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### **In-Form Consult**

In-Form Consult Ltd is an independent information and document management consultancy group founded in 1987. IFC provides a range of services and training programs to support private and public companies in developing a corporate-wide information management strategy to improve services and productivity and meet compliance requirements.

In-Form Consult, through their work with clients and involvement in the development of best practice standards, have established themselves as the UK thought leader in information and records management. Clients include the Houses of Parliament, Metropolitan Police, European Central Bank, the Scottish Parliament, Honda UK, BP Angola, Zurich Financial Services, and many local authorities. In developing standards, In-Form has collaborated extensively with the European Commission's DLM Forum, AIIM and the UK Records Management Society.

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# 1

## Orientation

### 1.1 The Objective of this Paper

This paper aims to help the business executive reader to understand how MoReq2 will affect their corporate records management programs.

The paper provides an assessment of the possible value and limitations of MoReq2 in addressing the challenges of specifying good records management practices for the complex e-information technology world of business.

### 1.2 What is MoReq2 and What is its Purpose?

Organisations across Europe have been subject to increasing pressure, through the demands of compliance and corporate governance, to manage their organisational records in a more disciplined way, and to make public the policies and procedures that they follow in order to do this. The European part of the AIIM 2008 Information Management survey showed that “Compliance and Risk Management” vied with “Improved Efficiency” as the main business driver for adopting a corporate records management program. Organisations of less than 1,000 staff showed 31 percent identified compliance and risk management as an important driver against 36 percent for efficiency; over 1,000 staff the figures were 38 percent for compliance and risk against 28 percent for efficiency. Most organisations now have at least some records in electronic format, and as a result have demanded “Electronic Records Management” software from IT vendors.

Over the last ten years, electronic records management has established itself as a core discipline in organisations, and with that several best practice guidelines have been produced at national, pan-European, and international levels to provide guidance to organisations and suppliers. These guidelines have been mainly for the public sector with various governments including the UK producing their own guidelines in the absence of a European approach. The creation of a comprehensive specification of requirements to provide a European “standard” for Electronic Records Management (ERM) was funded by the European Commission in 1999. The resulting MoReq—“Model requirements for the management of electronic records”—was first published in 2001. This MoReq document was developed as a guide to organisations in both the public and private sector when specifying their functional requirements for an EDRM system. MoReq also included general guidance on operational and user considerations in deploying an EDRM system. MoReq quickly gained wide acceptance and recognition in Europe and internationally. EU member states such as Holland and Finland have used it as a base to define their national standard and Germany, UK, and Norway updated their existing standards along MoReq guidelines. MoReq has also been translated into ten languages including Spanish, Russian, Italian, and Hungarian.

MoReq2, published in March 2008, is a comprehensive revision of the original MoReq specification. The MoReq2 project has updated and significantly expanded the original specification, and also developed a set of testing scripts which will be used to support a compliance testing scheme for EDRM solutions vendors. Unlike other internationally recognized ERM specifications such as the American DoD 5015.2 and the UK TNA, it is written to be equally applicable to public and private sector organisations. Also it is written with EDRM users of all types in mind: not only administrators, records managers, and archivists, but also general office and operational staff who use EDRMS as part of their everyday work.

The specification covers both records management and related areas such as document management, e-mail, and physical record management. This is advisable because records do not stand alone; they are part of the larger information management picture.

<sup>1</sup> Design Criteria Standard for Electronic Records Management Software Applications, DoD5015.2, 2002, U.S. Department of Defense

<sup>2</sup> Requirements for Electronic Records Management Systems, The National Archives, UK, 2007

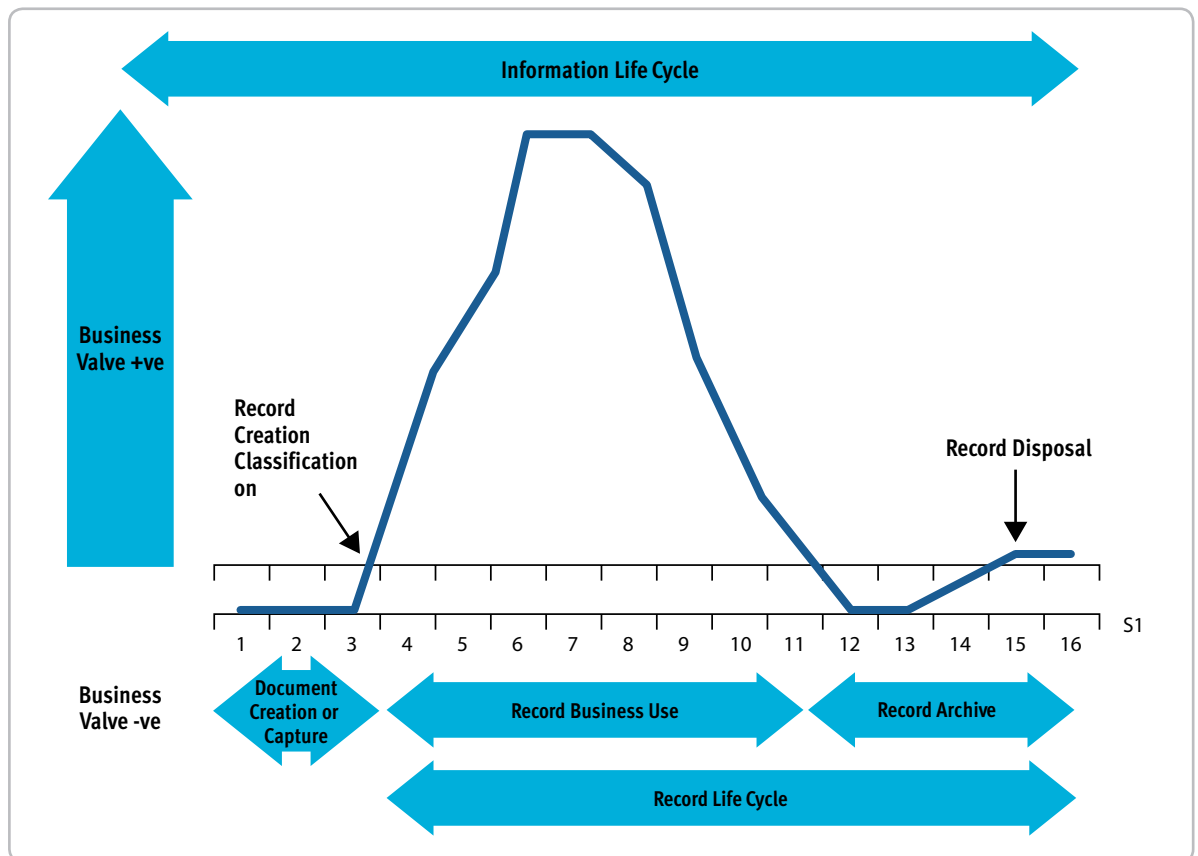
Commercial software products may support only records management (ERM systems or ERMS); many go wider and provide integrated support for document, web content and content management, workflow/business process management, e-mail management, archival, and other functionality. Typical acronyms for these are EDRM or ECM systems—Electronic Document and Records Management or Enterprise Content Management systems.

