III. RECOMMENDED OUTLINE FOR REQUEST FOR PROPOSAL (RFP)

This section presents an outline that the PMU may uses in creating RFPs to send to vendors under consideration as suppliers of the LRC information system. .

Using this document: The information is presented in a format that will allow the PMU to excerpt this section for distribution to vendors.

The RFP should be distributed in an electronic format that vendors can edit as they draft their responses. The vendor will then return the document containing both requests and answers to the PMU.

Scheduling the RFP: It should be noted that LIS technology changes quite rapidly. Therefore, if the PMU submits the RFP to vendors later than the March-May 2005 schedule recommended in the November 8, 2004 memo "Revised PMU Critical Path" and the final report *PMU Implementation Plan*, specifications and other requirements should be reviewed and possibly updated shortly before submission.

PMU LIBRARY INFORMATION SYSTEM RFP

The vendor will supply the following information regarding the library information system proposed for the PMU. Please address each topic and provide information in the sequence provided.

- Executive summary
- General vendor and library information system (LIS) information
  - System description
    - Present a summary of the major functions and modules of the LIS, including screen shots.
  - Documentation
    - Present a sample of the documentation for each module or major function of the LIS
  - Architecture
    - Describe the LIS architecture, including such aspects as software, operating systems, client/server, scalability, standards compatibility, and network compatibility
  - System flexibility
    - Describe the system's capacity to support LRC staff intervention to set local parameters, such as circulation periods, access authorizations, and so on.
  - Management reports
    - Describe the capability to produce reports and provide samples.
- Response to Technical Specifications
  - Respond to the technical specifications requirements described in Section IV Technical Specifications for a Library Information System of the report *LRC Information System Requirements.*
- Implementation
  - Provide detailed information describing the implementation procedures for a system to serve a new library with no existing collection but with an aggressive schedule for acquiring and processing a new collection. Describe a schedule, with rationale, for implementing modules. Describe procedures for building a database including linking to records provided by book and serials jobbers and database contractors.
- Training and staff development
  - Provide detailed information describing the training and staff development program that will be provided to meet the goals described in the report *Learning Resource Center Design*. Describe initial training procedures as well as ongoing staff development programs and opportunities.

- Technical support
  - Describe in detail the maintenance and technical support provided for the LIS. Include information about location of nearest support staff and technicians, means of access to live support staff, description of customer service availability via telephone and via e-mail, options for different support plans, how often enhancements to the software are expected, description of any user groups and electronic discussion groups, and any other data relevant to maintenance and support.
- Pricing
  - All costs should be included in the cost section of this proposal. Present a cost section detailing the prices of software, hardware, peripherals, supplies, and services. The presentation should include quantity, item description, and total cost and maintenance pricing, with clear distinctions between required and optional products, services, and warranties.
- Development plans
  - Describe strategies and plans for future development of the LIS with target dates for changes and innovations, particularly those set for the years 2005 and 2006.
- References
  - Provide a list of peer institutions that are LIS vendor customers, including names and contact information for specific responsible individuals at each institution.
- Additional information
  - Include additional information that may be helpful to the PMU in arriving at a decision that will best serve the mission and goals of the university.
- Contract
  - Include a sample contract.

IV. TECHNICAL SPECIFICATIONS FOR A LIBRARY INFORMATION SYSTEM

This section describes the technical specifications to be included in a Request for Proposal for the library information system to be installed in the PMU LRC.

Using this document: The information is presented in a format that will allow the PMU to excerpt this section and use it as the main body of a request for proposals (RFP). The university will need to add only fiscal details, the scheduling of demonstrations, dates and addresses for responses, and other items particular to the PMU.

It is intended that the vendor will receive an electronic copy of this document. Typically, the vendor will insert answers directly into the Word document in the spaces between specifications. The vendor will then return the document containing both specifications and answers to the PMU.

Types of questions: Potential vendors of an LIS are asked to provide two kinds of information, either by writing direct response to questions or by providing published documents about their system that directly address the concerns and specifications described in this section.

Section A describes general information the vendor should supply about itself as a company and about the LIS system it offers.

Section B presents functional specifications to which the vendor should respond.

Scheduling the RFP: It should be noted that LIS technology changes quite rapidly. Therefore, if the PMU submits the RFP to vendors later than the March-May 2005 schedule recommended in the November 8, 2004 memo "Revised PMU Critical Path" and the final report *PMU Implementation Plan*, specifications and other requirements should be reviewed and possibly updated shortly before submission.

A. GENERAL VENDOR AND SYSTEM INFORMATION

The vendor will supply the following information regarding the library information system proposed for the PMU.

1. Documentation

A sample of the documentation for all modules purchased shall be provided by the vendor.

2. Required list of references

The vendor must provide three customer references who have purchased such software. The list must include: name of customer, address, contact person, and telephone number.

3. Contract negotiations

Final resolution of all contract issues, language, and terminology will be made at the time of the final LRC/vendor negotiations. The LRC requests the vendor include a sample contract.

4. System description

Please include a summary of your system's capabilities, including screen shots.

5. System architecture

Please describe your system's architecture, specifically addressing the issues of client/server, scalability, and network compatibility.

6. System modification

The system must allow the LRC staff to change most parameters without engaging a programmer from the vendor or incurring programming. It must be possible for the LRC to modify or change these parameters at any time without consulting the vendor. LRC parameters include such items as circulation rules, statistical category definitions, LRC hours, passwords.

The vendor will describe the parameters that the LRC staff may modify and describe any parameters that require programmer intervention and/or programming fees.

7. Reports generator

The vendor must describe the report generator and provide sample reports.

8. System Security

The vendor must describe the security features available in all modules of the proposed system. The LRC expects this to include security of each module and specific functions within each module.

B. SYSTEM SPECIFICATIONS

The vendor will address each of the following items with "Complies," "Development Date ____", or "Does not Comply." The vendor may provide further explanation after the initial response.

1. General

1.1 The system must offer all public access catalog (PAC) screens in both English and Arabic.

1.2 The PAC user must be able to select either English or Arabic screens.

1.3 The system must accommodate bibliographic records in both English and Arabic.

1.4 It should be possible to mix the Arabic language with any other language on the same database, in the same record, in the same tag, and in the same field.

