



InterPARES 3 Project

International Research on Permanent Authentic Records in Electronic Systems

TEAM Brazil

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Author: The InterPARES 3 Project, TEAM Brazil.

Writer(s): Ieda Pimenta Bernardes
Elisangela Mendes Queiroz
Josival Soares de Souza
São Paulo State Archives

Margareth da Silva
Fluminense Federal University

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Case Study Report

A. Overview

Case Study BR09 presents two peculiar features if compared to the others developed by TEAM Brazil. Instead of approaching a specific digital record, this case study analyzes São Paulo State's Unified Electronic System for Records and Information Management (SPdoc) that shall be the main instrument to the implementation of records management in the public administration of the state of São Paulo. That is the other particularity of this case study, as SPdoc has not been developed to serve just one institution, but all those within São Paulo's public administration. It serves around 13,000 record creators¹ from 25 secretariats and 64 other organizations, among which there are mixed joint-stock companies, publicly owned corporations, foundations and government agencies, apart from public companies.

SPdoc is a unified electronic records and information management system that has been in development since 2004, according to requirements, standards, rules and procedures that form the state archives policy, as established in the Normative Instruction APE/SAESP no.1, of March 10, 2009. Currently, SPdoc works, basically, as a reference system for conventional records created at public offices, where it also works experimentally.² However, it intends to overcome this initial stage in the future, in order to include conventional and digital records management in the public administration of the state of São Paulo, from the creation of records up to their disposition.

The Management Committee for SPdoc was established in 2010 so as to comply with the system's progressive implementation and continuous improvement. It is a collegiate bureau comprised of São Paulo's public administration representatives and coordinated by the State Archives, which is under the Governor's Cabinet and plays the role as the central unit of São Paulo State's Archives System (SAESP). The System's Management Department (DGSAESP) is in charge of SAESP's activities, as well as it is the archival authority in the Management Committee for SPdoc.

Considering such function in the Management Committee for SPdoc, DGSAESP identified the InterPARES 3 Project as a unique chance to improve SPdoc according to the latest updates in the field of research on the management of digital records. Besides, DGSAESP is willing to contribute with its own experience and that of the São Paulo State Archives to develop practical, theoretical and methodological knowledge about authentic digital records in electronic systems, which is one of the InterPARES Project's targets.

B. Methodology

The InterPARES Project's template for Contextual Analysis was fundamental to understand SPdoc and its Management Committee. The legislation concerning the issues approached here has already been released, though it may lead to the need to compile some more of the legal instruments that can indirectly have an impact on SPdoc, for instance, those concerning access restrictions and the level of secrecy of information. Data related to the public administration of

¹ See herein item C, "Documentary [context]."

² Governor's Cabinet, State Secretariat of Culture, Public Management State Office and Handicapped People's Rights State Office.

the state of São Paulo were found in electronic and printed versions at the government's Administrative Development Foundation's website. SAESP's conventional tools for records management are easy to obtain, because they have been created by DGSAESP itself, such as file plans, retention schedules, normative instructions, handbooks etc.

Nevertheless, gathering information about SPdoc's technological structure during the research was one of the biggest obstacles we faced. That happened because São Paulo's Data Processing Company (PRODESP) is a mixed joint-stock enterprise,³ with independent administrative structure and staff. However, an easier access to such information was enabled by the presence, in the InterPARES Project 3 case study, of DGSAESP members that also took part in a support group to SPdoc's Management Committee, as well as by the collaboration of public workers that have been implementing SPdoc since 2004.

The "Contextual Analysis Report" and the "Recordkeeping Systems Research Questions Report" helped DGSAESP build a broader acknowledgement of SPdoc. They allowed the identification of some credibility gaps between the theoretical model and actual evidences. So there have been indispensable improvements to SPdoc's functioning, some of which were described in the Action Plan.

C. Description of Context

Provenancial context

The establishment of SPdoc was encouraged to fulfill an old demand from the state's public administration for an electronic system to unify and control the course of records which were created by public offices, but SPdoc has not been designed to be just a protocol system.

Prior to the creation of its Management Committee, SPdoc had begun to be developed by one of the technical groups of the Government Cabinet's Committee for Quality in Public Management.⁴ In the following years, when the system's institutionalization took place, SAESP joined that technical group. From that point on, SPdoc has headed in the direction of a real electronic records management system to São Paulo State's administration, covering the record's life cycle completely, from its creation to destruction or permanent retention.

In 2007, the State Secretariat of Public Management took over SPdoc to implement it, experimentally, in six other state secretariats.⁵

On February 25, 2010, the decree no. 55.476⁶ inaugurated the Management Committee, within the Governor's Cabinet, in order to lead the development, implementation and continuous

³ Mixed joint-stock enterprises are those relying on public and private budget.

