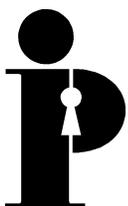


**Information
and Privacy
Commissioner /
Ontario**

Electronic Records and Document Management Systems:

A New Tool for Enhancing the Public's Right to Access Government-Held Information?



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Commissioner
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Introduction

In 1994, a veterans group in Georgia submitted a freedom of information (FOI) request to the United States Department of National Defense. The veterans, who had fought in the 1991 Gulf War in Iraq, were seeking military logs that might contain evidence regarding the possibility that US troops were exposed to nerve gas and other chemical weapons during the war.¹

However, when the Defense Department released the logs, the Georgia veterans discovered that numerous pages covering key dates were missing. An October 1997 report by the Pentagon's Inspector General concluded that most of the missing logs were likely destroyed in October 1994 or later after the relocation of the military office that had custody of the logs. However, he found no evidence of a conspiracy to willfully or wrongfully destroy the logs.²

This incident demonstrates how poor records management can impede the public's right to access important government-held information. In particular, a failure by government institutions to adhere to proper records management practices can have an adverse effect on the ability of individuals to scrutinize the activities of public bodies and to obtain information that is crucial to exercising their fundamental rights.

During the past few years, government officials in a number of jurisdictions, including Ontario, have been considering whether a new set of tools known as "electronic records management systems" or "electronic document management systems" could help to improve records management.³

In simple terms, an electronic records and document management system (ERDMS) is a tool that enables an organization to efficiently manage all records and documents that are created and maintained in both electronic and hardcopy format. An ERDMS can serve as a tool for building the infrastructure required for e-government. A key component of e-government is "e-democracy," which focusses on the use of technology to enhance the engagement of citizens with democratic institutions. In particular, the use of technology can enhance public access to government-held information and promote transparency, accountability and open government.

The purpose of this paper is to examine the role that ERDMSs can play in enhancing the public's right to access information from government institutions in Ontario. First, we will look at the link between records management and FOI. Second, the underlying factors that are driving the implementation of ERDMSs will be examined. Third, we will look at the proposed solutions and standards for ERDMS software tools. Finally, we will look at two ERDMSs that are being implemented in different government ministries in Ontario, and the potential FOI benefits of these systems.

Link Between FOI and Records Management

Ontario's Access and Privacy Laws

An individual's right to seek and receive information, including that which is held by public bodies, is a fundamental human right that is entrenched in international law⁴ and has been implemented into domestic law in Canada.⁵ In the late 1970s, the Ontario government established a public commission chaired by Dr. Carleton Williams and gave it the mandate to examine ways of improving both access to information and individual privacy in Ontario. In his 1980 report, which recommended the enactment of an FOI law and a privacy protection law, Dr. Williams noted:

Increased access to information about the operations of government would increase the ability of members of the public to hold their elected representatives accountable for the manner in which they discharge their responsibilities.⁶

In response to the Williams Commission report, the Ontario government enacted two FOI and protection of privacy laws. The *Freedom of Information and Protection of Privacy Act*⁷ (the provincial *Act*) came into effect in 1988 and the *Municipal Freedom of Information and Protection of Privacy Act*⁸ (the municipal *Act*) came into effect in 1991. The Information and Privacy Commissioner, who is an officer of the Legislature, provides an independent review of the decisions and practices of government organizations concerning access and privacy.

The provincial *Act* applies to all provincial ministries, most provincial agencies, boards and commissions, colleges of applied arts and technology, and district health councils. The municipal *Act* covers local governments, including municipal police services, libraries, school boards, health boards, public utilities and transit commissions.

Good records management is an essential pillar that supports the FOI process in Ontario. The public's statutory right to access government-held information cannot be fulfilled unless public servants properly document government programs and activities and maintain records in a well-organized manner.

A maxim frequently cited by FOI advocates is that access delayed is access denied. This is why both *Acts* require government institutions to respond to FOI requests from the public within 30 days.⁹ A good records management system should enable a government institution to quickly locate and retrieve any requested records. Moreover, records must be kept long enough to protect the public's FOI rights. Public bodies should retain and destroy records in accordance with provincial and municipal laws, policies and directives.