1.5 The system shall be compatible with the PMU computing and networking environment as described in the report PMU Infrastructure Specifications.

1.6 Please describe networking compatibility of your system.

1.7 The system must be searchable via the LRC's Web site.

1.8 The system must comply fully with the Z39.50 Version 3 standard on both the client and server sides.

1.9 The system must utilize an SQL relational database to store data.

1.10 The system must offer choice of relational data base management systems (RDBMS) and not be limited to one alternative.

1.11 The system must include the following modules: PAC (for staff and patrons), Cataloging (with authority control), Circulation (with Self Check-Out), Serials, Serials Binding, Acquisitions, Reserve, Media Scheduling, Inventory, and Interlibrary Loan.

1.12 The system must be fully scalable. The vendor will discuss the system's ability to add modules, clients and other servers over time.

1.13 Staff should be able to configure the system without vendor intervention. Please discuss the ability and ease of customization in the proposed system.

1.14 The system must accommodate multiple levels of security: network level, database level, application level, record and field level.

1.15 The system must be compatible and interact with at least one library security system (for example, Checkpoint or 3M). Please discuss the compatibility with these systems.

1.16 The system administrator must be able to configure different data entry fields as "mandatory," requiring the user to place information in that field (such as in patron records, POs, etc.).

1.17 The system must include a single user interface for all modules and must never require exiting from one module to work in another.

1.18 This interface must have a consistent look and feel, and should be fully customizable by each staff member.

1.19 Staff members' customizations should be tied to their log-ins, and should travel with them from workstation to workstation.

1.20 Users should be able to launch other applications such word processing, e-mail, and a Web browser from within the library application.

1.21 The staff interface throughout the system must be fully customizable, including the ability for LRC staff to change staff displays, windows, and labels.

1.22 It must be possible to change the system at the database level, including adding fields to tables, and making certain fields mandatory before a record can be saved. These modifications must not require vendor intervention.

1.23 The system must fully support UNICODE in all modules.

1.24 The system should provide an upgrade wizard that simplifies the software upgrade procedures.

1.25 The upgrade wizard should make software upgrades self-installable, without the need for vendor intervention.

2. Public Access Catalog

The vendor will provide a brief summary of the system's Public Access Catalog (PAC) module.

Public Access Catalog (PAC) refers to an integrated subsystem that allows patrons to search and browse the bibliographic database according to LRC-specified parameters.

Standards/Environment

2.1 The system must be fully compliant with the MARC 21 and UNICODE standards.

2.2 The system should be able to search any Z39.50 compliant database or server.

2.3 The system must run on the network described in the report PMU Infrastructure Specifications.

2.4 The system must be Web-based.

2.5 The system must have full multi-tasking capability; staff should be able to search PAC and edit a bibliographic record simultaneously without switching between modules.

2.6 A staff member should be able to search PAC and electronically “send” a record to any other module for Cataloging, Acquisitions, etc. This operation should require no more than one mouse click or keystroke.

2.7 The system must interact with the circulation system in real-time in order to show accurate status of holdings.

2.8 The system must accommodate session pooling that allows multiple patrons to access the catalog with a single database license. There must not be simultaneous user limits for remote usage.

2.9 The interface should be quickly customizable using XSL style sheets. One change should reflect on all pages that the element touches. It must not be necessary to change each page individually.

2.10 The LRC must be able to completely define how search indexes and search result pages display, including which elements of the MARC record display at both the brief and title level, and in what order those elements display.

2.11 The system must be able to display enhanced content such as book jackets, summaries, and reviews (such as content offered through Syndetics).

2.12 The system should support Open URLs in order to integrate with Open URL targets such as SFX, Novelist, Amazon, and others.

2.13 The system must allow direct linking from a record for an electronic subscription or e-book to the electronic resource with only one click.

Indexing

2.14 The system must be able to index for searching any MARC field or tag.

2.15 The system must offer browsing by Author, Title, Subject, Call Number, and exact match indexes for LCCN, ISSN, and ISBN.

2.16 The system shall allow the LRC the option of building a separate set of indexes for staff searches.

2.17 The system must allow keyword, alphabetic, and exact match searching.

2.18 The system must enable the LRC to set up its subject indexes so as to ignore "spacer characters" in alphabetizing the index. For example, Art, Ancient should appear between Art, Africa–West and Art–Belgium. Setting up the index to ignore spacer characters should not be mandatory but should be an option.

Searching

2.19 Patrons must enter searches through a graphical, Web-based user-friendly search screen.

2.20 The system must have easy-to-follow prompts throughout the inquiry process.

2.21 Patrons must be able to easily choose an index to search.

2.22 Multiple continuous spaces or space equivalents must be compressed to a single space.

2.23 Apostrophes, quotation marks, parentheses, brackets, and diacritic marks must be ignored. All other punctuation and special characters should be treated as spaces.

2.24 Character case must be disregarded.

2.25 Beginning a new search should require no more than one keystroke or mouse click.

2.26 The system must enable patrons to search the holdings of the male and female sections of the LRC separately.

2.27 The system must inform the user of the number of records that satisfy the search specifications and must display brief bibliographic data for those records. The user should be able to page forward and backward through the individual title records. The user should be able to see all windows up to the point of the search in a stackable or cascaded format.

2.28 The system must allow the patron to move forward and backward in a search, exploring alternative paths without having to retrace the entire original search.

2.29 The system must retain on the screen the term or terms used as a search string for an inquiry until the user goes to another search, in order to allow checking for errors in input if no matches are found and to validate which terms were found in the system.

2.30 The system must save previous searches conducted during the same session and allow them to be modified and reinitiated.

2.31 The system must be able to save search strings to hard disk for use in a future search session.

2.32 The system must allow the user to download, print or e-mail search results.

2.33 The system must automatically include “see” and “see also” references in the alphabetical listing of the authority forms in the authority list in order to direct the patron to the valid form.

2.34 The system must be able to go directly from a keyword search to browsing by the shelf list by call number or to browsing by title.