⁴ The Committee for Quality in Public Management is a deliberative, normative and representative advisory council composed by the heads of the following offices/secretariats: the Governor's Cabinet, Regional Development and Planning, Treasury, Public Management, the State Attorney General's Office and an executive secretary, appointed by the Governor's Chief of Staff. For more information (in Portuguese): <http://www.cqgp.sp.gov.br>

⁵ SPdoc was established experimentally in the following secretariats: Governor's Cabinet, Communication, Culture, Handicapped People's Rights, Public Management and Institutional Relations. In 2011, the secretariats of Communication and Institutional Relations were extinguished.

⁶ The Enactment No. 55.479 of February 25, 2010 which established the Management Committee for SPdoc in the Civil House was changed by the Enactment No. 56.260 of October 6, 2010.

improvement of SPdoc, according to the state government's archives policy. Whereas it is responsible for SPdoc, the Management Committee must:⁷

- develop actions shared by the Governor's Cabinet and the Public Management State Secretariat concerning Information Technology matters related to archival procedures;
- plan, coordinate and carry on the gradual and progressive implementation of the system;
- elaborate and propose guidelines and procedures to be adopted for SPdoc's steady maintenance and improvement;
- forecast the necessary resources to the system's functioning, maintenance and improvement;
- respond conclusively to queries concerning SPdoc presented by the state secretariats;
- develop a training program for workers on archival and protocol procedures, as well as on SPdoc's operation;
- design continuous support services to the common users of the system;
- upgrade, review and adjust, regularly, the established procedures to keep the system's compatibility;
- encourage the system frequent system upgrades and its conformity with the state's archival policies on information security;
- write bylaw;
- constitute technical commissions whenever necessary;
- define archival requirements, metadata, forms, standards, rules and procedures that the system must obey;
- guide the development of specific modules of the system aiming at the inclusion of digital records and the preservation of long-term records;
- manage, in the system, operations to change, include or exclude archival functions;
- determine the criteria to define the granting or denial of access to public records of the state government;
- encourage local public administrations to implement archival policies and join the SPdoc;
- homologate the system and all of its improvements;
- design the infrastructure and the constant upgrade of the technological environment;
- appraise the system's performance and improve it progressively;
- define strategies, procedures and techniques for digital records preservation;
- establish security procedures for the system;
- create policies to ensure the system's interoperability, allowing data migration from former systems; and
- elaborate and upgrade the system requirements' documentation and basic handbooks.

Besides these attributions, the Management Committee for SPdoc manages the use of the financial resources available to the system according São Paulo state's Budget Law.⁸

Juridical-administrative

The Management Committee for SPdoc is a collegiate bureau under the State Government's Chief of Staff's Office. The Enactments no. 55,479 of February 25, 2010 and no. 56,260 of October 6, 2010 regulate the Manage Committee, according to the bylaw approved by the Resolution CC-43 of October 6, 2010.

⁷ Enactment No. 55.479 of February 25, 2010, and Resolution CC – 43 of October, 2010, approve the Management Committee for SPdoc's bylaw.

⁸ Annually, the Budget Law calculates the incomes and expenses of São Paulo's state government for the period.

The members of the Management Committee for SPdoc are:

- three Government Cabinet's representatives (the São Paulo State Archives' Coordinator, the DGSAESP's Director and another public worker chosen by the Governor's Chief of Staff);
- two representatives from the State Secretariat of Public Management (one from the Information Technology and Communication Unit); and
- one representative from each of the following offices and entities: the State Secretariat of Planning and Regional Development, the Attorney General's Office and the São Paulo State Data Processing Company – PRODESP.

The Management Committee for SPdoc is assisted by:

- one Support Group, formed by nine public workers from DGSAESP and one from the Governor's Cabinet; and
- one Technical Commission on Digital Records and one Technical Commission on Implementation and Training; other commissions could be formed if necessary.

Each member of the Management Committee for SPdoc has a specific function.

The São Paulo State Archives, SAESP's central unit, is responsible for formulating and implementing the state government's archival policy, and its coordinator leads the Management Committee's works.

The DGSAESP defines archival requirements, standards, rules and procedures to ensure consistence, security and reliability for SPdoc. Therefore, the DGSAESP is the archival authority in charge of SPdoc, whereas the Management Committee works as the system's administrative authority.

The PRODESP, a mixed joint-stock company under the State Secretariat of Public Management, is an enterprise hired for SPdoc's technical development, maintenance and infrastructure. The Management Committee for SPdoc and PRODESP signed a legal contract to provide IT services to the system and regulate their partnership.

The representatives of the Governor's Cabinet, of the state secretariats of Public Management and Planning & Regional Development, and of the Attorney General's Office, have a role in their respective areas as participants of the Management Committee for SPdoc.

The Support Group and the Technical Commissions assist the Management Committee with administrative and technical support, respectively.

Procedural context

In São Paulo's public administration, the state's archival policy guides the records management by means of a set of guidelines, rules and procedures for public offices and entities to carry on their archival and protocol activities within the São Paulo State Archives System (SAESP).

