

# A Strategy for Openness

## Enhancing E-Records Access in New York State Part III-C: Results of Request for Public Comments

*Submitted to:*

*The Honorable David A. Paterson, Governor  
The Honorable Joseph L. Bruno, Temporary President of the Senate  
The Honorable Sheldon Silver, Speaker of the Assembly*



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**Part I – Executive Summary**

*(Separate Document)*

**Part II – Supporting Documentation**

*(Separate Document)*

**Part III - Results of Request for Public Comments**

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## Part III-C

### **Public Comments Received: Government Responses (19 comments received)**

*With the exception of formatting and correction of obvious and minor spelling errors, the substantive comments are printed verbatim with any errors or omissions intact. Salutations and individually identifying information have been REDACTED. Dates and times of comment receipt refer to when the comment arrived in the CIO/OFT e-mailbox created for this study. For any RFPC comments received slightly late, none were so late that they could not be considered for this report.*

#### **C. GOVERNMENT RESPONSES:**

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1. [New York State Banking Department](#): *Wednesday 12/19/2007 4:27 PM*

**Question #1) Contact Information: [REDACTED]**

My experience is with the production of electronic records. All Department institution records and documents files are scanned through the copier/scanner. The scans are reviewed for accuracy and then are transferred from the folder assigned to scans to a lotus notes database. Upon transfer to the lotus notes database, the scans are indexed with information such as the name, date, type of document, etc. The file is then saved and closed. The Department began this process in 2005 and is ongoing.

**Question #13)** Yes, the existing standards, regulations and guidelines regarding records management are adequate to meet the challenges of electronic records retention for our agency. Our Department has a Records Retention & Disposition Schedule issued by SARA that address our records. Regardless of format or media, records are retained according to the specific records series assigned.

**2. [New York State Library](#): Thursday 12/20/2007 2:50 PM****Question 1. Contact Information: [REDACTED]****Question 2. What Mechanisms and processes should the state of New York establish for accessing and reading its electronic records in order to encourage public access to those records?**

The state should consider the use of xml based formats to help ensure future accessibility since tools that can read and write xml can be developed relatively quickly and easily. The state should also consider using new technologies as they become available such as RSS feeds, pod casts and other web 2.0 technologies.

**Question 5. What Mechanism and processes should the State of New York consider for encouraging choice and vendor neutrality when creating, maintaining, exchanging and preserving its electronic records?**

Open source software, tools, and standards.

**Question 6. Are there mechanisms and processes the State of New York should establish that are specific to the management of its electronic records in its various life cycle stages (creation, maintenance, exchange, preservation and disposal)?**

During the creation phase it is important to assign appropriate metadata that can later be used to access the records. Maintenance of records should take into account required retention schedules and keeping file formats current to ensure future accessibility and preservation. Copies of records should be provided to required and other appropriate repositories to ensure long term preservation.

**Question 9. What constraints and benefits should the state of New York consider regarding the costs of implementing a comprehensive plan for managing its electronic records?**

Absent a comprehensive plan individual agencies and government entities will develop their own individual policies and standards some or all of which may not be compatible. This will compound the problem of future access and preservation of these records. The do nothing option would be very costly in this case with the loss of government records far outweighing the cost of developing appropriate policies and procedures.

**Question 14. What else should the State of New York consider about this subject?**

Although this Request for Public Comment is concerned mainly with "electronic records" and a definition and a distinction is made between electronic "records", "data", and "documents" it is worth noting here that research and practice in the area of electronic government documents is finding that these types of distinctions are becoming increasingly blurred in the digital and web environment where this information now exists. This point was recently made by Lin and Eschenfelder : Traditionally, government information resources are categorized into publications, documents and records. Such distinctions, however, are blurred in the Web environment and can cause confusion in selection decisions. Web publishing also creates new types of resources, such

as organizational information (directories, job announcements, and press releases), homepages, and service-based online transactions (California Digital Library, 2003). The genre diversity of Web-based government information not only creates problems for selectors but also challenges the traditional institutional responsibilities between libraries and archives. (Government Information Quarterly 25 (2208) pg. 9.)

The above speaks to the need for a cooperative approach between libraries, archival organizations, and agencies when developing policies and procedures for dealing with electronic government information. This being the case I have the following comments.

#### *Lack of Standards*

Currently no standards for publishing electronic New York State documents exist. Agencies and individual offices and bureaus within agencies often have their own style and methods for publishing documents to their websites. This lack of standards creates a huge problem when trying to preserve and make these documents available for future use and research. New York State needs to set web publishing standards for electronic information including:

Standardized website design so electronic documents can be harvested by automated tools;

Standardized document design including standard metadata elements to ensure documents can be retrieved by search engines and other tools;

Standardized file formats for electronic documents to ensure future capture, accessibility and preservation.

Standards related to length of time documents will be available and how they will be made accessible once they are removed from their respective websites.

#### *Born Digital Information*

Government information is increasingly being published only in a web based environment. Born digital information presents policy makers with unique issues that need to be considered. Born digital information is difficult to track since its publication is often unannounced and sporadic. Authenticity is a problem because Born Digital documents change frequently and are subject to revisions. It often becomes difficult or impossible to determine if one is looking at the original version or an updated version of a particular document. Born digital information tends to disappear quickly and without notification and presents a unique set of preservation problems since agencies do not often have the resources or inclination to preserve it once it is removed from their websites.

**3. National Archives and Records Administration (NARA): Thursday 12/20/2007 7:04 PM**

Your message seeks input regarding how "electronic data can be created, maintained, . . . ." While it is not appropriate for us to comment, if you seek information on the Records Management program of the National Archives and Records Administration, or NARA's custodial electronic records program, you may wish to review the materials at: <http://www.archives.gov/records-mgmt/> and <http://www.archives.gov/research/formats/electronic-records.html>, respectively. We hope this information is helpful.

**4. New York State Governor's Office of Regulatory Reform: Friday 12/21/2007 1:51 PM**

**Part 1**

**Question 1. Contact Information: Please provide name, organizational affiliation if any, and means for contacting you (e.g. e-mail address, street address, phone number). Contact information collected in Question 1 will not be displayed on a public website.**

[CONTACT INFORMATION REDACTED]

**Part 2**

**Question 1. Are the distinctions described in Part I of this RFPC between the definitions of electronic data, documents, and records useful? Are there any specific elements or distinctions in those terms which CIO/OFT should be taking into account?**

Yes.

**Question 2. Is the description in Part I of this RFPC of three types of access needed for electronic records – day-to-day utility access; ancillary active record access; and historical access – a realistic and useful conceptualization of the main uses of electronic records? If not, please describe**

Yes, but while not explicitly stated, it does mean that the three types of accessibility can coexist.

**Question 6. Is this the correct definition of interoperability which the study should be using? If not, please provide a better, alternative definition.**

The definition of interoperability is useful.

**Question 7. Is this the correct definition of "openness" and "open standards" which the study should be using? If not, please provide a better, alternative definition.**

The definition of open standards seems appropriate. My only comment is that these standards would need to be used by all states and the federal government to truly create open standards.

**Question 8. For State agency respondents in particular: What percentages of your electronic records (using the term generally) consist of office suite records? What other types of electronic records, such as those in online information systems, GIS systems, etcetera does your agency create? What percentages do those other records consist of? How did you determine this?**

Office products 17 gig.

GORR has one application which is in Lotus/Domino and Websphere -- 16 gig.

**Question 23. For State agency respondents, please quantify if possible the types and amount of custom applications which would need to be re-written in your agency, and the cost.**

This is a concern for GORR. There are two related custom applications that comprise what is known as OPAL. I can not estimate the cost at this point but expect it would be significant since the system uses Lotus Notes/Domino as well as Websphere.

**5. New York State Police (NYSP): Thursday 12/27/2007 12:44 PM**

Agree it's an extremely short timetable. Therefore, I'm electing to not put a team together to review and respond. However, here are a couple of comments from our counsel's office perspective --

**Question 49.** The State Police will not have any substantial concerns over intellectual property litigation in the event OOXML or ODF formats are used for storing documents.

**Questions 52-54.** The format of electronic data has implications for litigation discovery. But litigation concerns, in our judgment, should not assume central importance in determining storage conventions. The State Police has been required to provide records in discovery in database or spreadsheet format. We generally do not supply word processing documents in electronic format, except that we do convert the records to PDF format and send them out. This procedure works well, except that storage capability problems sometimes emerge. We do not want to supply electronic records that can be manipulated by technology experts to reconstruct prior versions from the version supplied. Significant concerns have been expressed over the providing, in litigation discovery or through FOIL, large amounts of electronic data. For instance, our Collision Reconstruction Unit is sometimes called upon to produce electronic data from its total workstations. An unscrupulous litigant could massage the data and present it in a court in a manner that would be difficult for the State Police expert to recognize in the hurried atmosphere of a courtroom. Based on experience in the past few years, the State Police would not be confronted with compatibility issues with litigation support software if the state were to choose one particular document format.

**6. New York State Office of Children & Family Services - Commission for the Blind and Visually Handicapped:** *Wednesday 1/9/08 10:04 AM*

Concerning Part II question # 12 - Interoperability:

In the Spring of 2007 OFT pushed out Microsoft Office 2003 to all of our OCFS PC's. We found that people using screen reading software, like JAWS, could not read Word 2003 documents. The default view for documents in Word 2003 is set to "Print Layout". The Print layout appears to be a graphic image of the document. There was no way to set the default view in Word 2003 to "Normal". We attempted to modify the Normal.dot template to force Word 2003 to open in "Normal" view, but this did not work. I was able to find a modified Normal.dot template on a web site. This modified template used some VBA code to force the Normal.dot template to open in "Normal" view. I then had to replace the Normal.dot template with the modified Normal.dot template for those people using screen readers.

**7. The Smithsonian Institution:** *Thursday 1/17/2008 7:21 PM*

**Question 2.** The State should make access to its records possible for physical and virtual researchers. Its records should be accessible in properly controlled environments both in digital form viewable over the Internet and in its original form viewable at the State Archives facilities. Internet access ensures that researchers can access this material from college and university campuses, personal residences, offices, and elsewhere.

Identification and location of desired records should be facilitated with online search strategies that include keyword searching, advanced Boolean searches, full text searching, and proximity and relevancy ranking functions.

**Question 3.** The State should establish a standard of accepted digital formats for records retained for more than five (5) years. This list of standard formats can be used in two ways: first, prescriptively so as to require record depositors to supply their electronic records in a format specified by the NYSA; and second, as a specification of the formats that NYSA considers to be preservation-quality digital file formats and which NYSA will commit to ongoing and long-term readability.

To address the question now, this standard list will serve to limit the programs needed by an online visitor to a consistent set. Alternately, or in complement to the former, the NYSA can make the necessary file format readers accessible to online visitors through a separately secured online interface, such as Citrix.

**Question 4.** To encourage appropriate government control of its electronic records, NYSA should ensure that all record categories received are on defined and enforced records disposition schedules. Access to the records must take into the account and rights or restrictions that apply to the records requested. Use of an enterprise-level Electronic Records Management System (ERMS) can serve as an effective foundation for this requirement. Other national and state archives are taking this approach, particularly where the state or national archive bears some records management responsibilities for the different governmental agencies. Ideally, the depositor will manage its digital records with an ERMS and transfer well-managed records to NYSA at an appropriate later date.

**Question 5.** To encourage choice and vendor neutrality when creating, maintaining, exchanging and preserving its electronic formats, NYSA should:

- a. adhere to professional procurement standards, e.g. RFI, RFQ, RFP issuances.
- b. stipulate adherence to digital recordkeeping, records management, and digital preservation best practices as standards for equipment and/or service functionality
- c. document all rationale and other justification for defining a limited set of preservation digital file formats and ensuring that said rationale is based on unbiased factors such as data file format longevity/obsolescence characteristics and storage media lifespan and integrity capabilities.

**Question 6.** Life cycle stage-specific mechanisms and processes are recommended to guard against inherent vulnerabilities. The nature of these mechanisms should not be unlike mechanisms already in place for non-digital records.

- a. Declare and classify a record on its creation. Safeguard the record against later corruption (accidental or willful). This can be done efficiently if the depositor is using an ERMS in its standard business operations activities.
- b. Maintain the declared records in secure, tamper-evident computer environments and architectures. Log all actions taken that affect the storage systems involved. It is assumed that the records are being maintained in one or more secure and well-controlled data center.
- c. Apply best practices IT disaster recovery and security practices at every stage of the lifecycle.
- d. Document all record exchanges to verify that the recipient has gotten the records noted on a manifest, in the condition specified on the manifest, the names and affiliations of all parties involved and the roles they played in the transaction(s).
- e. Perform quality control checks regularly and, during preservation tasks, frequently.
- f. Conduct regular record inventories and preservation assessments of both the records, the storage environments, and physical handling practices of the storage media and environment.
- g. On disposal, verify no other reasons require the further retention of the records to be disposed of. Use a trustworthy record disposal service and audit regularly to verify that they are performing the disposal service to the satisfaction of the NYSA.

**Question 7.** How should the State address the long term preservation of its electronic records? What should the State consider regarding public access to such archived content?

Several different preservation strategies have been defined by nationally and internationally recognized experts in the past two decades. Over time, most digital archival operations use a blend of two strategies, emulation and migration. Long term preservation formats must have extended life expectancy to reduce the likelihood of lost access common to proprietary software formats and applications. Therefore, standards-based data formats are preferred in circumstances where a nonproprietary, standard data format supports all of the significant values of a given digital record. For example, use of a well-structured Tagged Image File Format (TIFF) is preferred over a proprietary image format because the TIFF's ongoing accessibility is not dependent on a proprietary software vendor that will likely not exist fifty years from now.

Leveraging the State's financial investments, physical storage should leverage enterprise-level, tiered storage architectures and use components constructed for archival use. An online catalog maintains the intellectual control of all archived records regardless of location and availability. Requests for records are made through the online catalog which then retrieves the records in manners determined by State-defined criteria. For example, a request should be screened for appropriate security clearance of the requestor vis a vis the material requested. Little used

record sets will normally be stored in an off-line state. A request for such materials must trigger retrieval of the off-line media and restoring it to network accessibility in order to fulfill the request. Type of record storage media should be determined by the frequency of requests for a given record set.

**Question 8.** [LEFT BLANK]

**Question 9.** The State should consider that electronic records are admissible in federal and state Courts as documentary evidence and are therefore equivalent to non-electronic records with regard to the State's obligations to keep and insure electronic records' integrity and reliability. Financial sustainability depends on strong records management practices at all levels. Periodic evaluations of the technological systems used in its electronic record archive must be performed to identify opportunities for cost-savings that may result from improved technology or similar factors.

**Question 10.** Regarding specialized data formats, the State should consult with organizations who already have experience handling those record types. Many organizations have experience archiving and preserving CAD files. Other organizations have experience doing the same with geospatial and GIS data (e.g. Edinburgh University). Experience with digital images, video, audio, multimedia is more common. It is suggested that, in an effort to maintain state of the art strategies, the NYS convene discussions of digital preservation experts according to record type category. For example, a convocation of digital preservation experts on geospatial and GIS data, another convocation for Computer-Aided Design and other blueprint/technical drawing formats. As the host for such an exchange of experience and expertise, the State will enrich its own knowledge of these areas in much the same manner as it is doing through this RFPC.

**Question 11.** The State should consider that there is a danger of reduced funding in the future and lobby effectively to protect and safeguard the necessary financial and other resources required. Because these are electronic records and are therefore inextricably linked to IT budgets, care must be taken to ensure that the electronic records archive can be sustained from one administration to another to another.

**8. New York State Office for Temporary and Disability Assistance: Friday 1/18/2008 9:58 AM****Part I - General Questions****Question 2. What mechanisms and processes should the State of New York establish for accessing and reading its electronic records in order to encourage public access to those records?**

A needs assessment and project plan must be developed, based on responses to this survey, to respond to this question. Any resulting processes would need to be developed in the context of existing processes, such as F.O.I.L.

**Question 3. What mechanisms and processes should the State of New York establish for accessing and reading its electronic records to encourage interoperability and data sharing with citizens, business partners and other jurisdictions?**

Same response as #2 above. We would add that efforts led by the OCIO, in partnership with a cross agency team, to advance NYS agency open, enterprise-grade standards for electronic document format and data sharing technology standards would be welcomed.

**Question 4. What mechanisms and processes should the State of New York implement to encourage appropriate government control of its electronic records?**

Same response as #2 above.

**Question 5. What mechanisms and processes should the State of New York consider for encouraging choice and vendor neutrality when creating, maintaining, exchanging and preserving its electronic records?**

It would seem that our only option would be to follow existing law and agency regulations. The agencies already have and follow contract regulations and processes that encourage competition and protect choice. OGS would likely be the lead agency in any state efforts to change the contracting process.

**Question 6. Are there mechanisms and processes the State of New York should establish that are specific to the management of its electronic records in its various life cycle stages (creation, maintenance, exchange, preservation and disposal)?**

Yes. This should be done in the context of existing ESRA and State Archives & Records Administration (SARA) standards, guidelines and technologies.

**Question 7. How should the State address the long term preservation of its electronic records? What should the State consider regarding public access to such archived content?**

This should be a joint undertaking led by the Office of the Attorney General (OAG). We would encourage the OCIO, in partnership with the OAG and a cross-agency team, to develop and promote enterprise guidelines and standards in this area. Where possible, related technology

service offerings should be provided through OCIO/OFT. As stated above, standards in the areas of controls, security roles, and retrieval processes would be necessary.

**Question 8. What changes, if any, should be made to the government records management provisions in New York Statutes? (Please reference those laws which are cited here: [http://www.archives.nysed.gov/a/records/mr\\_laws.shtml](http://www.archives.nysed.gov/a/records/mr_laws.shtml) ).**

The primary change would be that the statutes must fully address electronically stored information.

**Question 9. What constraints and benefits should the State of New York consider regarding the costs of implementing a comprehensive plan for managing its electronic records?**

Main constraints would include budget and recognizing each agency's unique requirements, including security needs and costs.

**Question 10. What should the State of New York consider regarding the management of highly specialized data formats such as CAD, digital imaging, Geographic Information Systems and multimedia?**

OCIO could provide guidelines and standards and offer technology services, similar to the approach taken with the Open Meetings Law. Providing format standards and archiving guidelines with above technologies would be beneficial for the enterprise.