2.35 The system must allow the user to browse the authority list.

2.36 The system should include a search thesaurus. It must allow the LRC to use controlled vocabulary lists from external agencies as the method of providing a thesaurus to patrons and staff.

2.37 The system interface should be able to be translated quickly into Arabic, either by the vendor or by the LRC. If there are extra costs for this, please describe in the cost section.

2.38 The system should comply fully with the Web Content Accessibility Guidelines as described by W3C.

2.39 The system should support single-point authentication for all licensed databases, Z39.50 databases, and any other content the LRC chooses to make available to its patrons. This should be accomplished through compliance with standards such as LDAP, NCIP, and SIP2. Please describe the system's single point authentication capabilities.

Advanced Searching, Sorting and Limiting

2.40 The system must be able to perform multiple-index searching.

2.41 The system must be able to perform broadcast searching of multiple databases through Z39.50.

2.42 The system must provide sorting of hits that are retrieved by at least two fields.

2.43 The system must provide search limiting once the initial result set has been retrieved.

2.44 The system shall provide search limiting by operators such as: less than, more than, less than or equal to, more than or equal to, and equal to.

2.45 The system must provide pre-search restricting by item format and location.

2.46 The system must allow implicit Boolean searches. That is, the system must allow users to enter keywords without Boolean connectors and process a search as if "AND" connectors were used.

2.47 The system must allow for the use of Boolean operators: AND, OR, NOT, and XOR.

2.48 The system must allow multiple terms in using Boolean operators.

2.49 The system must recognize a defined, right-hand truncation symbol in keyword searching.

2.50 The system must allow a selected search to be sorted by title, author, publisher, publication date, subject, or call number. It must allow a sort by publication date in descending order.

2.51 The system must have the capability to pre-formulate searches (with limits and sorts) and store them as HTML links, creating pre-defined searches.

Display

2.52 The system must display a brief record.

2.53 The system must highlight the keyword that is being searched in color on the display screen.

2.54 The system must allow the LRC to define summary screen and bibliographic displays.

2.55 The system should be able to retrieve and display multimedia files (including Web sites) that are cataloged in a record's 856 tag.

2.56 The system should provide a list of newly acquired items displayable in categories such as titles, serials, authors, and others.

2.57 The system should be able to display MARC record information for reserve items.

2.58 The system should give the LRC the option to display – or not display – the next expected issue of a serial publication.

2.59 The system must display full-screen bibliographic and authority records.

2.60 The system must be capable of displaying enriched content, such as book covers, book reviews, summaries, and table of contents. Please describe and show screen shots.

2.61 The system must be able to provide consolidated, simultaneous searching of multiple licensed databases and present the user with a single result set, listed by resource. Please provide a URL where we can see this system in a live library environment.

2.62 The system must have an Arabic searching interface. It must be possible to switch easily between English and Arabic.

Patron Empowerment

2.63 Patrons should be able to access their own patron records directly from the PAC by entering their Patron ID numbers.

2.64 Patrons should be able to generate a list of items they have checked out.

2.65 Patrons should be able to display their own LRC fees/fines.

2.66 Patrons should be able to place a hold on a title directly from the PAC.

2.67 Patrons should be able to place a copy-specific hold directly from the PAC.

2.68 Patrons should be able to specify a date after which an item they have placed on hold is no longer needed.

2.69 The patron should be able to search for an item, and then place an interlibrary loan request for that item directly from PAC.

2.70 The user should not have to re-type the bibliographic information when placing an ILL request; the system should retrieve the information automatically.

2.71 Staff and patrons must be able to build and sort a bibliography on the system, download it to a storage device or network directory, and have the capability to edit, sort, print, e-mail and save the items marked for bibliography.

2.72 The system must enable patrons to renew their own materials.

2.73 The system must require the patron to enter his or her user ID before performing any of these patron empowerment features.

2.74 The system should enable patrons to mark bibliographic entries to a saved list, which can then be downloaded or e-mailed in multiple formats, including commonly used academic style sheets such as MLA.

2.75 The system should be able to support multiple saved lists, and give patrons the ability to name their lists, edit them, and delete them.

2.76 The system must support patron alert profiles, enabling patrons to indicate fields of interest and allowing the system to send e-mail notifications when it acquires new items in the collection that match that patron's interest profile. Please describe your system's implementation of selective dissemination of information (SDI) functionality.

2.77 Patrons should be able to register for a patron card online.

2.78 The system must allow patrons to move directly from the PAC to electronic resources to which the LRC subscribes.

3. Cataloging Module

The vendor will provide a brief summary of the system's cataloging module.

Standards and Environment

3.1 The database must be updated in real-time and must be shared among all modules.

3.2 Commands must be executed via pull-down menus and command buttons.

3.3 The system must provide full-screen MARC editing by mouse or keyboard. The vendor will describe or provide a sample screen.

3.4 The windows in the cataloging module must be movable and resizable. It must be possible to have two records open simultaneously side by side. Please provide a screen shot.

3.5 Cut, Copy and Paste commands must be available for MARC record editing.

3.6 The system must be capable of merging bibliographic records, re-attaching all existing item records from the old bibliography to the new bibliography.

3.7 The database must store records for all types of media for which there is a defined MARC record.

3.8 The vendor must be able to convert any existing machine-readable database into the proper formats for the proposed system.

3.9 The system must handle any MARC format, such as books, serials, AV, and film.

3.10 The system must also allow multiple records to be edited at one time, with the ability to copy information from one record to the other.

3.11 Procedures for additions, modifications, and deletions online must be logical and easy to learn.

3.12 The system must recognize record-level and field-level security options. This security must prevent unauthorized users from accessing the SQL database.

3.13 The system must allow authorized staff members to record the owning institution for each bibliographic record and authority record in the system.

3.14 Record ownership information that is contained in imported records must be retained upon import.

3.15 The system should fully support the UNICODE standard for multi-lingual cataloging.

3.16 The system should properly sort and sequence international characters in the list based on the index chosen.

Cataloging Features

3.17 The system must provide a non-MARC bibliographic workform, a simplified interface that allows staff members unfamiliar with MARC to catalog bibliographic records. This non-MARC bibliographic workform can also be used to catalog items not supported by MARC, such as Arabic records. The data should be stored in MARC-like format, allowing it to be stored, retrieved, indexed, and searched using the same processes as full MARC records.