Records Management Requirements – Provincial Institutions

Under the regulations that accompany the provincial *Act*, provincial institutions must ensure that reasonable measures are defined, documented and put in place to protect records from inadvertent destruction or damage.¹⁰

Moreover, the Archives of Ontario, which has government-wide responsibility for ensuring that recorded information is properly managed, has prepared records management guidelines, fact sheets and information bulletins that are available on its website.¹¹

The work of the Archives of Ontario is governed by the *Archives Act*,¹² which stipulates:

- No official records may be destroyed or permanently removed from government custody without the Archivist of Ontario’s authorization,¹³ and
- All records designated by the Archivist for permanent preservation must be transferred to the Archives when no longer needed by ministries.¹⁴

In June 1992, Management Board Secretariat (MBS) released a *Management of Recorded Information Directive*,¹⁵ which supplements the requirements of the *Archives Act*. Under this directive, ministries must develop “records retention schedules” that specify how long a record will be kept and whether it will be destroyed or transferred to the Archives. This is meant to ensure that records are kept long enough to give members of the public a reasonable opportunity to exercise their FOI rights.

Records Management Requirements – Municipal Institutions

At the municipal level, there is no central body, such as the Archives of Ontario, which is responsible for ensuring that all municipalities properly manage recorded information. Instead, each municipality is responsible for complying with records management provisions in various pieces of legislation.

Under the regulations that accompany the *Municipal Freedom of Information and Protection of Privacy Act*, municipal institutions must ensure that reasonable measures are defined, documented and put in place to protect records from inadvertent destruction or damage.¹⁶

Moreover, Ontario’s new *Municipal Act*,¹⁷ which came into effect on January 1, 2003, contains several records management provisions, including the following:

- The municipal clerk must keep the originals or copies of all by-laws and all minutes of the proceedings of council.¹⁸

- A municipality must retain and preserve the records of the municipality and its local boards in a secure and accessible manner.¹⁹
- A municipality may enter into an agreement with an archivist, which would also have a duty to retain and preserve the records transferred to it in a secure and accessible manner.²⁰ Any records transferred to an archivist would continue to be subject to the *Municipal Freedom of Information and Protection of Privacy Act*.²¹
- A municipality may, subject to the approval of the municipal auditor, establish retention periods during which the records of a municipality must be retained and preserved.²²
- A municipality may destroy a record if an established retention period has expired or the record is a copy of the original record.²³

One underlying purpose of these provisions is to ensure the activities of municipal governments are properly documented and records are kept long enough to give members of the public a reasonable opportunity to exercise their FOI rights.

Factors Driving the Implementation of ERDMSs

The need to implement ERDMSs is being driven by at least five factors:

Downsizing of Records Management Staff

During the past decade, there has been a reduction in the number of government employees, including records management staff, particularly at the provincial level.²⁴ Records management staff continue to exist and do good work in government institutions. However, a reduction in their numbers has meant that record-keeping responsibilities now fall more heavily on individual public servants. Consequently, government institutions are looking for a technological means of filling this human resources gap.

Shift from Paper to Electronic Records

There has been a significant shift from paper to electronic records during the past two decades. Although government institutions continue to print and maintain paper documents as “official records,” the vast majority of records are now created and stored in electronic format. Many government institutions do not have adequate systems in place to track and retrieve electronic records or to manage their retention and disposal. Different versions of the same record may be located on personal computer drives, disorganized shared drives, network servers or e-mail “in” boxes. Records are often perceived as resources belonging to individuals and program units, not as shared corporate resources.²⁵

Response Times to FOI Requests

The absence of a sophisticated system for managing electronic records and documents has an adverse effect on the public’s right to access government-held information within the statutory 30-day timeframe. Public servants may have difficulty locating the final versions of records and responding to access requests in an expeditious manner, particularly if paper versions of the requested records do not exist.