**Question 11. What constraints and benefits should the State of New York consider regarding potential savings or additional costs associated with the management of defined electronic record formats?**

Ensure a cost-benefit analysis, budgetary constraints, allocations, controls, and oversight are all in place, and defined metrics available to measure desired outcomes. We do not anticipate any potential 'savings', other than on a long-term basis.

**Question 12. What existing policies and procedures in the private or public sector for the management of electronic records would be appropriate for the State of New York to examine? Please cite specific examples**

Industry and government agency best practices (including other states) should be solicited, such as DOB's record retrieval manual, existing imaging solutions by Workman's Compensation and OTDA, OFT's NYSeMail practices for archiving, etc. OAG has a workgroup underway investigating this area.

**Question 13. Are New York State's existing standards, regulations and guidelines regarding records management adequate to meet the challenges of electronic records retention? How should these standards, regulations and guidelines be changed?**

No. This area should be thoroughly evaluated and overhauled, under the leadership of appropriate agencies, and standards and guidelines developed and disseminated. Perhaps NASCIO has guidelines in this area.

**Question 14. What else should the State of New York consider about this subject?**

NYS OCIO should also consider the efforts of the OAG to define e-discovery preparedness guidelines, and provide e-record filtering tools and solutions to meet agency needs.

OCIO should also prioritize efforts for providing a centralized secure file transfer management solution for the agencies.

At this time, a core team in OTDA Division of Legal Affairs (DLA) is looking at current gaps in OTDA record retention policies and procedures. An agency-wide work team will next begin to define requirements, examine related technology solutions, and create an e-discovery preparedness plan. This OTDA work group will work closely with the OAG work group.

It is the expectation of OTDA that the OAG should be the lead agency developing record retention and e-discovery guidelines for all state agencies, and the OCIO should have the lead role in providing the related technology services and solutions.

**Part 2 - Detailed Questions**

OTDA feels it would be premature to respond to the Part 2 Detailed Questions at this time, as further analysis and time are needed to accurately examine and define agency requirements.

**9. New York State Department of Environmental Conservation: Friday 1/18/2008 1:53 PM****RFPC Response - New York State Department of Environmental Conservation****Part I**

**Question 1).** [CONTACT INFORMATION REDACTED]

**Question 2).** In order to promote availability of electronic records to the public, the State of New York should establish mechanisms and processes that would encourage easy access in a readily available format. Most records should be maintained in a format such as Adobe .pdf, which is widely accepted and not easily manipulated. The format would preserve the original document. Electronic records that are not subject to FOIL or discovery exceptions should also be made available on-line. Procedures must be developed internally within each agency to preserve records in specific formats and make the stored records available, for each agency will have records created, stored, and maintained differently. However, model procedures would be welcome. Lastly, the mechanisms and processes established should be “user-friendly” for the general public, and technical language should be refrained.

**Question 3).** To encourage interoperability and data sharing, it is imperative to have each agency electronically store public records in a widely used format that can be accessed in a “read-only” format to preserve the original document. Processes should easily distill publicly available documents from agency datasets into widely readable formats.

**Question 4).** Although opening public access to non-protective records is a beneficial goal for good government, each agency must exercise an element of control over its electronic records. There are many issues relevant to the open access of government records. First, the agency must protect confidentiality. Agencies hold records containing information from external individuals and entities whom are regulated by or have interacted with the agency. Records held by state agencies often contain business trade secrets and/or commercial information which, if released, could be harmful to a private entity. Internal confidentiality must also be maintained. Personal information from employees and state contractors must be preserved in confidence. Draft documents should not be made public until approved as a final product, since they are subject to change. Inter- and intra- agency memoranda and correspondence relating to strategy also should not be released. Other information relating to security or infrastructure must be identified, protected and kept confidential. Metadata should also be secured. If an agency faces potential litigation, it must maintain the metadata of the record in question, but the metadata should not be made readily available to the public. Strict statewide guidelines and oversight for the above categories of electronic records should be prepared in model form for usage by each agency, with the ability to be curtailed then adopted to their specific needs.

**Question 5).** Currently, there is a process in place for procuring vendors. It encourages choice and vendor neutrality. Ethics rules prevent the incurring of favor upon any one vendor for personal gain.

**Question 6).** OFT should review and promote statewide guidance or model procedures for the management of electronic records. Having model procedures would create uniform regulations, reduce legal issues regarding whether a document should be maintained. Without a statewide

guidance system, our Department must develop its own policies, which may be very different from the policies of another agency. One agency may develop a retention schedule for records which may vary from the practice of a sister agency. It is presently conceivable for two agencies to hold the same record, yet destroy it in their records at different times.

Secondly, without statewide oversight, agencies are left to determine what software or other products are beneficial to them. This Department hired a private contractor to review its present record creation and retention tools, and to study the needs of the subsections of the Department. A uniform bundle of tools made available to state agencies may assist in determining what is best used to preserve records, and encourage intra-departmental sharing of records and easier public dissemination of information.

**Question 7).** There are many considerations that need to be addressed by the State for long-term preservation of documents. The same issues relating to the preservation of hard copies are also concerns when maintaining electronic records. The most obvious issue is the limits of space. Although electronic records may take less physical space than hard copies, memory space is a limited quantity. Storing data electronically also creates an issue of maintenance and energy. Storage equipment also creates heat, and must be housed in regulated environments. Security is another concern. Where documents are stored, and how they are accessed inherently create security issues for the maintenance and dissemination of those records. Accessibility, as previously discussed, is a third factor that needs to be considered when creating policies and procedures for the maintenance of electronic records.

**Question 8).** Changing statutes to address agency record retention is much different than creating policies. Statutes often take a long time to be developed and to ultimately pass through the legislature and the governor. Therefore, in order to prevent multiple amendments and specific exceptions within legislation, governing statutes need to remain broad. Interpretation of a regulating statute should be performed by each individual agency, with guidance presented by OFT. At this time, this Department is not requesting any new legislation for record retention.

**Question 9).** The implementation of a comprehensive plan for managing the State's electronic records will be costly. To be comprehensive, a statewide plan should review all of the issues outlined above, including legal issues of retention and dissemination, technical issues of products and maintenance, and policy issues including record retention schedules, uniform formatting, and availability to public information. However, the State should be more concerned about the cost of NOT effectively managing its electronic records. Each agency has been left to devise its own policies, and it is likely that without guidance, they may not be in full compliance with recent case law. The State must meet its legal obligations at all costs.

**Question 10).** The State should consider the same issues presented previously for the management of highly specialized data formats. Additionally, the State must consider potential proprietary nature of the data.

**Question 11).** See reply to #9.

**Question 12).** In its review of managing its electronic records, the State should examine the policies and procedures presently in existence at each Department. Additionally, there is ample case law on the subject that should be reviewed and addressed, including the definition of a "document" and what material that is discoverable in litigation [see, e.g., Delta Financial Corp. v.

Morrison, 819 NYS2d 908 (S.Ct. Nassau County 2006)], what should be maintained, who is liable if a document is not retained [see, e.g., Turner v. Hudson Travel Lines, Inc., 142 FRD 68 (SDNY 1991)], and ultimately sanctions to be imposed to a party who failed to maintain discoverable documents [see, e.g., Zubulake v. UBS Warburg, LLC (IV), 220 FRD 212 (SDNY 2003), see also, Zubulake (V), 229 FRD 422 (SDNY 2004)]. The Federal Rules of Civil Procedure have been amended to broaden discovery rules to specifically include electronically preserved documents [See generally, FRCP Advisory Committee Comments R.34]. Recent decisions have also reviewed issues of the authentication of electronically preserved documents during motion practice in court. See, Lorraine v. Markel American Insurance Co., 241 FRD 534 (D.Md. May 4, 2007). All of these legal issues need to be addressed when preparing a statewide set of policies for records retention.

**Question 13).** New York State's existing standards, regulations and guidelines are not adequate to meet the challenges of electronic records retention set forth above in reply to #12.

**Question 14).** The State should consider the need for consistency across state agencies in identifying resources for effective implementation of an electronic records management system. Such a system should address technical, legal, and public concerns, as set forth above. Other states should be consulted as possible resources for model policies and procedures, and to determine what products are most effective to satisfy the needs of the State of New York.

## Part II

**Question 1).** The need for distinction is pertinent, however the depictions given are not meaningful or easily distinguishable.

**Question 2).** Yes.

**Question 5).** Control should be based on data classification standards (see recent proposed OCSCIC data classification policy and standards).

**Question 48).** Yes, this is a legitimate concern. ANY intellectual promises made should be evaluated and presented to legal counsel for advice.

**Question 49).** Intellectual property issues relate to property rights: License, usage, and ownership. All of these issues should be reviewed and discussed with a vendor prior to accepting any one format. The State could face litigation relating to intellectual property issues if the State exercises property rights it does not have legal right to enjoy.

**Question 50).** To best protect itself, the State should hold a meeting with the vendor providing the specific format in question. Any acceptable purchase agreement or license to use a product should answer any of the intellectual property questions that would rise as potential issues. Concerns would only exist in the unknown: Where the State is exercising a usage of a format but never received approval from the owner of the format.

**Question 51).** See #50.

**Question 52).** The implications for record production that would arise from having chosen a specific document format would be logistical more than legal. The requestor of the discovery

materials must have reasonable access to their request. If they cannot read what is provided, the State may be required by a court order to reformat materials submitted in discovery. The State may also be in an embarrassing situation, including facing sanctions, even an adverse inference at trial.

**Question 53).** PDF is an acceptable format for its usability and the fact that it is widely accepted. However, it is not tamper proof. Although formatting documents into PDF is safer than maintaining documents in their original word processing format.

**Question 54).** To answer this question, one would have to compare specific litigation support software prior to making any purchase.

**Question 64).** It is unlikely that vendors will even do this. Question 65 is more appropriate.

**Question 66).** Yes.

**Question 67).** On the face this sounds like a reasonable and flexible suggestion, but would be difficult to implement. The cost of agencies investing in the “certified” software and then having to migrate would be overly burdensome and costly and use up valuable resources that could be applied to more critical needs. Provisionally setting a standard is not a good option for the state or the agencies.

**Question 70).** No, this is overly burdensome in already protracted process.

**Question 72).** Absolutely. The landscape is in flux right now between adoption of ODF and OOXML and waiting to see how this market plays out is wise. In the interim the state can work on steps to help agencies increase accessibility to the data and document resources they already have in place, assist with a more proactive approach to records management practices as well as data classification, all of which are the underpinnings for better access to records and information by citizens.

**Question 73).** A pilot would not be objectionable, however a wide range of entities would need to be involved in order to get valid comparisons for the various state organizations.

**10. Saratoga County Clerk:** *Friday 1/18/2008 1:54 PM*

NYS CIO/OFT – Part I

**Question 1.** [CONTACT INFORMATION REDACTED]

- Question 2.**
- a. The state should continually advertise its internet sites.
  - b. Fire walls and/or security should be maintained so that the integrity of the records are not at risk.
  - c. A text file (index system) should be available for easy searching of documents as well as the availability of the scanned document be available online
  - d. Online instructional manual on how to utilize the index/documents should be available
  - e. Documents should be provided either free or at a nominal charge

- Question 3.**
- a. We should review state/businesses/local government platforms.
  - b. The state should consider establishing standards and/or legislation to encourage Interoperability

- Question 4.**
- a. The State of New York could provide grants and/or a funding stream to encourage governments to take control of their electronic records.

- Question 5.**
- a. Bidding and/or RFP should occur.

- Question 6.**
- a. The State of New York should consider creating the record in electronic format when possible in a format that is widely used. This will allow easy access for its customers, other employees and business partners. Creating in electronic means will also ease the burden of later scanning the paper into the system, reduce the use of paper, etc.
  - b. Long and/or short term maintenance of an electronic record should be considered with plans for the next computer update fixed as well as an established disaster plan in place. Storage of electronic medium should be established.
  - c. When exchanging electronic records, security should be of paramount importance. Also consideration should be given to back end of programs for speed, etc. of exchange.
  - d. Record disposition could be fixed at beginning of the creation of the electronic record by placing a disposition date in a field created for this purpose and yearly purging those records that may be disposed of. Preservation of an electronic record could be kept in various mediums (i.e. microfilm, electronic) and placed in various locations a minimum distance apart (i.e. NY and Kansas in underground storage).

- Question 7.**
- a. The State should be prepared to migrate electronic records to the newest computer formats when they are available. The State should consider various mediums and at least two storage locations for safety of records.
  - b. The State should consider indexing all archival content and should provide as much access to the public as possible. In Saratoga County, we have indexed all permanent record series from every town, village and city and various county departments. Our residents can locate records they would like to view by first checking an online index and saving themselves countless hours of research. Protecting the archival content is also a serious consideration in making the records available to the public. Firewalls and security are a must. Also compatibility for public to access records is important.

**Question 8.** The acceptance of electronic signatures for recording real estate documents should be considered.

**Question 9.** a. The up front cost can be somewhat staggering, yet in dealing with a record in electronic format, there are no additional costs for physical storage, boxes and shelving. In addition, there is no further need for personnel to maintain and/or preserve or protect paper so that the record can continue to be available to the public. In addition, there is no further concern about loss of the paper and/or original copy that cannot be replaced. It may be cost prohibitive for the state to look at all of its records (past and existing) to be transferred and/or created in electronic format, a priority list of permanent records and documents should be established for the eventual transferring of permanent paper records to electronic format (either computer based or microfilm).

**Question 10.** The State of New York should consider if these programs can be integrated and/or layered with the necessary information within that platform.

**Question 11.** Conversion to new formats when necessary, security, computer crash.

**Question 12.** a. Interoperability of systems to connect.  
b. Which electronic formats should be used for short term and long term preservation of electronic records.  
c. Storage questions  
d. Security of records - look at a suggested filing structure  
e. System maintenance should be considered  
f. Backup recovery  
g. Implementation of support and training/or "How To Manual"

**Question 13.** a. The State should consider putting more emphasis on Disaster Recovery Plans.  
b. Offsite storage of electronic medium should have more specified guidelines (i.e. distance from original site where record is found)  
c. Acceptance of Electronic signatures should be further considered.

**Question 14.** Connectivity to Federal as well as local services.

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## Part II

**Question 1.** Yes

**Question 2.** Yes

**Question 5.** The government should address records that compromise the identity and/or privacy for an individual.

**Question 6.** Yes – but perhaps consideration can be given to interoperable software that connects the main frames with the end user and not that each software system need to be created interoperability. I am addressing proprietary software only.

**Question 7.** I believe that open standards can be utilized and maintained but still maintained by a commercial organization and believe that we should not be excluding software commercially written and/or maintained. Again I'm addressing large data base computer systems.

**Question 15.** The problem the state should be addressing throughout this study is: How to allow as many people as possible to view/secure online documents and at the same time, preserve and protect those documents for the future.

**Question 16.** 1% to 2%.

**Question 25.** I believe that office suite software is used by most businesses/individuals but for large database needs (such as a county clerk's office with millions of pages of documents plus a text component), our main computer needs would not be adequately addressed through office suite. It does however meet our daily needs. I don't believe it would stifle competition in the IT market. I would, however, be concerned that we do not set a single format to suit every application without consideration to large computer systems (such as mine).

**Question 26.** I find this to be a tough question and perhaps the office of the State Comptroller should be considered for review of mandated applications while performing our general audits.

**Question 64.** The source codes should be shared

**Question 65.** Yes

**Question 66.** It depends on the record. If it is a record that the public has interest in viewing, it should be placed in an open format immediately. If the public has less need or desire to view the record, conversion at a later date to a different format could be considered.

**Question 67.** Yes

**Question 68** a. Yes. A change of regulation standards would directly affect the format used by software vendors.

b. Financial incentives would be helpful if they were available but great consideration should be given relative to the fairness of this approach. Ample time for vendors to make the switch is (to me) more important not only to the vendor but the customer. Customer should be able to get full monetary value of existing computer system before having to migrate (maybe a 10 year maximum time frame is appropriate).

c. Lack of funds and a fair approach of distribution of whatever funds are available. Concerns of competing computing companies receiving monetary incentives.

**Question 69** a. If incentives are provided as stated in 68, and funds are available, this would provide some fairness to the approach. I believe the need for incentives is less, if the state would just provide a realistic time frame for private business/government to adhere to.

**Question 70.** Yes.

**Question 71** a. This is always an option.

b. If the state recommends no changes, it would not be taking a proactive standard to protect and/or make available electronic documents most readily available to its citizens. By taking no

action, the state would be allowing private enterprise to drive which software formats would be selected, which perhaps would get to the same end (as we've seen with Microsoft).

**Question 72.** a. Yes

b. The problem with a pilot program is that different state departments would have differing needs and because it worked in one department, does not mean that an ODF Office Suite software would be all encompassing for all state departments.

c. Perhaps a pilot program could be conducted in two departments that have very different electronic records needs.

**Question 73.** I believe the state should migrate all data to a new format unless they can microfilm data that is not widely used by the public. When initializing the use of electronic records, a decision should be made at that time that migration is a must. Keeping outdated hardware is risky to forever having that information available to the public.

**11. New York State Office of Children and Family Services: Thursday 1/18/2008 2:02 PM****Part 1 General Comment**

To facilitate a comprehensive review of each application and data storage need it is suggested that this survey or subsequent surveys attempt to utilize an electronic means to collect and report and the Public Comment. In fact, aggregating this information in a compiled manner would be helpful for later and subsequent reviews.

In developing an electronic record policy for New York State, the state should ensure that the information made available to the public is equally accessible to all member of the public, including individuals with disabilities. Section 508 of the Federal Rehabilitation ACT of 1973 lists the electronic and information technology standards for the federal government. This standard requires that all systems developed to create, maintain, exchange or preserve electronic records allow individuals with disabilities access to the information on a comparable level as an individual who in not disabled. New York State should adopt similar standards when creating an electronic records policy.

**Question 1. CONTACT INFORMATION: [REDACTED]****Question 2. *What mechanisms and processes should the State of New York establish for accessing and reading its electronic records in order to encourage public access to those records?***

Any process must include an ability to delineate what is public information and what is not; consider FOIL requirements; and have common definitions of records and documents that is consistent with existing statutory definitions.

Mechanisms and processes for accessing and reading electronic records to encourage public access to records should include compatibility with software (such as JAWS and Window Eyes) which enables access by legally blind individuals and individuals with other disabilities.

**Question 3. *What mechanisms and processes should the State of New York consider for encouraging choice and vendor neutrality when creating, maintaining, exchanging, and preserving its electronic records?***

Agree on a common platform; consider cost to consumer and State; Abode Reader has worked well with the OCFS CMS application which has 3500 users and several hundred interactive documents; also need the ability to lock/secure the documents.

