Copyright Office BPR Implementation Plan

Copyright Office

CPR Team Redesign Recommendation

he Copyright **Office employs** approximately 500 staff. The Fiscal Year 2001 annual budget was more than \$38 million, around \$21 million of which was funded by fees.

Management



uilding on last year's planning efforts for two

major management initiatives — business process reengineering and information technology — the Office made significant progress in defining new processes and improvements for its core business processes and in chartering a path for a comprehensive information technology strategy.

Business Process Reengineering (BPR)

is aimed at improving our public services. Specific project objectives are to:

- achieve timely public records through a redesigned workflow process that reduces the time needed for registration and recordation;
- achieve more efficient material processing both to and through the Copyright Acquisitions Division;
- achieve optimum response to public requests for or access to copyright information, search reports, and access to or copies of copyright related materials and documents;
- use new technologies to enhance general processing and tracking, as well as for work processes;
- contain costs to maintain current service fees;
- strengthen security and improve control over material; and
- use staff and space efficiently.

Business Process Reengineering (BPR)

In FY 2001, the Copyright Office continued the multi-year Business Process Reengineering (BPR) effort begun in FY 2000. The focus of this effort is to reengineer the Office's principal public services of registering claims, recording documents, acquiring works for the Library of Congress, answering public requests, maintaining records, and accounting.

After the selection of the contracting firm of PricewaterhouseCoopers LLP (PwC) in September 2000 to facilitate the reengineering effort, a Copyright Process Reengineering Team was formed. In addition, a BPR Steering Committee was formed of senior staff of the Copyright Office, representatives from the Library, and both labor organizations, to provide expertise and recommend solutions or actions to the Register. The Copyright Process Reengineering Team, comprised of 12 copyright staff members, facilitated by PwC staff, worked to assess the core business processes including organization, facilities, and technology and bring together a Baseline Current Operations Report which was completed in January 2001. This report was the first of a series of documents to record findings, conclusions, recommendations, and plans to implement processes in the Office. The team identified several high level issues that exist in the current environment. These issues represent areas in which the Office stands to realize the most improvement through the BPR effort. The team also identified the inputs and outputs from the current processes and mapped these processes at a high level. The team used this CO core process information as the baseline from which to plan for the new environment.

From January until April 2001, the team worked to redesign the Office's principal business processes. During this phase of the project, the team addressed current issues and problems with the processes and looked to apply best business practices. New processes were organized around outcomes to ensure that all activities focus on the final output to be produced. The designated new processes are:

- Maintain Accounts
- Answer Request
- Record Document
- Acquire Deposit
- Register Claim
- Receive Mail

The redesign recommendation included the replacement of current labor- and paper-intensive processes with automated systems that encourage the use of electronic submissions. New IT systems will automate the tracking and processing of materials throughout the Office, support the six redesigned processes, integrate services, and distribute and share information across the Copyright Office and with the Library.

A proposed Office organizational structure supported the six redesigned processes by grouping staff into divisions that correspond to the new processes. Because a single division will be responsible for an entire process, this new structure would reinforce accountability for delivery of an end product or service.

The team's redesign recommendations were presented to the BPR Steering Committee at an offsite retreat in April 2001. The Steering Committee supported the recommendations with some modifications which the Office then adopted. The contractor used these recommendations to create a BPR Implementation Plan which was delivered in June.

In June, the Office awarded a second contract to PwC to assist with the BPR implementation process. This contract runs through June 2002 and includes plans to define the redesigned processes to an operational level, draft procedures manuals, create a training plan, and develop a reorganization package, including new job roles for the new processes.

As implementation began, implementation teams were formed and process owners identified for four of the six new processes: Receive Mail, Maintain Accounts, Register Claim, and Acquire Deposit. All of the implementation teams are comprised of CO division staff, and at least one LC Library Services representative, representative from the Office's Copyright Automation Group (CAG), and/or the Library's Information Technology Services (ITS). Labor organizations are also represented.

