



A Strategy for Openness

Enhancing E-Records Access in New York State Part III-A: 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



Executive Co-Sponsors

Dr. Melodie Mayberry-Stewart New York State Chief Information Officer and Director, New York State Office for Technology and Office of the New York State Chief Information Officer

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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-A

REQUEST FOR PUBLIC COMMENTS

(published by NYS CIO/OFT on December 12, 2007)

Request for Public Comment - A study concerning electronic record policy for New York State. RFPC # 122807

In its 2007 session, the New York State Legislature directed NYS Chief Information Officer/Director of the Office For Technology, Melodie Mayberry-Stewart, to gather stakeholder input regarding the mechanisms and processes for obtaining access to and reading electronic data so that such data can be created, maintained, exchanged, and preserved by the state in a manner that encourages appropriate government control, access, choice, interoperability, and vendor neutrality.

Specifically, the law requires:

"The director shall study how electronic documents and the mechanisms and processes for obtaining access to and reading electronic data can be created, maintained, exchanged, and preserved by the state in a manner that encourages appropriate government control, access, choice, interoperability, and vendor neutrality. The study shall consider, but not be limited to, the policies of other states and nations, management guidelines for state archives as they pertain to electronic documents, public access, expected storage life of electronic documents, costs of implementation, and savings. The director shall solicit comments regarding the creation, maintenance, exchange, and preservation of electronic documents by the state from stakeholders, including but not limited to, the office of the state comptroller, the office of the attorney general, the state archives, and the state historian. The director shall also solicit comments from members of the public. The director shall report findings and recommendations to the governor, the speaker of the assembly, and the temporary president of the senate on or before January fifteenth, two thousand eight."

Laws of 2007, Chapter 477 (codified at New York State Technology Law § 305(4))

CIO/OFT is issuing this RFPC to help direct the findings and recommendations of the required study.

The RFPC is in two parts, an initial list of general questions, and a second portion with very detailed questions. CIO/OFT designed it this way with the hope that including general questions might elicit greater input from members of the public interested in the broader issues but not necessarily concerned with the more granular aspects of electronic records creation and preservation.

All stakeholders are encouraged to submit responses to all or parts of the RFPC, irrespective of whether they currently do business with or intend to participate in future procurements by CIO/OFT and/or the State of New York. No contract will be awarded based on responses to this RFPC.

Responses are due by: December 28, 2007, 5:00 PM EST January 18, 2008, 5:00 PM EST

Responses should be in writing, preferably sent by electronic mail to:

Darlene Van Sickle, Principal Attorney New York State Office for Technology State Capitol, ESP - PO Box 2062 Albany, NY 12220-0062 FAX: (518) 486-7923 E-mail: <u>erecords-study@oft.state.ny.us</u>

NEW YORK STATE CIO/OFT REQUEST FOR PUBLIC COMMENT (RFPC) Part I - General Questions

I. INFORMATION REQUESTED

Input is requested regarding the items/questions listed below. Any additional ideas or proposals are also welcome. Please identify by letter/number each question you are addressing. In addition, please provide for you and/or for the entity for whom you are providing responses a brief description of any experience which you have had with the production and preservation of electronic records.

Terminology - Electronic "Records"

Concerning a similar survey, the State of Minnesota CIO recently noted that the "terms 'records', 'data', and 'documents' are often used interchangeably; the [Minnesota law requiring an e-records study] uses 'documents' and 'data' without distinguishing the two. But all of these terms have a separate legal meaning and significance in Minnesota, so it will be important to understand the exact distinctions any respondent makes in this survey."

This observation is equally true in New York State: words such as electronic "data" and "records" are terms of art with specific legal definitions. To avoid confusion, survey respondents are asked to please keep in mind the following basic distinctions. In this study and in the survey, the term:

- Electronic "data" will be conceptualized as electronic "information, evidencing any act, transaction, occurrence, event, or other activity." (NYS Technology Law § 302, the Electronic Signatures and Records Act or "ESRA");
- Electronic "documents" will be conceptualized as the "physical embodiment of information or ideas" (Black's Law Dictionary) within electronic "forms [which are] perceptible by human sensory capabilities." (ESRA);
- Electronic "records" will be conceptualized as being created when electronic data is "produced or stored by electronic means and accurately reproducible" (ESRA) as required; and
- Electronic copies of "official [government] records" will be conceptualized also in accordance with their legal definition, as electronic records made "in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities, or because of the information contained therein." (The NYS Arts and Cultural Affairs Law § 57.05).