### 1.3 Information Lifecycle

The following schematic shows the information lifecycle of a document from the creation or receipt of the document which progresses to a final rendition which is then declared as a record. The record is then considered to have business value as it is used in transacting or recording business activity. The record loses business value as its activity decreases. The record however needs to be still retained to meet its designated retention period normally set by legal or statutory requirements and at the end of the period disposed of or in exceptional cases retained for historical or other designated purpose.

This lifecycle records management process is a vital requirement to meet compliance requirements and improve quality and accessibility of corporate information. MoReq provides a technical specification of good electronic records management practice to meet these requirements throughout the record's lifecycle.

#### Records Business Value Overtime



### 1.4 Terms of Reference

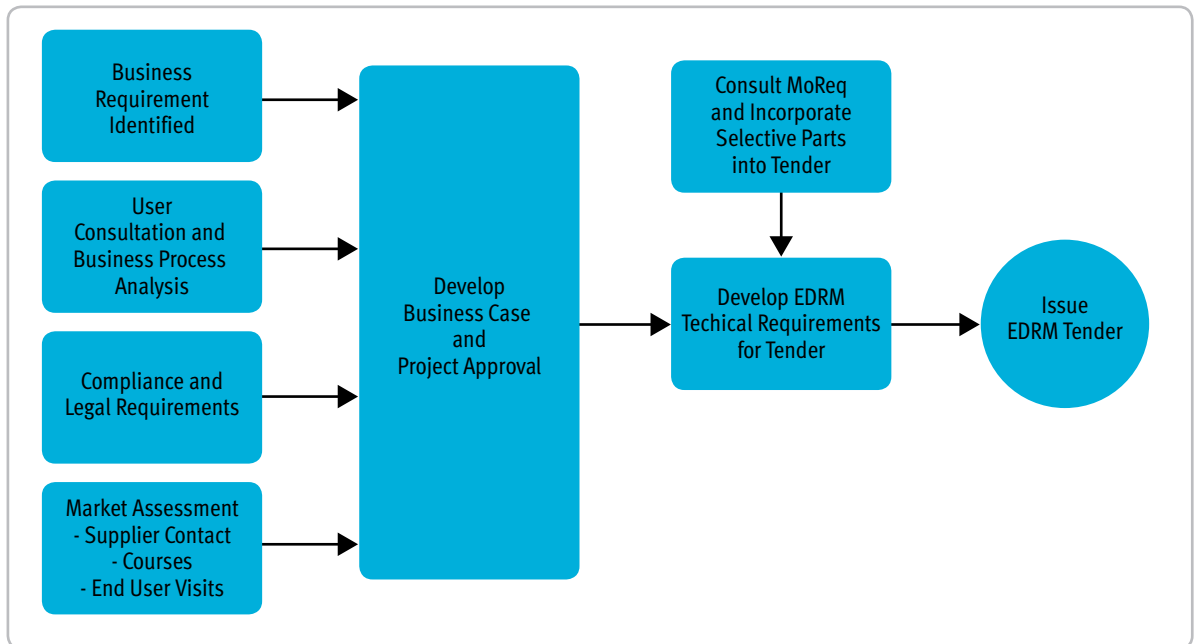
This paper is aimed mainly at organisations considering implementing EDRM, and sets out guidelines to assist the user in assessing whether MoReq2 could be of value for their organisation within their EDRM project. It includes review and comment on the main sections of MoReq2 and an assessment of areas that need careful scrutiny. It identifies areas omitted from MoReq2 that may need to be included in your EDRM requirement. For those familiar with the original MoReq, it describes the major changes and enhancements in MoReq2.

### 1.5 Where Does MoReq2 Fit in an EDRM Project?

As with any other IT-related project, business requirements come before technical requirements. MoReq2 is not suitable as a base for developing business requirements but provides input to producing the technical requirements for the EDRM system. The schematic below identifies where and how MoReq2 contributes to an EDRM project.