The SAESP, established by the Enactment no. 22,789 of October 19, 1984, has the São Paulo State Archives as its central unit and the DGSAESP's as its manager. It has been created to ensure and accelerate the granting of access to public information and records; to preserve the state's archival heritage; and to dispose of, according to criteria previously defined, records that do not present suitable reasons for their preservation, through the use of retention schedules. For

this, the public offices and entities from SAESP carry out a series of technical operations that are partially performed by the SPdoc in its current development stage, but in the future that shall be done almost entirely by the electronic system, with possible exceptions.⁹

Another important issue about records management in São Paulo state's public administration is the implementation of the "Itinerant Records Management Program," a DGSAESP action to consolidate, among other initiatives, the use of SPdoc in public offices. The program is a task force that has assisted the elaboration of file plans and retention schedules for records of production activities, as well as and the appraisal of backlog – piled-up unprocessed records.

Documentary context

SPdoc is a unified and automated digital and non-digital records management system developed as determined by the DGSAESP, with the purpose of standardizing the records management procedures of São Paulo state's public administration.

The Management Committee for SPdoc coordinates its deployment into the government's management structure whose records creators are settled at 13,000 units (public offices, mixed joint-stock companies, public companies, foundations, self-ruled entities and social organizations¹⁰). The Management Committee is in charge of implementing the system in that huge administrative structure, with the aid of records appraisal committees and computer professionals from those organizations.

SPdoc works experimentally in four public offices managing conventional paper documents. Since the electronic system moved from the State Secretariat of Public Management to the Governor's Cabinet in 2010, the Management Committee for SPdoc has sought to take the necessary steps so that the system will be able to create, manage and preserve digital records.

Among the conventional records management procedures in Brazil, SPdoc only performs, totally or partially, the activities underlined below:

⁹ The records' creation, form, content, identity, organization and keeping in São Paulo state's public administration is under state and federal archival legislation, especially the Enactment no. 54,276 of April 27, 2009. It assigns to the São Paulo State Public Archives, as SAESP's central unit, the role of defining requirements, standards, rules and archival procedures that guide SPdoc's development, implementation and improvement.

¹⁰ Based on the study *Perfil da Administração Pública Paulista 2011* ("São Paulo State's Public Administration Profile 2011"), by FUNDAP – *Fundação para o Desenvolvimento Administrativo* ("Foundation for Administrative Development").

- Transfer
- (De)Accession
- Registering
- Proceedings
- Rulings
- Annexation
- Extraction
- (Dis)Accrual
- Temporary attachment
- Detachment
- Ordering
- Packing
- Preservation
- Archiving

Also, SPdoc, totally or partially, incorporates the following underlined conventional records management procedures:

- 1 Backlog processing:
 - application of retention schedules;
 - formalization of retention schedules for production activities;
 - identification of records created prior to 1940, for the sake of long-term storage;
 - storage of records created after 1940, to comply with preventive and prescriptive deadlines; and
 - accretion to the São Paulo State Archives.
- 2 Preventive preservation:
 - environmental control;
 - fighting biological agents;
 - guidance on the handling of records; and
 - stabilization of records.
- 3 Disposal of semi-current records:
 - consultation with the state's Attorney General;
 - sampling;
 - making and approval of records disposal list;
 - publication of records disposal notice;
 - making of records disposal agreement;
 - destruction of records' media;
 - donation of leftover paper; and
 - follow-up to the records appraisal committee's activities report.
- 4 Transfer and acquisition:
 - organizing, appraising, disinfecting, packing and providing descriptive tools;
 - requesting official authorization;
 - making of the List and Term of Transfer or the List and Term of Acquisition; and
 - ensuring records integrity.

On SPdoc's interface, all those procedures are gathered under the following eight macro-function groups:

| |
|--|
| 1. Pre-register |
| 2. Record |
| 2.1 Registering |
| 2.1.1 Request |
| 2.1.2 Register |
| 2.1.3 Cancel request |
| 2.2 Insert data |
| 2.3 Consult |
| 2.4 Close |
| 2.5 Close and open volume |
| 2.6 Instruction |
| 3. Protocol |
| 3.1 Attach/Detach |
| 3.2 Extraction |
| 3.3 Accrual/Dis-accrual |
| 4. Proceedings |
| 4.1 Send |
| 4.2 Receive |
| 4.3 External organization |
| 4.3.1 Send |
| 4.3.2 Receive |
| 4.3.3 Register received record |
| 4.4 Cancel sending |
| 5. Filing |
| 5.1 File record |
| 5.2 Accession record |
| 5.3 Deaccession record from current archives |
| 5.4 Filing address |
| 5.5 Record reopening |
| 5.5.1 Request |
| 5.5.2 Cancel request |
| 5.6 Finish record transfer |
| 5.6.1 Send |
| 5.6.2 Reverse transfer list |
| 5.7 Consult closed record |
| 5.7.1 Request |
| 5.7.2 Receive |
| 5.7.3 Return |
| 5.7.4 Cancel transfer |
| 5.8 Local records transfer |
| 5.9 Disposal |
| 5.9.1 Consultation |
| 6. Reports |
| 6.1 Report |
| 6.1.1 Records under custody |
| 6.1.2 Other organizations' |