In summary, e-<u>data</u> fills e-<u>documents</u> creating e-<u>records</u>, some of which represent <u>official</u> State agency e-records requiring preservation. As in Minnesota, when being referred to inclusively and generically within this survey the term "electronic records" will be used. In your responses to the survey, please be sure to indicate if your usage of any term other than "electronic records" carries any special meaning or has any special implications. Another important distinction for survey respondents concerns the lifecycle of electronic records, which are not static but have utility for varying purposes. When responding to this survey, please keep in mind that State government produces electronic records to meet varied and specific governmental purposes. Some of those purposes endure for significant periods of time. Although many electronic documents, such as working drafts and inventories of supplies, can be discarded after a short time, others, including Retirement System records and architectural drawings of State-owned buildings, must remain readable, interoperable, compatible with assistive technology, and generally accessible for extremely long periods of time. In addition, a few records have enduring historical value and warrant permanent preservation.

Electronic records thus require differing mixtures of functionality and features at different points in time:

- accessibility for being used for the day-to-day purposes for which they were created; versus
- accessibility during their active business use for ancillary purposes (e.g. pursuant to Freedom of Information Law (FOIL) requests, or pursuant to discovery requests in litigation ("e-discovery"); versus
- accessibility for their historical and research value after having been preserved as official State agency records.

In your survey responses, if you are making recommendations concerning "access" please specify the type of access which you are envisioning.

Terminology - "Records Management"

When the phrases "records management" or "management of electronic records" are used in this RFPC and in the study, those phrases shall mean "the planning, organizing, directing, controlling and other activities needed for effective records creation, records maintenance and use, and records disposition." 8 NYCRR: Regulations of the Commissioner of Education, Part 188.

With those caveats in mind, please respond to the following general questions:

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

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- 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?
- 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)?
- 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?
- 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: <u>http://www.archives.nysed.gov/a/records/mr_laws.shtml</u>).
- 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?
- **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?
- 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?
- 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.
- **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?
- 14. What else should the State of New York consider about this subject?

Download Part II of the RFPC (Detailed Questions) (PDF, ___KB, ___pg.)

NEW YORK STATE CIO/OFT REQUEST FOR PUBLIC COMMENT (RFPC) Part II - Detailed Questions

II. INFORMATION REQUESTED

Input is requested regarding the items/questions listed below. Any additional ideas or proposals are also welcome. Please identify by letter/number each question you are addressing. In addition, please provide a brief description of the experience which you or your entity have with the production and preservation of electronic records.

Definitions - "Electronic data, documents, and records"

Questions

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?

Definitions – "Access"

Questions

 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.

Definitions – "Government Control"

The statute requiring this electronic records study asks CIO/OFT to consider appropriate "government control." CIO/OFT understands this as referring to the security and privacy of electronic records.

The State has increasing obligations to ensure that electronic records remain private and secure. Relevant statutes include, but are not limited to, the Personal Privacy Protection Law, the Information Security Breach and Notification Act of 2005, the federal Health Insurance Portability and Accountability Act, and others. At the same time the State has a long-standing responsibility to ensure widespread public access to State records pursuant to the NYS Freedom of Information Law (FOIL), which was recently updated to require more rapid responses to FOIL requests.

- **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?
- **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?

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

Definitions - "Interoperability"

The statute requires CIO/OFT to make recommendations concerning interoperability. One definition of "interoperable" is "products and systems from multiple vendors that can be used together without modification or development of custom interfaces and tools."¹ Many State agencies maintain large-scale information systems designed for specific purposes (e.g., maintenance of birth and death records, processing of Medicaid claims), and it may not be possible to specify a single interoperability standard for such diverse systems. However, all agencies use an office suite to create some electronic records (e.g. word processing documents; spreadsheets; presentation documents), and CIO/OFT can recommend that agencies use an office suite compatible with the Open Document Format (ODF), Microsoft's Office Open XML, or other interoperable formats. Many governments are exploring adoption of these formats. Gartner predicts² with 0.7 probability that "[b]y 2010, ODF document exchange will be required by 50 percent of government and 20 percent of commercial organizations."

Definitions - "Open Standards"

Various definitions have been suggested for "open standards" and "open formats."³ In its recent adoption of ODF "as a government standard for exchanging documents between government agencies and the general public,"⁴ the South African Department of Technology stated that it would consider a standard to be "open" if it is: maintained by a non-commercial organization; participation in the ongoing development work is based on decisionmaking processes that are open to all interested parties; anyone may access committee documents, drafts and completed standards free of cost or for a negligible fee; anyone may copy, distribute and use the standard free of cost; the intellectual rights required to implement the standard (e.g. essential patent claims) are irrevocably available, without any royalties attached; there are no reservations regarding reuse of the standard; and there are multiple implementations of the standard.⁵ For purposes of this RFPC and for this study, CIO/OFT proposes using the same definition of "openness."