It should be noted that MoReq2 does not address aspects of EDRMS implementation such as project management, development of a fileplan, training and communications, and acceptance of the system. These are all outside the scope of MoReq2, but are absolutely essential to any successful implementation.

#### ERM Project Initiation Steps



### 1.6 Drawbacks of Using MoReq2 “As Is”

The specification attempts to cover a wide range of requirements and it is also voluminous—there are some 868 requirements across all sections with 462 in the Records Management section alone, and it runs to 332 pages.

This wide scope was intentional and set out in the MoReq2 tender document published by European Commission’s DLM forum. This has resulted in major limitations, primarily that time-consuming modification is required to map it on to an individual organisation’s EDRM requirements. MoReq2 also provides little or no guidance on which areas apply, or how to prioritise the detailed requirements within each area (other than as mandatory or desirable). Suffice to say, this can lead down a path of wasted or unnecessary effort.

It’s important to understand that MoReq2 relates to a wide range of business, compliance, and operational requirements; some may not be relevant to your organisation and others may be addressed in more depth than required to meet your needs. You most likely will not need a system to be as complex and extensive as implied by the full MoReq2 specification. Many users will find themselves grappling with example esoterics of archival science which in fact apply only to a limited audience within the public sector.

As acknowledged in MoReq2, the requirements for “optional modules” which are not core functions of an ERMS are presented at a high level; they are not exhaustive but provide an indication of the appropriate activities. This is particularly true of Chapter 10 which contains a wide range of functionality including collaboration, workflow, and CMS integration.

Also MoReq2 has introduced a Chapter zero, allowing member states to add their unique national requirements, take into account different national languages, legislation, regulations, and record keeping traditions. As yet none have been submitted for approval, so MoReq2 may be incomplete in this respect.

### 1.7 Client-Side Requirements

A further major omission is that there are no requirements specified for the rapidly growing number of organisations that use SMS, instant messaging, wikis or blogs, which have similar record keeping requirements. This area of “Social Networking” applications is set to grow rapidly with Web 2.0/ social networking content being created and the associated applications now being widely adopted by large enterprises.

# 2

## Using MoReq2

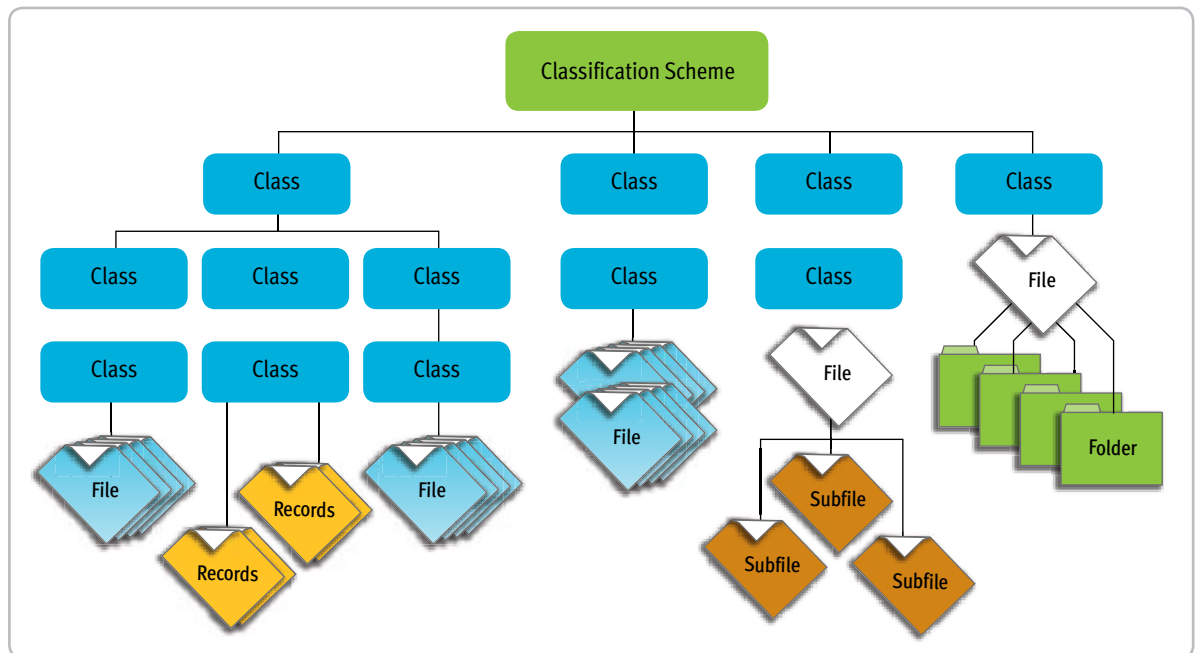
### 2.1 Concepts and terminology

MoReq2 Chapter 2 includes definitions of all the terms and concepts used in the specification; on the whole, the definitions in MoReq2 are very useful. This section highlights some terms where the usage is new or has changed.

#### 2.1.1 Classification scheme—Chapter 3

A classification scheme is fundamental to records management—no change here—MoReq stipulates a hierarchic arrangement of business activities and/or records covering the whole organisation, with procedural rules. In MoReq2 the classification scheme hierarchy can contain classes, files, sub-files, volumes, and records.

### Classification Scheme Options



MoReq2 uses the term “file” in the records management sense; most people (who are not records managers) would probably use the term “folder” instead.