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|---|
| records under custody |
| 6.1.3 Closed un-filed records |
| 6.1.4 Unclosed filed records |
| 6.1.5 Sent and not received records |
| 6.1.6 Records disputed at management office |
| 6.1.7 Archives with records |
| 6.1.8 Users |
| 6.1.9 Users by profile |
| 6.2 Reissuing |
| 6.2.1 Record |
| 6.2.1.1 Accession protocol |
| 6.2.1.2 Leader sheet |
| 6.2.1.3 Refusal to register |
| 6.2.1.4 Registering request |
| 6.2.1.5 Registering |
| 6.2.1.6 Closing |
| 6.2.1.7 Volume closing |
| 6.2.2 Protocol |
| 6.2.2.1 Accrual |
| 6.2.2.2 Attachment |
| 6.2.2.3 Detachment |
| 6.2.2.4 Extraction |
| 6.2.2.5 Dis-accrual |
| 6.2.3 Proceedings |
| 6.2.3.1 Internal shipment list |
| 6.2.3.2 External shipment list |
| 6.2.3.3 Accession list |
| 6.2.4 Archives |
| 6.2.4.1 Transfer of closed records |
| 6.2.4.2 Reopening |
| 6.2.4.3 NA reopening |
| 7. Management |
| 7.1 Formats |
| 7.2 Messages |
| 7.3 ID issuing institution |
| 7.4 External organizations |
| 7.5 Privileged external organizations |
| 7.6 Records creator |
| 7.7 Provenance |
| 7.7.1 Register |

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| 7.7.2 Association |
| 7.8 Former systems |
| 7.8.1 Register |
| 7.8.2 Association |
| 7.9 Demand |
| 7.9.1 Register |
| 7.9.2 Association |
| 7.10 Retention schedule |
| 7.10.1 Field |
| 7.10.2 Function |
| 7.10.3 Subfunction |
| 7.10.4 Activity |
| 7.10.5 Archival series |
| 7.10.6 Privileged archival series |
| 7.11 Diplomatic document |
| 7.11.1 Register |
| 7.12 State |
| 7.13 Management office |
| 7.14 Privileged management office |
| 7.15 Transfer record's custody |
| 7.16 Alteration in user's data |
| 7.17 System |
| 7.17.1 Security |
| 8. Help |
| 8.1 Manual |
| 8.1.1 File plan – management activity |
| 8.1.2 File plan – alphabetical order |
| 8.1.3 File plan – State Secretariat of Culture |
| 8.1.4 Retention schedule – management activity |
| 8.1.5 Retention schedule – State Secretariat of Culture |

SPdoc users perform these features according to their profiles. Each feature may represent a single action or a set of actions. Information changes made by the use of a feature are registered.

Note that since SPdoc is under development and improvement process, its features may be modified as required by compliance analyses carried out to assess the suitability between SPdoc and the requirements, standards, rules and procedures defined by Normative Instruction APE/SAESP no. 1 of March 10, 2009.

In its current stage, SPdoc generates digital records just during the execution of the actions below:

- accession protocol
- leader sheet
- internal shipment list
- external shipment list
- accession list
- term of request of registering
- notice of refusal to register
- notice of registering
- notice of loan to third parties
- return receipt of loan to third parties
- notice of accrual
- notice of main record attachment
- notice of attachment
- notice of main record detachment
- notice of extraction
- notice of volume closing
- notice of volume opening
- notice of closing
- transfer list of closed records
- accession list of closed records
- notice of reopening
- records disposal list
- notice of records disposal
- term of records disposal
- report of records under custody
- report of other organizations' records under custody
- report of closed un-filed records
- report of unclosed filed records
- report of records sent and not received
- report of records disputed at management office
- report of archival units keeping records
- users report
- report of users by profile
- record's history report

SPdoc has four management levels carried out by the profiles described below:

- 1) The technical manager is held responsible for meeting the Management Committee for SPdoc's demands regarding the database structure and other technological requirements. This role is played by the PRODESP staff.
- 2) The central manager is held responsible for inserting retention schedules, creating and deleting management profiles, registering the public organization's administrative structure, transferring records when necessary, transferring the records' domain when necessary. This role is played by a member from the Management Committee for SPdoc and a member from its Support Group.
- 3) The agency manager stays at the organization's headquarters and holds responsibility for creating and deleting user profiles and for transferring the domain of the record when necessary. This role is played by the unit's records appraisal committee leader.
- 4) The regional manager stays at a decentralized unit and is held responsible for creating and deleting user profiles and for transferring the domains of the records when necessary. Currently, this profile is not active.

At this current stage, SPdoc profiles are not wholly defined, and the Management Committee for SPdoc intends to rearrange them. A normative act is being prepared in order to formalize the operation of management profiles.