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

¹ <u>http://www.metaglossary.com/terms/interoperable/</u>

² ISO Approval of OASIS OpenDocument Is a Blow to Microsoft, Rita E. Knox, Michael A. Silver, Publication Date: 12 May 2006 ID Number: G00140101

³ See for example: <u>http://en.wikipedia.org/wiki/Open_standard</u>

⁴ <u>http://www.computerworld.com/action/article.do?command=viewArticleBasic&articleId=9048521&intsrc=hm_list</u>

^{5 &}lt;u>http://www.oss.gov.za/MIOS V4.1 final.pdf</u>

- 8. <u>For State agency respondents in particular</u>: 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?
- 9. Is Gartner's prediction correct? What predictions have been made about other formats?
- 10. Will the usage of ODF amongst 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?
- 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?
- **12.** Other than in the office suite context, in what other ways does the State need to be concerned about electronic records interoperability?

Focus of the Study

The statute uses broad terminology which clearly sets forth certain features favorable to publicly accessible electronic records. Drawing from the terms used in the statute, electronic records should be:

- creatable;
- maintainable;
- exchangeable;
- interoperable;
- accessible;
- readable;
- preservable;
- storable;
- appropriately controllable;
- end-user technology choice capable;
- vendor neutral; and
- cost effectively implementable

The boundaries of that which are considered "documents" are blurring, and electronic documents are becoming increasingly dynamic and blended with other formats (envision, for example, a word processing document embedded with a slide show which is itself embedded with audio, video, and photographic files).⁶

There are several active efforts to categorize all existing technological formats, for example, in the United States, the U.S. Library of Congress National Digital Information Infrastructure

^{6 &}lt;u>http://en.wikipedia.org/wiki/Document</u>

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Preservation Program (<u>http://www.digitalpreservation.gov/formats/</u>), and the National Archives in the United Kingdom PRONOM program (<u>http://www.nationalarchives.gov.uk/PRONOM/</u>). There have been estimates of over fifteen thousand (15,000) file name extensions in existence.⁷

The debate concerning more open versus less open formats exists in many other realms besides office suite formats (for example, the .jpeg versus .png photo formats, or the .mp3 versus .ogg audio formats). Nevertheless, it is clear to CIO/OFT that the majority of State records, readable and accessible to its citizens, are created within office suite software applications. There has been significant debate and discussion during the past two years concerning appropriate office suite formats, particularly since Massachusetts first published its Enterprise Technical Reference Model version 3.5 in September 2005 initially mandating usage of Open Document Format within Massachusetts State agencies' office suite software. (Subsequently, the ETRM was amended in 2007 to also permit usage of the OOXML format). Therefore, it makes sense to CIO/OFT as it performs this "critical first step" to focus this study on office suite document formats as an illustrative example of electronic format debates in general, and encompassing the most compelling use case for the State.

What is clear is that standardized XML document formats are of increasing importance. As one commentator noted, "It will enable new applications to be written to process content from many different sources, and to support integration with applications that aren't specifically focused on document creation (such as computer-aided design programs)."⁸

- 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 <u>all</u> relevant formats? Please describe with specificity.
- 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.
- **15.** What is the "problem" that this study should be addressing? Please define with specificity exactly what the State should be trying to solve.
- 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.

⁷ www.dpc.delos.info/private/output/DELOS WP6 d631 finalv2(5) urbino.pdf

⁸ Hype Cycle for the High Performance Workplace, 2007, Rita E. Knox et al., Publication Date: 16 July 2007, ID Number: G00148111.

Functionality

It has been observed that "it is very important that customers have the freedom to choose from a range of technologies to meet their diverse needs. [OOXML] and ODF were designed to meet **very different customer requirements.**"⁹ (emphasis added) The State has multiple e-record "customer" requirements, including immediate utility versus utility for long-term preservation and access, ease of accessibility for State government versus ease of accessibility for members of the public, and immediate utility versus ease of access for electronic discovery purposes.

Questions

- 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 <u>best</u> met by **OOXML**.
- **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 <u>best</u> met by **ODF**.
- 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?
- **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?
- 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?

Integrated software applications

Some commentators have observed that many entities have written custom software applications using certain technologies (e.g. ActiveX; scripting; Microsoft Access) which may need to be rewritten during any migration to ODF because those software programs that use ODF do not support these particular technologies.

^{9 &}lt;u>http://www.microsoft.com/presspass/press/2006/jul06/07-06OpenSourceProjectPR.mspx</u>

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

Standardization

Recent media reports suggest that the process for standardizing formats is corruptible.¹⁰ Concerns have also been raised about the value of using "de jure" standards (i.e., approved by an officially recognized formal standards body such as the American National Standards Institute (ANSI) or the International Standards Organization (ISO)) versus "de facto" standards (i.e. those which gain greater ubiquity in the marketplace).¹¹

By law and regulation, different State agencies have differing responsibilities concerning electronic records. For example, while CIO/OFT has statutory authority to establish statewide technology and electronic record policy and standards, the NYS Archives is primarily responsible for setting standards for the disposition, but not the creation, of records. And, the NYS Archives lacks effective enforcement authority over other agencies.