**Question 4. *What mechanisms and processes should the State of New York implement to encourage appropriate government control of its electronic records?***

Assess the mandates that are associated with the record; assess the security of data within each record so that it is not exploited, such as, but not limited to, federal ID and Social Security numbers; consider a common data storage "warehouse" (similar to the OGS paper storage); establish or standardize upon an off-site disaster recovery location; create standardized procedures, tools and formats for encryption of data and data classification

**Question 5. *What mechanisms and processes should the State of New York consider for encouraging choice and vendor neutrality when creating, maintaining, exchanging, and preserving its electronic records?***

The process needs to evolve to a point that all data is stored in a common format like "PDF" so that electronic storage can be easily accomplished; consider application compatibility; avoid anything that requires scanning because it consumes time and resources

Suggestion: for any document that doesn't need to be edited by an end user, have a plain text (for easy indexing, etc.) and a PDF version (for the people who want to see a finalized document). ODF would probably be preferable to Microsoft's OOXML format, which may or may not ever be publicly standardized and could be changed at a moment's notice by Microsoft.

Mechanisms and processes that all vendors must meet must include compatibility with assistive technology systems for the disabled.

**Question 6. *Are there mechanisms and processes the State of New York should establish that are specific to the management of its electronic records in its various life cycle stages (creation, maintenance, exchange, preservation and disposal)?***

Format compatibility is critical; access managements provisioning - see 2, 4, 5

**Question 7. *How should the State address the long term preservation of its electronic records? What should the State consider regarding public access to such archived content?***

Laws and regulations

Regular review to ensure that information is still accessible

Regarding cost—the least expensive and quickest solution may not have the best value for a long term approach; common policies on what is saved is important to avoid saving unneeded documents and records, this will reduce the long term storage costs; the ability to purge records at the appropriate legal time is important

The state should ensure that archived electronic records are accessible on an equal basis for all individuals, including individuals with disabilities.

**Question 8. *What changes, if any, should be made to the government records management provisions in New York Statutes? (Please reference those laws which are cited here: [http://www.archives.nysed.gov/a/records/mr\\_laws.shtml](http://www.archives.nysed.gov/a/records/mr_laws.shtml)).***

Define what records should be kept; compare to the bond requirements; consider converting old documents to new technology; this topic has actually been addressed by General Electric in relation to all its buildings

**Question 9. *What constraints and benefits should the State of New York consider regarding the costs of implementing a comprehensive plan for managing its electronic records?***

Preserving the integrity of the data is crucial; formats are important but more critical is the integrity of the data and the definitions associated with the data dictionary

**Question 10.** *What should the State of New York consider regarding the management of highly specialized data formats such as CAD, digital imaging, Geographic Information Systems and multimedia?*

This is a very broad question and should consider all mandates and each agency policy; the State must also consider the security of such data where it concerns infrastructure or targets of interest to terrorists

**Question 11.** *What constraints and benefits should the State of New York consider regarding potential savings or additional costs associated with the management of defined electronic record formats?*

The regulations should attempt to standardize the retention this will require cross Agency mandates and federal mandated; this review should include an impact analysis of deleting records prematurely

**Question 12.** *What existing policies and procedures in the private or public sector for the management of electronic records would be appropriate for the State of New York to examine? Please cite specific examples.*

CSCIC

Federal requirements and efforts to initiate this activity at the federal level and in other large States

**Question 13.** *Are New York State's existing standards, regulations and guidelines regarding records management adequate to meet the challenges of electronic records retention? How should these standards, regulations and guidelines be changed?*

No

**Question 14.** *What else should the State of New York consider about this subject?*

Internet logs

Audit logs

Email (whether deleted or not)

Voicemail (whether deleted or not)

Instant messaging logs

## **Part 2: Detailed Questions**

**Question A1** *Are the distinctions described in Part I of this RFPC between the definitions of electronic data, documents, and records useful? Are there any specific elements or distinctions in those terms which CIO/OFT should be taking into account?*

Not addressed are audit logs, coding requirements

**Question B2** *Is the description in Part I of this RFPC of three types of access needed for electronic records – day to-day utility access; ancillary active record access; and historical access – a realistic and useful conceptualization of the main uses of electronic records? If not, please*

*describe with specificity recommendations for alternative methods for conceptualizing the study's issues.*

Sort records from the start as “foilable” or not

### **Question C. Government Control**

There were three specific statutes cited as relevant: the Personal Privacy Protection Law (secs. 91-99 of the Public Officers Law, or POL), the Information Security Breach & Notification Act of 2005 (sec. 208 of the State Technology Law, or STL), and the federal Health Insurance Portability and Accountability Act (Public Law 104-191 of 1996, or HIPAA).

The state statutes focus upon two problems: (1) the government’s tendency to collect ever larger amounts of personally identifiable data on the citizenry in the normal course of business, and the need to protect the security, confidentiality and accuracy of such data;<sup>1</sup> while, (2) simultaneously increasing the “user-friendliness”<sup>2</sup> of the process of disclosing such records to relevant agencies and the data subject,<sup>3</sup> upon a proper request. Sections 91-99 of the POL address that balance by limiting the amount of personally identifiable information that any agency should maintain in its records,<sup>4</sup> imposing a duty to secure such records, and by providing a method for data subjects to correct errors in their personal data. Section 208 of the STL adds additional safeguards to security and confidentiality by creating a duty for state agencies to notify New York residents of any security breaches in which data personally identifiable to them is implicated.<sup>5</sup>

The federal HIPAA statute’s purpose was to create national minimum standards for the protection of individuals’ health information,<sup>6</sup> and to create national standards for the electronic exchange of health information.<sup>7</sup> HIPAA also adds additional duties to the State’s obligation to ensure its

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1 Agencies have a duty to: “establish appropriate administrative, technical and physical safeguards to ensure the security of records;” “establish rules governing retention and timely disposal of records in accordance with law,” and to “designate an agency employee who shall be responsible for ensuring that the agency complies with all of the provisions of this article [sec. 94 of the POL].” POL, secs. 94(h-i).

2 An agency shall, “whenever a data subject is entitled under this article to gain access to a record, disclose such record at a location near the residence of the data subject whenever reasonable, or by mail.” POL, sec. 94(1)(k).

3 The agency, “within five business days of the receipt of a written request from a data subject for a record reasonably described pertaining to that data subject, shall make such record available to the data subject, deny such request in whole or in part and provide the reasons therefore in writing, or furnish a written acknowledgement of the receipt of such request and a statement of the approximate date when such request will be granted or denied, which date shall not exceed thirty days from the date of the acknowledgement.” POL, sec. 95(1)(a).

4 Each agency shall: “maintain in its records only such personal information which is relevant and necessary to accomplish a purpose of the agency required to be accomplished by statute or executive order, or to implement a program specifically authorized by law.” POL, sec. 94(1)(a).

5 “Any state entity that owns or licenses computerized data that includes private information shall disclose any breach of the security of the system following discovery or notification of the breach in the security of the system to any resident of New York state whose private information was, or is reasonably believed to have been, acquired by a person without valid authorization.” STL, sec. 208(2).

6 See the U.S. Department of Health and Human Services’ summary of the HIPAA privacy rule at <http://www.hhs.gov/ocr/privacysummary.pdf>; last visited January 9, 2008.

7 See Public Law 104-191 of 1996

electronic records are secure and, for covered entities, would require an additional level of scrutiny with regard to whether the proposed open document formats comply with an agency's duty to safeguard the privacy and security of its records. Since OCFS is not a HIPAA covered entity however, HIPAA's additional duties do not apply directly to OCFS. We should ask OFT to be mindful of the fact that not all state agencies that maintain health related information are HIPAA covered entities.

**Question C.3 “Does the use of particular office suite formats such as the Open Document Format (ODF) or Office Open XML (OOXML) raise any security or privacy implications and, if so, what are they?”**

A vote by the International Standards Organization (“ISO”) concerning fast-tracking OOXML to become a competing standard to Open Document Format (“ODF”) was held on September 4, 2007.<sup>8</sup> OOXML was not recommended for adoption, although there will be a meeting in February 2008 at which Microsoft (the originator of OOXML) will attempt to address the various national and institutional comments concerning various problematic issues with OOXML.<sup>9</sup>

Among the reasons for the ISO member entities' failure to approve OOXML as an open document standard, was that OOXML's implementation, according to Brazil, for example, created the possibility of security issues such as vulnerability to viruses and password breaches.<sup>10</sup> The Department of Defense and the National Institute of Standards and Technology (“NIST”) also cited OOXML security concerns and, in NIST's case, accessibility concerns, with their votes at the ISO.<sup>11</sup>

With regard to OCFS's business needs, there are certain types of records maintained by the agency that must remain confidential over extended periods of time, such as, but not limited to, adoption records and state central register reports. Use of an insecure document standard, therefore, would imperil the confidentiality of agency clients and related individuals to whom a legal duty of confidentiality is due. To the extent therefore that either document format may be insecure, or may represent a possibility of data corruption, it would not appear to be a good idea to transpose mission critical or confidential information into such formats.

Alternatively, irrespective of any security concerns that may be caused by adoption of either format, privacy and security concerns could arise from the process of mass-translating older records into new formats. If an agency has a significant amount of older records in proprietary and/or obsolescent file formats, one could imagine a circumstance where these old records would need to be mass-migrated to the new open formats, such as pursuant to an agency policy decision, or complex litigation, or even a massive FOIL request. If such a mass-migration was undertaken by outside contractors, or by temps, for an agency that handles a large number of

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8 See <http://www.theinquirer.net/en/inquirer/news/2007/09/05/what-microsofts-iso-loss-on-ooxml-means>, last visited January 8, 2008.

9 Id. See also <http://www.iso.org/iso/pressrelease.htm?refid=Ref1070>, last visited January 8, 2008.

10 See <http://www.itworldcanada.com/a/News/41c10c11-2ee9-4052-ba6c-93026ca1b1d4.html>, last visited January 8, 2008.

11 See <http://news.zdnet.co.uk/software/0,1000000121,39289033,00.htm>, last visited January 8, 2008. See also [http://www.itl.nist.gov/Updated%20NIST%20XML%20Fact%20Sheet\\_Sept20.pdf](http://www.itl.nist.gov/Updated%20NIST%20XML%20Fact%20Sheet_Sept20.pdf), last visited January 8, 2008.

documents that must be kept confidential, and large amounts of personally identifiable data, a process that involved non-agency employees handling agency records could pose significant privacy and security concerns. OCFS is not unique in this circumstance; any agency that requires criminal background checks of new employees may be in a similar situation.

**Question C.4. “Will accessibility to electronic records through the FOIL process be affected by adoption of either format, and if so, how? Will the rapidity of response required by recent updates to the FOIL law be affected.”**

There are at least three assumptions under which access to electronic records could be affected by adoption of either open document format. They are: (1) that the agency elects to print out records requested under FOIL, rather than providing an electronic copy; (2) that the agency provides requested records in electronic format, but does not convert its existing stored records into open format until a FOIL request; and (3) that an agency uses digital rights management/privilege settings and customized office suite applications for gathering data from non-pc systems in its normal course of business.

If the agency elects to print out records requested under FOIL, for records created under either open document format, there should be no impact upon accessibility or rapidity of response. With regard to records created in a proprietary format (e.g., Word™, WordPerfect™, Ami Pro™, etc.), there will be issues with translation (filtering) of the proprietary format into the open format that will require quality control of the final product. As a practical matter, assuming that the agency’s open document-compatible office suite can translate the older record formats, there will be an investment of time necessary to open and translate, or open and print, such older records. Additionally, because of the potential for translation errors, it will be necessary to examine the printed records for conformity to the format and content of the translated records. Therefore, it is possible that adoption of either open document format could hinder a rapid response by an agency to a FOIL request.

If the agency elects to transfer records in electronic format, and converts its older proprietary format records to either open document format, or to another format such as PDF/A, FOIL response speed could be affected, as could record accessibility. In the case of conversion of a record from a proprietary or obsolescent file format to an open format, as with the conversion process leading to printing out the records, before they can be sent to a FOIL requestor, all converted records will need to be examined for conformity to the original record because of the potential for translation error. Additionally, at this stage of the open document format development process, there appear to be limited assistive technology options to make records usable by the visually impaired, which might create a significant loss of accessibility for such populations to agency records.

There is also the challenge of rights-management issues and custom applications. It is a widespread practice at the agency to have rights-management policies and/or settings upon the data it maintains. OCFS’ CONNECTIONS system, for example, has an extensive system of rights-management and access-management policies in place to protect confidentiality and client privacy. Such rights-management and access-management policies may be widespread on individual records throughout the agency, although it is unlikely that a systematic analysis of such a possibility has been conducted to date. Conversion to open document formats, whether done on a case-by-case basis or in bulk, implicates the need to migrate any existing access and rights-management policies to the new formats, and to be certain that any such policies remain intact for

internal use and on records that are transmitted in response to a FOIL request. With regard to custom applications, it is not uncommon to have database or spreadsheet applications custom-coded to gather, manipulate, or display data from data repositories on mainframes or enterprise-wide servers. To maintain such functionality for end-users within an agency, such custom-coded applications will need to be migrated to open document office suites, and put through the same development and testing process as the original applications, which could likely slow down any FOIL responses that are predicated upon using such applications.

Finally, it is important to note that CONNECTIONS has an extensive system of custom programmed Word™ templates built into it to enable the entry of information by client entities. Conceivably, the standardization process would require the re-programming of all such templates in CONNECTIONS, and at this and other agencies.

**Question C5. “In terms of appropriate ‘government control’ of electronic records, what factors or concerns should the State be addressing?”**

To the extent that ‘government control’ refers to the security and privacy of individual records created by office suites, there appears to be little reason to presume that ODF or OOXML would be inherently less protective of privacy and security, provided however that there are two caveats to that statement. First, as noted above in C.3, both DOD and NIST cited some security concerns with OOXML in their initial reviews of the proposed standard. If such concerns were not to be addressed, that could pose challenges to appropriate government control. Second, as noted in C.4 above, for agencies using rights-management systems in their records, if such rights-management policies cannot be replicated in the open document formats, that could also pose security and privacy challenges.

It is reasonable to suggest that each of the State’s agencies and departments could have substantially different day to day business needs for document level security and confidentiality. Therefore, a government-wide needs assessment focused upon security and privacy would provide the State with the empirical data to determine how any security shortcomings of either the ODF or OOXML formats should be weighted in the standards-setting process. It would also be logical to examine, on a case-by-case basis, the difficulty in maintaining the security and privacy of records for an agency whose mission requires it to exchange large amounts of records with third-party entities that may or may not be able or willing to change their formats to ODF or OOXML. Furthermore, if third-parties choose not to adopt the new standard document formats, the State would need to have in place a secure and confidential process for converting such documents that would need to be maintained by the State as records.

ISO comments: Should there be a central repository or have each agency maintain their own records or a combination of these? Should be coordinated with data classification.

**Question E8 For State agency respondents in particular: What percentages of your electronic records (using the term generally) consist of office suite records? What other types of electronic records, such as those in online information systems, GIS systems, etcetera does your agency create? What percentages do those other records consist of? How did you determine this?**

20%  
Legacy

Cobol

Oracle

Regarding the State Welfare Management System (SWMS): Curam

“Other” types of electronic records: The Commission for the Blind and Visually Handicapped maintains, under New York State law, a Register of Blind Individuals, in Access format. It is also developing an electronic caseload management system in XML format to replace an existing electronic caseload management system. It is difficult to estimate what percentage these records consist of.

**Question E10. Will the usage of ODF among those individuals and entities with whom the State interacts be so great that failing to provide the NYS workforce with the capability of using ODF will cause NYS interoperability problems? If so, if the State did not adopt the ODF format, what would be the best method to ensure interoperability with ODF documents received by the State from others?**

Probably

**Question E12. Interoperability**

a) In addition to interoperability with assistive technologies for the disabled, the State also needs to be concerned with the ability to exchange data, on a program level, with the federal government and with other states.

In the spring, of 2007 OFT pushed out Microsoft Office 2003 to all of our OCFS PCs. We found that people using screen reading software, like JAWS, could not read Word 2003 documents. The default view for documents in Word 2003 is set to "Print Layout". The Print layout appears to be a graphic image of the document. There was no way to set the default view in Word 2003 to "Normal". We attempted to modify the Normal.dot template to force Word 2003 to open in "Normal" view, but this did not work. A modified Normal.dot template was available on a web site. This modified template used some VBA code to force the Normal.dot template to open in "Normal" view. It was necessary to replace the Normal.dot template with the modified Normal.dot template for those people using screen readers.

**Question F. Focus of the Study**

OCFS is currently unable to perform these functions within its own Agency or for its own business partners much less for the “public at large.”

**Question F15. What is the “problem” that this study should be addressing? Please define with specificity exactly what the State should be trying to solve.**

Lack of consistency

Possibility of data no longer being accessible due to outdated storage choices

**Question H23. The need to re-write this state agency unit’s custom applications software, developed by an IT specialist vendor (a caseload management system) is not immediately quantifiable.**

**Question M39** *What are the key issues which CIO/OFT's study should be addressing concerning electronic records and assistive technologies?*

Requiring a plain text version of every document posted/archived might be the best way to assist those with sight challenges. Caution should be used when forcing the end-users to only buy screen reading software from one vendor because we pick a specific format (e.g., if PDF files are reliably screen readable, but only with software that runs exclusively on Microsoft operating systems, we would indirectly be forcing the end user to buy Microsoft software, even though we'd chosen a non-Microsoft controlled document format).

Key issues to be addressed concerning electronic records and assistive technologies:

- a) File formats must be compatible with current and futures assistive technology software (e.g., screen reader software such as Jaws or Window Eyes);
- b) The NYS Chief Information Officer (CIO) should establish an advisory committee on assistive technology comprised of specialists from not-for-profit and for-profit organizations to provide on-going input on current technologies and future directions for assistive technology.

**Question M40.** RTF and Word documents work best with screen readers like JAWs or Window Eyes. These software packages can read PFD documents but the results are poor quality unless the documents have been mapped prior to reading. Long term developments in this field would best be addressed by a standing committee, as recommended in #39, above.

**Question M41.** Yes, provided the ODF documents were converted to and maintained in a format compatible with assistive technologies for disabled users.

**Question M42.** Yes, such an initiative should be consistent with the Federal Rehabilitation ACT of 1973, Sections 508 on Electronic and Information Technology. An advisory committee, as recommended in #39, above, would be the best source of particularity on this topic.