3.18 The system must also provide bibliographic workforms in MARC format.

3.19 The system must not delete items with the status of "checked out" and must inform the operator before deleting an item with a patron hold.

3.20 The LRC must be able to add fields to workform templates.

3.21 The system must handle brief records for items not fully cataloged, as well as materials for which full catalog records are not created and to which only identifiers are assigned for purposes of circulation control. This format shall be defined by the LRC.

3.22 Authority files must permit appropriate “see” and “see also” cross-references.

3.23 Item records may be created manually or through batch creation.

3.24 Item records must be easily accessible from the parent bibliographic record with one keystroke.

3.25 When manually creating item records, bibliographic information found on the bibliographic record must be automatically transferred to the item records.

3.26 When a second or third copy of an item is added to the collection, the following fields are assumed to be the same and are copied from the record for the first holding:

a. Collection
b. Call number
c. Agency
d. Item type (for circulation parameters)
e. Publication date

3.27 Any field that is copied into a new item record may be edited at any time.

3.28 The item record must contain, but must not be limited to, the following fields:

a. Title
b. Collection
c. Call number
d. Copy/volumes
e. Item type
f. Item statistical class
g. Owning and lending agencies
h. Price
i. Publication date
j. Added/modified
k. Use count
l. Date last used
m. Hold status
n. Patron ID number in hold queue
o. Circulation statistics
p. Number of times renewed
q. In-LRC use statistics

3.29 Cataloging must be able to attach an item barcode or RFID prefix in its item barcode or RFID lookup command, so that users need only enter the significant digits in a search.

3.30 The system must be able to prevent specified bibliographic records from appearing in public access search indexes. For example, the system must be able to flag unshelved or lost items for display in search indexes that only LRC staff can view.

3.31 The system must accommodate three different kinds of search indexes:

a. staff only
b. public
c. combined staff and public

3.32 The system must be able to generate default 008 tags.

3.33 Authority-controlled fields must take the text entered and pass it automatically as a search to the authority file. The system must then present a display of entries from which the operator may select the appropriate insert. Authorized operators may, on the spot, create new authority records if no existing records are discovered.

3.34 The system must allow a list of holdings to be displayed. The operator may then add or modify items.

3.35 The entire record must be displayed, but only the portion of the field to be modified will need to be re-input. The vendor must describe editing capabilities.

3.36 The system must provide on-screen entry aids that provide the following:

a. Tag description for the tag currently being edited
b. Fixed field values via code list
c. Coded lists of valid tags and subfields

3.37 The system shall display labels for each field or subfield when information is entered. Help screens should be available.

3.38 The user should be allowed to batch-create item records by specifying a starting and ending barcode or RFID number.

3.39 A code must be validated against a list of similar codes.

3.40 Item records must be established with suitable fields so that, for example, audiovisual records will be distinct from periodicals.

3.41 Records may be keyed manually.

3.44 The system must allow a staff member to search remote and local Z39.50 databases for MARC records, and then send those records directly to Cataloging, to be modified and then saved directly to the database.

Database Architecture

3.45 The database must not be proprietary.

3.46 Custom reports must be available via any SQL-compliant application.

3.45 The database must be able to store a varied number of variable-length single- and multiple-value fields.

3.46 Item records must allow for single and multi-value fields.

3.47 The system must be capable of creating and maintaining a bibliographic database with full USMARC records and utilizing appropriate data from those files in each subsystem.

3.48 The system must be capable of creating and maintaining a bibliographic database with full European UNIMARC records and utilizing appropriate data from those files in each subsystem.

3.49 Records in the holdings file must be linked to the bibliographic file. Multiple copies of books, separate film prints, or individual series issues must share a common bibliographic file record.

3.50 Multiple agencies may share the same "title file."

3.51 Bibliographic records must contain, but not be limited to, the following fields:

a. Title
b. Author
c. Call number
d. Imprint
e. Publication date
f. Edition
g. Collation
h. LCCN
i. ISBN
j. Series
k. Generate notes

l. Content notes
m. Subject(s)
n. Variant title
o. Date added or modified
p. ISSN

3.52 The system must accommodate LRC-defined MARC tags.

3.53 The system must maintain only one file for each designated authority controlled field.

3.54 The proposed system controls must allow restrictions on the input and reading of data. These controls include:
a. Restrictions on staff who are allowed to add, delete, or modify the bibliographic record
b. Batch deletion of tagged title within LRC specified parameters (for example, aging)
c. Retaining on system records for which no holding exists, with display only to authorized users and no display in Public Catalog, with the option to purge
d. Capability for authorized operators to replace all occurrences of a data field (for example, to change a collection description from "R" to "Ref" in batch mode)

3.55 The system must be able to link bibliographic records. For example, the system must be able to link the bibliographic record of a translation title to the bibliographic record of the original title; the system must be able to link all the editions of the same title together so that the patron can research and locate all copies that are directly related to the original title the patron retrieved.

3.56 The system must ensure that bibliographic records are attached to valid authority records

3.57 Authority records must be accessible from bibliographic records with one keystroke.

3.58 The system must ensure that See Also references are attached to valid authority records.

3.59 The system must ensure that See references are attached to valid authority records.

3.60 The system must be able to display/edit serials Summary of Holdings within the Cataloging module.

Editing

3.61 The system must provide the ability to make global changes to authority records.

3.62 The system must use standard Windows navigation and editing techniques.

3.63 The system must include a spell-check feature that can be turned on or off, tag by tag.

3.64 The system must monitor the MARC data displayed in the MARC record and display incorrect or improper values in a separate frame.

Importing/Exporting

3.65 The system must be capable of importing records from bibliographic utilities such as OCLC and RLIN without having to use a specialized or dedicated workstation.

3.66 The system must be capable of searching any Z39.50 cataloging source and then directly importing records from those sources into the local LRC catalog with no module switching.