Questions

- **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?
- **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?
- **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?

Vendor implementation - costs from using multiple standards

Some commentators have cited the costs which vendors would incur for implementing multiple standards, and pointed to this as a reason for the lack of OOXML implementations thus far in the marketplace. See for example:

<u>http://www.odfalliance.org/resources/Google%20XML%20Q%20%20A%20(2).pdf</u>. If true then presumably if the State accepted multiple standards not only could vendors to the State incur increased costs but the State itself might as well.

Questions

http://www.groklaw.net/article.php?story=20070827111019189

¹⁰ See for example this article, and the links cited therein:

¹¹ Office Software Battle Moves to Open-Source Theater, Michael A. Silver, Rita E. Knox, Tom Austin, Dale Kutnick, Jeffrey Mann, Nikos Drakos, Publication Date: 6 April 2006 ID Number: G00137688

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

Vendor implementation - difficulty of adopting multiple standards

The State's procurement policy has long favored ensuring fair competition amongst vendors. Some commentators have noted that several aspects of OOXML prevent its implementation by most vendors. See for example:

<u>http://www.odfalliance.org/resources/Google%20XML%20Q%20%20A%20(2).pdf.</u> For this question, CIO/OFT would particularly be interested in hearing from stakeholders who have formally *supported* adoption of OOXML as an ECMA and/or an ISO standard.

Questions

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

Costs/Burdens of Migration

One of the recommendations raised by some commentators concerning the usage of ODF is that a sufficient analysis be performed as to the cost of such a requirement. For instance, the Massachusetts Senate's Post Audit and Oversight Committee performed a detailed audit into the factors which would need to be addressed before presuming that cost savings could be realized from adopting the ODF format.

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Some research suggests that ancillary costs (such as the costs of system integration, maintenance and training) rather than software licensing costs make up the "lion share" of IT costs, and raises the concern that mandating use of the ODF office suite format could cost many millions of dollars.¹²

However, many studies now appear to have been completed finding on the contrary significant cost savings after actual conversion to ODF by various governmental bodies, even taking into account such items as conversion costs, system integration, hardware costs, and user costs such as training. (See e.g. the various studies linked to from: http://odfalliance.org/resources/PrelimCostAssess20070312.pdf).

One historical example of a large-scale "rip and replace" transition in office suite applications and document formats is the migration of many entities worldwide in the 1990s and 2000s from the WordPerfect Office Suite to the Microsoft Office Suite.

Questions:

- **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.
- **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?
- **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 <u>actual increased costs</u> <u>after migration to the ODF format</u>?
- **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.

Assistive technologies

In the transition to XML-based formats, there has been much discussion about the perceived shortcomings of various software accessibility application programming interfaces such as Microsoft Active Accessibility, or iAccessible2. There has also been discussion of the accessibility options natively offered within various office suites, as well as a concern about the degree to which assistive technology vendors have ported their assistive software to all relevant environments.

¹²

http://www.state.mn.us/portal/mn/jsp/content.do?agency=OETweb&action=content&contenttype=EDITORIAL&content ntkey=Survey_Results_110507020703

In August 2006, Massachusetts' IT Division (ITD) reportedly signed a memorandum of understanding with the Massachusetts Office on Disability and Massachusetts Department of Health and Human Service "to design, procure, certify and develop training for software that is accessible to people with disabilities," and to "establish a unit devoted to accessible technology."¹³

Questions

- **39.** What are the key issues which CIO/OFT's study should be addressing concerning electronic records and assistive technologies?
- **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?
- **41.** Would adoption of ODF be acceptable if conversion to other formats was available which allowed usage of assistive technologies existing on that platform?
- **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.
- **43.** Who are the relevant stakeholders most conversant with issues related to document formats and assistive technologies?

Obsolescence

Some observers have predicted that given the fast-paced changes in information technology and the expectation that office suites as currently known will migrate to more interactive platforms (such as TCP/IP-based), the current debate concerning ODF versus OOXML will soon be mooted. On the other hand, the current migration to XML-based formats is unmistakable, perhaps most graphically illustrated by the efforts of the National Archives of Australia to even encode images in XML-based formats.

Technical issues raised during the September 2007 ISO voting process concerning OOXML are scheduled to be addressed before the next ISO ballot resolution meeting in late February, 2008. The ODF format is apparently also undergoing revisions to a new version (version 1.2).

- **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.
- **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.

¹³ See: <u>http://www.computerworld.com/action/article.do?command=viewArticleBasic&articleId=9002594</u> and <u>http://www.mass.gov/?pageID=itdterminal&L=4&L0=Home&L1=Policies%2c+Standards+%26+Guidance&L2=Tec</u> <u>hnical+Guidance&L3=Accessibility+Guidance&sid=Aitd&b=terminalcontent&f=accessibility_mou_mod&csid=Aitd</u>

- **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?
- **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.