The regulatory, scientific, artistic and ethical requirements and restrictions under which SPdoc operates are highlighted below:

- SPdoc's mandatory requirements and metadata: Normative Instruction APE/SAESP no. 1 of March 10, 2009. This norm sets guidelines and procedures for the management, preservation and continuing access to digital records of the São Paulo state's public administration.
- Classified records: legislation on degrees of access and confidentiality of public records is still in its making, as Law no. 12.527 of November 18, 2011 has just been enacted. This law regulates national access to public information. This subject will be handled by the Technical Group created by Resolution CC-3, in CQGP 09/01/2012.
- Standard ethical behavior for public workers operating SPdoc: Enactment no. 44,074 of July 1, 1999 (ombuds office for public workers), Enactment no. 45.040 of July 4, 2000 (Ethics Committees). Both the ombuds office and ethics committees are subject to specific legislation:
 - a. Law no. 10.261 of October 28, 1968 (Statute of São Paulo's Public Workers);
 - b. Each government entity usually has an ethical code (e.g. Finance Department Resolution no. 51 of December 20, 2007, and São Paulo state's Weights and Measures Ordinance no. 218 of June 19, 2009);
 - c. Code of Medical Ethics: Resolution CFM no. 1931 of September 17, 2009, which, for example, states: "The physician shall not allow the handling and knowledge of records by persons not bound by professional secrecy when the documents are under his/her responsibility."
- São Paulo Public Service User enforcements: Law no. 10.294 of April 20, 1999.
- Copyright and industrial property enforcements: Law no. 9.610 of February 19, 1998 (Copyright Law) and Law no. 9,279 of May 14, 1996 (Industrial Property Law).

Technological context

The SPdoc operates in two environments: Internet, open to citizens who place demands at offices that are already using the system; and *Intragov*, restricted to public workers who use SPdoc or are responsible for its maintenance.

The infrastructure of SPdoc varies according to the environment in which it is operated:

- Internet: server, Windows 2003 Enterprise x64, 2 Dual-Core, 8GB RAM.

- *Intragov*: three servers in different locations, Windows 2003 x64, Dual Core 2 processors, 8 GB RAM.

Two other servers, also in different places, help convert the information to the SPdoc Cluster Database in a third location. These computers host Windows 2003 Enterprise x64, SQL Server 2005 Enterprise x64, 4 Dual Core processors and 32GB RAM.

The information produced and stored (including backups) in SPdoc are in SQL format. Documents, such as the list of shipped records and the accession list, are converted into PDF format by a plug-in.

The minimum requirement for SPdoc's operation is Internet Explorer 7 or Mozilla Firefox, and Adobe Acrobat Reader to open the PDF format.

D. Narrative answers to the applicable set of questions for researchers

The São Paulo State Archives System (SAESP) was established by Enactment no. 22,789 of October 19, 1984, with the São Paulo State Archives as its central unit and the Management Department of the São Paulo State Archives System (DGSAESP) as its coordinator. The harmonization of the various management steps of the records created by government agencies is among SAESP's main objectives, which makes it a records management system or a recordkeeping system. The archival heritage of São Paulo's public administration – which includes current and semi-current records and archives – requires several tools to constitute the state's archives policy. The appraisal committees established at São Paulo's government agencies may be considered as an institutional tool; enactments, resolutions and normative instructions prepared by the DGSAESP may be considered legal tools; as well as the following may be considered as management tools: the file plan and retention schedule for management activities within São Paulo state's public administration (approved by Enactment no. 48,898 of August 27, 2004); the file plans and retention schedules for production activities within the state government's direct and indirect administration (some of which have been approved – and others are still undergoing preparation/approval – by the "Itinerant Records Management Program" sponsored by the DGSAESP).

There is, within the public administration, the effort to establish a centralized and integrated system for records of different media and formats. SPdoc, subject of this case study, makes it explicit by holding the name "Unified Electronic System for Records and Information Management." Designed as an instrument of control that leads to the use of traditional archival tools (file plans and retention schedules), SPdoc has aimed to integrate all state agencies and entities in a single system, leveraging the following benefits from records management:

- control of the records' workflow and organization;
- quick access to public records, ensuring agility in decision-making processes;
- assessment and standardization of administrative procedures, allowing more quality and productivity in public services;
- preservation of records which comprise the state's archival heritage; and
- disposal of records lacking permanent value, following strict criteria.

As SPdoc is currently under development, improvement and implementation, its priority is to include all state secretariats and then, all public offices, public companies, foundations, self-ruled entities, mixed joint-stock companies and, at last, all the other local or state public entities interested in joining the system (not necessarily in that order). As the complete development and

operation of SPdoc involve both technological aspects and recordkeeping requirements to feed the database, the Management Committee for SPdoc defined inclusion criteria in the Resolution CC-19 of April 19, 2011. There are four criteria for the public offices interested in endorsing the System. They have to:

- formalize the file plan and retention schedule of the public office's production activities, through its appraisal committee in accordance with Enactment no. 29,838 of April 18, 1989, and Enactment no. 48,897 of August 27, 2004;
- provide diagnostics for former records management systems and for any other systems that influence in the unit's records management;
- carry out studies to perform the data migration to, or the integration with, former records management systems and any other information systems of the unit, avoiding the loss or corruption of records and information, pursuant to Normative Instruction APE/SAESP no. 1 of March 10, 2009;
- designate the agency manager, who will be responsible for monitoring SPdoc's implementation and operation within the unit.