3.67 The system must combine and overlay records from bibliographic utilities, using LRC-defined match points.

3.68 There must be an option not to overlay duplicate bibliographic records.

3.69 Users should be able to define local fields that should not be overlaid during the bibliographic import process.

3.70 The system must be able to batch export authorities.

3.71 The user should be able to specify whether imported records will convert to the USMARC or MARC 21 format.

3.72 The system must be able to schedule a specific date and time to import records -such as when the LRC is closed.

3.73 The system must import MARC 21 records into the system.

3.74 The system must transfer records across databases and servers.

3.75 The system must be capable of selecting a batch of authority or bibliographic records for export or printing, based on a search for records that contain or match specified data.

3.76 The system must provide a built in NACO authority record loader. Please describe.

Authorities

3.77 The system must provide authority files for desired fields (such as personal and corporate names or series and subject headings) with appropriate cross-references for each.

3.78 The system must accept MARC-format authority file tapes.

3.79 The system must be able to import authority records online from outside sources.

3.80 Each heading in the authority file must be linked to each occurrence of that heading in the bibliographic file so that all occurrences of a heading may be modified globally.

3.81 The system must produce, on demand, a listing of authority files.

3.82 The system must permit multiple selection of authority records to attach to a bibliographic record simultaneously.

3.83 Only authorized operators may input authority records. These operators must have a password for this specific function.

3.84 Authority records may be created from within the general bibliographic file maintenance programs.

3.85 Whenever an authority file controlled field on a bibliographic record is entered or updated, the system must search the authority file to validate the forms.

3.86 If the form entered already has been established, then the system must assume the form is valid.

3.87 If the form has not been established, then the system must automatically display a relevant set of entries from the authority file, based on the data entered.

3.88 One of the authority entries may be selected or the new authority form may be added.

3.89 The system must be able to retrieve an authority record by authority key number.

3.90 The system must provide support for LC/MeSH headings, with the ability to create separate subject indexes based on the source of the authority headings.

3.91 The system must allow addition of authority records to be attached to multiple records without returning to the authority file.

3.92 The system must accommodate multi-use authority records (for example, a S.R. Ranganathan authority record that functions as both an Author Authority and Subject Authority record).

3.93 The system must support conditional authority headings, meaning that the system supports the ability to enter text in an authority controlled tag that can either be controlled as an authority record or merely kept as uncontrolled text.

3.94 Information held in local subfields in authority records should be preserved and should not be modified in any way by the system.

3.95 The system must allow a staff member to attach authority records to multiple bibliographic records simultaneously.

Miscellaneous

3.96 The system must print spine and pocket labels.

3.97 The system must enable staff members to view the status or creation information for authority and bibliographic records. Staff must be able to view:

a. The record's creation date and time
b. The name of the operator who created or updated the record
c. The record's most recent update date and time
d. The record's current cataloging status
e. The date and time of the record's previous status change

3.98 The system must accommodate copy records, as distinct from item records. Copy records represent multiple sets of a title that has several item records attached to it. The copy record is then attached to the title's bibliographic record. (For example, the LRC might have four sets of the World Book encyclopedia with 26 volumes in each set. Instead of displaying an item record for every volume in each set, the system should allow LRC staff to create a copy record for each set and attach it to the bibliographic record for World Book.)

4. Circulation Module

The vendor will provide a brief summary of the system's Circulation module.

Checkout

4.1 The system must read barcodes or RFIDs . Please describe what type of barcodes or RFIDs your system supports.

4.2 The system must allow entry of the borrower's and the item's identification/barcode or RFID using a light pen, barcode or RFID wand, laser scanner and/or keyboard.

4.3 The system must provide a check digit to ensure that the numbers have been accurately entered. The system must alert the operator visually and audibly when the barcode or RFID label is incomplete or incorrect.

4.4 The operator must access a patron's record by barcode or RFID entry, partial or full name search, student ID number, or other identifier.

4.5 The system must be able to check out items when the borrower's barcode or RFID card is not presented.

4.6 The system must alert the operator if no record exists for the patron entered, allowing for easy addition (completing only required fields on the patron record) and full checkout on first visit.

4.7 The system must use a temporary record and permit circulation of library materials that are not yet in the bibliographic database. At checkin, the system should alert the operator that only a temporary record exists, allowing the operator to complete the remaining fields.

4.8 When entering a temporary item record during circulation, staff must have the option to either fast-add both a bibliographic and an item record for uncataloged items, or to search PAC for an existing bibliographic record to which they can then fast-add an item record.

4.9 The system must automatically display on the checkout screen the following information: patron name, patron barcode or RFID number, item identification number, short title, due date, and due time (if applicable). Outstanding blocks must be automatically displayed when the patron record is accessed.

4.10 The system must check out items with missing barcodes or RFIDs .

4.11 The system must allow a group charge in a single operation.

4.12 The system must charge/transfer materials to special borrowers/locations such as bindery, mending, or others.

4.13 The system must be able to check out multiple items after entering a single patron barcode or RFID.

4.14 The system must list outstanding holds for a patron on demand.

4.15 The system must automatically switch patron records if a patron barcode or RFID is entered when an item barcode or RFID is expected.

4.16 The system must check out materials that have been temporarily reassigned or transferred from another branch or borrowed from another library.

4.17 The system must have an automatic, Web-based means of authenticating patrons who belong to other libraries that have reciprocal borrowing agreements.

4.18 The system must detect items that have not been checked in, allowing for a checkout function.

4.19 The system must "time out" after interval (in seconds) set by the LRC to prevent items being charged to a subsequent patron on the previous patron's validation.

4.20 The system should be able to interface with a self-checkout machine that allows borrowers to check out their own materials.

4.21 If the system includes a self-checkout feature within the system itself, the vendor will please explain and describe.

4.22 The system must have an automatic address check at specified time intervals to maintain patron records.

4.23 The system must allow the LRC to determine circulation parameters such as loan periods, fine rates, or others according to item and patron.

4.24 The system must accommodate separate circulation privileges by location.

4.25 The system must allow an operator to adjust easily an item's assigned due date via the terminal keyboard for individual or unique conditions.

