if you run

two pilots you are likely to test more functions than in one.

The second question is which areas do you run them in? If you opt for two pilots you could select a structured process such as a subset of student registration that involves integration with the existing student registration system and business process management and a publishing application that involves several staff collaborating on the drafting and approval of documents prior to publishing them on a web site etc. You should select reasonably high profile areas and areas where the relevant stakeholders are keen to be involved and ready to set aside the resources needed to manage a pilot.

The third question is how big should the pilot be? If you are running one pilot then you should aim to support at least 40 – 50 users. If you are supporting two pilots you could reduce that number so that the overall total is still 50 or 60 users. If you involve many more than that then the resources required to train the users and prepare for the pilot will slow the project down.

The fourth question relates to the contingency you provide to the users. Put simply this means if we ask a department to work on a pilot for six months do we instruct them to stop keeping paper records or records in shared drives during that period and only to keep one set of electronic records on the new system. If we do then what contingency do we have if the system does not perform as the users must keep some form of records during that period? If we do not then how do we resource the fact that we are asking staff to keep two sets of records over a period? The answer for most education organisations will be that our tests in phase two have proved that the system is stable and maintains the required records. Hence for the pilot we rely on the new system for our records and do not maintain duplicate record keeping systems. If problems do arise then we have to have a contingency plan.

The fifth question is how long do you run the pilot for? This depends on how big the pilot is and what services have to be delivered in order to make the pilot work as discussed in Service Requirements section below. If you need to integrate the system with a business administration system and/or scan and digitise the contents of some current folders and/or model, redesign and automate some business processes then you may need to allow six to nine months for your pilot. If it is a smaller standalone application then three to six months would be more realistic.

The final question to consider is how do you move from the pilot to live running. It is not desirable to run a pilot and then, even though it is successful, stop the pilot for a period and revert to old ways. So you should plan the pilot on the basis that it is the first part of a phased roll out into that section/department. Often you will run the pilot for one team and then roll it out to all the other teams and then go on to other departments/faculties. As for the model office so for the pilot you should have established in phase one the acceptance test and the criteria to be applied and then you can plan to roll out as soon as the test has been passed.

## **Initial and Secondary Roll Out**

The fourth and fifth phases are the roll out phases. You have tested the solution at the model office phase and at the pilot phase and it has been accepted. You now need to consider how far and how quickly you want or will be allowed to roll the system out and where you need to build in review points and possible stop points.

This is where you can get a pay back from stage two and stage three. If you carried out very detailed project planning and got all the stakeholders involved and set up user groups including users from each faculty and each administration department then you will have the basis on which to construct a clear roll out plan based on which users are keen to be early adopters and which would prefer to be later in the roll out for sound reasons. If you carried out a detailed information gathering stage and reviewed all the functions, activities and transactions and the user requirements and the IT infrastructure and the volumetrics then you will have all the additional data

you need to decide whether there are technical or logistical factors or process requirements which will influence the preferred roll out plan.

The third and most important factor that will influence the speed with which you roll out the system and the stop points you need will be your budget and internal resources. No matter how strong the business case you produce in stage five, it may be that budget constraints mean that you cannot spend more than a certain amount each year and hence you will need to phase your roll out accordingly. It may also be that you have identified a strong business case in central administration but are finding it more difficult to make the case for EDRM in the faculties. In that case you would make the first roll out phase central administration and then would put in a review point and have the faculties as an optional second roll out.

As indicated in stage two, supporting the implementation of a corporate EDRM solution is a labour intensive process. You need a change management plan to ensure that users are fully informed about the project and the roll out timetable. You need a training plan to ensure that all users are trained prior to their allotted roll out slot. You need to ensure that you start surveying the user records well in advance of the roll out date so that you have an agreed plan for whether you are starting day one forward or going back and loading any existing electronic content or paper content. You need to have agreed the folder metadata for that unit and the classification codes and the retention data.

For each department you need to decide whether you can roll out to the whole department or break it down into sections/units. You need to have agreed whether each department is simply being provided with the core system solution as specified in phase one and tested in phase two or whether they have a special case that has been accepted for additional customisation or for additional services. Examples may include modelling, redesigning and automating business processes specific to that section; backfile scanning of paper content; loading of existing electronic content. The more additional services you allow at this phase the longer the roll out will take.

The best advice is therefore not to commit to a single roll out. As part of stage two and stage three you should aim to identify the organisational structure and the total number of departments in scope of the project. At this stage you should decide whether you want to break the roll out down into two or three or more phases and then categorise each department as belonging to one of those phases. In order to make the business case you need to decide how many phases you will commit to initially in the ITT.