Due to the complexity and significant dimension of the state's public administration, it was not possible, within the InterPARES 3 Project's scope, to identify in detail the software platform on which records are created to be managed by SPdoc. So, in its current stage of development, SPdoc operates primarily as a reference system, and the records created are controlled in office applications (Microsoft Office, Open Office, BR Office, etc.), graphics editing software (CorelDraw Graphic Suite, Adobe Creative Suites, etc.) and other systems and applications necessary to perform public offices' activities, which are extremely varied. The public administration uses open-source software as much as proprietary ones, some of these developed by the São Paulo State Data Processing Company (PRODESP). When it comes to the hardware used by public workers, there is more diversity than there is in relation to software, making it impossible to identify them during the case study.

SPdoc's goal is to include all registries and archives in the public administration in the same database. Up to this moment, however, no detailed study about systems that should migrate or interoperate information with SPdoc has been carried out. The Support Group of the Management Committee of SPdoc has conducted a preliminary survey that identifies systems, such as the Enterprise Content Management (ECM), mostly developed by PRODESP. The Technical Committee for Implementation and Training will assess these systems, in order to define procedures to be adopted during the public offices' inclusion in SPdoc. In fact, SPdoc does not have a digital records management module, because the system where the software will capture those records has not yet been designed. Nevertheless, SPdoc is already interoperating with two other systems.

Nowadays, SPdoc does not capture any kind of record. However, it is expected to be able to perform this operation when its management module for digital records is launched. In this module, the records will be captured and organized to reflect their creation processes, according to the file plan and retention schedule for the public administration of the state of São Paulo, both for management activities and production activities. The methodology used to create the records management tools cited above is based on the gathering of "records, relating them to their creator, function and sub-function, and to the activity they were created and set aside for"¹¹.

In general, SPdoc uses the following administrative and operational profiles to grant access to the records (and their respective metadata) that it controls:

¹¹ State Enactment no. 48,897/2004.

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| A D M I N I S T R A T I V E P R O F I L E S | TECHNICAL MANAGER | <u>Who:</u> PRODESP team at the Governor's Cabinet. | <u>Responsible:</u> For meeting the Management Committee for SPdoc's demands regarding the database structure and other technological requirements of the system. | <u>Access:</u> To the entire structure of the system, its databases and metadata. |
| | CENTRAL MANAGER | <u>Who:</u> Currently, a member of the Management Committee for SPdoc, and a member of its Support Group. | <u>Responsible:</u> For inserting retention schedules, creating and deleting agency manager's profiles, registering the administrative structure, transferring records' custody and domain as necessary. | <u>Access:</u> To all the metadata regarding the users and the agency's structure and records; to the retention schedules; and to the agency's records referenced to in the system. |
| | AGENCY MANAGER | <u>Who:</u> Currently, the coordinator of the agency's appraisal committee. | <u>Responsible:</u> At the agency's headquarters, for creating and deleting user profiles; transferring the records' domain as necessary. | <u>Access:</u> To some metadata regarding the users and the agency's records; and to the agency's records referenced to in the system |
| | REGIONAL MANAGER | <u>Who:</u> Currently, this profile is not active | <u>Responsible:</u> At a decentralized unit within the agency, for creating and deleting user profiles, and for transferring the domain of the record as needed. | <u>Access:</u> To some metadata regarding the users the agency's records; and to the agency's decentralized units' records referenced to in the system. |

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|---|-------------|---|--|---|
| O P E R A T I O N A L P R O F I L E S | SPdoc USERS | <u>Who:</u> Public workers of the agencies where the system was implemented. | <u>Responsible:</u> For operating system functions, according to the public worker's profile (consultation, registration, protocol, archiving, etc.). | <u>Access:</u> To some metadata regarding their respective agency's records (according to the profile); and to their agency's records referenced to in the system. |
|---|-------------|---|--|---|

We must not forget to mention that, among SPdoc's users, there are citizens who have access to some metadata by the record's accession number, date and time. So, it is important to note that, during its current phase of development, SPdoc profiles have not been fully defined and the Management Committee has been studying their restructuration.

Standards / schemes for the description of metadata used in the creation, maintenance and use of digital records have been defined, and they shall guide the development of functional requirements for SPdoc's digital records' module. The São Paulo State Archives, through DGSAESP, published Normative Instruction APE/SAESP no. 1 of March 10, 2009, which sets guidelines and establishes procedures to be adopted by all public administration agencies and entities, in order to ensure the management, preservation and continuous access to digital records. Elaborated in accordance with international and national recommendations¹², this Normative Instruction presents mandatory and highly desirable requirements, along with their respective metadata, for the electronic management of conventional and digital records, created within the state's public administration.

Annually, in conformity with the Budget Law, the Management Committee for SPdoc calculates the application of financial resources in the system, based on the incomes and the expenses of São Paulo's government.