To maximize the benefits of BPR implementation for the Copyright Office and LC Library Services, Joint Issue Groups were planned to address serials processing, labeling, cataloging, selection, and the Library's opening of the National Audio-Visual Conservation Center in Culpeper, Virginia. The groups are comprised of a co-chair and three staff members from each service unit. At the end of the year, the scope of issues for two groups, serials processing and labeling, were in place, and meetings will begin early in calendar year 2002.

A Communications Plan was developed as the first step in a series of actions designed to facilitate communications with the staff about the BPR implementation. The plan focused on ways to keep staff informed about BPR activities and to encourage feedback and input from the staff about these activities. Articles were published for *Copyright Notices* and the Library of Congress *Gazette*, and a monthly *BPR Newsletter*, first published in August. The BPR staff website was redesigned and documents related to the BPR effort were posted.

At the close of the fiscal year, the implementation teams for Receive Mail and Maintain Accounts had completed process definitions and drafted procedures manuals. Teams were formed for the Register Claim and Acquire Deposit processes. Plans were underway to begin the organization redesign process, and discussions had begun to perform a baseline space assessment as a foundation for the necessary redesign of the Office's facilities.

Information Technology

The Copyright Office relies on the collection, processing, storage, and presentation of information to fulfill its duties under 17 U.S.C. Information processing and products are critical in the registration of claims to copyright, the recordation of documents pertaining to copyrighted works, statutory licenses, and the Office's responsibilities as an agency of public record.

The Office currently has more than 56 production systems. For the most part, they have been developed separately and are not supportive of full information sharing and integration. Some rely on hardware and software that is aging and becoming increasingly vulnerable to failure.

This year the Register began a fundamental transformation of the Office's public services from paper and hard-copy based processing to primarily electronic processing. The reasons were two-fold: 1) in order to fully serve its customers, the Office needs to have its services available online to the greatest extent possible, and 2) the new processes developed in the BPR project rely heavily on the use of technology.

Recognizing the need for a concomitant reengineering of IT systems to support the reengineered business processes, the Office began a comprehensive assessment of IT systems and projects. In April 2001, the Register initiated work on the technology component of reengineering by establishing an Information Systems Working Group (ISWG). The driving forces of this IT work were to:

- leverage information technology to increase the efficiency of Copyright Office business practices and the timeliness of service to the public;
- allow for online registration, recordation, and deposit;
- provide user-friendly Internet access to Copyright Office public records and information;
- provide administrative applications that increase Office productivity, including document management;
- support the Office's policy and regulatory work by providing access to current news sources and databases; and
- allow for interoperability with Library of Congress systems so that data can be shared.

The Working Group was charged with the following tasks:

- inventory present systems used in the Copyright Office;
- assess current IT projects and activities;
- recommend an IT management structure;
- prepare an action plan to guide work done during the transition period; and
- prepare a statement of work to obtain contract assistance in defining the complement of information technology needed to support the reengineered business processes.

IT Action Plan for Existing Systems

The Working Group completed an action plan for current Office information systems in July 2001. It looked at the 56 production systems used in the Office and 17 IT related projects and activities. The ISWG recommended continued use of all of the production systems because they were performing needed functions in the present business structure. The group recommended halting three of the development projects because they could be inconsistent with the new business structure. The group also adopted a new IT management structure centered on the establishment of a group to oversee the analysis of IT requirements, IT projects and activities, review and decide upon IT proposals and issues, promote efficient involvement of staff in system planning, and establish an effective IT status reporting mechanism. This group, the Information Technology Oversight Group (ITOG), was established and began its work in August 2001.

Some of the projects recommended for continuation involve strengthening existing systems. These include the following major initiatives:

- The replacement of prototypical components of the electronic registration system (CORDS) with software such as Oracle and Java.
- The migration of the workload management system (COINS) to more reliable and effective hardware and software.
- The redevelopment of the imaging system (CIS) with non-proprietary and more responsive software.

Work continued on these strengthening initiatives throughout 2001, each with a completion date in mid 2002. The work being done is required to ensure continued availability of these critical components of workload processing.

The IT action plan broadens the Office's approach so that electronic receipt and processing becomes the *primary* way to register works. In the future, the Office will encourage applicants to submit works for registration online. Once they are submitted, technology will be used to a much greater extent to process them quickly and ensure a timely public record. In the meantime, the functionality of the current CORDS system will not be expanded, but the system will be strengthened by replacing the prototypical software components with robust software, including the Oracle relational database management system and the Java programming language.