4.26 The system must produce circulation slips, such as borrower receipts, for Circulation transactions. Borrower receipts must be generated for:

a. single checkin
b. group checkin
c. single checkout (due date slips)
d. group checkout (checkout receipts)
e. payments
f. refunds
g. renewals
h. holds

Loan Periods

4.27 The system must allow any item to be checked out for any period of time (days, hours, or minutes).

4.28 The system must allow and adjust loan periods for holidays and hours when the LRC is closed.

4.29 The system must allow different loan periods and fine rules specific to patron types.

4.30 The system must enable staff to define special loan and fine rules that can override standard Circulation defaults.

4.31 The system must allow fixed due dates and multiple fixed due dates.

4.32 The system must allow for indefinite loan periods.

4.33 The system must allow the LRC to define the grace period used in circulating overdue items, fines, notices, etc.

4.34 The system must alert the operator if the loan period of the item is not the patron's standard period, so that the borrower can be given the correct date due.

Checkin

4.35 Staff must be able to search PAC during checkout or checkin, and then return to checkout or checkin without having to rescan the ID card or barcode or RFID, and without interrupting checkout or checkin procedures.

4.36 The system must check in items using (a) the current date and time, (b) yesterday's date (for book drop returns), and (c) date and time specified by the LRC.

4.37 The system must check in multiple items after entering a single patron barcode or RFID number.

4.38 The system must check in items by entering the item barcode or RFID by light pen, laser scanner or keyboard.

4.39 The system must check in items whose barcodes or RFIDs are missing.

4.40 The system must allow the operator to print a checkin receipt for the patron.

4.41 The system must allow the following display at checkin: name, ID number of patron, title and due date of item.

4.42 The system must provide the option to exempt fees and fines as individual cases arise.

4.43 Exempting fines and/or fees should be a password-controlled function.

4.44 The system must break the link between the item record and patron record at checkin. A history of the patron's checkout transactions should NOT be maintained, except in the instance of a damaged item checkin.

4.45 The system must alert the operator at checkin if an item is on hold, displaying either the name of the patron who has requested the hold or instructions for notifying the patron. The system must require operator acknowledgment before proceeding with the checkin.

4.46 The system must allow the operator to access information about the item being checked in without leaving the checkin function. The system must provide at least the following information: item barcode or RFID number, patron's name, patron's ID number, shortened title, and due date of item.

4.47 The system must allow the operator to search the item being checked in (for example, in the event of a missing barcode or RFID) without leaving the checkin function.

4.48 The system will alert the operator when items checked in have one of the following statuses:
a. On hold
b. Needs full cataloging
c. Lost item (Found)
d. Missing Item (Found)

4.49 The system must print a list of items tagged as "lost" after a specified period of time.

4.50 The system must permit an operator to tag an item as "borrower claims item returned," and must keep a record of such tags.

4.51 The system must allow an authorized operator to change the status of an item being checked in (lost, claimed returned, damaged, etc.)

4.52 The date upon which any item is assigned a special status must be recorded on the item. This date may be used as a criterion for additional processing (for example, assign all items "Missing since Feb. 1" to status of "lost").

4.53 The status of items may be changed by an authorized operator to any valid status (for example, "missing" to "lost") by entry of the barcode or RFID by lightpen, laser, or keyboard. The status of items with missing barcodes or RFIDs also may be changed.

4.54 The system must record on the item the date on which a special status was assigned. This date may be used as a criterion for additional processing (for example, assign all items "missing since Feb. 1" to status of ""lost").

4.55 The system must allow the LRC to define additional statuses without programmer intervention.

4.56 The system must provide an in-LRC-use checkin mode to provide statistics for use of materials within the LRC.

4.57 The system must provide circulation statistics for checkouts, renewals, phone renewals, and in-house use for current and previous years.

4.58 The system must provide use statistics for different time periods determined by the LRC.

4.59 Staff must be able to toggle between checkin and checkout with one keystroke.

4.60 The system must be able to create workslips for items needing to be cataloged and items in transit.

Blocks

4.61 The system must automatically alert the operator in the event of a patron or item block (such as non-circulation item or patron is impounded). Such blocks must require operator acknowledgment before checkout can proceed.

4.62 The system must allow the operator to view a detail screen of the block without leaving the checkin function.

4.63 Item and patron blocks must be defined by the LRC. The system should allow the operator to easily display blocks and detail reasons for blocks. All blocks must have the option to be overridden by an authorized operator.

4.64 The system must block patrons with overdue materials or unpaid fines, with the option to override.

4.65 The system must allow payment in full or partial payment of fines and fees at time of checkout.

4.66 The system must check to see if an item is being held, blocking the checkout if an item is in the hold file. The system must allow an authorized operator to override the block.

4.67 The system must give the option to require a passkey when staff members attempt to override a block on certain borrower transactions. These transactions must meet any of the specific situations that are set by the LRC including: number of items out, overdues, claims returned or lost, pending requests made, and the dollar amount of fines.

4.68 The system must automatically alert the operator of a patron or item block. The operator must acknowledge the block before the renewal can proceed.

4.69 The system must clear patron records of old blocks according to a specified date. Cleared records may be purged.

4.70 Staff must be able to delete blocks using a single command.

Renewals

4.71 The system must allow the operator to renew all items or an easily specified list of items. A single command should cause the system to renew materials without having to enter each item separately.

4.72 The system must allow the patrons to renew items by phone or in person.

4.73 The system must automatically calculate a new due date based on parameters for renewals set by the LRC.

4.74 The system must allow the patron to renew overdue items with the request of payment or no payment. This must require an authorized operator.

4.75 The system must automatically tabulate and display all fines for each overdue item renewed and must post any unpaid amounts to the borrower's account.

4.76 The system must allow the operator to manually change the due date of renewed items.

4.77 The system must allow the LRC to restrict the number of renewals that can be made by a patron in person or by phone according to the patron or item type.

4.78 The system should allow the LRC to renew items from the check in screen, using a renewal mode.

4.79 Staff should be notified if there is a problem renewing the item.

Fines

4.80 The system must allow the LRC to set parameters for fines, notice production, etc. Rates may vary according to type of material and type of patron.

4.81 An authorized operator may attach a fee to a patron record for any reason. The operator will be able to associate an explanatory message with the fee.