Intellectual Property

Some commentators¹⁴ have expressed concern that certain vendor promises not to sue software providers implementing certain electronic record formats¹⁵ do not extend as comprehensively and assuringly as the similar promises of those providing other formats within their office suite software. There may be legal uncertainty around the scope of such promises.

Questions

- **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?
- **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?
- **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.
- **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?

Electronic Discovery

Discovery is the gathering in a lawsuit of relevant information, of any kind, from any source, to support or defend a party's position. Court rules concerning electronically stored information were revised significantly in December 2006. When a lawsuit is initiated or can be reasonably predicted, those rules require the parties to immediately preserve, be able to describe, and be able to produce electronic information in its myriad forms, including metadata, embedded data, system data, or digital attachments that are associated with the primary electronic documents.

Those rules also speak directly to formats. Parties may request e-records in their original formats. In the absence of such a request, the producing party must produce the e-records either in the

¹⁴ "Google's Position on OOXML as a Proposed ISO Standard" See: www.odfalliance.org/resources/Google%2000XML%20Q%20%20A.pdf

¹⁵ See e.g. the Microsoft "Open Specification Promise" at <u>http://www.microsoft.com/interop/osp/default.mspx</u>, and the Sun "OpenDocument Patent Statement" at <u>http://www.oasis-open.org/committees/office/ipr.php</u>.

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format in which it "ordinarily maintains" the information, or in a "reasonably usable" format (electronic or paper, so long as it is indexed or readily searchable). Commentators have noted that spreadsheets are one problematic type of document, the preservation of which in a presentation format (such as after conversion to a .pdf document) will not capture the mathematical formulas associated with that spreadsheet. Commentators have further noted that the most acceptable format for record production is usually (but not always) the way in which the data was managed in the normal course of business.

Litigation support software applications help render the parsing of huge volumes of electronic data easier during lawsuits, and the State uses some of that software. Examples include, but are not limited to, applications by Concordance (<u>http://www.concordancesoftware.co.uk/</u>) and Summation (<u>http://www.summation.com/</u>).

The National Archives and Records Administration (US) and the Swedish National Archives have reportedly announced that they will accept archived records in PDF/A format, which is an ISO standard. CIO/OFT understands that there are differences in thought amongst archivists concerning PDF/A. Some of its perceived advantages include that it is self-contained and carries all metadata within the document itself without the need for extraneous applications or sources of data. But CIO/OFT also understands that amongst archivists there are also perceived disadvantages to the PDF/A format, which include PDF/A containing a degree of manipulability which is inherent in all electronic formats, as well as PDF/A being a more static format than the formats in which electronic documents are originally created, which can inhibit the ability to mine and manipulate data for informational purposes. One school of thought is that two archived copies of official records should be maintained, one set kept as a control original not released to the public, with a copy released to the public in PDF/A format or some otherwise non-manipulable format.

Questions

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

Specific, technical format concerns

Technical criticisms have been made concerning OOXML, including: that "areas of OOXML are undefined such that no other implementation will be successful in reproducing equivalent features;" that OOXML "is a literal porting of the features of a single vendor's binary document formats [which avoids] re-using relevant existing international standards;" that OOXML is "designed to work exclusively with the technologies supported by Microsoft Office;" and that OOXML "fails to consider or achieve cultural and linguistic adaptability."¹⁶ There have been many comments from those involved in ISO standardization requesting changes to the OOXML format and/or requesting that a second office suite format not be approved as an ISO standard at all.

¹⁶ See e.g. <u>http://www.odfalliance.org/resources/The%20Technical%20Case%20Against%20OOXML.pdf.</u>

Some commentators have noted that "The ODF was approved by the ISO in May 2006 with virtually no comments" criticizing the format.¹⁷ Technical criticisms which have been made concerning ODF include that it "is not optimized for representing the content in existing documents," nor does it have the "unique capability of hosting custom-defined data languages within the document format."¹⁸ Another criticism of ODF has been that many vendors of assistive technology software have not ported their software to ODF-based applications.

Questions

- 55. Should other formats be considered besides ODF or OOXML? If so, which formats, and why?
- **56.** How valid are the criticisms of OOXML? What are its most significant strengths and weaknesses?
- 57. How valid are the criticisms of ODF? What are its most significant strengths and weaknesses?

Procurement

State Finance Law § 163(1)(j) defines "best value" in government procurement as "the basis for awarding contracts for services to the offerer which optimizes quality, cost and efficiency, among responsive and responsible offerers. Such basis shall reflect, wherever possible, objective and quantifiable analysis." When State government procures software, such purchases typically entail the simultaneous acquisition of services (e.g. software maintenance, or for that matter, software "as a service"), such that best value analyses are applicable.