SPdoc has the following technological features:

- serving the Internet environment: one server, Windows 2003 Enterprise x64, 2 Dual-Core, 8GB RAM;
- serving the Intragov environment: 3 servers, Windows 2003 Enterprise x64, 2 Dual-Core, 8GB RAM;

¹² Mainly, the recommendations of United Nations Educational, Scientific and Cultural Organization (UNESCO), International Council on Archives (ICA) and the National Council on Archives (CONARQ).

- assisting the environment that helps convert the information to the Cluster Database: 2 servers (located in two different places), Windows 2003 Enterprise x64, 2 Dual-Core, 8GB RAM;
- assisting the Database Cluster: 2 servers Windows 2003 Enterprise x64, SQL Server 2005 Enterprise x64 with 4 Dual Core, 32GB RAM.

Regarding the preservation of information structure, SPdoc has a robot model StorageTek SL 8500, which is located at the PRODESP datacenter's safe room and carries out a daily backup routine.

The issues concerning access, security, data privacy and freedom of information legislation were discussed during the beginning of SPdoc and one more time later, in the preparation of Normative Instruction APE/SAESP no. 1 of March 10, 2009. But they still need to be detailed, especially after the promulgation of Federal Law no. 12,527 of November 18, 2011, which regulates the access to public information.

As mentioned earlier, in its current phase of development, SPdoc only works as a reference system for conventional records (analog/paper records, in general). However, it intends to be able to create, manage and preserve digital records. From a general analysis of the InterPARES 2 Preservation Chain, we suppose that the four levels of complexity in detail (A1 – *Managing the Framework for the Chain of Preservation*; A2 – *Managing Records in a Record-making System*; A3 – *Managing Records in a Recordkeeping System*; and A4 – *Managing Records in a Permanent Preservation System*) would be necessary to develop SPdoc.

E. Narrative answers to the project's applicable research questions

Before moving on to the answers, it is necessary to draw attention to the fact that most of the questions presented below approach subjects that are still under appreciation of the São Paulo State Archives, particularly of the Management Department of the São Paulo State Archives System (DGSAESP), and of the Management Committee for SPdoc.

Which are the regulatory, auditing and policy making bodies that need to be sensitized to the importance of digital preservation, and what are the best ways of influencing them?

The body of regulation, audit and policy decisions that must be sensitized is the Management Committee for SPdoc, by means of the guidance provided by DGSAESP to the system. As a collegiate body, the Management Committee gathers not only representatives of the strategic state secretariats, but also archival and Information Technology professionals, whose collaborative work is essential for digital preservation.

How can we adapt the existing knowledge about digital records preservation to the needs and circumstances of small and medium sized archival organizations or programs?

The São Paulo State Archives System (SAESP) is comprised of institutions of different sizes. The knowledge about digital records preservation will be disseminated by DGSAESP, responsible for coordinating SAESP's operations, no matter the size of the agency or entity.

How and when should these archives or programs prepare themselves for digital preservation?

As SPdoc is still under development, it is not possible to determine when archives must be prepared for digital preservation. Mainly because the implementation of the system will be held in different stages: firstly targeting the direct public administration agencies and later, the indirect ones.

What differentiates the preservation of digital records from that of any other digital entity for which the archives might be responsible?

What differentiates those two types of preservation is the care that must be taken of digital records “to ensure that they are accessible and readable over time with their form, content, and relationships intact to the extent necessary for their continuing trustworthiness as records.”¹³

What kind of policy, strategy and procedures should any such archives or program have in place to be able to control the digital records for which it will be or already is responsible from creation to preservation, and on what factors are these administrative devices dependent (e.g. a specific accountability framework and governance structure)?

The implementation of SPdoc intends to unify the control over the records created within the state’s public administration. The São Paulo State Archives, the Management Committee for SPdoc and the heads of the various public offices, according to their respective assignments, will define the policies, strategies, procedures and administrative mechanisms that SAESP should use to manage their digital records.

What action plans may be devised for the long-term preservation of these bodies of records?

According to the data collected in the “Contextual Analysis” and in the “Recordkeeping Systems Research Questions” forms, it was possible to identify some gaps and to point out necessary improvements to SPdoc, especially because the system is expected to be able to make, manage and keep digital records.

However, it is important to pay attention to the fact that, due to the complexity of Case Study 09’s subject and the short term available for the research development – once DGSAESP joined the InterPARES 3 Project only one and a half years before its end –, SPdoc’s diagnosis, presented below, just serves as a preliminary proposal of action plan, which could not be entirely developed so far.

Administrative activities

- *SPdoc’s records*

DIAGNOSIS: The difficulty to gather technical information about SPdoc shows that the records concerning the system’s development are not entirely under the Management Committee’s custody.

ACTION: Recover SPdoc’s records.

STAKEHOLDERS: Management Committee and PRODESP.

STATUS: Initiated by the Management Committee’s Support Group and the PRODESP team at the Governor’s Cabinet.

Archival activities

- **SPdoc’s compliance with procedures, requirements and standards of DGSAESP**

DIAGNOSIS: The analysis carried out within the scope of the InterPARES 3 Project was not enough to verify if SPdoc fully follows the requirements, standards, rules and archival procedures set by DGSAESP in order to ensure consistence, safety and reliability to the system.