E-Government

There has also been a push towards implementing e-government, which involves making services available to the public electronically and facilitating citizen engagement with government.²⁶ Traditional paper-based records management systems have limited utility and application to the implementation of e-government. However, ERDMSs can help to promote e-government by ensuring electronic records that document the government’s interaction with the public are soundly managed and accessible.

Knowledge Management

The efficient management of electronic records and documents is an essential component of knowledge management, which involves making effective use of information and people.²⁷ Knowledge cannot be shared effectively between public servants or with the public if it is poorly organized and difficult to retrieve. ERDMSs can play an important role in supporting the development of knowledge management in government.

Establishing Standards for ERDMSs

Modernizing Records Management Laws

The push to implement better systems for managing records is part of a broader global trend to modernize the laws and policies governing records management. In many jurisdictions, including Ontario, these laws (i.e., the *Archives Act*) have not kept pace with the digitization of records.

In July 2002, the National Archives and Records Administration (NARA) in the United States released a discussion paper recommending new ways to approach records management.²⁸ The paper argues that NARA's records management program was developed in the paper environment of the 20th century and has not kept pace with the electronic records that the federal government now creates and uses.²⁹ It also notes that although software manufacturers specialize in providing tools for creating and modifying electronic records, the development of tools for managing these records (e.g., ERDMSs) has lagged behind.³⁰

Setting Standards – International Community

A number of jurisdictions around the world have been looking at ERDMSs as potential tools for modernizing the management of government records. In particular, several jurisdictions have drafted papers that set out the standards that must be met when government institutions seek out software for managing records and documents electronically. These include the European Community's *Model Requirements for the Management of Electronic Records* (MoReq),³¹ the US Department of Defense's *Design Criteria Standard for Electronic Records Management Software Applications*,³² and the British Public Records Office's *Functional Requirements for Electronic Records Management Systems*.³³

In October 2001, the British Columbia government issued a request for proposal (RFP) for an "Enterprise Document and Records Management System."³⁴ According to the RFP, the government sought a system that could be used across government to manage all of its records. Ultimately, all government employees would have the tools to manage both paper and electronic records and documents in a consistent manner from their desktop computers.

Setting Standards – Ontario

In Ontario, the Archives of Ontario and MBS's Office of the Corporate Chief Technology Officer (OCCTO) have developed a proposed "Enterprise Records/Document Management Solution."³⁵ This solution, which sets out a framework for records and document management in government, would be made up of two components:

- Individual records and document management systems implemented at ministry and program levels.
- A single government-wide search engine that would allow public servants to access “metadata” about records and documents across government. “Metadata” can be defined as “data about data” (e.g., a library catalogue contains descriptive information (metadata) about books).

The Archives of Ontario published the draft paper, *Records/Document Management Systems (R/DMS) Standard – Technical Specifications*,³⁶ which defines the requirements for ministry and program-level records and document management systems. These standards provide guidance to Ontario government institutions that are contemplating the purchase of records and document management software.³⁷

The Archives of Ontario and the OCCTO have integrated many of the access to information and protection of privacy requirements of the provincial *Act* into both the proposed Enterprise Records/Document Management Solution and the standards that support the solution.

Potential FOI Benefits of ERDMSs: Two Case Studies

ERDMSs contain features that can enhance the public's right to access government-held information. These systems enable users to save all documents of value to the government or the public in a central repository (or linked set of repositories), which makes it easier to track and retrieve documents. These systems can also be connected to "web content management" software to expedite publication of documents on an organization's Intranet or Internet site. In short, ERDMSs can enable institutions to more efficiently locate records when dealing with FOI requests and can facilitate the routine disclosure and active dissemination of government-held information.

Some government institutions in Ontario have rudimentary systems in place for managing electronic records and documents. However, a handful of government institutions are testing or implementing more sophisticated systems that have significant potential for making government-held information more widely available to the public.