The Auditor of the Commonwealth of Massachusetts recently published the "Office of the State Auditor's Report on the Examination of the Information Technology Division's Policy for Implementing the Open Document Standard" (<u>http://www.mass.gov/sao/200608844t.pdf</u>) describing various factors which state government should take into account in selecting document formats. Implicit in the Auditor's report was that costs and benefits of all available document formats should be assessed objectively. Various commentators agree that government procurement of technology should define objective criteria of a number of factors representing "best value" in any given procurement.

- **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"?
- **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

¹⁷ "Microsoft's OOXML Standard Bid Falls Flat" by Nancy Cohen, LinuxInsider, 09/04/07, <u>http://www.linuxinsider.com/story/59174.html</u>

¹⁸ "Why We Need Multiple Standards" - <u>http://www.openxmlcommunity.org/multiple.aspx</u>

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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"?

- **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"?
- 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 ODXML format-using software?
- **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.

Other issues

As described herein, review of specific document formats and the State's long-term production and preservation of electronic records raises a host of issues related to procurement practices, technology standards, interoperability with other jurisdictions, consumer choice, and ultimately the ensuring of open and effective State government.

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.

Possible Recommendations

Would adoption of any of the following options render the need for adoption of particular formats for creating electronic records less compelling, and if so, how? How viable are any of the following suggested alternative options? Can you suggest (with specificity) any other possible recommendations which CIO/OFT should be considering? Are there alternative approaches which other jurisdictions have adopted which CIO/OFT should consider?

- **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?
- **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

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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?

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

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example, grid-based technologies. (See, for example, <u>http://chronopolis.sdsc.edu/</u>). 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.

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

III. RESPONSE DOCUMENTS

Responses are due by: December 28, 2007, 5:00 PM EST January 18, 2008, 5:00 PM EST

Responses should be in writing, preferably sent by electronic mail to:

Darlene Van Sickle, Principal Attorney New York State Office for Technology State Capitol, ESP - PO Box 2062 Albany, NY 12220-0062 FAX: (518) 486-7923

E-mail: <u>erecords-study@oft.state.ny.us</u>

Please clearly identify by letter/number each outcome/question you are addressing. It is not necessary to respond to each item. It is recognized that respondents will have different areas of expertise and interest; where applicable, please provide a brief description of your organization and its experience with this topic. In addition to the information requested in this RFPC, comments and recommendations to the State on additional desired outcomes or barriers are encouraged. Please identify barriers and tools needed to implement outcomes.

IV. RESULTS

Information gathered from responses to this RFPC may be used by CIO/OFT to help direct the findings and recommendations of the study. Respondents should keep in mind that RFPC responses may be made public by CIO/OFT voluntarily or pursuant to requests under the Freedom of Information Law.

Summary of Public Comments

In completing this study and in preparation of this report, the Office of the New York State Chief Information Officer / Office for Technology (CIO/OFT) solicited public comments on a series of questions that focused on various aspects of the topic at hand. These questions were posed through a formal Request for Public Comment (RFPC) that was noticed in the State Register and posted on CIO/OFT's website. Additionally, the RFPC was directly shared with various state agencies and local government bodies, as well as with commercial business entities, business related associations, assistive technologies organizations and non-profit groups who were recognized as having a stake in the electronic records and document format industry. Initially, public comments were to be submitted to CIO/OFT by December 28, 2007. At the request of various parties interested in responding to the RFPC, the time in which to submit comments was extended to January 18, 2008. The RFPC, as well as the comments received from the public in response to the same, are attached to Part III of this report and/or posted on CIO/OFT's website.

CIO/OFT received fifty-nine (59) comments to the RFPC from individuals, nineteen (19) comments from government entities, eleven (11) comments from non-profit organizations and twenty-five (25) comments from commercial entities, for a total of 114 public comments. The public comments totaled approximately six-hundred (600) single-spaced pages of comments.

The following represents a summary of the recurring/major ideas that are contained in the responses received to the RFPC. For a full appreciation of all comments received, readers are encouraged to review Part III of this report in its entirety.

Individual Responses

The commenters:

Fifty-eight (58) individuals submitted comments in response to the RFPC. (Fifty-nine comments are noted because one individual sent two different comments several weeks apart on different aspects of the RFPC's questions). Most of the individual commenters appear to work in the information technology sector of the economy. There were more than half a dozen comments from individuals in other states (California, Florida, Georgia, Massachusetts, Tennessee and Washington State) and one from overseas (the Netherlands). Of the fifty-eight commenters, twenty (20) did not provide any type of indentifying information besides their e-mail addresses. Those who provided identifying information identified themselves as:

- a Connecticut boarding school instructor;
- a Schenectady, New York resident;
- a software engineering student at Rensselaer Polytechnic Institute in Troy, New York;
- a non-New York State resident;
- an IT professional who works with XML, HL7, and EDI;
- a Ph.D. candidate at a New York State-based business school specializing in Information Systems research;
- an individual who "works with software";
- an assistant professor at a New York State-based university;
- a New York City resident;
- an Information Security Ph.D.;

