Secretary of State’s Optical Disk Scanner
Office Automation Project

ISSUE
Update on the optical disk scanner office automation implementation by the Office of the Secretary of State

AFFECTED AGENCIES
Secretary of State

CODE AUTHORITY
Senate File 529, Section 101 and House File 2459, Section 20

BACKGROUND

1. Technology -- Optical disk technology is a rapidly developing area for information storage and dissemination. It has the following characteristics:
   - Large amounts of information can be stored in a small space. (For example, one 5.25 inch disk can hold approximately 300,000 pages.)
   - The information is secure.
     - Information can be accessed many times, but it cannot be written over or changed. This is called WORM technology -- Write Once, Read Many.
     - Hackers cannot alter data even if they gain access to the system.
     - Documents can be copyright protected.
     - Formats and cross-references can be built into the data storage system to ensure the information is accessed properly.
   - The information can be directly loaded onto a computer permitting cutting and pasting information into other documents.
     - Information can be cheaply disseminated on compact disks. (A master disk can cost approximately $1,000 to $1,200 to produce; copies can then be made for approximately $1 per disk. Minnesota and Wisconsin offer their statutes on disk.)
   - The Secretary of State is not pursuing this option at this time.
2. **Activity to Date** -- For FY 1992, the General Assembly included $500,000 in the appropriation to the General Office of the Secretary of State for the purchase of optical disk office automation equipment. The FY 1993 appropriation continued the funding. In April 1992, the Purchasing Division, Department of General Services signed a purchase contract with Wang Laboratories. The equipment was delivered in May 1992. The equipment is to be tested and operational by the beginning of calendar 1993.

The equipment, software, and installation costs are approximately $1.7 million. The Office paid $350,000 down and financed the remainder with an installment purchase agreement through Norwest Bank. The agreement calls for 54 payments with an interest rate of 6.246% APR. The Office has indicated that their understanding is that $350,000 of their appropriation is for the purchase of equipment and software and continued office automation. The Office expects to spend $350,000 annually through FY 1996 and $118,360 in FY 1997. (The $150,000 difference between legislative intent and the Office's understanding is discussed in the Budget Impact section below.)

The optical disk system utilizes WORM technology to create unalterable stored documents. Documents are scanned to create a digital computer image of the document. The image is then burned into a laser disk for storage. The disks are maintained in a cabinet (called a "jukebox"). The documents are accessed by computer and the appropriate disk is mounted by the jukebox. All processing is done at a computer terminal, and paper documents are created for customers on a laser printer or delivered via fax machine.

Implementing the new system will restructure the operation of the Office and storage of documents. The following discussion compares the previous and new procedures for handling filings.

3. **Document receipt and sorting** -- Currently, when filings are received, they are sorted according to which section will process the document (Corporate, Uniform Commercial Code (UCC), Notary Public, or Statutory Filings). The filings and any included payments are taken to the cash register and rung up creating a record of payments received and amounts due. At the end of the day totals for receipts and amounts due are entered (rekeyed) into the accounting system creating the accounts receivable journal entries and preparing the deposits for the Treasurer. The documents are also time stamped by hand and stamped with an identification number. UCC documents are filed in triplicate and must be torn apart by hand so that one copy can be stored, another sent to microfilming, and the third can be returned to the client.

With the new system, all documents will be opened and immediately optically scanned creating computer digital images. Next an indexer (a staff person) will code the computer documents according to type and enter the payment amount if any is received. The computer automatically records the filing time and date, assigns an identification number, sets up the billing based on the types of documents, and makes the accounting journal entry. Thus, the paper handling will be reduced, and there will be no hand stamping, rekeying billing and accounting entries, or carrying paper to other work stations.

4. **Document Processing** -- Currently, paper documents are delivered to the work station for review by a staff person. Some documents require legal review in addition to other checking. The paper documents are reviewed for completeness and accuracy, information from the paper document is keyed into the data base, and then passed to the next reviewer. When errors in the filing are found, standard letters are generated requesting correction by the person or company making the filing.
With the new system, the document image will be placed in a job que and available to the proper reviewers. The reviewer calls the document to the computer screen and checks the accuracy. Much of the data that was previously entered will be automatically put in the data base. If corrections to the filing are needed, a standard letter requesting the corrections will be generated at the work station. The shuffling of paper from one location to another will be eliminated and the potential for misentering data is reduced.