As will be illustrated by the following two case studies, ERDMSs can be tailored to meet the specific needs and functions of a particular government institution. There is no "one size fits all" model that must be adopted by all government institutions. Variations in implementation are possible, so long as they meet provincial or municipal records management standards and are designed in a manner that respects, protects and fulfills the public's access and privacy rights.

At the provincial government level, proposals have been made to facilitate the acquisition of flexible but robust systems through a vendor-of-record process. The Archives of Ontario and the OCCTO are taking the lead in this process.

Case Study #1: Ministry of Public Safety and Security (MPSS)

In 1998, the Ministry of the Solicitor General and Correctional Services (now MPSS) was involved in an FOI appeal that highlighted the impact that poor records management can have on the public's right to access government-held information.³⁸

The ministry had received an FOI request for specific paper and electronic records created by the Special Advisor, First Nations to the Deputy Solicitor General and the Deputy Minister of Correctional Services from September 1–15, 1995. The request related to a high-profile incident on September 5, 1995 in which a member of the Ontario Provincial Police (OPP) shot and killed an Aboriginal protester during an occupation of Ipperwash Provincial Park.

The ministry was not able to locate any electronic records generated by the Special Advisor, First Nations after he left his position. Ultimately, the ministry informed the IPC that the requested electronic records appeared to have been deleted and could not be retrieved from backup tapes because the information had been overwritten. After receiving a sworn affidavit from the Deputy Solicitor General and the Deputy Minister of Correctional Services detailing the ministry's search efforts, the IPC accepted that the ministry had conducted a reasonable search for the records.³⁹

However, the failure of the ministry to locate the records cast a shadow over its records management practices. Consequently, MPSS decided to explore the possibility of implementing a more sophisticated system for managing its electronic records and documents. Currently, the ministry is testing a new document management system that could significantly enhance the ministry's ability to track and locate records. The system is being tested in MPSS's Business Planning and Issues Management branches.

The MPSS document management system can interface with documents created in a variety of applications, including Word, Excel, Access, PowerPoint and Outlook. It imposes high levels of control over the creation, storage and use of documents. When a user creates a document, a name and file classification must be attached to it, and access and security levels (i.e., who can access the document) must be assigned. (ERDMSs can also be configured so that only authorized users can assign access and security levels.) The document is then stored in a central repository.

Although this system has only been tested in a small number of branches in MPSS, it has significant potential for enabling the ministry to more efficiently locate records when dealing with FOI requests. A document can be retrieved through the system by its file name, creator, date of creation, etc. In addition, the system has a full-text search function that can be used to quickly locate documents using keywords. Most important, the storage of records in a central repository makes it very difficult to lose documents.

The system also allows a user to view the history of a document. In other words, a user can see who has accessed the document, when it was accessed, and what changes or edits were made. This is important from an FOI perspective, because it provides requesters with a level of assurance that they are receiving the final, authentic version of a document. In addition, the creation of an audit trail makes documents less subject to tampering.

The system also has advantages from a privacy and confidentiality perspective. Under the regulations accompanying both the provincial and municipal *Acts*, institutions are required to ensure that only those individuals who need a record for the performance of their duties shall have access to it. When a user classifies a document, the system allows the user to limit access to designated public servants. This is a particularly useful means of protecting the privacy of personal information and the confidentiality of other sensitive information that

may be covered by the exemptions in the *Acts* (e.g., law enforcement information, third party information, etc.).

Although the MPSS document management system can interface with Microsoft Outlook, staff are not required to save e-mails into the central repository. It would clearly be cumbersome and unrealistic to require users to classify and save all e-mails into the repository. However, the government decision-making process can often be traced through e-mail messages. Consequently, government institutions that are selecting and implementing ERDMSs should determine if a particular system can be configured to enable users to easily retain e-mails that document government activities and decisions, while enabling ready disposal of the rest.