**Question M43.** *Who are the relevant stakeholders most conversant with issues related to document formats and assistive technologies?*

Commission for the Blind and Visually Handicapped  
State Education Department's VESID  
Office of Mental Retardation and Developmental Disabilities  
Office of Mental Health

Relevant stakeholders most conversant with issues related to document formats and assistive technologies (*Please note: this listing is limited to the experience of the Commission for the Blind and Visually Handicapped*):

Assistive Technology Center Association for the Blind and Visually Impaired – Goodwill  
422 South Clinton Avenue  
Rochester, NY 14620  
716-232-1111

Assistive Technology Center  
Aurora of Central New York  
518 James Street  
Syracuse, NY 13202  
315-422-7263

Assistive Technology Center  
Northeastern Association of the Blind  
301 Washington Avenue  
Albany, NY 12206  
518-463-1211

Assistive Technology Center  
Helen Keller Services for the Blind  
57 Willoughby Street  
Brooklyn, NY 11201  
718-522-2122

Assistive Technology Center  
Jewish Guild for the Blind  
15 West 65<sup>th</sup> Street  
New York, NY 10023  
212-769-6200

Assistive Technology Center  
Lighthouse International  
111 East 65<sup>th</sup> Street  
New York, NY 10022  
212-821-9200  
Center for Assistive Technology  
University at Buffalo  
322 Kimball Tower  
Buffalo, NY 14214  
716-829-3141

EVAS  
39 Canal Street  
Westerly, RI 02891  
800-872-3827  
[sswerdlick@evas.com](mailto:sswerdlick@evas.com)

Libera  
1509 Buffalo St. Ext.  
Jamestown, NY 14701  
716-665-2800  
[abpc@libera.com](mailto:abpc@libera.com)

**Question O.48.** *“Is this [i.e., certain entities’ concern that certain vendor promises not to sue software providers implement certain electronic record formats are not as comprehensive as competitors’ similar promises with respect to open document formats and office suite software] a legitimate concern? Are there other IP promises which CIO/OFT should be evaluating besides the Open Specification Promise and the Open Document Patent Statement?”*

In the absence of existing or settled litigation, any answer to this question is necessarily theoretical. Both Microsoft, with regard to its proposed OOXML standard, and Sun, with regard to its ODF standard, have published promises not to sue entities creating software implementing the relative standards.<sup>12</sup> A statement made by a corporation on its website, such as these, is most likely without binding legal effect, absent at least some additional elements of a contract. Additionally, there is no practical bar to either company unilaterally changing the terms of the promises made on their respective web sites,<sup>13</sup> thus revoking the “irrevocable” promises not to sue. The agency could, of course, develop legal theories to test the efficacy of the respective vendors’ “irrevocable” commitments not to sue for infringement; however it would probably be useful to limit the risk inherent in such an approach. The State is a sophisticated negotiator and a volume buyer of office suite products and other products created by Sun and Microsoft, which could allow it to extract additional binding promises from the companies that could limit its risk in this area.

With regard to the question of whether there are other IP promises that CIO/OFT should be evaluating, both Sun<sup>14</sup> and Microsoft<sup>15</sup> have made a number of promises not to sue with regard to at least some of their respective intellectual property. Although Sun has made more of its software open source than Microsoft has, thus limiting risk with regard to infringement, past behavior should not be the only predictor upon which the State should forecast future performance. Sun or Microsoft’s track record in adhering to their respective promises not to sue are valuable data points, but a shift of the magnitude contemplated by OFT’s request for comment requires more certainty.

**Question O.49.** *“Are there other intellectual property issues which software providers or users should be concerned with in relation to either or both the OOXML and ODF formats, and if so, what are they? Is there any possibility that the State, as an end-user of software, could face litigation over format-related intellectual property issues?”*

As a simple end-user of software, presumably that of software implementing the open document formats, the likelihood that the State could potentially face litigation over intellectual property issues is relatively low. If the State, however, paid to have a developer develop custom applications implementing open document standards, and if such implementations infringed patents and the promises not to sue referred to above were withdrawn, then the State could be subjected to litigation.

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<sup>12</sup> See <http://www.consortiuminfo.org/standardsblog/article.php?story=20060126112043223> for an analysis of the competing promises; last visited January 9, 2008.

<sup>13</sup> In contrast to Microsoft, Sun has promised the standards entity to which it belongs that it will not enforce its patents against developers implementing the ODF standard, which may provide more certainty. See <http://www.oasis-open.org/committees/office/ipr.php>, last visited January 9, 2008.

<sup>14</sup> See <http://www.sun.com/software/opensource/index.jsp>, last visited January 9, 2008.

<sup>15</sup> See <http://www.microsoft.com/interop/osp>, last visited January 9, 2008.

**Question P.52. “Are there implications for record production in electronic discovery arising from having particular document formats? If so, what are they?”**

Yes. However, before discussing issues arising from specific document formats, the particular challenges posed by email, voicemail, record “life-cycles” and deleted records should not be overlooked. Additionally, although instant messages and portable storage devices are also discoverable in certain circumstances, they will not be considered here.

With regard to email, a litigant is responsible for the production of all email responsive to a properly drawn discovery request. Further, such document production can be completely at the respondent’s expense, subject to a multi-factor test applied by the Court. The types of email required to be produced can include email in active use (such as stored on an agency server), email saved to various categories of storage media, and email backed up to long-term storage or disaster recovery sites.<sup>16</sup> Consequently, regardless of any issues surrounding document format, production of email in response to a discovery request can be a tremendous task that would be best pre-planned via adoption of proactive management policies, rather than responded to on an ad-hoc basis.

Similar to email, voicemail, whether stored locally on an agency server or centrally at an OFT server, would also be subject to discovery.<sup>17</sup> Unlike email however, where search programs could ease the burden of searching for responsive records, voicemail has to be auditioned in order to determine whether it is responsive or not.<sup>18</sup> Additionally, depending upon how voicemail is stored, and the type or existence of retrieval system, retrieval of voicemail for analysis of relevance, may be even a more difficult task than assessing email for relevance to a discovery request. Further, similar to email, voicemail production orders could encompass active use files, interim storage and long-term storage/disaster recovery archives.

Deleted records are also subject to discovery. Unless documents and other agency electronic records are deleted with a “secure delete” process that overwrites the sectors in which data was stored, rather than just removing the indices or resetting pointers, deleted records can and must be restored if they are responsive to a properly framed discovery request. The scope of locations from which deleted records would have to be assessed for responsiveness would encompass the same storage locations and media as email and voicemail.

One key to limiting the burdens that e-discovery can place upon agencies is to consider the “life-cycle” of agency records. The phrase life-cycle refers in part to the existence or need for an appropriate record retention/disposal policy,<sup>19</sup> and the storage and disposal schedules that arise from such policy. Agencies (and other potential litigants) have a duty to preserve relevant/responsive records, which arises when a party acquires notice, or should know, that the materials are relevant to an existing litigation or investigation, or to reasonably anticipated

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<sup>16</sup> *Zubulake v. UBS Warburg* is the leading case on e-discovery. 217 F.R.D. 309, 320 (S.D.N.Y. May 13, 2003).

<sup>17</sup> See, e.g., Steven C. Bennett, *Voicemail: The Latest Front in the E-Discovery Wars*, 11/4/2002 N.Y.L.J. S4 (col. 1) (2002); and see *United States v. Smith*, 15 F.3d 1051 (9th Cir. 1998).

<sup>18</sup> See, e.g., *Electronic Discovery: Should you be thinking about Voicemail?*, September 12, 2006, Schaeffer & Lamere, P.C., <http://www.illinoispracticing.com/discovery/index.html>, last visited January 10, 2008.

<sup>19</sup> See sec. 57.05 of the Arts and Cultural Affairs law, 8 NYCRR part 188, and such agency rules as are applicable.

future litigation or investigation.<sup>20</sup> However, an effective record retention policy can ease an agency's burden in responding to e-discovery requests by eliminating the need to examine duplicative or chaotic records for responsiveness,<sup>21</sup> and allowing the disposal of older records without subjecting the agency or state to sanctions for spoliation of evidence arising from inappropriate deletion of documents or emails.

Turning finally to the question of whether particular document formats create additional issues in e-discovery compliance, there are several issues that arise directly from document format: (1) the potential need to convert records from older proprietary formats to new formats so that such records can be assessed for responsiveness; (2) the possibility that if an agency loses the ability to read its old electronic records that it may need to hire outside experts to convert such documents to the contemporary format, or face possible examination by the plaintiff's experts; (3) that agency employees and IT personnel are not sufficiently aware of the metadata characteristics of the newer document formats, and may inadvertently transmit potentially damaging metadata in documents circulated within the agency, and potentially subject to discovery; and (4) the creation of a need in the agencies to maintain the technical and experiential means to continue to read older, proprietary electronic records into the foreseeable future.

**Question P.53. “For archived electronic records, is PDF/A an acceptable format in which to preserve such documents? If not, please describe its deficiencies? Also, please recommend alternatives.”**

The PDF/A standard<sup>22</sup> may pose some challenges for OCFS. To the extent that current or future records for OCFS' CONNECTIONS system require embedding of audio or video, such functionality would be barred by the PDF/A standard. Similarly, any business solutions for CONNECTIONS that required embedding of java items or, arguably, active links to other records, would also be noncompliant with PDF/A. There are three other elements of the PDF/A standard that might pose issues for OCFS. First, PDF/A does not allow the use of encryption. To the extent that the State possesses or utilizes records that require encryption, that business need would be foreclosed by the PDF/A standard. Where documents require high levels of security, or confidentiality, the inability to use encryption could be a serious problem. Second, the Library of Congress' digital preservation project notes that there could potentially be intellectual property issues (i.e., licensing and patent claims), and states that “the standard includes ISO boilerplate text indicating ‘the possibility that some of the elements of this document may be the subject of patent rights.’”<sup>23</sup> Finally, there could be potential exposure to legal issues at all agencies that receive records – electronic or otherwise – from outside entities. The PDF/A standard requires that “all fonts must be embedded and also must be legally embeddable for unlimited, universal rendering.”<sup>24</sup> As a consequence, the State could inadvertently receive, and store as a record, documents that contain fonts that the originating entity did not have a legal right to use. Although

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<sup>20</sup> *Fujitsu Ltd. v. Federal Express Corp.*, 247 F.3d 423, 436 (2d Cir. 2001).

<sup>21</sup> Even documents stored chaotically and kept for no purpose can be ordered to be produced. See *Zubulake* at 322; *Dangler v. New York City OTB*, 2000 WL 1510090 (S.D.N.Y. Oct. 11, 2000).

<sup>22</sup> See <http://www.digitalpreservation.gov/formats/fdd/fdd000125.shtml>, last visited January 11, 2008.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.*

the likelihood of any kind of financial liability attaching to the State would be minimal, one could assume that for litigation purposes, plaintiff's attorneys would have a strong incentive to develop legal theories to attach the "deep pockets" of the State to any lawsuits.

**Question P.54. "Are there any compatibility issues with litigation support software which could arise if the State were to choose particular document formats? If so, please describe in detail."**

OCFS does not, at this point, use litigation support software, other than Westlaw, which is nominally format-independent. However, it is not inconceivable that a Microsoft supported standard could be better supported in the short run by third-party litigation support software. Such observation would only be pertinent however if the State chose not to use PDF/A as a storage format, and if third-party litigation support software developers chose not to support all open document formats.

**Question R58. What factors or elements determine best "quality" in the formatting of electronic records? Please list all of those which you believe a "best value" determination should take into account, including the "quality" needed at various points in time in an electronic record's lifecycle. What would be the best means to objectively and quantifiably determine best electronic record formatting "quality"?**

Factors for Best Quality should provide for accessibility over time, integrity of the data, ability to add to the record with minimum system and equipment requirements. Objective Quantifiable – need to be able to count, this includes users, dollars, records, reports; the response time; internal and external stakeholders need to be able to participate and access the system during the lifecycle of the document

**Question R59. What factors or elements determine best "cost" in the formatting of electronic records? Please list all of those which you believe a "best value" determination should take into account, including the "cost" applicable at various points in time in an electronic record's lifecycle. What would be the best means to objectively and quantifiably determine best electronic record formatting "cost"?**

Best Cost/Value – the cost of the initial application and document storage and the long term costs including the hardware and software; ability to access the data; compatibility with other software for instance GIS or Microsoft products; internal and external stakeholders need to be able to participate and access the system during the lifecycle of the document; maintenance and continued support and updating and keeping an application current should be considered

**R60. What factors or elements determine best "efficiency" in the formatting of electronic records? Please list all of those which you believe a "best value" determination should take into account, including the "efficiency" needed at various points in time in an electronic record's lifecycle. What would be the best means to objectively and quantifiably determine best electronic record formatting "efficiency"?**

Format efficiency – compatible document management tools as Adobe; application access timeliness which ties to the OFT server management; avoid scanning at all costs; ability to email the document-consider the document sizing; formatting documents is a huge issue and currently there is need for cross application recognition of file formats and font types—Office on the Server or like is a minimal requirement;

**Question R61.** *Part of determining the "responsiveness" and "responsibility" of bidders on State technological procurements relates to concerns that maintenance and support for those procurements remains available, robust, and within specific timeframes (e.g. ability to contact and receive assistance 24/7). To what extent should the State be concerned, or reassured, about the availability and reliability of maintenance and support from vendors of OOXML format-using software? To what extent should the State be concerned, or reassured, about the availability and reliability of maintenance and support from vendors of ODF format-using software?*

Maintenance – there needs to be a philosophical understanding by the IT leaders and DOB that maintenance of applications and developed systems are critical to the integrity of the application and the long term use of the data. OOXML and ODF (Office Open XML) is a change to a new architecture—it is suggested that this point that current applications are not compatible with this new application. It is also understood by BCM that ;“**There is no provable implementation of the OOXML specification: Microsoft Office 2007 produces a special version of OOXML, not a file format which complies with the OOXML specification**”.

**Question R62.** *In terms of the procurement of software for the creation and retention of office suite records, please list all of the objective criteria which State government should always consider as part of any officesuite software "best value" analysis.*

Best Value – The OGS Procurement Council guidelines set a standard of requirements for Best Value. These guidelines include but are not limited to the following areas: Experience, references, corporation structure, skill sets of the individuals assigned to the task, fiscal viability, general vendor responsibility assessment, named projects that have been completed in a comparable situation in size and volume; compatibility; product sizing; scope and capability of the product; flexibility to modify or enhance the application; and maintenance and support.

#### **Question T. Possible Recommendations**

It is important that the background work be thoroughly completed so that there is an inclusive understanding of all the applications and nuisances and requirements before the State goes down the road of prescribing a new enterprise solution. The costs to shift the entire State to an unproved format-using software will likely have considerable fiscal impacts. Without a clear vision of the expected outcome it is unlikely that the State could perform a complete best value formula. The end product must be defined. It is recommended that the CIO consider this impact very seriously before trying to advance a particular technological solution.

Source code developed with 100% state dollars can and should be shared unilaterally with all Agencies; access to the source code is essential for the respective agency if the application is to meet the needs other particular agency; modification and tailoring of the code may be needed as determined by the particular application of the code; as situations and demands change over time the source code will need to follow suite; the value of developing a source code that is modifiable in manner that maintains the integrity of the system edits but allow for tailoring rules as interrupted by a particular agency is essential. Source code developed with federal funds may be very limited to very narrow applications, the rules should be checked.

**Question 66.** Because of the many unique applications in the State it is highly recommend that the CIO focus on the ability to convert or migrate records to an open format rather that creating a new software environment and requiring a major conversion of the records.

**Question 67.** Yes, however it must be contingent on State agency involvement in the decisions on which product is chosen.

**Question 68.** Yes, however the financial incentive presumably to the bidder is less attractive than the State preferences and evaluation of best value which is a stronger and more competitive route.

**Question 69.** Best Value offers the most competitive and fair means to bring a broader variety of vendors into the bidding process.

**Question 70.** No, it is recommended that maximum discretion is preserved.

**Question 71.** No, there are many improvements that are needed and this process is very important provided decisions are not made in advance of a comprehensive review and analysis.

**Question 72.** No, it is premature to pilot any proposed solution before absent a clear plan and vision of the desired outcome.

**Question 73.** Migrating to a new technology will permit the state to address the multitude of nuisances associated with all existing state data sources.

**Question 74.** Yes, it would produce efficiencies of time and cost and provide for consistency in terms of access.

**12. New York City Department of Records: Friday 1/18/2008 3:36 PM****Part I, Question 1: contact information [REDACTED]**

**Question 1:** *Are the distinctions described in Part I of this RFPC between the definitions of electronic data, documents, and records useful? Are there any specific elements or distinctions in those terms which CIO/OFT should be taking into account?*

As employed in Part I of the RFPC and its legislative sources, these definitions fail to correspond to the published professional definitions (e.g., ARMA *Glossary of Records and Information Management Terms*, 3rd Ed., 2007). For example, the definition of “electronic data” is actually the definition of “records”.

**Question 2:** *Is the description in Part I of this RFPC of three types of access needed for electronic records – day-to-day utility access; ancillary active record access; and historical access – a realistic and useful conceptualization of the main uses of electronic records? If not, please describe*

While the differences described in this section are good illustrations, they fail to reflect the basic difference between working documents (where the content is not finalized) and official records, the latter tending to have fixed content.

**Question 26:** *If standards were developed regarding the creation of electronic records in State government, how would they be enforced and who would be or should be responsible for enforcing them? Should NYS Archives be given enhanced enforcement authority?*

Assuming this question refers to the day-forward creation of electronic records—rather than the conversion of existing electronic records—a combination of methods would probably yield the greatest level of compliance. For example, setting the costs of compliance as low as possible and the costs of non-compliance as high as possible.

The responsibility for enforcing the standards in the development of new systems should go to the Office of the New York State Chief Information Officer.

The New York State Archives will face enormous and costly problems dealing with the preservation of existing (and presumably non-compliant) electronic records, so it should focus on resolving them. The State of New York should be prepared for high levels of expenditures in this area, and for the need to develop and maintain for the very long term NYS Archives expertise in digital preservation.

**Question 52:** *Are there implications for record production in electronic discovery arising from having chosen particular document formats? If so, what are they?*

How will the State of New York produce a useable electronic record when

- the native file format is no longer supported by its parent application, or
- if the parent application is no longer operable on then-current computer operating systems,
- or if no one remembers how the parent application works,

- or if no copy of the parent application can be found?