ACTION: Analysis of SPdoc’s conformity.

STAKEHOLDERS: Management Committee, DGSAESP and PRODESP.

¹³ InterPARES 2 Project. *Preserver Guidelines – Preserving Digital Records: Guidelines for Organizations*. Introduction. InterPARES 3 Project, TEAM Brazil

STATUS: Not initiated yet, although a preliminary analysis has been carried out recently by the PRODESP team at the Governor's Cabinet, which indicated that SPdoc complies with 28% of the mandatory requirements set by the Normative Instruction APE/SAESP no. 1 of March 10, 2009; considering that, from the remaining 72% mandatory requirements, 50% refer to digital records, which are not yet approached in the SPdoc module currently in operation. It is also necessary to verify SPdoc's conformity with the archival procedures established by DGSAESP.

- **Identification of records created by SPdoc**

DIAGNOSIS: Concerning to the digital records created by SPdoc, during the execution of some of its functions, it was not possible to verify if they have any archival value.

ACTION: Identify the digital records currently created by SPdoc, and verify their fixed form and stable content.

STAKEHOLDERS: Management Committee and DGSAESP.

STATUS: Not initiated yet.

System activities

- **Responsibility for SPdoc's maintenance**

DIAGNOSIS: It was possible to acknowledge that the staff in charge of SPdoc's maintenance remains undetermined.

ACTION: Determine the staff members responsible for SPdoc's maintenance and define their roles.

STAKEHOLDER: Management Committee.

STATUS: Not initiated yet, although the Management Committee's Support Group has already started studies to understand the system's profiles better.

- **SPdoc's maintenance and security strategies**

DIAGNOSIS: The investigation showed that, in fact, PRODESP holds a daily back up routine on SPdoc, keeping its database safe for 21 days, other files for 30 days and login registers for 1 year.

ACTION: Verify the degree of effectiveness of SPdoc's daily back up routine.

STAKEHOLDERS: Management Committee and PRODESP.

STATUS: Not initiated yet.

- **SPdoc's access and security**

DIAGNOSIS: Even though the access to SPdoc is granted through login, it was not possible to verify, in the analysis held in the scope of the InterPARES 3 Project, how the changes made in the system are registered.

ACTION: Verify SPdoc's protection strategy against unauthorized actions, including, for instance, an access privilege structure and audit trail.

STAKEHOLDERS: Management Committee, DGSAESP and PRODESP.

STATUS: Not initiated yet, although the Management Committee has asked PRODESP to include or change some functions related to the system's protection. Concerning to access restrictions, the São Paulo State Archives, through DGSAESP, has already begun to provide access to public information, according to the recently promulgated Law no. 12,527 of November 18, 2011.

Can the action plan chosen for a given body of records be valid for another body of records of the same type, produced and preserved by the same kind of organization, person, or community in the same country?

The initial proposal of an action plan, previously presented, cannot be used as a model for recordkeeping systems, once it presents necessary actions targeting specifically improvements in SPdoc.

What knowledge and skills are required for those who must devise policies, procedures and action plans for the preservation of digital records in small and medium sized archival organizations or programs?

Thinking about the case of São Paulo state's public administration, the staff in charge of setting policies, procedures and action plans for the preservation of digital records must hold not only the technical knowledge (on archives and information technology), but it also needs to know the context of the digital records' creation, management and keeping (aspects regarding administrative, physical, legal, logistics, etc.)

How can records professionals keep their knowledge of digital preservation up-to-date in the face of ongoing and increasingly fast technological change?

In Brazil, in order to keep their knowledge about digital preservation up-to-date, records professionals need to stay informed about technological changes and especially about the researches developed by the archival community. For this, professionals need to: have access to publications in the area, participate in national meetings and international forums in general, and be involved in research projects like the InterPARES Project.

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MANAGEMENT COMMITTEE FOR SPdoc:
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NATIONAL COUNCIL ON ARCHIVES – CONARQ:
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G. Findings, Recommendations and Products

The conclusion of the Case Study 09 outlines the reasons that constrained the whole development of the research: the late enrollment of the Management Department of SAESP in the InterPARES 3 Project, just one year and a half before its end, as well as the complexity of the subject in study, the Unified Electronic System for Information and Records Management - SPdoc, which is not only a specific digital record, as in other case studies carried out by TEAM Brazil.

Due to the aforementioned limitations, the results of Case Study 09 presented throughout this report are the possible contribution of the DGSAESP to the InterPARES 3 Project, especially

because SPdoc is still under development and currently does not create, manage or preserve digital records.

The InterPARES contributions to SPdoc's improvement were more significant than the contributions of DGSAESP to the InterPARES. Particularly when it comes to the Chain of Preservation developed in InterPARES 2, which will contribute significantly with the shaping the new SPdoc modules dedicated to digital records. In general, the project provides a rich environment for fostering knowledge and professional training, increasing the institutions' awareness of the responsibility over the safekeeping of digital records and the importance of kicking off their preservation as soon as possible.