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- a California resident,
- a Rochester, New York resident;
- a New York State-based attorney;
- a Computer Scientist/Physicist;
- a Corning, New York-based business manager;
- a Utica, New York-based network manager;
- a New York City resident;
- a Georgia resident who was a publications manager for a technology company;
- a Queensbury, New York State resident;
- a Florida-based Solution Center Analyst;
- an individual affiliated with a Port Washington, New York-based clothing chain;
- a New York State-based professional software engineer;
- a New York State-based Computer Systems Administrator;
- a computer programmer working in research in a Tennessee-based university;
- a New York State-based software analyst and developer;
- a New York State-based social worker;
- a New York State-based resident;
- a New York State-based software engineer;
- a Washington State-based Information Technology consultant (submitted two comments);
- an independent computer consultant (location not provided);
- a resident of the Netherlands;
- a Ph.D. at a Chautauqua, New York Internet services company;
- an Albany, New York-based professional software engineer for a New York media server and control system company;
- a Queensbury, New York-based computer professional;
- a New York State resident;
- an undergraduate studying history at an Ithaca, New York university;
- a Massachussetts-based professional software consultant; and
- a Massachusetts independent computer consultant.

Their comments:

The overwhelming majority of individuals who responded to the RFPC recommended that an open document format (ODF) be adopted by the State for creating, editing and maintaining electronic documents. A significant number of these same individuals recommended that the State choose a completely open format not owned or backed by a single entity, and suggested that the State should save money by using free software applications. A number of individuals recommended that the State store relevant public records and documents in a publicly accessible and searchable database. A few individual respondents suggested that the State should still use Microsoft's office suite software, using translators as needed, as long as ODF is used in place of OOXML. Several individuals recommended the adoption of Portable Document Format (PDF) for distributing completed State electronic documents, suggesting that neither ODF nor OOXML are sufficient or adequate in this regard. Several individual respondents also favorably referred to the adoption by other nations, including Australia, South Africa and the Netherlands, of more open formats for the creation and storage of government electronic records and/or of giving preferential

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treatment to open source software in cases of comparable functionality in all tax-funded procurements.

Government Entity Responses

The commenters:

Responses were received from nineteen (19) government agencies. Fifteen (15) were New York State agencies. They were, in the order in which their comments were received:

- New York State Banking Department;
- New York State Library;
- New York State Governor's Office of Regulatory Reform;
- New York State Police;
- New York State Office of Children & Family Services Commission for the Blind and Visually Handicapped;
- New York State Office for Temporary and Disability Services;
- New York State Department of Environmental Conservation;
- New York State Office of Children & Family Services;
- New York State Insurance Department;
- New York State Division of the Budget;
- New York State Division of Criminal Justice Services;
- New York State Department of Public Service;
- New York State Office of Cyber Security and Critical Infrastructure Coordination;
- New York State Committee on Open Government; and
- New York State Division of Military and Naval Affairs.

The other four government commenters were two federal agencies (the National Archives and Records Administration and the Smithsonian Institution) and two New York State local governments (the New York City Department of Records, and the Saratoga County Clerk).

Their comments:

While it generally was acknowledged by a majority of government respondents to the RFPC that the State would benefit from the adoption of a statewide electronic records management plan, several State government respondents recommended that the State not adopt a particular document format standard for use in the creation and/or receipt of all electronic documents at this time. A few State agencies expressed a preference for fully open and "non-proprietary" formats, but most State agencies suggested that government entities should be further canvassed as to their individual needs, applications and cost factors before a centralized approach on this topic is recommended or mandated. A number of government entities suggested that the State adopt procurement policies and practices that encourage the need to consider open document formats when procuring electronic record creation and storage tools, but that the ultimate determination on this topic should remain with the involved government entity. Additionally, several government respondents referenced the need to develop electronic document format standards in the context of open record law statutes and requirements, so to ensure ease of public access to public records while allowing for a capacity to redact information from such records where appropriate under law. It also was noted that the format the State selects for electronic

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data has implications for litigation discovery, though litigation concerns should not necessarily assume central importance in determining storage conventions. Finally, certain government entities noted the importance of storing electronic public records in a widely used format that preserves the original document and that can be accessed in a "read only" format, referencing PDF as an example.