These are the types of problems that are likely to occur when electronic records are kept for long periods of time e.g., more than 25 years.

A related question is how will encrypted records be retrieved in useable form if the encryption algorithm no longer exists and/or the access key (password, etc.) has been long forgotten?

Another related question is how will digitally-signed records be retrieved in legible and verifiable form if the digital-signature system no longer exists?

**Question 53:** *For archived electronic records, is PDF/A an acceptable format in which to preserve such documents? If not, please describe its deficiencies? Also, please recommend alternatives.*

Yes, but migration to a subsequent file format will still be required, in the case of electronic records retained for long periods of time e.g., more than 25 years.

Be aware also that, according to a presentation at the Archiving 2007 conference (see [www.imaging.org](http://www.imaging.org)), converting pre-existing files in “regular” PDF to PDF/A has proven difficult.

XML may well be an alternative file format, but the same issue applies. Claims that “XML will be used forever” (Federal employee at ARMA 2007) simply fail to consider the changes that are likely to occur in fundamental computing technology (quantum computers? Disappearance of binary systems?) over the span of time some records must be preserved.

**Question 73:** *Is it a viable solution for long-term access to electronic records that rather than migrating electronic data to new technologies and document formats, State government should archive electronic record-capable hardware and should seek to make various iterations of software available for the long-term as a safeguard against obsolescence and to facilitate access to electronic records.? Why, or why not? If you believe this is viable, then please describe measures to effectuate same.*

No. The requirements “archiving hardware and software” are simply too demanding over the span of time some records must be preserved. For example, two hundred years from now, who will remember how to start up any current version of Windows? What about replacement parts: what happens when capacitors in the hardware dry out and no one is producing new ones?

**13. New York State Insurance Department: Friday 1/18/08 3:56 PM****Background Summary Information**

We at the Insurance Department have a robust Information Technology and Records Management program. The Systems Bureau administers its support of the Department through a professional staff and computer centers in New York City and Albany, NY. The Executive Bureau administers the Records Management program. Basic requirements and general management policies regarding these two areas of operations are documented in the General Administration Manual which is accessible through the Department's Intranet. The Department also has outsourced electronic functions. The Department uses an office suite (Microsoft and Lotus products) for the major portion of its applications/interfaces. The entities supervised provide documents that are readily accessible to our on-site and office based staffs.

As the regulator for all entities that have insurance and insurance related businesses, it is important that the Insurance Department (the "Department") have the ability to distribute and receive different types of data. It is also important to have the ability to interact with more than one hundred thousand licensees, the National Association of Insurance Commissioners (the "NAIC") and various domestic and foreign regulators. There are certain nationwide programs in which the Department also participates in such as electronic rate and form filings and financial statement filings.

As a result of this critical role, much of the Department's Technology programs use current technology; with frequent updates (laptop fleet is recycled approximately every three years on a rolling basis).

Due to the demands of the role as regulator for sophisticated financial sector entities, the use of technology has been leveraged to achieve the Department's mission of ensuring the overall solvency of the insurance business in New York State as well as consumer protection. This has resulted in, for example, paperless bureaus that respond to consumer complaints, rapid turnaround time for licensing and renewals (on line renewals can be achieved within a 24 hour turnaround) and web-based frauds reporting from supervised companies.

These programs are constantly being updated and improved. Many of these programs, including New York State's first fully operating portal, were achieved with expenditures of over \$1 million with recognized savings (ROI) and rapid consumer service such as the External Appeals program which is a 24x7 operation that deals with life threatening issues.

The Department has a robust Records Management Function that is responsive to Department needs and requirements.

The Department standardized on the Adobe Reader the PDF format for data requested through FOIL. It is free for those people who choose to use this format. This secure format prevents changes to and the possible manipulation of Department documents and information that could be used to misrepresent the Department or used to defraud third parties.

The Department does not reprogram or create files to satisfy FOIL or other public access requests. The Department does have "public terminals" for in person visits where feasible. FOIL does not

pose any operational difficulties for the Department. The Department uses electronic recordkeeping, review and operation for tracking and responding to FOIL requests. Requests involving litigation are handled according to the policies and written procedures approved by the Department's Office of General Counsel.

This background information is important to understand and is the basis for the positions and information provided to you while responding to the questions published in your public comment request. Positions stated here reflect those within the Department.

**Question 1:** Contact Information: [REDACTED]

**Question 2:** One central approach for the public accessing and reading electronic information should not at this time or in the near future be promulgated (and more importantly, should not be mandated). Much preliminary work needs to be accomplished. Many state agencies and affiliated entities do not operate with what is considered current technology. The state should first be concentrating on upgrading technology at the numerous agencies that operate with outdated equipment and programs/applications. A benchmark to use is the typical depreciation schedule of various types of equipment such as three years for laptops, 5 years for PCs and various peripherals, etc.

Attention might also be given to fully automating the State Archives so that all records created over the years (since the program started in 1949 (or near that date), are reflected in a functioning relational database. This should include a sign-off by all of the entities that they have reviewed all the records on file (ever officially been created) and that they are correct and current.

**Question 3:** In order to fully encourage interoperability and data sharing throughout the State and with the public, the various requirements of agencies and public authorities first need to be in place. For example, data classification based on legal requirements must be addressed (various state and federal statutes which determine the level of public access such as FOIL exemptions, HIPAA, sections of the New York State Insurance Law and Banking Law which prohibit interagency disclosures as well. There are records that are excluded from FOIL, exempt from subpoena or agency requests. This has not yet been achieved for many entity operations or for security purposes.

Consideration must also extend to all outsourced environments, which has current enforcement problems (such as audits of all entities providing outsourced services to assure adherence to state security standards and other standards). Data sharing with business partners and other jurisdictions currently within the Insurance Department has many levels of oversight and agreements, with the weakest "link" being security enforcement concerning entities under central state contracts. Security audits/reviews are not being provided by some vendors supplying outsourced environments.

**Question 4:** The appropriate government control springs from a strong internal control environment for all records. Electronic records should be categorized as any other record. The medium is different and therefore the identification, categorization and monitoring of data would be reflected in the technical/logical controls. However, management policies would be the same (creation, purpose, retention and destruction).

**Question 5:** The ability to remain “vendor neutral” depends on the ultimate goal of this questionnaire. Laws, policies and related documented procedures (not undocumented “practices”), that suggest one uniform method or “shift” in current products and services would require a massive effort with a price tag in the millions (just for the Insurance Department alone, if required to examine, reprogram, modify or change all existing applications). In addition, the interface with various supervised entities, whether it would be insurance companies, banks or hospitals needs to be considered. If vendor neutral means that choices by the various state entities would be dictated by one “authority” it would not best serve the citizens of New York. As noted above, the mechanisms and processes should first be used to accurately identify and classify all records with entities reviewing records for updates (especially in retention periods).

**Question 6:** The “Life Cycle” of electronic (and any other kind of record) first must have a recognized identifier (for creation), maintenance, exchange and preservation which are driven by both legal requirements and business purposes (much of which is identified by the State Archives retention and disposition schedules). The requirements should not change. However, electronic records must also include a Life Cycle step which provides for migration of data reflecting technology changes and new releases/versions. Media such as disks and CDs must also be identified with the record Life Cycle. For example, in instances where records are required to be maintained for long periods of time (over six years), electronic records in the state archives and within the control of entities should be transferred to either newer formats (reflecting newer versions) or “fresher” disks/CDs etc, at regular intervals to guard against any spoilage due to age. Retention should not be changed due to an electronic format.

**Question 7:** The long term preservation of electronic records is addressed in comments in question 6.

**Question 8:** Records Management provisions of any law should not specifically identify electronic medium(s), any type of format requirements or any other specific non-static attribute. For example, specifying that a record can be reformatted to a tape would limit any other electronic format such as a CD. Specifying that a record may be converted to an electronic format would not require future changes to allow for a medium that does not presently exist. Five or ten years ago flash drives were basically not available and unknown. The state should be addressing best practices and proper controls regardless of the medium. Currently FOIL does not require something to be reprogrammed for access. This should continue. Public access to archived material poses no problems with an archives control program that ensures upgrades and proper migration of material. The legal questions as to admissibility in court of the acceptance of migrated material as legally acceptable documents should be addressed. Providing a “copy” of an electronic document by any entity could also be “certified” by the appropriate party within the entity to satisfy some of the legal issues.

Consideration might be given to a statute that cites the requirement that there should be a statewide records management program that incorporates all kinds of records and that they need to be protected and preserved—much like the Comptroller being mandated to create an accounting system for the state. Currently the state is run on a cash basis, but could be changed to Generally Accepted Accounting Principles (without legislative action). Statutes should address the fact that a program is needed, and must exist but the specifics of it are best left to the expert. In this case expertise in records format and in records protection is needed.

**Question 9:** The constraints or benefits that should be considered for implementing a comprehensive plan for managing electronic records must start with the recognition that many agencies currently have weak records programs and have out of date technology. The technology dollars are not available. The development of a solid internal control environment must be established first. Specific functional requirements need to be established and reviewed and discussed with state entities. It should also be recognized that to mandate changes to meet “new requirements” would be very costly and requires either a change in how technology staffing is currently managed or the employment of very expensive consultants. For example, in order for an information technology staff person to earn more money with more promotions, they have to also have administration responsibilities (such as supervising large numbers of staff). Thought might be given to developing technical expertise without administrative constraints (as the state does with certain job groups such as actuaries to a large extent) as a preliminary step to having the ability to manage significant electronic records mandates. This also might encourage staff to obtain the education and credentials which would enable them to effectively contribute to technology efforts while being rewarded for the effort (and often paying for it themselves). This still does not, however, provide the dollars in those agencies that have no funding for technology changes.

It should also be noted that cost estimates of any program mandates or changes should include staff time with associated fringe benefits. Often this is not considered. When developing a cost/benefit study, the cost of lost opportunities for other types of development, and meeting business/program objectives must also be included.

Therefore, any questionnaires or surveys must also be administered with an educated estimate of actual staff time and projects not completed or “put on hold.”

**Question 10:** Highly specialized formats should be examined jointly with those entities that use them with input from knowledgeable individuals.

**Question 11:** What constraints or benefits that New York State should consider depends on what the actual objective and the detailed functional requirements are for a “defined electronic record format.” Once this is determined the technology “shops” of all entities should be examined (this has a very big price tag –time and/or additional funding).

**Question 12:** The State of New York representatives might consider the costs of compliance to laws and regulations in the various sectors such and the financial sector and the health care sector. There are very stringent requirements relating to electronic security. You might consider gathering the data on the costs relating to compliance of several electronic programs required by law such as Sarbanes-Oxley, Federal Civil Rules of Civil Procedure, HIPAA, Credit Card Security requirements. Each of these required specific changes (in some instances major changes with matching investment). Each type of requirement had issues and “price tags.” Before embarking on a major records program, problems concerning implementation of various programs impacting records should be examined.

**Question 13:** Existing standards and guidelines should be modified to include policies and procedures (written) that would ensure the proper migration and updating of existing electronic records to current electronic media. Retention schedules should also be reviewed to ensure that records are not maintained longer than for the required business purpose or that records are

maintained in accordance with statutes which have long-tailed retention periods. Proactive enforcement of existing policies should be examined.

**Question 14:** Consideration should be given to those agencies which have up to date functioning records programs in relation to labor intensive questionnaires and mandated programs. Where there are no public access problems or problems with the sharing of data, changes should not be required for a time (until all agencies have been examined). Information requested should always be accurate and respondents should not be required to guess or estimate. When gathering information, the inability to provide data is indicative of weaknesses of program standards which result in the inability to provide the requested data. That too is a finding.

The remaining questions were reviewed. Addressing specific timeframes and definitions we believe is premature.

**14. New York State Division of the Budget: Friday 1/18/08 3:57 PM**

Enclosed are the Division of the Budget's responses to several of the survey questions in the Office for Technology's (OFT) Request for Public Comment regarding New York State's electronic record policy.

We recognize the value that the results of this study will provide to us and to all New York State agencies in the creation, management and preservation of electronic documents. While time has precluded our responding to more of the items in the survey, we would be pleased to participate in future State agency meetings to discuss and explore the records management and information technology issues this survey presents.

**Question 1.** [INDIVIDUALLY IDENTIFYING CONTACT INFORMATION REDACTED]

**Question 2.** *What mechanisms and processes should the State of New York establish for accessing and reading its electronic records in order to encourage public access to those records?*

The streamlining of e-record creation, retention, filing, and disposition would enable more efficient responses to e-discovery and FOIL requests.

**Question 3.** *What mechanisms and processes should the State of New York establish for accessing and reading its electronic records to encourage interoperability and data sharing with citizens, business partners and other jurisdictions?*

Ideally, electronic records should be stored in a non-proprietary format. Investment in open document file formats would allow interoperability of office documents using software that adheres to the open standards. This approach would be most beneficial to NYS and its constituents.

**Question 4.** *What mechanisms and processes should the State of New York implement to encourage appropriate government control of its electronic records?*

The State should build upon the records control mechanisms already in place to address the particular challenges of e-records administration.

Section 57.05 of the Arts and Cultural Affairs Law authorizes the State Archives and Records Administration (SARA) within the State Education Department, to acquire, preserve and make available State agency records deemed to have historical value.

Section 57.05 also makes SARA responsible for the preservation and disposal of non-permanent records housed for agencies at SARA's State Records Center. The law also establishes that official records exist in a variety of media, therefore including the type of electronic records being studied through this survey.

Section 57.05 requires SARA to provide records retention and disposition training, technical assistance and recommendations to State agencies on agencies' record management structures, practices and policies. SARA's oversight includes the approval of agency records series and retention and disposition schedules, and SARA guidelines already include one e-record document,

“Managing E-Mail Effectively” (2002). As e-mail and other e-records begin to accumulate, and to include information subject to e-discovery and FOIL requests, agencies need additional guidance in the creation, retention and disposition of these materials.

**Question 5. *What mechanisms and processes should the State of New York consider for encouraging choice and vendor neutrality when creating, maintaining, exchanging and preserving its electronic records?***

If NYS standardizes and adheres to open document formats for all electronic records, the choice of vendor, based on a particular format, becomes moot.

**Question 6. *Are there mechanisms and processes the State of New York should establish that are specific to the management of its electronic records in its various life cycle stages (creation, maintenance, exchange, preservation and disposal)?***

As referenced in Question 4 (above), State agencies are in need of mechanisms and processes that can streamline the creation, preservation and disposal of electronic records. Such guidelines are essential to assisting State agencies eliminate file duplication, multiple versions of documents, and non-record e-mail. Specifically, these mechanisms should address:

- The creation, updating, finalizing, storage, and preservation of word processing and other documents created within computer systems to avoid multiple (paper and electronic) draft versions filed in multiple hard-copy and electronic filing systems;
- The identification of e-mail and instant messaging (IM) records, including streamlined technology solutions (such as templates) that enable up-front identification of e-mail/IM records as they are being created;
- Updating of State Archives disposition methodology for transfer and storage of agency e-records, consistent with guidelines and methodology for transfer of paper records from agency to State Records Center and State Archives; and,
- Improve security protocols for the transfer and storage of sensitive information.

**Question 7. *How should the State address the long-term preservation of its electronic records? What should the State consider regarding public access to such archived content?***

SARA has the responsibility for the long-term preservation of, and making accessible to the public, State records it deems archival material. Electronic records will constitute an ever-increasing share of such archival material. The range of electronic record formats, the method of their transfer to the State’s archival centers and the rapidity with which formats become obsolete and therefore render the record unreadable, challenge SARA’s charge to preserve and guarantee access to records. Consistency in the format of electronic records and structure of such material would streamline both preservation and access. State agencies are looking to SARA for guidelines regarding the transfer of electronic records.

**Question 8. *What changes, if any, should be made to the government records management provisions in New York Statutes? (Please reference those laws which are cited here: [http://www.archives.nysed.gov/a/records/mr\\_laws.shtml](http://www.archives.nysed.gov/a/records/mr_laws.shtml)).***

SARA exercises a key advisory role in State government records management and is therefore in a unique position from which to guide, albeit not to direct, electronic records management practices. Arts and Cultural Affairs Law, Section 57.05 authorizes SARA to acquire as its own State agency records deemed to have historical value and imposes on SARA the responsibility for making such records available for use. The law does not grant SARA the authority to impose upon State agencies the methodology of record creation and storage, but to make recommendations to the agency head and Director of the Budget upon review of agency records management plans and to provide technical assistance. Similarly, SARA is authorized only to store and dispose of nonpermanent State agency records, which remain the record of the original State agency. While Arts and Cultural Affairs Law is silent as to the nature of the recommendations and technical assistance that is allowed SARA, or the medium in which records are created (e.g., paper, visual, audio or electronic print or messaging), agencies are looking to SARA for guidance on e-records, similar to those issued in the General Retention and Disposition Schedule for New York State Records.

**Question 9. *What constraints and benefits should the State of New York consider regarding the costs of implementing a comprehensive plan for managing its electronic records?***

New York State can benefit from an established legal and policy framework for the current records management system overseen by SARA by implementing a statewide electronic records management plan. As the State moves its business into the electronic realm, agencies are seeking guidance in applying the paperbased concepts to electronic records management. A comprehensive electronic records management plan and the uniformity of systems and controls would improve access to information (to the public and within the State) as well as improve information security. Conversely, the application of a comprehensive system for electronic records is constrained by the current diversity of information technology systems and records management needs and requirements across the State.

**Question 10. *What should the State of New York consider regarding the management of highly specialized data formats such as CAD, digital imaging, Geographic Information Systems and multimedia?***

N/A

**Question 11. *What constraints and benefits should the State of New York consider regarding potential savings or additional costs associated with the management of defined electronic record formats?***

Certainly one of the biggest constraints dealing with a defined format for electronic records is the lift associated with converting to a new format. Especially, dealing with scripts and macros will be involved. Depending on how historical records are handled, the effort to convert could be enormous. The benefits will be found moving forward and the relative ease of sharing and retrieving electronic records.

**Question 12. *What existing policies and procedures in the private or public sector for the management of electronic records would be appropriate for the State of New York to examine? Please cite specific examples.***

The file management components of Enterprise Content Management systems now in use throughout the public and private sectors suggest a range of solutions for improved access to, and retention of, electronic records.

**Question 13. Are New York State's existing standards, regulations and guidelines regarding records management adequate to meet the challenges of electronic records retention? How should these standards, regulations and guidelines be changed?**

State agencies are in need of standards, regulations and guidelines that can streamline the creation, accessing, preservation and disposal of electronic records.