If you have more than two roll out phases then you will need to adjust the table above to show three roll out phases etc.

## **Corporate Application Development**

Phase six assumes that you have rolled out the core solution to all Departments within the scope of the project. All key staff and certainly all administrative staff will now have access to the system and will have access to their folders on the system and will be saving their documents and e-mails etc into those folders on a regular basis.

This is then the time, after a suitable pause for reflection and congratulations at your achievement to consider now using the system to automate and streamline some key corporate processes.

These are processes which either could not be addressed or could only be partially addressed prior to the system being fully rolled out. Now that it is you can take it for granted that staff have access to all the data and content they need to conduct their work. That is a simple statement but it has enormous implications. There is scope at this phase for achieving a whole new range of business benefits as we explain in stage five.

Examples of corporate processes that could be modelled and streamlined at this stage include policy making and committee administration; the processing of invoices; student administration; collaborative research applications; capital project management; curriculum development; correspondence and complaints handling etc.

Many of these applications will require tight integration with existing business administration systems and some will best be developed within business process management software provided with those applications. The EDRM system will then simply act as a slave system controlled via the business administration system. All the content will be held on the EDRM system and at key points in the process the EDRM solution will be instructed to retrieve and display the required content.

Most of these applications will be partially addressed during the departmental roll outs but there will be limits set to how far each application can be fully automated until all staff have access to the system.

Clearly phase six will be a major phase. One issue is how much of phase six you try and specify in your statement of requirements. We review that issue in stage six of the toolkit.

## **Project Closure and Support**

This refers to the final phase where you have rolled out the solution to all staff within scope and you have developed all the corporate applications that you require. The main activity then becomes closing the project and supporting the solution, conducting all the system administration tasks and training new staff etc.

Of course you will need support for the system from phase two onwards and the options for support services are reviewed in Service requirements below. Here we are talking about the requirement to close the project and start to support the solution like any other IT application within the education organisation. The project closure process is reviewed at a high level in stage two under project management and in more detail in stage nine of the toolkit.

## **Service requirements**

The third area where there are options to consider comes under the general heading of services.

Any EDRM solution you purchase just like any IT solution is made up of a combination of software, hardware and services.

As long as you have a modern IT infrastructure the only hardware you will probably need for your EDRM solution will be scanning equipment and dedicated server/s plus additional networked storage. If your IT infrastructure is ageing you may need new desktop PCs, high resolution displays and new switches and/or cabling to upgrade parts of your network.

For software you will need to purchase licenses for the software modules you need to support the functions you have identified in the section on System functions.

The general heading of services covers a lot of related areas. To decide your service requirements you need to look at how you want to procure the solution and what tasks you are happy to take ownership of and what tasks you require the supplier or a third party to perform.

At one extreme you could purchase the hardware and software and set about implementing the solution internally using your ICT department and your project manager and your records manager.

At the other extreme you could out source the entire project and task a supplier/systems integrator with total responsibility for selecting the hardware and software, procuring it, implementing it on your IT infrastructure and configuring it and providing all the services required to ensure that the solution meets your requirements.

We are aware of a small number of large public sector bodies who have purchased the hardware and software and implemented the solution internally. This is exceptional and we would not recommend that education organisations take that approach.

We are also aware of some public sector bodies who have taken the outsource approach. They are normally bodies who have already outsourced the management of their IT infrastructure and core applications to a large outsourcing company already. In that situation it is logical to add EDRM to that contract.

For most education organisations the right solution will be between those two extremes. We divide the services that you should consider into core and additional services.

## Core services

The following represent some of the core services which you should require the supplier to provide:

Service	Description
1	Project planning and management services. Includes working with project team and providing supply side project management and support.
2	The supplier should configure and install and test the software at all phases on the hardware purchased by you and attached to your network by you to ensure that the system provides all the required core functions and facilities. This includes loading the classification scheme/file plan onto the system.
3	The supplier should provide integration services as specified in the ITT to integrate the solution with the desktop and with key business administration systems
4	Change management, training and documentation services
5	The supplier should provide software support and optionally specialist hardware support services for an agreed period of three to five years

The options to consider here include how much support do you procure from the supplier to:

- Help you refine and test your file plan and load all the data onto the system
- Provide floor walking support to users as they start to use the system
- Train end users. The alternative is for the supplier to train internal trainers to train the users.
- Support software and hardware for longer periods. Usually hardware support can be added to existing hardware support arrangements. Software support is more critical as it needs to include the provision of new versions of the software which may causes changes to the system

## Additional services

The following represent some additional services you may require the supplier to provide:

Service	Description
1	Additional change management support including – setting up a change team and support desk, agreeing the detailed file plan and assisting each user department to set up their folders
2	Communication support – setting up a web site, issuing project newsletters, running user

	group meetings etc.
3	Providing additional business process management services for individual departments
4	Providing additional integration services with business administration systems for individual departments or corporate applications
5	Providing backfile paper scanning and digitisation and indexing and loading services for individual departments
6	Providing additional data migration services – migrating e-mails onto the system; migrating electronic documents onto the system; migrating metadata from a paper records management system onto the new system etc

To summarise here the more additional services you require the higher the costs will go. Hence if, as expected, you are working to a tight budget you have to work to the assumption that you are rolling out a core set of functions and individual faculties or departments have to justify additional facilities and pay for them if required.

## Candidate options

Based on the decisions made in the sections on System functions, Implementation plan and Service requirements, you now need to agree and detail to the required level what you consider to be realistic options.

Your work on stages one, two, three and this stage should enable you to narrow down the options and agree a subset of options that all appear to be capable of meeting your business objectives and your record keeping requirements and appear to be within your budget and resource constraints as well.

To illustrate the process we can present the following scenario. As a result of the section on System functions, you have identified a definite need for input, document and content and records management, output and business process management requirements. You are sure that you do not want to procure a separate collaboration module but you are unsure about whether or not you want to procure a web content management module to replace your existing web content management solution. The outcome would be two sets of function options to consider – one with web content management and one without.

As a result of the Implementation Plan above you have agreed to a seven phase implementation plan. You cannot agree on whether to run one or two pilots as there are two departments who are very keen to be pilots. The result would be two sets of implementation options to consider – one with one pilot and one with two.

As a result of Service requirements you have agreed the core services required but there is disagreement on the range of additional services required. The result would be two sets of service requirements to consider – one with minimal additional services and one with a fuller range of additional services.

## Preferred option

You now need to review the six options that resulted from your review in Candidate options and decide on the preferred option.

How detailed this process needs to be will depend on two factors. The first one will be the degree of consensus within the team. If you all agree after due consideration that while it would be nice to do two pilots you do not have the resources then that option can be dropped. Similarly if you cannot afford all the extra vendor services then that might need to be dropped. If by this process of elimination you can agree the preferred option then you are ready to go to stage five and do one

detailed business case. If you cannot agree then you may need to do a business case for both options and make your decision based on that. This will increase the workload at stage five, however.

The second factor will depend on what your stakeholders and project board require. If they decide that they need a business case for each of the options that you have considered in Candidate options then you will need to do a high level business case for each option. If they are happy to accept the recommendation of the team on the preferred option in section on preferred option then you can just do one detailed business case for the preferred option.

## Deliverables from stage four

After completing stage four of the toolkit you should be able to produce as many of the following deliverables as you need for your project

Step	Deliverable
1	A documented range of tactics that satisfy your organisation's record keeping requirements and meet organisational constraints.
1	A report for senior management recommending an overall strategy to improve record keeping in your education organisation.
2	A description and assessment of each of the candidate options.
2	A detailed description of the preferred option with a justification for its preferred status.

## Resources required to complete stage four

The resources required for stage four are not too demanding provided you have conducted stages one, two and three in full.

Step	Resource estimate (days)	Description
1	20 – 40	Project resource to produce and agree the documents.
2	20 – 30	Project and consultancy resource to produce and agree the documents. There will be fewer days needed if you reach consensus early and more if there is a significant disagreement within the team.
Total steps 1 – 2	40 – 70	

## Tools to complete stage four

You will require the check list table from stage one, step one to complete/modify. Otherwise no special tools are needed to complete this stage. As for other stages, useful basic tools include:

- Word processing software
- Spreadsheets
- Project management software

## Frequently asked questions

**Question:**

How do you narrow down all the possible options?

**Answer:**

By reviewing the system options out in the market in stage one and carrying out a detailed information gathering and analysis activity in stage three you can identify the areas where improvements are needed in your records management policies and procedures and agree the key functions you need in your future EDRM solution. Then in stage four you review the records management strategy options and select the preferred one and you review the system and service options and select the one that best meets your record keeping requirements and your business objectives.

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**Question:**

Why do I need to select a preferred option at this stage?

**Answer:**

EDRM solutions are complex and there are many different options available. In order to make a business case you need to cost the solution and the benefits it will bring. You cannot do that accurately until you have tied down all the optional elements. In addition you need to ask the project board to agree the preferred option and sign off that option so you can then produce a detailed Statement Of Requirements and start the procurement process secure in the knowledge that the project board should not ask you to change the requirements at a later stage unless there is a very sudden change to the business requirements.