Case Study #2: Ministry of Natural Resources (MNR)

In recent years, MNR's overall compliance rate with the 30-day statutory timeframe for responding to FOI requests has been somewhat low. In 2000, it responded to only 30.9% of complaints within the 30-day timeframe.⁴⁰ However, its compliance rate has been steadily increasing in the last two years. In 2001, it responded to 48% of FOI requests within 30 days,⁴¹ and in 2002, its compliance rate increased to 55.7%.⁴² This increasing compliance rate can be attributed to a number of steps taken by the ministry, including a greater emphasis on improving its records management system.

MNR is currently designing and implementing an innovative web-based document management system that could enhance its ability to more efficiently locate records and facilitate the routine disclosure and active dissemination (RD/AD) of information to the public. The system is made up of two components: an Online Document Management System (ODMS) and an Online Web Publishing System (OWPS). While this system is not a fully functional ERDMS (as it lacks basic capabilities for managing the retention and disposal of records), it has many important features. Meanwhile, the developers are exploring enhancements to bring the system closer to full functionality.

The ODMS involves placing corporate documents such as briefing notes, letters and presentations, in a central repository that can be accessed by all ministry staff. When staff create documents in applications such as Word, Excel, Access and PowerPoint, they are required to save them into the ODMS database, which serves as the central repository.

The ODMS program requires staff to input "metadata," such as the title and abstract for the document, author, individual(s) accountable for the document, creation date, approval date, and which ministry project the document is affiliated with. The software also contains a "visibility" field, which requires staff to flag whether the document should be posted (i.e., made visible) on MNR's Intranet, Internet or Extranet sites.

The OWPS (the second component of MNR's document management system) then comes into play. This web publishing tool telescopes into the central repository and looks at the document's visibility status. If the document has been flagged as "visible" for the Intranet, Internet or Extranet, it will be pulled out of the central repository and made available for posting on these websites.

From an FOI perspective, MNR's document management system has two significant advantages. First, the ministry's Freedom of Information and Privacy Unit can use the ODMS as a starting point for locating and retrieving documents in response to FOI requests. The ODMS program has a function that allows staff to search the central repository for documents by keying in detailed search terms such as the title, author and creation date of a requested document. This can help MNR staff to respond to FOI requests more quickly and potentially increase the ministry's overall compliance with the 30-day statutory timeframe.

Second, the automated nature of the web publishing tool can help to promote electronic RD/AD. However, MNR's Freedom of Information and Privacy Unit should carefully review all documents to ensure that no personal information or other information subject to the mandatory exemptions in the provincial *Act* is inadvertently posted on MNR's public website.

For example, MNR issues work permits for activities such as mineral exploration and logging. It receives a significant number of FOI requests from members of the public who are trying to determine if a company or individual has a permit for doing certain work. In accordance with the provincial *Act*, MNR usually severs personal information and third-party information from the permits before releasing them to requesters.

MNR could use the web publishing tool to post all approved work permits on its Internet site after removing any information that is subject to the mandatory exemptions in the provincial *Act*. Consequently, if an individual wants to know if a company has a permit for doing certain work, he or she could access this information on MNR's website rather than submitting a formal FOI request.

Although MNR's document management system has significant potential for improving the ministry's records management practices and enhancing the public's right to access government-held information, the ministry will face ongoing challenges as the system is fully implemented. For example, entering metadata about a document (e.g., title, abstract, author, etc.) is a new task for staff to perform when they create certain types of documents.⁴³

Any government institution that is implementing an ERDMS, including MNR, should provide staff with training sessions. These sessions should not only emphasize the benefits of quick and comprehensive retrieval, but should familiarize staff with the individual system features and provide guidance to ensure comprehensive and accurate metadata about documents is captured where entered by the user. These sessions should outline the role that an ERDMS can play in protecting and fulfilling the public's right to access information from the institution. In addition, a written policy should be established that requires staff to save specified records into the system.

Conclusion

Outdated records management systems can have an adverse effect on the public's right to access government-held information. When a requester cannot obtain a document in an expeditious manner because it cannot be found or has been prematurely destroyed, this strikes at the heart of open and transparent government in Ontario.