**Question 14. What else should the State of New York consider about this subject?**

Events in New York and other states, ongoing FOIL demands, and Federal ediscovery procedures highlight the need for statewide guidelines for the creation, retention, storage, archiving, and disposition of electronic records. As records are increasingly created in electronic mediums, it is essential that agencies be given direction for management of e-records or historical documents will be lost.

## Part II - Detailed Questions

**Question 1. Are the distinctions described in Part One of this RFPC between the definitions of electronic data, documents, and records useful?**

Yes

**Question 2. Is the description in Part One of this RFPC of three types of access needed for electronic records – day-to-day utility access; ancillary active record access; and historical access – a realistic and useful conceptualization of the main uses of electronic records?**

Yes

**Question 3. Does the use of particular office suite formats such as the Open Document Format (ODF) or Office Open XML (OOXML) raise any security or privacy implications and, if so, what are they?**

No

**Question 4. Will accessibility to electronic records through the FOIL process be affected by adoption of either format, and if so, how? Possibly Will the rapidity of response required by recent updates to the FOIL law be affected? Possibly**

**Question 5. In terms of appropriate "government control" of electronic records, what factors or concerns should the State be addressing?**

Creation, interoperability, storage, maintenance, access, retrieval, discovery and storage

**Question 6. Is this the correct definition of interoperability which the study should be using? If not, please provide a better, alternative definition.**

It is an acceptable definition

**Question 7. Is this the correct definition of "openness" and "open standards" which the study should be using? If not, please provide a better, alternative definition.**

It is an acceptable definition

**Question 8. For State agency respondents in particular: What percentages of your electronic records (using the term generally) consist of office suite records?**

52.39% of DOB electronic records are MS Office suite records.

**What other types of electronic records, such as those in online information systems, GIS systems, etcetera does your agency create? What percentages do those other records consist of?**

Graphic Files – 8.33%  
URL - 5.31%  
Adobe – 4.34%  
MS Shortcut LNK – 4.05%  
HTML – 3.91%  
SAS – 3.36%

**How did you determine this?**

This information was generated from analysis of DOB network file shares and does not include data from the Division's web or database servers.

**Question 14. Is CIO/OFT's proposed focus for this study appropriate? (That is, conceptualizing three types of "access," and focusing on office suite formats as an illustrative example). If not, please describe with specificity the approach which you recommend CIO/OFT should take.**

Yes

**Question 16. If determinable, what percentages of current formats do you have in your systems, e.g. what percentage of your digital data is in the common office suite formats, e.g.**

.doc format? 34.62%  
.xls format? 14.75%  
.ppt format? 1.83%  
.rtf? 0.16%  
.pdf? 4.34%  
.html? 3.91%  
.txt? 1.80%  
.wpd? 0.78%

**To what degree have you already migrated to XML-based formats such as .docx, .xlsx, .pptx, .odt, .ods, or .odp, or what are your plans to do so?**

We plan on migrating to Office 2007, which is XML based, in summer 2008. We have already installed conversion software to access XML based documents.

**Question 26. *If standards were developed regarding the creation of electronic records in State government, how would they be enforced and who would be or should be responsible for enforcing them? Should NYS Archives be given enhanced enforcement authority?***

SARA's authority is sufficient for guidelines.

**15. New York State Division of Criminal Justice Services: Friday 1/18/2008 4:23 PM****Question 1. CONTACT INFORMATION [REDACTED]****Question 2. What mechanisms and processes should the State of New York establish for accessing and reading its electronic records in order to encourage public access to those records?**

The combination of a dispositive records retention policy and encouraging the use of either common software or software that includes the ability to export records in a reasonably common file format can achieve this objective, but there are certain applications, for example biometric files or the output of proprietary systems where this is not feasible. Since the operating agencies are most familiar with these circumstances and their practical aspects, it is the agency that must make the determination. When possible, agency procurements should specify record storage methodology that has been driven by the marketplace so that public access will be encouraged. This may not always be possible, but it is a reasonable target. Certain factors such as access time, proprietary algorithms and hardware and the inability to license IP assets may limit the ability to attain this objective. In the case of text documents the state should require that documents are stored in an open standard such as ooxml, odf or pdf format.

**Question 3. What mechanisms and processes should the State of New York establish for accessing and reading its electronic records to encourage interoperability and data sharing with citizens, business partners and other jurisdictions?**

See number 2 above. In many cases business partners understand that certain proprietary formats or formats which, while not proprietary, are not commonly available in the marketplace are nevertheless the only or the most effective solution for particular applications.

**Question 4. What mechanisms and processes should the State of New York implement to encourage appropriate government control of its electronic records?**

Agencies are capable of following guidelines which can be established that provide information. But burdening the agencies with additional layers of procedure isn't necessary or advisable. If mandatory file formats are to be established, this should be done in an inclusive manner and not with overly constrictive restraints. In most cases the marketplace lights the way to the appropriate decision. For example, establishing one sole source vendor of Word Processing is not necessary. Today there are agencies that use Corel, and those that use Word. Some agencies use Lotus Notes and some use Outlook. All of these interoperate sufficiently so that it would not make sense to cause an agency to spend the time and funds necessary to convert. The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in an standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace.

**Question 5. What mechanisms and processes should the State of New York consider for encouraging choice and vendor neutrality when creating, maintaining, exchanging and preserving its electronic records?**

Model procurement language would be good, but where an agency selects certain software for its own reasons, so long as that software is “interoperable” the agency should control the process.

**Question 6. Are there mechanisms and processes the State of New York should establish that are specific to the management of its electronic records in its various life cycle stages (creation, maintenance, exchange, preservation and disposal)?**

Yes. Uniform minimum time frames for these events should be established, after which time the decision would be left to the agency having expertise in its field. Something like the Courts deferring to agency expertise in the face of an Article 78 proceeding.

**Question 7. How should the State address the long term preservation of its electronic records? What should the State consider regarding public access to such archived content?**

Records which are required to be retained pursuant to a clear and uniform policy may be deposited by the agency into a central facility. This relieves the agency of an undue administrative burden and such a facility could perform necessary indexing and conversion functions.

**Question 8. What changes, if any, should be made to the government records management provisions in New York Statutes? (Please reference those laws which are cited here: [http://www.archives.nysed.gov/a/records/mr\\_laws.shtml](http://www.archives.nysed.gov/a/records/mr_laws.shtml) ).**

This question needs to be answered after fully considering the results of this survey.

**Question 9. What constraints and benefits should the State of New York consider regarding the costs of implementing a comprehensive plan for managing its electronic records?**

If agencies were to be empowered to make selections of software (and hardware) based on the agency requirements, and considering those products that the State has determined produce storage in a common format, there may not be significant additional PS or equipment costs at the agency level. To the extent that there is to be created a central repository; an archive, the cost of the archive facility is a factor. IF a new plan imposes additional burdens on the agency – e.g. – requirements for new infrastructure and personnel and vendors necessary for the deployment and implementation thereof, then there will likely be multiple duplications of expenses.

**Question 10. What should the State of New York consider regarding the management of highly specialized data formats such as CAD, digital imaging, Geographic Information Systems and multimedia?**

Ostensibly the commonality of all of these formats is market driven. In some cases, for example proprietary formats such as the OFT SWN or as of yet uncommon formats such as those which could be expected in biometric systems, the agencies are experts and management must be left to the agencies. As a backstop the State can require that each agency include the ability to make such records available if required to do so within procurement specifications. For formats in more common use, for example, multi media, there are market driven selections. WMV files have surpassed RM files for multimedia distribution through the web, but Flash is also most promising and as many as ninety eight percent of PCs have Flash, which is available across operating systems. But OFT does not deliver webcasts in this format, choosing instead to use of WMV. Of

course there are valid reasons for this, and WMV is certainly a common market format. This illustrates that so long as the agency distribution of multimedia comports with the market demand, the agencies generally are capable of making this determination. It works for OFT, and it works for every other agency. So the requirement should be market driven. To the extent that any centralized archival facility stores such files, that facility can either store them in their present form or if the format is no longer viable, make such conversion as necessary.

**Question 11. What constraints and benefits should the State of New York consider regarding potential savings or additional costs associated with the management of defined electronic record formats?**

To the extent that the Legislature determines that records are to be archived for periods in excess of the then applicable record retention policy, the costs which such a determination would entail would have to be weighed against other budgetary objectives so that available funds may be distributed accordingly. For records that have not yet passed the retention time, if the agency has followed the common marketplace format guideline, in most cases it is a reasonable expectation that there would be little cost net of the PS cost the agency would bear in management of requests for such records, even assuming that the agency did not charge for the media on which they are stored.

**Question 12. What existing policies and procedures in the private or public sector for the management of electronic records would be appropriate for the State of New York to examine? Please cite specific examples.**

Record retention policies would be good candidates for examination and for the development of a uniform approach. This needs to include everything from email to web server files to print documents.

**Question 13. Are New York State's existing standards, regulations and guidelines regarding records management adequate to meet the challenges of electronic records retention? How should these standards, regulations and guidelines be changed?**

It is time to closely look at record retention, especially considering the changes that have occurred with respect to discovery in the Federal Rules of Civil Procedure and the case law that has developed in this area.

**Question 14. What else should the State of New York consider about this subject?**

This area can impact large systems, for example DMV records, the Comptroller's Payroll, Retirement and Unclaimed Funds systems, Biometric systems, TAP and others. BEFORE any policy is finalized it needs to be developed by the agencies who are accountable for the management of these systems and who must meet budgets. These are the agencies with the knowledge and experience to establish this policy. Additionally, there are often partners and users of these systems who physically connect to the infrastructure, and these organizations cannot be left out of the process.

**PART TWO - INFORMATION REQUESTED - DETAILED QUESTIONS**

**Question 1. Are the distinctions described in Part I of this RFPC between the definitions of electronic data, documents, and records useful? Are there any specific elements or distinctions in those terms which CIO/OFT should be taking into account?**

Yes, to some extent, however the requirements mandating preservation are common to all of these distinctions and point to the need to accommodate a wide variety of formats.

**Question 2. Is the description in Part I of this RFPC of three types of access needed for electronic records – day- to-day utility access; ancillary active record access; and historical access – a realistic and useful conceptualization of the main uses of electronic records? If not, please describe with specificity recommendations for alternative methods for conceptualizing the study's issues.**

Yes.

**Question 3. Does the use of particular office suite formats such as the Open Document Format (ODF) or Office Open XML (OOXML) raise any security or privacy implications and, if so, what are they?**

Only that agency ISO's would need to be aware of these file formats so that they can be included in agency monitoring and virus scanning activities.

**Question 4. Will accessibility to electronic records through the FOIL process be affected by adoption of either format, and if so, how? Will the rapidity of response required by recent updates to the FOIL law be affected?**

Such an adoption should not impact the FOIL process. The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace and FOIL requests could be answered in these or MS Office formats as an available courtesy to the initiator of the request.

**Question 5. In terms of appropriate "government control" of electronic records, what factors or concerns should the State be addressing?**

Adequate security, and additionally that the procedures surrounding the storage, use and access of such records will support establishing a requisite evidentiary foundation to support admission. Given that the best evidence rule could allow admission notwithstanding format, nevertheless if a sufficient evidentiary foundation cannot be established the record will not be admitted. Control and custody are equally important in this regard.

**Question 6. Is this the correct definition of interoperability which the study should be using? If not, please provide a better, alternative definition.**

Generally OK – it's interesting that in MS Office Suite there are a number of add-ins, some of these are extremely useful for statistical analysis – e.g. – Solver in Excel allows Linear and Quadratic Programming – that are either not the same or are not available otherwise in Office

Suite Products, so the issue becomes one of degree of Interoperability. For basic documents many of these suites can suffice, but the question is one of the degree of interoperability. The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace and this provides for the interoperability requirement.

**Question 7. Is this the correct definition of "openness" and "open standards" which the study should be using? If not, please provide a better, alternative definition.**

These definitions are feasible for this purpose.

**Question 8. For State agency respondents in particular: What percentages of your electronic records (using the term generally) consist of office suite records? What other types of electronic records, such as those in online information systems, GIS systems, etcetera does your agency create? What percentages do those other records consist of? How did you determine this?**

Other than Portals and specific purpose systems (finger print, unclaimed funds, criminal records and the like, the agencies seems to function on MS Office, Corel or similar suite. Without conducting specific research it would be a safe assumption that almost all agency employees use an office "suite" and some significant amount work on or in specific purpose systems.

**Question 9. Is Gartner's prediction correct? What predictions have been made about other formats?**

By 2010 some sort of Interoperability will likely be the rule, however this does not necessarily foreclose providers of proprietary or licensed products from including features which permit exporting work in odf formats. ODF has its limitations. Despite the hype surrounding Open Office, in many cases MS desktop suite is better. It has more features, better support and as long ago as Front Page in Office 2000 it offered feature integration with externals such as NT web servers and even NT and to some extent Linux servers operating in a web environment. Some of the statistical functions in Excel/Solver do not seem to be equally available in the market. So the problem might be solved by incorporating interoperable export features into existing suites. The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace.

**Question 10. Will the usage of ODF among those individuals and entities with whom the State interacts be so great that failing to provide the NYS workforce with the capability of using ODF will cause NYS interoperability problems? If so, if the State did not adopt the ODF format, what would be the best method to ensure interoperability with ODF documents received by the State from others?**

Consider that most of what is in the inbox in the average case comes from internal sources, or other State agencies. We expect that at some point we will be able to import and export so that there will be cross talk between for example MS Word and ODF. The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf. These formats are broadly supported in

the marketplace. This would ensure that advanced features of a leading product such as MS Office or even Corel are not rendered unavailable to agencies.

**Question 11. For office suite formats, which governments have adopted ODF exclusively? Which governments have adopted OOXML exclusively? Which governments have adopted both formats? What other formats for office suite software besides ODF and OOXML have other governments adopted?**

A further examination of the State of Massachusetts and the proponents of these formats would be enlightening. Studies of other governments based solely on technology may not take into account that there are a myriad of reasons for adopting legislation including political factors. This information may be somewhat enlightening but New York State agencies are certainly capable of ascertaining the most appropriate, cost effective and efficient solution considering the requirements of all of the stakeholders, whether external, internal, employees, constituents and so on.

**Question 12. Other than in the office suite context, in what other ways does the State need to be concerned about electronic records interoperability?**

Images are important, because many of the State's systems are now incorporating various formats. Do we force jpg for fingerprints when we know that subsequent generations of the file experience degradation? Png and BMP take more storage, but perhaps gif is suitable. Additionally the early mainframe records including both data and code are in some cases nearing a point when they will be lost either because no device remains capable of reading the format or media or the code itself is obsolete and no longer supported by newer operating systems. This can be difficult when laying an evidentiary foundation. That a purported record exists is not sufficient proof of the "care and custody" or procedural requirements. The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace.

**Question 13. Given the existence of tens of thousands of e-data formats, the increasingly dynamic nature of electronic documents, and a preference toward more open formats in other realms besides office suite formats, what type of an approach or mechanism should be used within the State to further the existence of openness in all relevant formats? Please describe with specificity.**

If cost effective and operationally feasible, the agencies should be required to migrate to current versions of software applications to ensure that output products are as openly interoperable as possible. A balance of marketplace information and agency operational impact must be considered in this determination. The agencies are best equipped to make this determination.

**Question 14. Is CIO/OFT's proposed focus for this study appropriate? (That is, conceptualizing three types of "access," and focusing on office suite formats as an illustrative example). If not, please describe with specificity the approach which you recommend CIO/OFT should take.**

The study is one part of the process. CIO/OFT should develop an inventory of software in use within the State, and OFT personnel should become familiar with the actual deployment of

software within agencies. Survey information can be either correlated or disputed by the “as deployed” and “as in operation” information.

**Question 15. What is the “problem” that this study should be addressing? Please define with specificity exactly what the State should be trying to solve.**

What provisions should the State make, if any, to determine and quantify marketplace and legal demand for open formats considering financial and operational resources reasonably available to the State Agencies to accommodate the level of demand identified.

**Question 16. If determinable, what percentages of current formats do you have in your systems, e.g. what percentage of your digital data is in the common office suite formats, e.g. .doc format? .xls format? .ppt format? .rtf? .pdf? .html? .txt? .wpd? etcetera. To what degree have you already migrated to XML-based formats such as .docx, .xlsx, .pptx, .odt, .ods, or .odp, or what are your plans to do so? What tools do you use to determine the mix of formats being used within your systems? Anyone can respond, but we are particularly interested in learning the experience and current situation of governmental responders, and particularly from state and local governments.**

We use MS Office as part of the standard desktop deployment. We have looked at open formats but have not yet determined final agency policy. We expect that migration to current versions of office suites will ensure that documents can be stored in a standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace.

**Question 17. Assuming this observation is correct, please provide a numbered list, with the greatest specificity and in the simplest terms possible without marketing verbiage or usage of ambiguous phrases, of exactly which customer requirements are best met by OOXML.**

Office Open XML (commonly referred to as OOXML or OpenXML) is an XML-based file format specification for electronic documents such as spreadsheets, charts, presentations and word processing documents. This format was actually developed by Microsoft as a successor to binary Microsoft Office file formats. It can be stated that OOXML is useful for custom development, since historically many vendor formats have been difficult for developers to work with because of lack of information and/or IP issues. Customers who have a requirement to deploy applications which require customized development may benefit the most by OOXML. (We understand that Microsoft is in the process of standardizing Office to XML).

**Question 18. Assuming this observation is correct, please provide a numbered list, with the greatest specificity and in the simplest terms possible without marketing verbiage or usage of ambiguous phrases, exactly which customer requirements are best met by ODF.**

See answer to Question 17

**Question 19. As a customer of office suite software, the State has a requirement that software support the State’s day-to-day operational functions. Which office suite format would be best for this day-to-day utility: OOXML, ODF, or another format? Why? What specific features for this purpose does one format have that the other(s) are missing?**

At this time, Microsoft Office Suite best supports our operational requirements. In addition to more robust features in Solver (Excel) and the market availability of “plug-ins” for the product, agencies have expended considerable resources in training. The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in an standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace.

**Question 20. As a customer of office suite software, the State has a requirement for that software to support the State’s need in office suite software for long-term preservation and production of electronic records. Which format would be best for this function, OOXML, ODF, or another format? Why? What specific features, for this purpose, does one format have that the other(s) are missing?**

We are not entirely certain that a .doc file will become unreadable in a few years, but there is a solution which is elegant in its simplicity and cost effectiveness, and which does not require that agencies lose the benefit of years of training of personnel - agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in an standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace.