4.82 The system must calculate and display fines at time of checkin or renewal. Full or partial payment may be accepted at checkin. The system must permit the operator to include a text message for each line.

4.83 The system must print receipts for fines paid showing date, time, amount, and items for which money was received.

4.84 The system must provide a way to track accounts receivable. The system must:

a. Allow staff to track payments and changes by fee type
b. Provide payment receipts and invoices
c. Generates statistics and management reports.

4.85 The system must permit the operator to include a text message for each line when accepting payment for fines or fees.

4.86 The system must permit an authorized operator to waive or modify system assigned charges. The system must prompt for an operator ID, for example, initials or employee number.

4.87 The system must allow an authorized operator to access the patron's fines and payments record, itemizing the details of each block.

4.88 The system must maintain a record of fines or fees levied, fines or fees waived, and fines or fees collected by agency.

4.89 The system must provide data showing system-wide fines or fees collected for specified periods.

4.90 The system must, on demand, print billing notices for patrons exceeding the threshold levels of unpaid fines or number of overdues.

4.91 The system must, on demand, print overdue notice reminders of all materials overdue since the last printing or subsequent notice reminders.

4.92 The system must prepare a Final Notice incorporating the replacement price of the item.

4.93 If a book billed as a "lost book" is returned to the LRC, the system must automatically cancel the lost status and must produce a bill for outstanding overdue fines. Should the money have already been collected, credit due the patron must be prepared, minus a processing fee.

4.94 The system must purge outstanding bills for fines within a specified date.

4.95 The system must create billing notices for damaged items.

4.96 The system must reprint (or partially print) a run of bills, notices, etc., within the same day.

4.97 The system must include unpaid balance for fines and bills to be included on all patron and availability notices.

4.98 The system must accommodate "reminder invoices," where all current unpaid fees/fines can be combined onto one invoice.

Overdues

4.99 System must set a maximum fine amount and number of overdues that can be overridden with an authorized password.

4.100 The system should allow the LRC to specify text for overdue notices and allow sorting such notices by any field in the borrower record.

Holds

4.101 The system must allow holds to be placed by TITLE, such that the first-available copy will fill the request, and by ITEM, such that only a designated copy will fill the request.

4.102 The system must allow the patron to specify the notification method when placing a hold:

a. mail
b. phone
c. electronic mail

4.103 The system must automatically check for a borrower's outstanding requests at checkout and renewal times.

4.104 The system must allow an operator to optionally specify a last acceptable date for a hold, after which time the material is no longer needed.

4.105 The system must block a patron from placing more than one hold on the same item.

4.106 The system must allow the LRC to set a threshold for the number of holds that a patron can make.

4.107 The system must alert the operator when materials on hold are renewed or checked in, displaying either the name of the patron placing the hold or instructions to notify the patron.

4.108 The system must verify that the correct patron is checking out material at the time of the loan.

4.109 The system must allow easy hold cancellations, making a note on the patron's record.

4.110 The system must allow an operator to optionally specify a last acceptable date for a hold, after which time the material is no longer needed. The system must automatically clear holds not filled by such dates and automatically readjust the hold queue.

4.111 The system must allow an authorized operator to view on-line the patron record for which a particular item is being held.

4.112 When circulation staff fills a hold, the system must automatically display any comments related to the request that were entered at the time the request was placed.

4.113 The system must prepare a “purchase alert” when the ratio of holds to the number of available copies exceeds threshold set by the LRC.

4.114 The system must produce notices alerting patrons of materials being held with an indication of when to pick up material, and by what date.

4.115 The system must allow for the printing of hold slips to be placed in items being held, showing the patron name.

4.116 The system must allow an authorized operator to review holds for any given patron.

4.117 The system must monitor the length of time items sit on the hold shelf. If the time exceeds the number of days defined to hold, the hold must be canceled and an appropriate note made on the patron's record. If other patrons are in the queue, notification must be signaled for them.

4.118 The system must maintain multiple holds in a queue with oldest first.

4.119 The system must allow an authorized operator to view and alter the sequence of holds within a queue.

4.120 The system must be able to automatically generate a recall if the hold queue size reaches a threshold determined by the LRC.

4.121 The system should have the ability to transfers hold queues from one bibliographic record to another bibliographic record.

Borrower Information

4.122 The LRC will create the initial patron file by downloading from an existing database and in some cases by manual entry. If downloading from an existing database, the creation of patron records must allow importing of existing data from delimited ASCII format. The system also must allow for exporting of data from patron database in delimited ASCII format. The vendor must give the data file structure to the LRC.

4.123 The system must be able to import borrower records, with the ability to import multiple values for a single item (such as multiple addresses or phone numbers).

4.124 The system must allow operators to register patrons without exiting the checkout function.

4.125 When a patron record is fast-added during checkout, the system must automatically open the checkout window and display the newly-added borrower's name in the window.

4.126 Each of the data elements in the patron file must be variable length.

4.127 The information entered and stored in the patron database must include, but not be limited to, the following fields:

a. Last name
b. First name and middle initial
c. Street address
d. City and state
e. Postal code
f. Phone number
g. Statistical categories to include:
    1. Birth date
    2. Location code.
h. Sex
i. Patron class code
j. Registration date (mm/dd/yy)
k. Expiration date (mm/dd//yy)
l. Bar code label number
m. Delinquency, stop, lost/stolen card report, etc.
n. Date the card was last issued (mm/dd/yy)
o. Date of last update to record
p. Fines and charges
q. Overdues

4.128 The system must be able to calculate the patron expiration date based on an established loan period, or assign a specific expiration date to each borrower type.

4.129 The LRC must control circulation policies by assigning a patron category to the patron's record.

4.130 The system must allow an authorized operator to suspend borrower privileges.

4.131 The LRC must be able to define as many different patron type categories as they desire.

4.132 The following information must be stored in and linked to the patron's record:

a. Date of registration
b. Number of items overdue and checked out
c. Fine and/or other charge amount owing
d. Payment
e. Date of payment
f. Identification of items on hold
g. Default item loan period
h. Date overdue notice sent
i. Identification of items checked out
j. Number of times patron claims returned items
k. Patron status
l. Message relating to patron

4.133 The system must not allow duplicate patron records.

4.134 The system must provide for coded fields to expedite the entry of patron information. Codes entered must be verified against a list of existing codes to ensure database integrity.