Other continued projects involve more immediate needs such as improvements in online search procedures used by the public and enhancements to the Licensing Division system.

IT Requirements Analysis

On July 26, 2001, the Office formally began the reengineeering of its automated systems by issuing a request for quotation for contract assistance to complete an IT requirements analysis. This is the first step in the process of renovating and rebuilding the Office's IT systems so they will support the reengineered business processes and allow the Office to provide more services electronically.

The House and Senate approved an Office request to reprogram funds to undertake the requirements analysis. In September 2001, a contract was awarded to follow in step with the Office's BPR work and define the automated procedures to collect, route, and manage the information that makes up the historical record of a copyrighted work. Addressed in this effort will be electronic and scanned images of applications for copyright registration and transfer and other documents submitted for recordation, more comprehensive fiscal processing including acceptance of credit card payments, electronic routing of records and documents, and effective means to track public service requests. In addition, parts of the Office not included in the business process reengineering study will be looked at and opportunities identified for technology based improvements in those areas.

Coming from the requirements analysis will be two products that will be critical to fully prepare for the new business architecture:

- Functional specifications for system components that will be needed to support the re-engineered business processes including decisions about best hardware and software options and best IT development and operation practices.
- An integrated BPR and IT implementation plan that lays out the events and objectives necessary to put in place the changes in the Office processes, organization, and facilities as well as in technology. The plan will delineate the dependencies between events and will identify the critical path to facilitate management of the overall program.

Oversight Hearing

As mentioned previously in this report, on May 2, 2001, the Register testified before the House Subcommittee on Courts, the Internet, and Intellectual Property at an Oversight Hearing on the Copyright Office. The testimony focused on the Office's BPR and IT initiatives. The Register reported on the Office's request for a modification in its FY 2002 budget to establish an overall strategy for electronic delivery of services before continuing with further development of the CORDS project. The CORDS project will continue at its current level of service and eventually will be incorporated into the overall electronic delivery of services.

Management Planning and Policy Initiatives

Strategic Planning

The Office prepared a new Strategic Plan covering Fiscal Years 2002-2006 that was ready for publication by the end of fiscal 2001. The plan ties the constitutional provisions for copyright to the Copyright Office's mission, functions, goals and objectives, and the strategic initiatives that support the accomplishment of the plan. The strategic plan structure is now the framework for reporting in Annual Reports and other Office documents.

Management Controls

The Management Control Program ensures that Copyright Office programs are carried out in the most effective and economical manner possible, that obligations and costs comply with applicable laws, assets are safeguarded, and revenues are properly accounted for. During FY 2001, the Office conducted Vulnerability Assessments on all 22 management control modules, of which three were low risk and the rest at medium risk. Seven modules were chosen for control reviews.

Business Continuity Plan

The Copyright Office determined during its control review process that it needed to develop a current Business Continuity Plan (BCP). The Office used its earlier Y2K contingency plans as a foundation. A draft BCP was near completion at the end of the fiscal year, given added urgency by the terrorist attacks of September 11, 2001, and the threat of bioterrorism.

Budget

The Copyright Office receives three appropriations from Congress: BASIC, Licensing, and CARP. Total fiscal 2001 Copyright Office budget authority was \$38,438,249 with a full time equivalent (FTE) staff ceiling of 530. The BASIC appropriation (\$32,667,972) funds the majority of the Office's activities. The Licensing budget activities (\$3,250,000) and the CARP budget activities (\$2,519,445) were fully funded from user fees withdrawn from royalty pools.

The total BASIC appropriation derives its funding from two revenue sources: net appropriations from the U.S. Treasury (\$9,167,972 in Fiscal Year 2002) and offsetting collections authority from user fees (\$23,500.000). At the end of the fiscal year, the Office had collected \$21,601,045 in user fees. Any over collection or underspending of collected fees are deposited into a special "No-Year Account" set up by Congress in a 1998 law. The No-Year Account provides the Office with a reserve for operational improvements to meet customer service needs. Access to funds in this account is contingent upon congressional approval through the annual appropriation process. In FY 2001, the Office used \$1,374,607 from the No-Year Account.