**Question 21. As a customer of office suite software, the State has a requirement for that software to support the State’s need in office suite software for the identification, production, and examination of electronic records for electronic discovery purposes in litigation, or in response to FOIL or investigatory or audit requests. Which format would be best for this function, OOXML, ODF, or another format? Why? What specific features, for this purpose, does one format have that the other(s) are missing?**

As far as we know, the State need not create “new” records in response to a FOIL request. The State has required bidders in large procurements to submit in MS Word. A request for that submission could be produced by providing the submission in the same format. If the agencies were to be required to migrate to a current version of their office suite to ensure that documents can be stored in an standard format, such as ooxml, odf or pdf, because these formats are broadly supported in the marketplace, the requestor could be provided with an array of formats. Note that the pdf format is extremely common and the State has produced responses in this format.

**Question 22. How valid is this concern? Is re-writing of custom in-house software also needed (and has it been needed in the past) for migration between different versions of office suite software?**

In general use this has not been an issue. While there are exceptions, Office suite products are generally upwardly compatible.

**Question 23. For State agency respondents, please quantify if possible the types and amount of custom applications which would need to be re-written in your agency, and the cost.**

Presuming we upgrade to a suite that can “export” to ooxml or odf, there wouldn’t need to be any conversion until the time the request was responded to.

**Question 24. What weight, if any, should the State give to the fact that a particular format has been accepted by a standards body? In affording that weight, what elements should the State consider?**

Ostensibly the State should, within the limitations of time, and financial and operational impact, endeavor to at least ensure that an agency can interoperate. Beyond this requirement the agencies should determine what best provides for their operational requirements.

**Question 25. For office suite software, would standardization by the State on the usage of a single format promote or stifle competition in the IT marketplace?**

Neither. The IT market place is bigger than the State. There may be ancillary effects such as a possible stimulation of development of “plug-ins” by ancillary market players who would take advantage of agencies being unable to respond to the marketplace because their ability to select an appropriate product has been curtailed by some centralized policy that accommodates a general objective without regard to specific requirements and in so doing cannot fully accommodate any single constituent. This will result in frustration.

**Question 26. If standards were developed regarding the creation of electronic records in State government, how would they be enforced and who would be or should be responsible for enforcing them? Should NYS Archives be given enhanced enforcement authority?**

We're not sure that the New York State archives has the ability to enforce standards with its existing funding levels and the quantity of records. It may make more sense that if such a requirement were to be imposed on the agencies that the Comptroller could audit it as part of the already existing procedures for auditing other parts of the agency operation. The Standard should be a functional one – e.g. – a test to produce a response to a FOIL, and not an examination of desktop images. Agencies are best suited to manage their own operations. Requirements should be couched in the nature of guidelines – for example - agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in an standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace.

**Question 27. What would be the costs and benefits to the State and to its citizens and other stakeholders (e.g. vendors) if the State were to mandate a single document format for State agency use?**

If OGS could negotiate volume credit adjustments based on total purchases there may be some periodic financial discount available, but “one size fits all” means no one constituent gets what they want. Establishing a single format as preferred is possible, so long as agencies can accommodate different requests. Imagine that Adobe .pdf were no longer allowed. The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in an standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace.

**Question 28. What would be the costs and benefits to the State and to its citizens and other stakeholders (e.g. vendors) if the State were to allow agencies to employ multiple document formats?**

Agencies with flexibility to respond to constituent requests can motivate employees to do so in a manner which allows for one hundred percent satisfaction. Forcing an agency into a centrally selected format sends a message to agency employees on the front line that their experience in dealing with “customers” doesn’t count. We realize that Vendors are stakeholders, but Vendors as stakeholders must respond to citizen and legislative constituents in the same manner as Agencies – not the other way around.

**Question 29. Which option is the most cost-effective? Why?**

By virtue of their front line experience, agencies are in the best position to drive constituent satisfaction within budgetary constraints.

**Question 30. Is the observation correct, or not? Please support your conclusion with specificity.**

It is not clear to us that the OOXML format cannot be implemented by Vendors. Vendors may choose not to do so for a variety of reasons, for example integration with proprietary formats. This is a vendor business decision.

**Question 31. If you or the entity with which you are affiliated as part of the ECMA or ISO standardization process submitted formal comments requesting changes to the OOXML standard, please list those changes which you requested.**

N/A

**Question 32. If you or the entity with which you are affiliated as part of the ISO standardization process submitted formal comments requesting changes to the ODF standard, please list those changes which you requested.**

N/A

**Question 33. What are the specific reasons why a vendor can not or will not directly support the OOXML format? What impediments are there to doing so? What, specifically, prevents a vendor from fully adopting the OOXML format natively, and what would need to occur for a vendor to be able to do so?**

See response to question 30

**Question 34. What are the specific reasons why a vendor will not directly support the ODF format? What impediments are there to doing so? What, specifically, prevents a vendor from fully adopting the ODF format natively, and what would need to occur for a vendor to be able to do so?**

See response to question 30

**Question 35. To what extent does the WordPerfect to Microsoft Office transition serve as a viable migration model? Describe the elements of that transition, and how they relate to current needs. On this question we would be particularly interested in hearing from or being**

**directed to the studies of subject matter experts capable of providing a comprehensive historical analysis and a comparison to current scenarios.**

Both of these products can produce documents. There are agencies that prefer Corel, and those that prefer MS Word. With later versions we find the level of interoperability is increasing. Forcing one or the other will result in frustrated employees and the loss of many hours of training. There is no need to do so. Other than the nominal expense of maintaining an additional application, there is no reason not to allow dual deployment.

**Question 36. If New York State agencies were to migrate to ODF-based office suite software, what specific measures going forward would constitute an optimum migration strategy for those State agencies?**

The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace.

**Question 37. Are those studies finding actual cost savings after converting to ODF valid, or are they faulty? If faulty, in what manner are they deficient? What counter-examples of studies exist that considered not just licensing costs but also ancillary costs and demonstrated actual increased costs after migration to the ODF format?**

These studies seem to ignore employee satisfaction, productivity and the cost of lost training on the old product. Our agency values our employees because we know that the folks on the front line are in the best position to understand the needs of our constituents. We work hard to foster this input. A forced conversion, especially one in which the rank and file did not participate will diminish this resource.

**Question 38. What studies have found actual lower costs after migrating to OOXML? What studies have found actual higher costs after migrating to OOXML? For these various questions about studies, CIO/OFT is less interested in studies which predict certain cost effects. Instead, we wish to learn about studies quantifying cost savings or increases actually incurred after adoption of either respective office suite format.**

We have yet to find a study that can quantify the qualitative factors involved. Please see answer to question 37.

**Question 39. What are the key issues which CIO/OFT's study should be addressing concerning electronic records and assistive technologies?**

No adoption can result in degradation of accessibility. The State must comply with applicable law and regulation. There is an accessibility policy for Internet applications and the process that led to that policy is a model.

**Question 40. Which format currently will better facilitate access to electronic records through the use of assistive technologies? Which is best positioned to provide such access in the long term?**

This question should be answered by the use of state personnel who are able to test candidate formats, as is done with html page readers.

**Question 41. Would adoption of ODF be acceptable if conversion to other formats was available which allowed usage of assistive technologies existing on that platform?**

The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace.

**Question 42. Should the State be engaging in an initiative similar to that described in the Massachusetts MOU? If so, please provide a description with particularity.**

The State should fully evaluate the result of the Massachusetts initiative considering the impact on all constituents and particularly those who are most involved with actual delivery of services to customers. What is the present status of the Massachusetts initiative and why?

**Question 43. Who are the relevant stakeholders most conversant with issues related to document formats and assistive technologies?**

Actual users who require this technology and constituents who must provide it.

**Question 44. Is it true that setting an office suite software format standard would be premature because other more interactive platforms will soon be surpassing in usage ODF- and OOXML-using software? Please explain.**

A less restrictive standard would provide for that situation. The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace and we presume marketplace changes would continue to drive the architecture of the then current version of the office suite.

**Question 45. Is it true that setting an office suite software format standard would be premature because (a) ISO standardization has yet to fully play out for the OOXML format, or (b) ODF format is undergoing revisions? Please explain.**

We don't advocate a restrictive standard. We advocate that the standard encourage forward looking migration which takes advantage of market forced innovation. The agencies should be required to migrate to a current version of their office suite to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf. These formats are broadly supported in the marketplace.

**Question 46. What factors would define the appropriate timeframe within which CIO/OFT should recommend a particular electronic record format or formats? When could this optimally be done?**

This depends on whether the recommendation prohibits use of alternatives. Without the proposed recommendation it is difficult to answer.

**Question 47. If CIO/OFT were to recommend the adoption of a particular office suite format standard or grouping of standards, how much advance notice would be sufficient to enable vendors and the State to adopt the new standard? Please explain.**

Again, this can't be answered without seeing the proposed recommendation. If we lose the benefit of years of training that will take some time to replace.

**Question 48. Is this a legitimate concern? Are there other IP promises which CIO/OFT should be evaluating besides the Open Specification Promise and the OpenDocument Patent Statement?**

The answer to this depends on whether the procurement requires the vendor to secure necessary rights in the event that there is an issue. The State seems to have tolerated other instances of this problem, for example Research in Motion.

**Question 49. Are there other intellectual property issues which software providers or users should be concerned with in relation to either or both the OOXML and the ODF formats, and if so, what are they? Is there any possibility that the State, as an end user of software, could face litigation over format-related intellectual property issues?**

Anyone can litigate. Whether it will be successful depends on many factors. There is risk in any procurement. To the extent that the need for the product overcomes the risk, it is worth it. The Attorney General should weigh in on this question.

**Question 50. If such concerns do exist, how can the State as an end-user best protect itself from liability for using one or the other of the formats? What methods should the State adopt to ensure that intellectual property matters do not limit the State's ability to preserve and provide access to State information of enduring value.**

See number 49. Indemification works to the extent that it doesn't precipitate a Chapter 11. Best answered by the Attorney General. One of the best arguments for agency flexibility is that if there is a central dictate, then the whole of State operations is exposed, as opposed to perhaps a smaller number of agencies which would mitigate the exposure.

**Question 51. How can and should the State, as a governing body, best protect its citizens, individual, governmental and corporate, from intellectual property liabilities in relation to electronic records?**

See number 49 and 50. Best answered by the Attorney General.

**Question 52. Are there implications for record production in electronic discovery arising from having chosen particular document formats? If so, what are they?**

In a very broad sense, we can't provide what we don't have. Here's a copy of what we do have. Can it be machine read years from now? How much will the conversion cost? Is the storage format capable of being read years into the future? Could the State produce records kept on older 8 inch floppy disks used by Artemis Word Processors? Probably not. Do we have the documents in the file? Perhaps.

**Question 53. For archived electronic records, is PDF/A an acceptable format in which to preserve such documents? If not, please describe its deficiencies? Also, please recommend alternatives.**

This begs the question of taking the actual record and converting it. The conversion becomes a procedure that might be subjected to a foundational challenge. The Attorney General should advise. Pdf seems to be a stable format. We can't predict what will happen in the years ahead. If the output were saved as another format that did not accommodate the formula or Features such as solver then the State would have made a decision to alter the record by virtue of its storage methodology

**Question 54. Are there any compatability issues with litigation support software which could arise if the State were to choose particular document formats? If so, please describe in detail.**

Since in most cases the Attorney General has the most experience with Litigation we would defer to OAG.

**Question 55. Should other formats be considered besides ODF or OOXML? If so, which formats, and why?**

Yes, the marketplace should drive the format. Part of litigation could concern the formulae in a spreadsheet. If the output were saved as another format that did not accommodate the formulae or features such as solver then the State would have made a purposeful decision to destroy or alter the record by virtue of OFT's selection of archival storage methodology.

**Question 56. How valid are the criticisms of OOXML? What are its most significant strengths and weaknesses?**

We have not completed extensive testing because of the demands of agency objectives

**Question 57. How valid are the criticisms of ODF? What are its most significant strengths and weaknesses?**

We have not completed extensive testing because of the demands of agency objectives

**Question 58. What factors or elements determine best "quality" in the formatting of electronic records? Please list all of those which you believe a "best value" determination should take into account, including the "quality" needed at various points in time in an electronic record's lifecycle. What would be the best means to objectively and quantifiably determine best electronic record formatting "quality"?**

The degree of degradation over time.

**Question 59. What factors or elements determine best "cost" in the formatting of electronic records? Please list all of those which you believe a "best value" determination should take into account, including the "cost" applicable at various points in time in an electronic record's lifecycle. What would be the best means to objectively and quantifiably determine best electronic record formatting "cost"?**

One the objectives are established it becomes a procurement issue – a best value in meeting the objective which have been established.

**Question 60. What factors or elements determine best "efficiency" in the formatting of electronic records? Please list all of those which you believe a "best value" determination should take into account, including the "efficiency" needed at various points in time in an electronic record's lifecycle. What would be the best means to objectively and quantifiably determine best electronic record formatting "efficiency"?**

Labor requirements – both PS and vendor. Again, this is a best value scenario once the objectives have been established.

**Question 61. Part of determining the "responsiveness" and "responsibility" of bidders on State technological procurements relates to concerns that maintenance and support for those procurements remains available, robust, and within specific timeframes (e.g. ability to contact and receive assistance 24/7). To what extent should the State be concerned, or reassured, about the availability and reliability of maintenance and support from vendors of OOXML format-using software? To what extent should the State be concerned, or reassured, about the availability and reliability of maintenance and support from vendors of ODF format-using software?**

The more the State can mitigate risk the better. To that end the Comptroller's Vendor Responsibility initiatives are helpful. Other methods have been employed including performance bonds. Vendors must be required to provide evidence of sustained ability to continue to provide the required level of support.

**Question 62. In terms of the procurement of software for the creation and retention of office suite records, please list all of the objective criteria which State government should always consider as part of any office suite software "best value" analysis.**

Any such software must be provided with the capability of being continuously upgraded by version and rev. level as new market driven formats appear, while at the same time retaining the basic functionality so that prior training is not lost.

**Question 63. What other issues has this RFPC omitted which the State should be considering as it conducts this electronic records study? Please describe these additional issues with particularity, and any recommended approaches.**

Input from a variety of employees would be helpful, particularly those who extensively use the software products.

**Question 64. For the purposes of preserving long-term abilities to access and read e-data, when procuring software which creates e-data, should the State require in its procurement contracts that the source code for that software be shared with the State, i.e. through "open source" or "shared source" licensing?**

Yes, to the extent feasible considering the cost, time to deploy and other factors as the agencies desire, the source code can be either shared or escrowed in such an event that the Vendor is no longer able to support the State's interoperability objectives.

**Question 65. For the purposes of preserving long-term abilities to access and read e-data, when procuring software which creates e-data should the State require in its procurement contracts that the source code for that software be escrowed so that the State can access the source code when such access is the last reasonable option for the State to be able to access and read its e-data?**

See answer to number 64 above.

**Question 66. In the procurement process, should the State place less emphasis on openness of creation software and focus instead on being able to convert or migrate records to an open format at the time of preservation?**

Yes. The agencies should be required to procure a version of their office suite to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf and whatever the future may bring in terms of formats which are broadly supported in the marketplace.

**Question 67. Should CIO/OFT certify one particular office suite standard provisionally, but with the flexibility to change that recommendation if future iterations (or other standards) provide sufficient or better functionality or easier translation to the new standard?**

No. Agencies are quite capable of determining their own course of action. To the extent that there may be procurement savings from a "mass procurement" there will be greater costs in terms of disenfranchisement of front line operating staff, lost training hours and the inability of one size fits all. CIO/OFT certainly can recommend software, but in the end the agencies charged with the accountability for their operations must be allowed the ability to select the tools with which they are to accomplish the objectives. When vendors compete, products get better. No competition leaves out the group of vendors capable of or driven by innovation.

**Question 68. Should the State provide encouragement for proprietary software vendors to support more open formats? If so, what would be the most effective means for the State to do so (e.g. direct financial incentives; State preferences for the usage of more open formatted software whenever the functionality of the software exceeds the user base's needs; other)? What advantages or what problems would be presented by this approach?**

The agencies should be required to negotiate procurements which require vendors to provide the ability to migrate to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf and to what the market brings in the future. These formats are broadly supported in the marketplace.

**Question 69. Should the State encourage any software providers who have incorporated the most open formats within their software to improve the software's other functionality so that it becomes more feature-rich and becomes a more viable alternative to software which does not adopt the most open available formats? (e.g. direct financial incentives; funding of research centers; other)? What advantages or what problems would be presented by this approach?**

We believe that competitive procurement among multiple offerors will accomplish that objective if it is required by the procurement. Agencies should be required to initiate procurements which

require migration to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf and that whatever the marketplace produces in future years can be accommodated.

**Question 70. Some governmental jurisdictions have required that the usage of fully open formats within software must be an element which is evaluated whenever that jurisdiction is assessing the "best value" available when procuring software. In its procurement laws or regulations, should the State specifically require when purchasing software an evaluation of format openness as part of the "best value" analysis performed by State agencies? If so, should the requirement be to define and compare best value in functional capabilities of the software today versus best value of the software towards long-term preservation?**

An evaluation of the ability to accommodate open source aspects can be included in the procurement record, but the agency makes the decision because it is in the best position to ascertain how to support its needs, which may require a balancing of several factors.

**Question 71. Is recommending no changes to existing State practices a viable option? What would the State risk from recommending no changes to existing practices, and what would the State gain from so refraining?**

Yes, this is a viable option. It is not the best option. The solution which provides that agencies should be required to procure software such as office suites to ensure that documents can be stored in a standard format, such as ooxml, odf or pdf now and in the future is a good solution. To the extent that OFT can provide information on alternatives, there is a productive process. On the other hand, removing this decision from the purview of the agencies will create more problems than it would otherwise solve.