Non-Profit Organizational Responses

The commenters:

Eleven (11) non-profit entities submitted comments in response to the RFPC, as follows:

- One (1) labor union based in Albany, New York, representing New York State public employees and advocating avoidance of single-vendor lock-in;
- Two (2) private law schools based in New York State (New York City and White Plains respectively) recommending the use of ODF and/or non-proprietary solutions which make data extraction easier;
- Two (2) "progressive" advocacy organizations, based respectively in Washington, D.C. and New York City, advocating use of ODF;
- Two (2) open documents advocacy organizations (with mixed industry, government and non-profit participation), one based in Washington DC advocating use of ODF, and one whose location is indeterminate which didn't state a position; and
- Four (4) technology industry advocacy organizations, three based in Washington D.C. and one based in Canada and Sweden but with a New York City office, respectively advocating that:
 - The State should work to ensure technological interoperability in the context of specific procurements and their functional goals;
 - The State should focus on electronic databases of information rather than on electronic documents;
 - The State should not mandate standards but should permit flexibility; and
 - As translators (converters) make electronic document format choice irrelevant, the State should make no changes at all and instead should follow the marketplace.

Their comments:

As noted, the responses from these entities appeared to be equally divided among those who believed it would be in the State's best interest to adopt open document standards and formats for use in the creation, retention and sharing of electronic documents, and those who favored the State's not taking a single approach or mandating a sole solution on this topic. Those in favor of an open document format and standard articulated the perceived public access, long-term preservation and cost saving benefits of this approach.

Other entities argued that the State should allow market forces, competition among existing and future technological standards and solutions, and choice based on government entity needs and preferences to shape the State's approach to this subject. These same entities questioned the perceived cost savings that would accompany the adoption of an open document format standard.

Commercial Entity Responses

The commenters:

The RFPC received twenty-five (25) responses from commerical entities. All but two appear to be directly part of the information technology industry. They were, in the order in which their comments were received:

- Sun Microsystems, Inc.;
- Red Hat, Inc.;
- Traxi Technologies;
- Kraft Kennedy & Lesser, Inc.;
- NetCom Information Technology;
- SMART Business Advisory and Consulting;
- Lockheed Martin Transportation and Security Solutions;
- Conmergence Strategy and Systems Architecture;
- ABCDataworks;
- DGH Technologies, Inc.;
- Hewlett Packard;
- Tessella, Inc.;
- Netrics, Inc.;
- Twenty Six, New York;
- Oracle;
- KPMG;
- EMC;
- IBM;
- Google;
- Microsoft;
- Advanced Processing & Imaging, Inc.;
- Advanced Processing & Imaging, Inc. (2nd, duplicate submission); and
- Accord Advisory Group.

The other two commercial commenters were respectively involved in book publishing and filmaking:

- Cityscape Filmworks; and
- Open Book Software Publishing.

Their comments:

As with the non-profit organizations responding to the RFPC, the twenty-five commercial entities that submitted comments were almost equally divided among those who would encourage public access to electronic records through the State's adoption and use of open document formats and those that recommended the State not change existing practices but instead maintain choice in the marketplace that, while supporting public access, allows agencies to employ electronic document tools of their own choosing. Several commercial respondents strongly suggested that ODF is preferable for accessing and reading government records, for encouraging choice and vendor

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neutrality, and for actualizing cost benefits for citizens and stakeholders. Several others equally argued that true choice and vendor neutrality can only be achieved through the acquisition and use of information technology tools that are selected to meet the needs of government players in particular situations. These respondents maintained that the State should not focus on particular evolving technologies or office suite formats in addressing the questions raised in this study, but instead should focus IT acquisitions on achieving the State's business needs and the pursuit of best value investments across all State IT systems.

Other commercial respondents suggested that the State not settle on a specific office suite format at this time, but instead consider the questions raised in the RFPC in the context of goals and priorities as set forth in a New York State strategic information plan and enterprise architecture. In this fashion, the State would address electronic document management standards and formats from a better organized and long-term perspective. In this same vein, it was suggested that if openness is a State strategic priority, New York State should work with the National Association of State Chief Information Officers (NASCIO) to establish openness standards that states could adopt and, thus, create more market demand for including open document formats in applications.

Responses in General

Sprinkled throughout the comments received from individuals, commercial entities, government agencies and non-commercial associations was the recurring theme that the State should pilot or use test suites to evaluate how well a particular document format standard is supported across operating systems, vendors and applications. Some commented that the piloting of the usage of an ODF office suite should be tested against a set of criteria that are representative of a significant percentage of State government agencies, while another suggested that this study should consider the creation of an intra-state electronic records interoperability lab. Another recurring suggestion was that the adoption of any electronic record format standard by the State should be through an open, cooperative and collaborative approach among government players. Various individuals and entities responding to the RFPC referenced the need to ensure accessibility to electronic documents for persons with disabilities when choosing a particular electronic document format for use by the State. Finally, a number of commentators suggested that this study should also consider the globalization and increasing network effects driven by use of the Internet and web-based applications. As a consequence, these respondents recommended that applications, platforms and formats used in these external environments need to be considered when selecting an electronic record format standard.

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Part III-B

Public Comments Received: Individual Responses

See Next Section: 🏓