The term “sub-file” is used for an intellectual or logical split of a file e.g., split by type of record—the requirement to support sub-files is new to MoReq2. This is illustrated by the use in the Case File definition—see below.

The term “volume” is used for a physical, logical, or mechanical division of a sub-file, e.g., based on a number of records, period of time, e.g., yearly, or other agreed division. (TNA requirements use the term ‘part’).

Unlike MoReq, MoReq2 permits records to be stored directly in classes. It does not however encourage it. This is a long-running argument. Storing records in classes is more intuitive and consistent with DoD 5015.2 (U.S. Department of Defence Electronic Records Management Software Applications Design Criteria Standard), but is not standard practice in Europe. It offers less control and context.

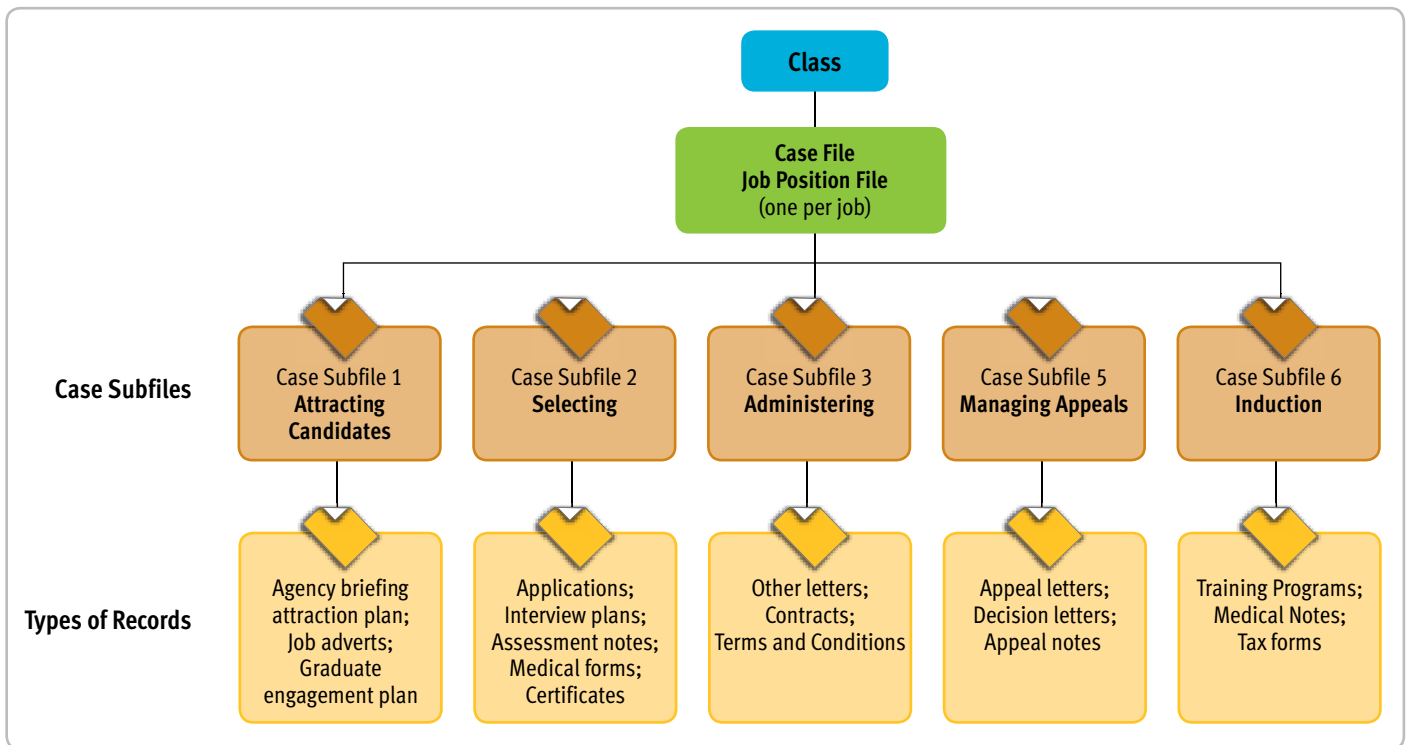
### 2.1.2 Case files

MoReq2 has introduced the concept of case files, to meet the particular requirements of records associated with casework applications such as applications for permits, enquiries about a routine service, investigation of an incident, and regulatory monitoring.

The business requirements specific to case files (folders) typically include:

- can be created, opened, and closed by practitioners, end users, or data processing systems without the need for management approval
- are structured or partly structured (e.g., contain many application forms all based on one template)
- documents may have particular naming conventions (e.g., name + date of birth) which need external validation
- may have specific metadata, integration, and access requirements, e.g., a metadata item to show “status” or “progress” which can be set externally

#### Case File Example



### 2.1.3 Security categories

An ERMS will always control access to records by role and group (see Section 2.2.1), but some organisations need to limit access further, using a scheme of security clearances, for example, by marking records as Not Restricted, Confidential, Top Secret, etc. These take precedence over any other access rights. Examples of use may involve personal information, national security, healthcare, etc. A further example may be where higher grades of staff have access to information (such as details of a new product) that is not available to more junior staff. MoReq2 calls these security categories (TNA: Access Control Markings) and they are dealt with in some detail in Section 10.13.