5. Archiving -- Currently, filings are sent to the Microfilm Division in the Department of General Services. Each page is photographed and put on microfilm. The microfilm copies are returned to the Secretary of State's Office and stored in large filing racks. When information is retrieved from the archives, a person walks to the files, searches through the racks, pulls the microfilm, and either reads or makes a paper copy on the microfilm reader/copier.

With the new system, the scanned image will be burned into the optical disk by computer. No microfilming is necessary. When a file is pulled from the library, the staff person will simply call the document to the computer screen. If a paper copy is needed, it either can be sent to the printer or directly to the customer's fax machine without creating a paper copy. Staff time will be saved by eliminating walking to the files, searching the racks, using the microfilm reader, and returning the microfilm to the files.

6. Inquiries -- The Secretary of State receives inquiries about filed information by telephone, letter, in-person request, and by computer search. Under the present system, a staff person can directly answer questions from the data base or pull a microfilm copy of the document and make a paper copy for the requestor. These are mailed or faxed to the customer. Customers can also obtain an account number and access the computer data base via a personal computer and modem; they are billed for their time connected to the system. Billing is handled through the cash register arrangement.

Under the new system, the staff person will be able to pull up the document on the computer screen, answer questions or send the document to the printer for a paper copy. In cases where the customer has a fax machine, the document can be sent directly from the computer to the customer's fax machine without making a paper copy. Billings will be handled automatically through the computer.

CURRENT SITUATION

This situation raises several questions/issues:

1. As the current services are automated and new services are added, the Office's staffing level should be examined in terms of the ability to meet demand, productivity, efficiency, etc.

2. The transferability of the technology and ability to improve office efficiency of other State agencies that maintain large numbers of individual files needs to be examined (e.g., tax records in the Department of Revenue and Finance; birth, death, and health records in the Department of Public Health).

3. New information access services that can be provided automatically and cheaply while generating revenues could be developed.

4. The potential for disseminating information using compact disks rather than paper documents and to increase public access to large amounts of information not previously available could be explored.
During the 1991 Session, the Administration Appropriations Subcommittee passed Senate File 529 with an FY 1992 appropriation of $1,623,450 for the General Office of the Secretary of State. This was a $99,226 reduction from the FY 1991 expenditure. The reduced appropriation was passed by the Senate but was increased to the FY 1991 level by the House. When the bill went to Conference Committee, $500,000 was added to the amount passed by the Senate for the purchase of the optical disk technology. Thus, the $99,226 reduction had been reinstated (see Attachment 1). No specific intent language was included in the bill. Legislative intent is reflected in the bill summary (see Attachment 2) and shows that the $500,000 was to be used for equipment purchases and continued office automation.

The Office of the Secretary of State has indicated that it is their understanding that $350,000 of the appropriation was to be used to purchase the office automation equipment (see Attachment 3). The attached table shows the FY 1991 expenditures by line item and the expenditures and encumbrances as of June 30, 1992. If the $350,000 purchase from Wang is removed from the Data Processing line item, there is an overall decrease in spending of $55,468, instead of the $99,226 reduction identified earlier. (The on-line ledger does not show that any payments equaling $7,000.18, the monthly payments for May and June 1992, have been processed.) The pattern of expenditures also suggests that the $87,156 in across-the-board cuts and deappropriations were taken from the $500,000 intended for equipment purchases and office automation.

To date, $25,474 remains unexpended. Assuming the $14,000 for the May and June payments will be taken from this amount, there will be $11,474 to further offset the intended reductions or to be reverted to the General Fund. The Office has indicated that it expects a minimal reversion, thus the total offset to the intended reductions accounts for approximately $140,000. In sum, it appears that the Office has used funds from the $500,000 for equipment purchases and office automation to offset much of the budget reductions made by the Legislature and the Governor.

This change to the legislative intent has implications for financing costs. The payment schedule calls for 52 monthly payments of $29,590 ($355,080 annually) which totals $1,536,080. Of this amount, $207,680 is interest. This necessitates appropriations through FY 1997. If payments were spread over the next 3 years (through FY 1995) instead of over 4.33 years, the annual payment would be approximately $450,000 and would allow approximately $50,000 annually for miscellaneous expenses. The total interest would be reduced by one fourth, saving approximately $50,000.

Regardless as to how the appropriations are expended, the automation should improve the efficiency of the Office. In the future, the budget should be examined for new costs generated by the automation and for efficiency gains. Consideration also could be given to expanding the technology to other areas and to raising revenues through providing new, automated information services.

STAFF CONTACT: Dwayne Ferguson (Ext. 16561) Larry Sigel (Ext. 16764)
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