Fortunately, there is a movement towards replacing antiquated records management systems with more sophisticated systems that facilitate the timely retrieval of records and promote the routine disclosure and active dissemination of documents. These systems should be configured in a manner that enhances the public's right to access government-held information while protecting the privacy of personal information. Moreover, they should contain as many records as possible, including e-mails that document government decisions. The FOI co-ordinators in government institutions must be key participants in selecting the appropriate ERDMS software solutions.

The implementation of ERDMSs will require sufficient resources and funding from government. Such schemes cannot succeed unless there is support at both the senior management level in institutions and at the political level. The IPC fully supports the expansion of ERDMSs and encourages both provincial and municipal institutions to consider the feasibility of testing and implementing such systems in the near future.

Notes

1. <www.cnn.com/US/9612/05/missing.records/>.
2. Office of the Inspector General – Department of National Defense, *Report of Investigation Concerning the Missing U.S. Central Command Nuclear, Biological and Chemical Weapons Desk Logs*, October 20, 1997, <www.gulflink.osd.mil/dodig/>.
3. Section 2 of both the *Freedom of Information and Protection of Privacy Act* and the *Municipal Freedom of Information and Protection of Privacy Act*, *infra* notes 7 and 8, define a record in the following way:

“record” means any record of information however recorded, whether in printed form, on film, by electronic means or otherwise, and includes,

- (a) correspondence, a memorandum, a book, a plan, a map, a drawing, a diagram, a pictorial or graphic work, a photograph, a film, a microfilm, a sound recording, a videotape, a machine readable record, any other documentary material, regardless of physical form or characteristics, and any copy thereof, and
- (b) subject to the regulations, any record that is capable of being produced from a machine readable record under the control of an institution by means of computer hardware and software or any other information storage equipment and technical expertise normally used by the institution....

In records management literature, a distinction is often drawn between documents and records. However, for the purposes of this paper, it is assumed that most documents containing recorded information are records.

4. During its first session in 1946, the United Nations General Assembly adopted Resolution 59(1), which states that, “Freedom of information is a fundamental human right and ... the touchstone of all freedoms to which the UN is consecrated.” An individual’s right to seek, receive and impart information is also entrenched in article 19 of the Universal Declaration of Human Rights (Resolution 217 A (III), 10 December 1948) and article 19(2) of the International Covenant on Civil and Political Rights (Resolution 2200 A (XXI), 16 December 1966, entered into force 23 March 1976).
5. In Canada, the federal government and 10 provincial governments have all enacted FOI laws.

6. Dr. Carleton Williams, *Public Government for Private People, The Report of the Commission on Freedom of Information and Individual Privacy*, vol. 2, Toronto: Queen's Printer, 1980, p. 77.
7. R.S.O. 1990, c. F.31, <www.ipc.on.ca/scripts/index_.asp?action=31&P_ID=11607&N_ID=1&PT_ID=23&U_ID=0>.
8. R.S.O. 1990, c. M.56, <www.ipc.on.ca/scripts/index_.asp?action=31&P_ID=11603&N_ID=1&PT_ID=23&U_ID=0>.
9. See s. 26 of the provincial *Act* and s. 19 of the municipal *Act*.
10. R.R.O. 1990, Reg. 460, s. 4(1), <www.ipc.on.ca/scripts/index_.asp?action=31&P_ID=11609&N_ID=1&PT_ID=23&U_ID=0>.
11. <www.archives.gov.on.ca/english/rimdocs/index.html>.
12. R.S.O. 1990, c. A.27, <192.75.156.68/DBLaws/Statutes/English/90a27_e.htm>.
13. *Ibid.*, s. 6.
14. *Ibid.*, s. 3.
15. This document is available on MBS's Intranet site, <intra.pmed.mbs.gov.on.ca/mbc/pdf/Mgmt_of_Recorded_Information-Dir.pdf>.
16. R.R.O. 1990, Reg. 823, s. 3(1), <www.ipc.on.ca/scripts/index_.asp?action=31&P_ID=11605&N_ID=1&PT_ID=23&U_ID=0>.
17. S.O. 2001, c. 25, <192.75.156.68/DBLaws/Statutes/English/01m25_e.htm>.
18. *Ibid.*, s. 228(1)(c).
19. *Ibid.*, s. 254(1).
20. *Ibid.*, ss. 254(3), (7).
21. *Ibid.*, s. 254(6).
22. *Ibid.*, s. 255(3).
23. *Ibid.*, s. 255(2).
24. Since 1995, the number of people directly employed by the Ontario government has declined from more than 81,000 to approximately 60,000, as of March 2001. See *2002 Ontario Budget: Budget Papers*, <www.gov.on.ca/FIN/bud02e/english_complete.pdf>, p. 38.