### 2.1.4 Disposal holds

MoReq2 includes the concept of “disposal holds,” which was not mentioned in the previous version of MoReq. Disposal holds are used in response to unexpected events to ensure that specified records are not destroyed. The common example is to ensure that records that are, or that may be, required as evidence in legal proceedings are not routinely destroyed as a result of the assigned disposition decision.

Highly regulated industries and complex engineering projects where claims and disputes are common will find this function of real value in overriding the designated retention period and actions in order to retain the records during the dispute.

## 2.2 Identifying Business Requirements

This section introduces the functional areas in MoReq2 from a business viewpoint and gives guidance on their areas of application and use.

### 2.2.1 Records management (MoReq2 Chapters 3-9)

These chapters are the core requirements of records management and are substantially expanded compared with the original MoReq specification.

Project business drivers related to the management of records are quite diverse. Drivers could be a requirement to reduce the amount of paper and duplication of paper and electronic copies of information, or to dispose of electronic records in line with the organisation’s disposition policy, or provide better access to information, or incorporate e-mail, or comply with Freedom of Information (FOI) and Data Protection Act (DPA) legislation, or indeed all of these.

Some organisations will require a more-strict regime for records management than others. However for organisations that operate in a lightly regulated environment, with little risk of documents being needed in court, and with no long-term holding of records, records management still has many benefits. For example, adoption of a corporate classification system, standardising taxonomies, enforcing retention schedules and access controls, all raise productivity and reduce risk.

The main technical elements of a system which supports records management are: classification scheme, retention schedules, and access controls; these are all addressed in chapters three through nine.

The content of each chapter and key and new aspects are set out below:

#### 1. Classification Scheme & File Organisation—Chapter 3

This provides more details of the classification scheme requirements discussed above in 2.1.1. It also deals with maintenance of the Scheme in Section 3.4.

#### 2. Controls and Security—Chapter 4

Access control for users and protection from system failure are covered plus audit trail requirements and management of vital records.

#### 3. Retention & Disposition—Chapter 5

All aspects of retention and disposition schedules are addressed including review processes and requirements for disposition, export, and destruction.

#### 4. Capturing and Declaring Records—Chapter 6

The capture of records is covered in some detail with 41 requirements, and aspects of bulk and e-mail capture and the integration with scanning systems are addressed.

An organisational e-mail policy needs to be in place before technical requirements for e-mail management can be finalised, as the way e-mail is used will affect the capture requirements. MoReq2 provides a useful set of e-mail records management considerations and the 18 requirements set out provide the user with a comprehensive checklist of features which should be considered. Also mapping these back into your policies is useful exercise which may see a re-alignment of your policies or practices. Note that e-mail archiving is not the same as e-mail management; MoReq2 might help identify business requirements that are not addressed by e-mail archiving applications.

Any organisation that is involved in legal discovery and then relying on that information in court will need records management. The MoReq2 requirements can act as a useful checklist of business requirements that are consistent with the evidentiary code of practice, BIP0008. EDRM systems may include scanning capability, but they are more likely to offer integration with industry-standard scanning solutions. Not all scanning applications however will support records management; in any statement of requirements suppliers should be asked for clarification of the support provided.

#### 5. Referencing—Chapter 7

This chapter provides a useful guide on setting up standards for classification codes and system identifiers, and examples of different schemes. An organisation may require, for example, to retain consistency with the indexing on an existing physical filing system.

#### 6. Searching, Retrieval and Presentation—Chapter 8

For many organisations a fundamental objective is to improve access to information so that users can find the correct information reliably and quickly, subject to authorisation of course. EDRM systems generally provide excellent search capabilities on information held in the repository; searching on other information located outside of a records repository is normally out of scope.

With an ERM, users who need to browse rather than search will be able to do so by navigating the classification scheme (rather like using the subject index in a library to find the correct shelf, then scanning what's there).

The technical elements underpinning these are full text retrieval capability (similar to Google searching), support for metadata and thesaurus, access controls, and ease-of-use features such as the ability to display favorites and recently used folders and documents. MoReq2 provides a detailed specification of these functions.

This section could also be of use to an organisation considering or already using search technology. MoReq2 provides a useful checklist for their business requirements and to identify if there are any aspects that they may wish to consider.

#### 7. Administration—Chapter 9

MoReq2 may be a very useful check list of all the administrative tasks that need to be considered when planning an EDRMS implementation.

Organisations adopting ERM need to decide how the system will be administered and allocate these tasks to 'roles' which may be individuals or groups. Note that administrative roles are only implementing policy decisions taken by more senior management, which should be based on the business needs of users to access information, the organisation's records policy, laws relating to data security and archiving, and industry regulations. (The addendum on page 19 provides a useful guide on the type of controls and assignments you may wish to use).

Aspects such as maintaining the classification scheme will remain with a records manager or RM group, but there are options on how much should be devolved to user departments—for example allowing some users to add folders or create specific types of records.

Consideration should be given to the requirements for an audit trail—these can easily grow to unmanageable size if every action is logged and the audit trail is not archived periodically.

Backup and recovery policy and procedures need to be defined; the functionality may be provided by the EDRMS, by a database management system operating with the EDRMS, or by corporate-wide backup and recovery services.

Although it is not mandatory as in North America, organisations may require the functionality to restore 'vital records' as a priority during a recovery exercise, that is, those that are considered absolutely essential to the organisation's ability to carry out its business functions in the short term or the long term or both.

## **2.2.2 Optional modules—Chapter 10**

This chapter covers requirements that are closely related to electronic records management such as management of physical (non-electronic) records, and also related functions such as document management, workflow, electronic signatures, and case management.