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**Question:**

Why do I need an implementation plan?

**Answer:**

There are two main reasons. The first one again is so that you can provide an accurate estimate of the costs and resource requirements for the project at each stage and so when you issue your statement of requirements in stage six you can gain an accurate assessment of the supplier costs. The second one is so that you can engage all your stakeholders and user group members and keep them informed of when they need to have completed all their preparation tasks prior to implementation.

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**Question:**

What services should the supplier provide and what should we do ourselves?

**Answer:**

Here you are looking for the best balance between cost, time and quality. The suppliers or system integrators know how their software works and are skilled in customising it so it is efficient to use them to customise the solution to meet your requirements. This applies to most of the core services listed in section on Core services. On the other hand you will need to take ownership at some point and need to be in a position where you can administer the system and make any changes that are required in future. Hence you need to ensure you are supplied with training and a toolkit so you can

start to take ownership of the solution. The Additional services section lists all the additional services you may need but each of them comes at a cost so you need to make a business case for each one.

## Hints and tips for stage four

1. Follow the DIRKS methodology step E to identify your preferred records management strategy.
2. Do not try and detail and cost too many solution options. Use the checklist provided in stage one, step one of the toolkit to define your functional requirements and use the methodology outlined in Step Two to narrow down the options that you are prepared to review to four to six.
3. Seek consensus in the team wherever possible and try to agree one preferred option for which you can do a detailed business case rather than three or four options for which you will only have the resources to do very high level business cases.

## Additional References and Case Studies

Design criteria standard for electronic records management software application (version 19, June 2002) US Department of Defense, Washington 2002. DOD Directive 5015.2.

<http://jitc.fhu.disa.mil/recmgt/p50152s2.pdf>

MoReq – Model requirements for the management of electronic records. CECA–CEE–CEEA. Bruxelles Luxembourg 2001.

<http://www.ispo.cec.be/ida>

Functional requirements for ERMS 2002. The National Archives.

<http://www.nationalarchives.gov.uk/electronicrecords/reqs2002/pdf/requirementsfinal.pdf>

For Project Management, as well as the infoKit the OGC PRINCE2 website has further details of the PRINCE2 project management methodology.

<http://www.ogc.gov.uk/prince/index.htm>

The OJEC website for details of EC procurement procedures

<http://www.ojec.com/>

The industry yearbook published by Cimtech provides a comprehensive list of all the main suppliers in each of the categories described in stage one, step one. It also provides a detailed management guide to the subject. Electronic document, records and content management: a comprehensive guide to electronic document, records and content management and a directory of products and services 15th edition 2004 Cimtech Ltd, University of Hertfordshire, College Lane, Hatfield, Hertfordshire AL10 9AB.

[http://www.cimtech.co.uk/Main/Pub\\_EDRCM.htm](http://www.cimtech.co.uk/Main/Pub_EDRCM.htm)

The DIRKS Manual, Steps A – D

<http://www.naa.gov.au/recordkeeping/dirks/dirksman/contents.html>

BSI–ISO 15489 – 2001 – Information and documentation – records management. Standards. BSI Customer Services 389 Chiswick High Road, London W4 4AL

<http://www.bsi-global.com/>

For modelling and redesigning business processes there are a number of useful reference works available as well as the Process Review infoKit. The following are three which we would recommend.

- Dave Chaffey. Groupware, Workflow and Intranets. Re–engineering the enterprise with collaborative software. Digital Press. Butterworth Heinemann. ISBN 1555581846.  
<http://books.elsevier.com/marketing?isbn=1555581846>
- Thomas M Koulopoulos. The Workflow Imperative – building real work business solutions. Van Nostrand Reinhold. 1995 ISBN 0442019750.
- Rosemary Rock–Evans. Data modelling and process modelling. 1992 Butterworth Heinemann, ISBN 0750607394.

For guidance on the conduct of records audits, the design of business classification schemes and retention schedules you are recommended to visit the National Archives website.

<http://www.pro.gov.uk/recordsmanagement/standards/default.htm>

Magazines which contain useful case studies describing how organisations have successfully implemented an EDM or EDRM system include the following:

Managing information and documents MiD. Infoconomy Ltd, 17–18 Margaret Street London W1W 8RP.

<http://www.infoconomy.com/>

Information management & technology. Cimtech Ltd University of Hertfordshire, College Lane, Hatfield, Hertfordshire AL10 9AB.

<http://www.cimtech.co.uk/>

Web sites that contain useful information on all aspects of EDRM include the following plus individual supplier web sites:

- <http://www.aiim.org>
- <http://www.cimtech.co.uk>
- <http://www.document-manager.com>

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