**Question 72. Would a program piloting the usage of ODF office suite software to determine its viability for the State's electronic record needs be a viable recommendation from this study? If not, what are the objections to this? If so, what specific recommendations can you offer for the design of such a pilot program?**

Sure. Pilots are good. We'd be interested in seeing the results. We might benefit from that. But the pilot has to include all factors, including financial impacts and impact on productivity. Perhaps OFT ought to ask the agencies if there is software that the agencies would like to see "piloted"

**Question 73. Is it a viable solution for long-term access to electronic records that rather than migrating electronic data to new technologies and document formats, State government should archive electronic record-capable hardware and should seek to make various iterations of software available for the long-term as a safeguard against obsolescence and to facilitate access to electronic records.? Why, or why not? If you believe this is viable, then please describe measures to effectuate same.**

We need more detail. Possibly, but there are legal implications (spreadsheet formulae) if records are not retained in their original format and data is lost. Decisions of that sort are purposeful decisions.

**Question 74. Some commentators have suggested that governments should create or participate in centralized record management systems consolidating the electronic record systems of different agencies. CIO/OFT is aware of the development of certain nascent**

**comprehensive systems using, for example, grid-based technologies. (See, for example, <http://chronopolis.sdsc.edu/>). Would the creation of or participation in centralized record management systems consolidating the electronic record systems of different agencies be appropriate for New York State? If so, please describe recommendations for its design.**

We'd need to know more about the impact on agency operations before we provide comments on this question.

**Question 75. Please provide any other suggested alternative approaches and describe which approach you believe would be best for the State, and why.**

We'd like to see this opened up to more input that involves operations and human factors including productivity, morale, efficiency. It would also be good to take a look at second tier impacts such as impact on training.

**16. New York State Department of Public Service: Friday 1/18/08 4:38 PM****Question 1. CONTACT INFORMATION [REDACTED]****Question 2. What mechanisms and processes should the State of New York establish for accessing and reading its electronic records in order to encourage public access to those records?**

The first step would be to characterize records to specify those that are public documents, as the Public Service Commission has done in accordance with §§ 15 and 16(1) of the Public Service Law and Article 6 of the Public Officers Law (the Freedom of Information Law), thereby implementing a policy statement in Case 03-M-1241 (issued September 19, 2003). The second step would be to make such public records accessible on agency websites, on a priority basis beginning with those having the greatest public interest.

**Question 3. What mechanisms and processes should the State of New York establish for accessing and reading its electronic records to encourage interoperability and data sharing with citizens, business partners and other jurisdictions?**

Establishment of standards, such as, data format standards; availability of good search engines in websites, etc. For interoperability, a mechanism for appropriately sharing sensitive data so other government agencies (federal, state, local) have ready access to records under suitable technical protocols (e.g., certification and encryption standards). The mechanism should allow interaction between parties on either side of record access transactions. (Facilitating public access to this Department's records often involves a corresponding obligation for staff to protect against imprudent access and publication of trade secrets, confidential commercial information, and critical infrastructure information.)

**Question 4. What mechanisms and processes should the State of New York implement to encourage appropriate government control of its electronic records?**

Data classification standards and security standards for accessing and transferring data would need to be established consistently across agencies and between parties exchanging information. It should also be noted that agencies are currently required by law to train all staff in records retention and management.

**Question 5. What mechanisms and processes should the State of New York consider for encouraging choice and vendor neutrality when creating, maintaining, exchanging and preserving its electronic records?**

This is a difficult question to answer without undertaking more analysis about the availability and feasibility of integrating open standards into our IT environment, which from the detailed questions, is a subject of this study. As with other agencies, we have invested a considerable amount in technical platforms that support our technical environment, applications, and records. These are proprietary, place constraints on interoperability, and limit our choices accordingly. However, within these constraints, the goal of vendor neutrality is well-supported through existing procurement policies, rules, and regulations.

**Question 6. Are there mechanisms and processes the State of New York should establish that are specific to the management of its electronic records in its various life cycle stages (creation, maintenance, exchange, preservation and disposal)?**

Asset classification, creation of retention schedules based on asset type, creation of standards for physical preservation of records including media type and access mechanism. Access, particularly long-term access, is dependent on the selection of an enduring technology and preferably one built upon some open or commonly accessible standard. It should be noted that this conversion effort (to a common open standard) would likely be tied to considerable work effort and would be difficult to undertake in the short term without additional resources.

**Question 7. How should the State address the long term preservation of its electronic records? What should the State consider regarding public access to such archived content?**

See #6 above.

**Question 8. What changes, if any, should be made to the government records management provisions in New York Statutes? (Please reference those laws which are cited here: [http://www.archives.nysed.gov/a/records/mr\\_laws.shtml](http://www.archives.nysed.gov/a/records/mr_laws.shtml) ).**

This question probably requires more research before comment; however, any statutory changes would need to address the goals and standards as defined in #6, and address more specifically the issues with electronic records.

**Question 9. What constraints and benefits should the State of New York consider regarding the costs of implementing a comprehensive plan for managing its electronic records?**

Since any mandate affecting the platforms on which records are created and retained in NYS systems could introduce considerable work effort, this would need to be carefully prioritized in light of other technology goals. However, it would make sense to consider the areas where the need for access and preservation is most compelling and prioritize implementation of any migration to new platforms accordingly.

**Question 10. What should the State of New York consider regarding the management of highly specialized data formats such as CAD, digital imaging, Geographic Information Systems and multimedia?**

It is important to understand where this data exists and what the retention needs and issues for this data are. CSCIC is likely familiar with many agencies [which] that have much of this data.

**Question 11. What constraints and benefits should the State of New York consider regarding potential savings or additional costs associated with the management of defined electronic record formats?**

See #9 above.

**Question 12. What existing policies and procedures in the private or public sector for the management of electronic records would be appropriate for the State of New York to examine? Please cite specific examples.**

CSCIC's Information Security policy addresses many related areas such as asset classification and requirements for exchanging sensitive information among State entities. It would be important to consider these existing standards and related work efforts.

**Question 13. Are New York State's existing standards, regulations and guidelines regarding records management adequate to meet the challenges of electronic records retention? How should these standards, regulations and guidelines be changed?**

It might be helpful to have the CIO Council membership or similar group of knowledge experts consider the standards, regulations and guidelines in light of the challenges faced in adhering to records retention requirements with respect to electronic records.

**17. New York State Office of Cyber Security and Critical Infrastructure Coordination: Friday  
1/18/2008 4:48 PM**

**Part I – General Questions**

**Question 1. Contact Information:** [REDACTED]

**Question 4. What mechanisms and processes should the State of New York implement to encourage appropriate government control of its electronic records?**

**Question 6. Are there mechanisms and processes the State of New York should establish that are specific to the management of its electronic records in its various life cycle stages (creation, maintenance, exchange, preservation and disposal)?**

**Question 12. What existing policies and procedures in the private or public sector for the management of electronic records would be appropriate for the State of New York to examine? Please cite specific examples.**

In relation to the foregoing questions, we note the following:

The recommendations concerning the mechanisms and processes that govern the creation, maintenance, preservation, and disposal of State agency records, including electronic records, must take into account the State's Information Security Policy (P03-002, V3.0) and Information Security Standard (S05-001). The Policy and Standard set forth the minimum requirements, responsibilities, and accepted behaviors necessary to establish and maintain a secure environment and achieve the State's information security objectives. Under their terms, the Policy and Standard apply to all information, regardless of the form or format, that is created to support the activities of State agencies.

In addition, the recommendations concerning the management and control of records should be informed by the Information Classification and Control Policy and Standard, which are currently in draft form and are being piloted by several agencies.

**Question 8. What changes, if any, should be made to the government records management provisions in New York Statutes? (Please reference those laws which are cited here: [http://www.archives.nysed.gov/a/records/mr\\_laws.shtml](http://www.archives.nysed.gov/a/records/mr_laws.shtml) ).**

It is CSCIC's view that no additional, specific statutes or regulations are required to effectively manage electronic records. The existing regulations governing the creation, maintenance, disposition, and preservation of State government records (8 NYCRR Part 188) apply to all such records "regardless of physical form or characteristics." Similarly, the definition of "record" in the Freedom of Information Law encompasses information in "any physical form whatsoever." Finally, the Electronic Signatures and Record Act provides that, with some specific exceptions, "[a]n electronic record shall have the same force and effect as those records not produced by electronic means."

In light of the foregoing, it would appear that the statutes and regulations governing records management should remain neutral as to the form of those records. Studies, such as the one

directed by Chapter 477 of the Laws of 2007, can provide important guidance to agencies on compliance with existing statutes and regulations in the current technological environment and how subsequent technological environments can be configured to maximize compliance and increase efficiency in the future.

## Part II – Detailed Questions

### C. Definitions – “Government Control”

**Question 3. Does the use of particular office suite formats such as the Open Document Format (ODF) or Office Open XML (OOXML) raise any security or privacy implications and, if so, what are they?**

**Question 4. Will accessibility to electronic records through the FOIL process be affected by adoption of either format, and if so, how? Will the rapidity of response required by recent updates to the FOIL law be affected?**

**Question 5. In terms of appropriate “government control” of electronic records, what factors or concerns should the State be addressing?**

In relation to the foregoing questions, we note the following:

Without undertaking extensive research it is not possible to identify the universe of security and privacy implications associated with the use of open office suite formats or to compare the risks and benefits of implementing open office suite formats to those associated with proprietary products. Based on readily accessible information, it is apparent that the open office suites that employ open document formats are not free from security flaws (see, e.g., <http://www.openoffice.org/security/bulletin.html> ).

In the event that other respondents to the Request for Public Comment identify security issues with particular formats, CSCIC would appreciate being informed of those issues, particularly if they involve formats currently in use by State agencies.

Regardless of the format of the documents employed by State agencies, the security and privacy of the information contained in those documents will be improved as the State moves forward with the implementation of its encryption policy. Under the provisions of Information Security Policy (P03-002, V3.0) and Information Security Standard (S05-001), State agencies must implement encryption for certain devices, methods of transmission, and storage media by December 31, 2008.

With regard to FOIL, it should be noted that, while the recent amendments imposed time frames for responding to requests, the rapidity with which records must be made available is dependent on a variety of circumstances. Presumably, the format of the records that are the subject of a FOIL request is only one of the of circumstances that an agency would take into account in determining the reasonable period in which a request would be granted in whole or in part (see FOIL, §89[3][a]).

### E. Definitions - "Open Standards"

### F. Focus of the Study

In relation to the foregoing portions of the Request for Public Comment, we note the following:

Although reference is made to only two office suite “open” formats (ODF and OOXML), it may be appropriate to consider PDF as a recommended document format due to its widespread adoption and support in the industry. This is consistent with the approach contemplated by Massachusetts in its Enterprise Technical Reference Model 4.5.

With regard to the electronic records currently maintained by the agency, the formats are predominantly the standard Microsoft Office suite formats, PDF documents, and Geographic Information Systems (GIS) data. Our GIS data, by data volume, is mostly digital orthoimagery. For Annual Lots 2001-2005, the imagery is in MrSID wavelet compression format, a de facto proprietary standard in wide use. Starting with Annual Lot 2006, the imagery is in JPEG2000 wavelet compression format, an open standard very similar to MrSID. The remainder of our GIS data is vector data stored in proprietary ERSI and MapInfo formats. At this time CSCIC is not aware of any GIS format being included in open document formats.

#### **T. Possible Recommendations**

**Question 72. Would a program piloting the usage of ODF office suite software to determine its viability for the State's electronic record needs be a viable recommendation from this study? If not, what are the objections to this? If so, what specific recommendations can you offer for the design of such a pilot program?**

This appears to be the most viable recommendation offered. A pilot program would permit the State to resolve many of the questions that need to be answered before a recommendation can be made about any particular software or “open” record format.

**18. New York State Committee on Open Government: Tuesday 1/22/07 9:52 AM**

Pursuant to the Request for Public Comment regarding concerning electronic record policy for New York State government, I offer the following remarks.

By way of background, the Committee on Open Government, housed in the Department of State, was created as part of the state's Freedom of Information Law ("FOIL") in 1974. It is authorized to provide advice and opinions to any person relating to that statute and required to report to the Governor and the State Legislature annually. Similar responsibilities were added with the implementation of the Open Meetings Law in 1977 and the Personal Privacy Protection Law in 1984. With the evolution of information technology, the Committee has been required to consider those laws creatively and to offer interpretations consistent with their intent.

It is noted that FOIL is expansive in its coverage, for it pertains to all government agency records and defines the term "record" expansively in §86(4) of the Public Officers Law to include:

"...any information kept, held, filed, produced, reproduced by, with or for an agency or the state legislature, in any physical form whatsoever including, but not limited to, reports, statements, examinations, memoranda, opinions, folders, files, books, manuals, pamphlets, forms, papers, designs, drawings, maps, photos, letters, microfilms, computer tapes or discs, rules, regulations or codes."

Based on the foregoing, it is clear that FOIL includes information maintained or communicated electronically within its coverage. Additionally, FOIL was recently amended to require that agencies disclose records sought via email when they have the ability to do so.

A primary challenge involves dealing with requests for records that are maintained electronically, and several issues have arisen in relation to that matter.

For instance, FOIL requires that an applicant must "reasonably describe" the records sought. The Court of Appeals has held that meeting that standard is often dependent upon the nature of an agency's filing, indexing or retrieval systems. In short, when an agency has the ability to locate and retrieve or generate information with reasonable effort, it is required to do so, irrespective of the volume of material requested. Contrarily, if records or portions of records cannot be located or retrieved with reasonable effort, i.e., if locating a record is equivalent to searching for the needle in the haystack, an agency is not required to engage in that degree of effort, even if it known that the needle is there. A continuing issue, particularly with respect to email communications, involves the ability of an agency to locate records. It is hoped that electronic record policy will include the need to employ or develop search engines or mechanisms that enable agencies to locate records with facility, thereby enhancing the operation of FOIL.

In a related vein, it is essential to consider the design of information systems to provide maximum access to government information, while concurrently protecting against

disclosure of deniable information, particularly when disclosure would constitute “an unwarranted invasion of personal privacy” [see FOIL, §87(2)(b)]. Through the design of information systems that provide appropriate disclosure coupled with the protection of privacy, often an agency need only redact certain fields from a database. Once the fields containing protected information are redacted, the database becomes fully public. Clearly that course of action, accomplished in consideration of access and privacy, is preferable to and more efficient than entering queries following a request in order to extract portions of a database, or worse, making manual deletions from a printout.

Similarly, software should be developed or purchased that removes designated text and text fields and can scan documents and redact all occurrences of specific words and phrases, as well as text patterns, such as social security numbers, telephone numbers or perhaps email addresses. It is my understanding that “batch processing features” permit the redaction of many documents at once without human intervention and can simplify the redaction process by combining several steps into one. Consideration should be given those kinds of processes, again, to maximize disclosure in a manner consistent with law while automatically redacting portions of records that may justifiably be withheld.

A recent recommendation offered by the Committee involves “proactive disclosure”, the posting of records that are clearly public and of significance to the public on agency websites. By so doing, members of the public need not take the step of requesting records from a government agency, and government agencies would not be encumbered with the responsibility of responding to FOIL requests or the attendant costs associated with compliance. In short, the records would be available online, there for the taking by the public.

In sum, as electronic record policy for the state is developed and evolves, consideration should be given to FOIL in terms of the ease of its use, the burdens imposed upon agencies that must give effect to the law, the employment of modern mechanisms that guarantee optimal disclosure, as well as an optimal capacity to redact, in a manner consistent with the letter and spirit of the law.

**19. New York State Division of Military and Naval Affairs:** *Wednesday 1/23/08 4:08 PM*

**NEW YORK STATE CIO/OFT REQUEST FOR PUBLIC COMMENT (RFPC)**

**Part I - General Questions**

**Question 1. Contact Information:** [REDACTED]

**Question 2. What mechanisms and processes should the State of New York establish for accessing and reading its electronic records in order to encourage public access to those records?**

Web based process that protects privacy and health related information and is in compliance with the Freedom of Information Law.

**Question 3. What mechanisms and processes should the State of New York establish for accessing and reading its electronic records to encourage interoperability and data sharing with citizens, business partners and other jurisdictions?**

Web based process that protects privacy and health related information and is in compliance with the Freedom of Information Law.

**Question 4. What mechanisms and processes should the State of New York implement to encourage appropriate government control of its electronic records?**

Use of copywrites and disclaimers ensuring the integrity of the record.

**Question 5. What mechanisms and processes should the State of New York consider for encouraging choice and vendor neutrality when creating, maintaining, exchanging and preserving its electronic records?**

A media that has industry acceptance and that can be accessed with non-proprietary indexing.

**Question 6. Are there mechanisms and processes the State of New York should establish that are specific to the management of its electronic records in its various life cycle stages (creation, maintenance, exchange, preservation and disposal)?**

A published disposition schedule that identifies who creates a record (anyone in state gov't), a date, event or both that triggers the maintenance stage, an acceptable period of time to hold the record in the office to conduct business. Records disposition should be accomplished when the storage period expires.

**Question 7. How should the State address the long term preservation of its electronic records? What should the State consider regarding public access to such archived content?**

Dual storage, industry accepted hardware that is not proprietary.

**Question 8. What changes, if any, should be made to the government records management provisions in New York Statutes? (Please reference those laws which are cited here: [http://www.archives.nysed.gov/a/records/mr\\_laws.shtml](http://www.archives.nysed.gov/a/records/mr_laws.shtml) ).**

No change.

**Question 9. What constraints and benefits should the State of New York consider regarding the costs of implementing a comprehensive plan for managing its electronic records?**

The costs already born by the agencies themselves.

**Question 10. What should the State of New York consider regarding the management of highly specialized data formats such as CAD, digital imaging, Geographic Information Systems and multimedia?**

No comment.

**Question 11. What constraints and benefits should the State of New York consider regarding potential savings or additional costs associated with the management of defined electronic record formats?**

No comment.

**Question 12. What existing policies and procedures in the private or public sector for the management of electronic records would be appropriate for the State of New York to examine? Please cite specific examples.**

Para 8-8 AR 25-1: All electronic information generated by or contained in an information system or any office IT source, or created during the conduct of electronic business/electronic commerce, must be considered. This requirement applies to information contained in any enterprise information system, e-mail, command unique systems, and systems maintained in the office environment. The disposition of electronic records must be determined as early as possible in the life cycle of the information system.

DOD 5015.2-STD Design Criteria Standard for Electronic Records Management Software Applications. (Available at <http://www.dtic.mil/whs/directives>.)

**Question 13. Are New York State's existing standards, regulations and guidelines regarding records management adequate to meet the challenges of electronic records retention? How should these standards, regulations and guidelines be changed?**

Yes.

**Question 14. What else should the State of New York consider about this subject?**

No comment.

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## Part III-D

**Public Comments Received: Non-Profit Responses**

See Next Section: ➡