In this chapter MoReq2 provides less detail for these functions than in the chapters related to electronic records management.

### **2.2.2.1 Management of physical records (Chapter 10.1, 10.2)**

An organisation that already has physical record-keeping systems should use this section to consider how they fit their solutions under two options: separate physical and electronic systems, or a unified environment.

To manage non-electronic records such as paper based records or microfiche, the EDRM system must be able to hold information about them and/or their containers (e.g., a box number and location), so that users can locate, track, retrieve, review, and dispose of physical records, and allocate access controls to them in the same way as to electronic records.

If the volume of records is large and they are actively used, you may want to produce bar code labels and use these to track who holds the records, and when they are issued and returned.

In MoReq2, classes, files, sub-files, and volumes may all contain any combination of electronic records and physical records—a change from the previous version of MoReq, to reflect the need to preserve the integrity and accessibility of electronic and physical records taken as a whole and manage them under a unified set of policies.

### **2.2.2.2 Document management and collaboration (Chapter 10.3)**

MoReq2 groups together document management and collaboration. Document management requirements are very comprehensive but collaboration requirements less so; for example facilities such as blogs and wikis which some would see as important within “collaboration” are not included in MoReq2. Collaboration is a rapidly developing field. It is probable that we will see a lot of developments in this area, in part due to the mass proliferation of Microsoft Office SharePoint Server 2007.

If all you require is a records repository, and you can accept the overheads of back-end filing, then you may not need document management. Most organisations take a wider view and want to address the process of creating, approving, and capturing documents; perhaps including the scanning and capture of external paper documents (see the lifecycle diagram in Section 1.2). For some, the ability for teams to collaborate in producing and updating documents as project or workgroups is also a key requirement.

The technical elements underpinning document management that relate to EDRM systems are version control, support for review and approval, and for document publishing.

### **2.2.2.3 Integration with content management systems (CMS) (Chapter 10.6)**

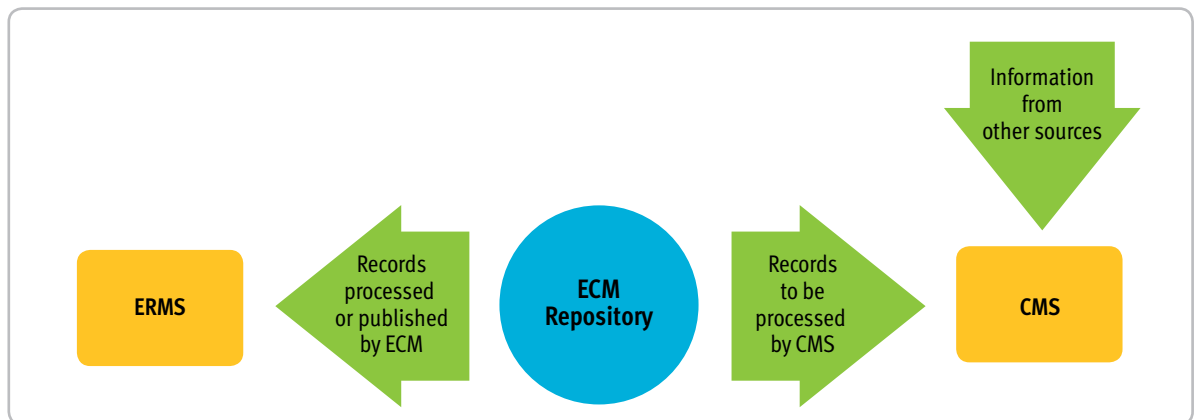
One of the useful aspects of this section of MoReq2 may be to help define what CMS actually is, and if it is in scope for your EDRM project. The line between EDRMS and CMS is somewhat blurred but CMSs usually deal with different aspects of managing information than EDRMSs. Common characteristics are:

- publishing information, often to websites or portals, and sometimes to several channels using different renditions (this is currently the most frequent use of the word CMS)
- managing information that originates from several sources
- reformatting information and/or migrating it to different rendition(s)
- relating different versions, renditions, and translations of documents to each other
- managing components of documents

Modern content management systems include most or all of electronic document management system (EDMS) functionality (see Section 10.3). There are also some clear differentiators with Electronic Records Management—ERM. ERM provides the disciplines required for compliance and good governance such as retention functionality, legal hold (for discovery), and disposition (destruction of content to reduce overall data stores), and most importantly ensures the immutability of the records.

Content management functionality may be provided by a CMS separate from the ERMS, but commonly as a unified solution that seamlessly integrates both CMS and electronic records management functionality. The relationship between an ERMS and a CMS in the unified solution is shown below, in a highly simplified form.

CMS technology is evolving rapidly, so organisations that require CMS integration must specify their individual requirements; reliance on this section alone is not likely to suffice. This section should be viewed as a starting point to prompt further analysis to determine your CMS requirements.



#### 2.2.2.4 Workflow (Chapter 10.4)

If in your organisation, workflows are part of a broader ECM solution that ties into ERM, then you would be well advised to examine this section of MoReq2. One thinks for example of call centers in financial institutions or processing of applications, orders, or claims.

At its simplest, many organisations require only to deliver documents electronically, internally and/or externally, to improve productivity and reduce elapsed time. For others, documents are essential components in the context of a business process, where they may be tied closely to line-of-business applications as triggers or reference material or outputs.

Workflow will be an important requirement for operational business areas that are transaction oriented, for example processing applications or complaints rather than say producing research papers.