25. Archives of Ontario, *Records/Document Management Systems (R/DMS) Standard – Technical Specifications*, Version 2.0, October 21, 2002, <intra.archives.mbs.gov.on.ca/docs/rdmraftstandard.pdf>, p. 12.
26. See the Office of the Chief Information Officer's website on e-government, <www.cio.gov.on.ca/scripts/index_.asp?action=31&P_ID=15&N_ID=1&PT_ID=425&U_ID=0>.
27. The Ontario government has set out its vision for knowledge management in a March 2002 paper, *Knowledge Management in the Ontario Public Service – A Direction Setting Paper*, <www.cio.gov.on.ca/scripts/index_.asp?action=31&LG_ID=1&N_ID=1&PT_ID=1059&U_ID=0>.
28. National Archives and Records Administration, *Proposal for A Redesign of Federal Records Management*, July 2002, <www.archives.gov/records_management/pdf/rm_redesign.pdf>.
29. *Ibid.*, p. 3.
30. *Ibid.*, p. 8.
31. <www.cornwell.co.uk/moreq.pdf>.
32. <tis.eh.doe.gov/techstds/standard/std4001/std400100.pdf>.
33. <www.pro.gov.uk/recordsmanagement/erecords/2002reqs/default.htm>.
34. <www.bcarchives.gov.bc.ca/infomgmt/eimgmt/edmsrfp.pdf>.
35. *Supra* note 25, p. 15.
36. *Supra* note 25.
37. The Archives of Ontario defines records and document management systems as:

Server or web-based applications intended for the use of all end-users across an office or organization which:

 - consolidate subject-related hardcopy and electronic records for comprehensive, efficient access across organizations by linking them to file classifications and record folders as they are captured into the system at workstations;
 - simultaneously associate records and records folders with largely system-generated “metadata” (e.g., subject, date, author, security classification);

- enable fast, complete and secure cross-organization retrieval and use of information through a variety of search options (including simultaneous searches on text and metadata);
- provide prompt, thorough and efficient transfers to low-cost inactive or permanent storage in accordance with records retention schedule requirements;
- provide automatic purging of electronic documents when retention requirements are met, while expediting disposal of hardcopy records;
- maintain complete audit trails regarding the preceding events;
- while enabling access to records and to information about records to be managed by authorized users.

R/DMSs are capable of managing electronic and hardcopy records simultaneously, including word processing documents, e-mail messages, presentations, project plans, web pages and any other electronic record not part of a database that is continually updated.

38. Final Order P-1608, <www.ipc.on.ca/scripts/index_.asp?action=31&N_ID=1&P_ID=6093&U_ID=0>.
39. Ibid.
40. Information and Privacy Commissioner/Ontario, *2000 Annual Report*, <www.ipc.on.ca/userfiles/page_attachments/ar-00e.pdf>, p. 24.
41. Information and Privacy Commissioner/Ontario, *2001 Annual Report*, <www.ipc.on.ca/userfiles/page_attachments/ar-01e.pdf>, p. 22.
42. Information and Privacy Commissioner/Ontario, *2002 Annual Report*, <www.ipc.on.ca/userfiles/page_attachments/ar-02e.pdf>, p. 22.
43. According to the Archives of Ontario, there are also other commercially available EDRMSs that automatically capture metadata (e.g., author, recipient, date, record format).



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