Investment income from deposit accounts

In FY 2001, the Receiving and Processing Division continued to invest deposit account holdings in U.S. securities. During the first quarter, \$3,300,000 was invested in three-month Treasury bills. Succeeding investments were slightly lower, reflecting a decrease in deposit account balances over the year. At the end of the fiscal year, \$3,218,000 was allocated for investment for the first quarter of FY 2002. A total of \$158,337 in interest was earned from investments during the fiscal year, an increase of \$14,184, or 10 per cent in earnings over last year.

Security

Marking and Tagging

The Receipts Analysis and Control Center (RACC) continued to take steps toward full-scale marking and tagging of deposits to assure that items are marked as Copyright Office and Library property from the point of entry.

Two additional laser-marking machines arrived in October 2000, permitting marking of deposit copies received in standardized media such as compact disks, and video and audio cassettes.

With the completion of the new material and performance specifications for book anti-theft devices developed jointly by the Library's Preservation Research and Development Division and the Office of Security, the RACC plans to assume responsibility for applying these devices in calendar year 2002.

The Register approved the RACC proposal requesting a review and eventual replacement of the antiquated manual accession stamping operation with an automated accession label process. The major benefits for using automated accession labels are: a sound ergonomic label application process; elimination of risk of injury; smaller labels and more accurate placement; the elimination of ink and the maintenance and replacement of mechanical stamps; and greater efficiencies through new technology.

Reader Registration Program

In April, the Office implemented the Library's Reader Registration Program in five of its public service areas: the Certifications and Documents Section, the Card Catalog room, the Examining Renewals Section, the Records Maintenance Unit, and the Licensing Division Public Records Office. Registered users are issued a reader identification card, valid and renewable for two years, which permits the use of the copyright resources.

Secured Transport of Materials

Thirty-three new security carts were put in use for transporting book materials received under the mandatory deposit provision of the copyright law and for temporarily holding "high-risk" copyright registration materials such as CDs, DVDs, CD-ROMs, and other items of popular interest. This control measure is intended to achieve reasonable assurance against theft and mutilation of copyright deposits.



Automation

In addition to the IT work outlined in the beginning of this section, the following technology work was undertaken during the fiscal year:

COINS

The Copyright Automation Group (CAG) collaborated with the Library's Information Technology Services (ITS) to continue the conversion of the system to Oracle. A new team was assigned in ITS and progress continues to be made. A backup computer was purchased by ITS to mitigate the impact of any potential hardware failure.

Copyright Imaging System

Work continued on the redevelopment of the Copyright Imaging System. Collaborating with ITS staff, the CAG coordinated the review and testing of the information retrieval subsystem and the definition of requirements for scanning and inputting of data. Contract assistance was obtained by ITS to convert more than 4 million registration and document images to standard TIFF format.

Examining Production System (EPS)

In February 2001, the CAG completed the development, testing and implementation of the new automated statistical database system for counting the number of claims processed by examiners and technicians in the Examining Division. As mentioned previously, the EPS logs each application in-process number (IPN) into an automated database and generates reports of claims handled each week by individual staff member, team, section, and the Division. The statistics generated by EPS allow for better management of workflow.

Item Level Tracking

A requirements paper was finalized and will be used as input to the reengineering of IT processes. Item level tracking provides the capability to fully track copyright registration and deposit materials during processing and includes custodial transfer to the Library.

Copyright Office Intranet

In March 2001, the Office implemented a website for internal staff use containing annual reports, weekly production reports, planning information, and BPR and IT status reports.

Document Management Software

Collaboration began with Copyright Office staff to define the functionality needed in a system that would enable the building and routing of electronic folders containing staff work products, letters, memoranda and other correspondence and documents. The findings will be used in the selection of document management software that will support the routing of scanned applications and documents as well.

> Respectfully submitted to the Librarian of Congress by, MARYBETH PETERS Register of Copyrights and Associate Librarian of Congress for Copyright Services