MoReq2 in Chapter 10.4 addresses the simpler end of the workflow spectrum; if you require a full BPM system MoReq2 will not provide a comprehensive set of requirements.

Technical elements underpinning workflow include a design tool to make a model of the business process, a workflow engine or monitor to check real-time status, the ability to alert users when action is possible or required, and the ability to store or retrieve information from the repository within a workflow.

#### 2.2.2.5 Case management (Chapter 10.5)

Many organisations have case management requirements, that is, where a process is closely tied to a case file which contains the documents and/or records created and used in the application. This section provides an insight into what requirements might need to be added to leverage existing systems to provide a better record of their activities without going to the expense and added complexities of a separate records management system.

If you have case management applications, you need to decide where to hold the case files. EDRM systems traditionally had difficulty fitting these into the classification scheme, but MoReq2 has extended their “Fileplan” definitions to include a case file structure (see 2.1.2).

These applications may also require application integration facilities (described in the following section) to integrate with line-of-business computer applications, and also require workflow as previously described.

#### **2.2.2.6 Application integration (Chapter 10.5)**

The EDRM must fit into your technical environment and be capable of being used with other applications, for example:

- allowing other business applications to create, open, and close EDRMS case files
- allowing the EDRMS to query other systems, e.g., to validate metadata values

To define the requirements, administrators will need to understand in detail how users will use the system to carry out their normal workloads and involve IT to define the technical aspects.

MoReq2 provides a good start point for defining application integration requirements, but the requirements are interspersed in the case management section. Note this requires careful extraction if your requirement is just for application integration

#### **2.2.3 Other organisation-specific functionality**

Other requirements which are addressed in MoReq2 but not applicable to everyone include:

##### **2.2.3.1 Offline and remote working (Chapter 10.11)**

The requirements in this section cover all types of mobile and offline usage of the EDRMS by users who are not permanently connected to the EDRMS (or to the network hosting it).

There are several possible scenarios including:

- users who access the EDRMS using portable computers (such as mobile, laptop, or notebook computers) or PCs that are connected to the EDRMS intermittently
- users who connect to the EDRMS remotely through a dial-up connection, or any other connection with low-bandwidth connection (e.g., for telecommuting or in a temporary location)
- users who access the EDRMS using other mobile devices such as PDAs or smartphones

The importance of these requirements will depend on the nature of your organisation; the requirements covered relate mainly to:

- security, e.g., specifying what cannot be downloaded
- synchronisation of data including metadata when uploading and downloading for offline working

Again if you have a very distributed and dynamic workforce there will be many other functional and logistic requirements you will need to work through.

##### **2.2.3.2 Support for encryption (Chapter 10.8)**

The requirements in this section apply only where there is a requirement to manage records which are encrypted. This is a specialised requirement likely to apply only to a few organisations, but the fact that the support is there to be used if needed may provide reassurance.

##### **2.2.3.3 Distributed systems (Chapter 10.10)**

This section comprises requirements for organisations that require an EDRMS to operate in multiple locations and find it necessary to have multiple repositories rather than one central repository linked to all locations.

This requirement may apply where the sites are widely separated, and/or if the connectivity between them is not good. Considerations for the operation and management of multiple repositories are well covered.

This section will be important for organisations that are investigating and considering implementation of Federated Records Management systems (FRM).

FRM started to appear in products in around 2005. The idea is to provide records management that is capable of controlling content that resides in disparate repositories. Generally this is achieved by manipulating the security settings on the content within the repository. FRM products have been limited in the past, but this section potentially provides a method of assessing how capable these products are of achieving records management across multiple locations and systems.

#### **2.2.3.4 Digital rights management—DRM (Chapter 10.9)**

This is a specialized requirement to do with protecting intellectual property and/or to restrict the distribution of information. DRM is generally associated with the protection of intellectual property (especially in the music, electronic publishing, and film industries). E-DRM (Electronic DRM), as defined in MoReq2, deals with what is more commonly called Information Rights Management (IRM) and the section gives high level requirements providing a set of considerations on creating and exporting records with IRM features and their resulting restrictions. The user needs to take these requirements as a framework for developing more detailed technical requirements based on IRM sources and level of use.

#### **2.2.3.5 Electronic signatures (Chapter 10.7)**

For many organisations, the audit trail plus strict access control will provide sufficient assurance of the integrity of the records, and electronic signatures won't be needed at least for internal communications. However if you use e-mail to document business transactions between organisations, it may be advisable to append an e-signature.

Note, however, that although e-signatures have been put into law and the required bodies to govern their use are in place in Germany and other EU member states, to date public adoption has been very limited. The UK has yet to set up the infrastructure for its use.

### **2.3 Non-functional Requirements**

Some of the attributes of a successful EDRMS implementation cannot be defined in terms of functionality. These non-functional requirements are often difficult to define and to measure objectively but they should be identified and considered, at least at a high level. Some are specific to EDRM, but several are generic to many kinds of IT system.

MoReq2 Chapter 11 brings a number of these requirements together as a checklist of areas to cover, and they provide a useful start point that is worth mentioning.

- ease of use (11.1)
- performance and scalability (11.2)
- system availability (11.3)
- technical standards (11.4)
- legislative and regulatory requirements (11.5)
- outsourcing and third-party management of data (11.6)
- preservation and technology obsolescence (11.7)
- business processes (11.8)

MoReq does not address the suitability of different storage media, other than including requirements for long-term preservation.

### **2.4 Project Management and Implementation**

As mentioned earlier, MoReq2 does not address other aspects of EDRMS implementation such as project management, development of a fileplan, defining user roles and access rules, training and communications, acceptance of the system.

These are all outside the scope of MoReq2, but are absolutely essential to successful implementation.

# 3

## 3 Summary

### 3.1 Value and Limitations of MoReq2

Can an organisation or an EDRMS be MoReq2 compliant? Simplistically it might seem good to ask suppliers to confirm that their product is “MoReq2 compliant,” but unfortunately this is not a meaningful question because of the following.

Firstly, MoReq2 consists of a large number of mandatory and optional requirements, some with more than one acceptable outcome, so a simple ‘Yes/No’ rating is inadequate. Even a percentage score out of 100 percent for each product, were it available, would not tell you how the generic system addresses your organisation’s needs. Suppliers or products may not address all mandatory requirements areas (e.g., scanning) yet meet the subset that you require.

Second, as brought out in the paper, some functionality defined in MoReq2 is too complex and specialized for most organisations to understand and use, that is, it may not meet your needs.

Finally, no compliance testing of products has yet been undertaken. There are several reasons for this: MoReq2 is relatively new, the testing regime isn’t in place, and suppliers may be concerned at the effort and cost for development and testing.

So if you feel it is essential from a contractual point of view to have suppliers respond formally to each of your detailed EDRM requirements, you have little choice other than to include them in a statement of requirements.

Your aim however in developing your statement of requirements should be to produce a set of requirements that is business driven and this should be reflected in your selection and inclusion of MoReq2 requirements. Where you include a MoReq2 requirement, you still need to decide whether it is mandatory or desirable, but as a default you can follow MoReq2 as a guideline.

Finally, as a result of your assessment of Moreq2 based in part on this paper, and your business needs, you may decide on a different course for EDRM specification and selection. There are other ways to establish or validate how well a product meets your requirements: reference sites, industry reviews, demonstrations, model office projects—and you could consider using these to help shortlist your bidders.

### 3.2 EDRM Market Considerations

Electronic records management technology has become well established since the publication of MoReq in 2001. This is illustrated by MoReq authors being able to obtain feedback from only one supplier whereas there are 23 vendors on the Moreq2 panel. Electronic records management capability can now also be found in corporate business applications such as ERP systems and engineering design applications.

- The ERM/EDRM marketplace is relatively mature and a number of well-established high-function systems are available, so obtaining the core records management functionality you require may not be a real issue.
- There are variations in the end-user interface, so you should evaluate this area in detail against your environment and requirements.
- Integration capabilities and the capability of the workflow, document management, and web content management components should also be assessed at the same time if they are relevant to your business applications.

### **3.3 What MoReq2 Provides**

The MoReq2 specification has set a new bar for ERM functionality with a much expanded set of requirements.

It has stumbled by addressing in detail areas of marginal interest to the wider private sector or lighter regulated public bodies and omitting areas now widely used such as collaborative tools and with no consideration for Web 2.0 applications.

The user developing a corporate EDRM technical specification will find MoReq2 a useful reference document but to use it will require investing a lot of time and effort distilling the relevant parts from those that may be considered too extensive and ultimately not required.

This perspective provides a guide to assist you in streamlining the process of assessing your EDRM requirements and “Making MoReq2 work for you.”

## Addendum—Access Control Model

MoReq2 provides a useful matrix that provides examples of typical ERM system assigned administrator and user roles and their allowed functions.

There are four example roles defined in the MoReq2 example matrix:

- Central Administrator—this role has control over the configuration of the entire ERMS and the management of the aggregations and records themselves.
- Local Administrator—this is a role with administrative rights over a subset of the ERMS or its classification scheme. These roles usually are useful in geographically dispersed organisations.
- Reviewer—this is a specialist role which is primarily concerned with the application of disposition actions defined by Retention and Disposition Schedules.
- End User—the end-user role is the standard level of access to the EDRMS and comprises those who need to save records into, and access records from, the EDRMS for their routine work.

Function	User Roles		Administrative Roles	
	End User	Reviewer	Local Administrator	Central Administrator
Add new classes	No	No	Yes	Yes
Create new files	Yes	No	Yes	Yes
Change file metadata	No	Yes	Yes	Yes
Maintain classification scheme and files	No	No	Yes	Yes
Delete files	No	No	Yes	Yes
Capture records	Yes	No	No	Yes
Relocate a record to a different file	Yes	No	Yes	Yes
Search for and read records	Yes	Yes	Yes	Yes
Change content of records	No	No	No	No
Change record metadata	No	Yes	Yes	Yes
Delete records	No	No	Yes	Yes
Place and remove disposal holds	No	Yes	Yes	Yes
Retention and disposition schedule and disposition transactions	No	Yes	Yes	Yes
Export and import files and records	No	Yes	Yes	Yes
View audit trails	No	Yes	Yes	Yes
Configure and manage audit trail	No	No	No	Yes
Change audit trail data	No	No	No	No
Move audit trail data to offline storage media	No	No	Yes	Yes
Perform all transactions related to users and their access privileges	No	No	Yes	Yes
Allocate access permissions to local administrators	No	No	No	Yes
Allocate own access permissions also to other users	Yes	Yes	Yes	Yes
Set up and manage case management roles	No	No	No	Yes
Maintain database and storage	No	No	Yes	Yes
Maintain other system parameters	No	No	No	Yes
Define and view other system reports	No	Yes	Yes	Yes



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