4.135 It must be possible to search the patron file without exiting the checkout function.

4.136 The system must display the borrower address or phone number on the borrower search results screen.

4.137 Patron information must be held confidential and must be accessed only by those operators who have the appropriate passwords and codes.

4.138 The patron file must be accessed by using the patron's family name, bar code, or another alternative identifier provided by the LRC.

4.139 The following information may be updated by an authorized person:

a. Date of registration
b. Number of items overdue and checked out
c. Fine and/or other amount owing
d. Payment
e. Date of payment
f. Identification of items checked out
g. Default item loan period
h. Date overdue notice sent
i. Identification of items on hold
j. Number of times patron “claims returned” items
k. Patron status
l. Message relating to patron

4.140 The system must allow the operator to reassign a new barcode or RFID to the patron when a patron card is lost, changing the status of the old barcode or RFID to “lost” and the status of the new barcode or RFID to “active.” Patron information and items charged to the patron from the old barcode or RFID must be linked to the new barcode or RFID.

4.141 The system must be able to reactivate patron barcodes or RFIDs that were thought to be lost but then were found.

4.142 The system must not delete patron records that have patron blocks (overdue items, fines, etc.).

4.143 The system must allow staff members to copy an existing patron record and retain certain fields (to ease the creation of patron records for different members of the same family).

4.144 The system must enable patrons to designate representatives who can check out and renew items in their names. The system must link the patron to the items checked out and to the proxy who completed the transaction.

4.145 Patron statistical information may be obtained from a specific field or a combination of fields on the patron record.

4.146 The system must provide a printed statistical report on the number of patrons currently registered, by patron status, type, and location.

4.147 The system must maintain on-line records of the following transactions by patron:

a. total amount of unpaid fined
b. total amount of unpaid charges for lost or damaged items
c. current transactions or those items that are currently checked out to the patron
d. date of last LRC transaction

4.148 The system must provide a Save As option for notes and other lists (in case staff members want to save out a list of blocks or items).

Closed Stack Access

4.149 The system should allow patrons access to items that are not in the open stack area.

4.150 The system should allow closed stack areas to be defined by call number range (or individual call number) and by patron type. (Parts of the collection will be closed to male students; other parts will be closed to female students. In each case, the parts of the collection will be delineated by call number or by call number ranges.)

4.151 These items should be able to be requested through the Web-based PAC.

4.152 Requests should be sent to a printer so that a page or other LRC staff member can retrieve the item for the patron.

4.153 In order to support Closed Stack Access, the system should support Closed Stack collections (see section 4.151).

4.154 When a patron places a request for an item from the Closed Stack collection, the system should respond to that patron with the time that the item will be available for pickup.

4.155 The page or staff member should have the ability to complete or cancel a Closed Stack request. A completed request should be sent to the pickup location and the status is updated in the My Account section of the Web-based PAC.

Miscellaneous

4.156 The vendor must describe and provide sample circulation statistics and reports that are available.

4.157 The system must track circulation statistics generated both by checkins and checkouts.

4.158 There must be a backup circulation option to perform circulation activities in case the system goes down.

4.159 The system must provide for a report generator for custom reports to be written and generated by the LRC.

4.160 The LRC must be able to determine what happens to an item that is designated as "lost."

a. the item is suppressed so that it does not display in PAC
b. the item remains visible in the catalog with a status of "lost"

4.161 The system should be able to perform offline circulation using a portable handheld barcode or RFID reader, uploading the transactions back to the server when it is available.

4.162. Patron notices should be able to be printed, e-mailed, or telephoned, according to the patron's preferences.

4.163. The system must provide for unmediated e-mail notices.

4.164 The system must provide a graphical user interface in order to manage e-mail notices.

4.165 The system should provide a dead letter queue that enables e-mail addresses to be corrected. Once the address has been corrected, the notice should be able to be resent without generating the notice again.

4.166 The system should interface seamlessly with an automated telephone notice system in order to deliver patron notices via the telephone.

4.167 The telephone messaging system should also enable two-way communication so that patrons can renew items, check their items out, etc. using the telephone.

4.168 When delivering an overdue notice via the telephone messaging system, the system should not require the patron to hang up and call another phone number to renew their items. The system should allow the patron to renew their items during the same phone call.

4.169 Please describe your telephone messaging system.

5. Acquisitions

The vendor will provide a brief summary of the system's Acquisitions module.

Standards and Environment

5.1 The acquisitions module shall be available from all staff workstations on the system to users with the appropriate passwords.

5.2 The acquisitions module should be graphical. Commands should be executed via pull-down menus and command buttons.

5.3 An interactive record structure shall be employed so that transactions on one record will cause changes in several online files.

5.4 Password security for the acquisitions module shall delineate a variety of access levels based on the functions performed.

5.5 Records in the acquisitions module shall be updated online in real time.

5.6 An appropriately authorized user shall be able to retrieve and change existing acquisitions records online.

5.7 Once an acquisition record is created, all further information shall be treated as an update to the initial record.

General Acquisitions Functions

5.9 The following acquisitions functions shall be accommodated:

a. Pre-order searching
b. Ordering
c. Claiming
d. Cancellation of orders
e. Receipt processing
f. Fund accounting
g. vendor accounting
h. Currency control
i. Statistics and report compilation

5.10 A variety of types of materials shall be accommodated, including but not limited to the following:

a. Monographs, including e-books
b. Monographs in series
c. Serials, including subscriptions to electronic resources
d. Law reports and statutes
e. Continuations
f. Documents
g. Musical scores

5.11 The system shall accommodate and identify items in a variety of formats, including but not limited to:

a. Print
b. Microfilm
c. Microfiche
d. Online electronic resources
e. Film
f. Video
g. Audio
h. Magnetic tape
i. Software

5.12 The system shall report the current status of all titles ordered or received.

5.13 Data stored in the acquisitions files shall include but not be limited to:

a. Bibliographic information
b. Acquisitions type (order, gift, approval, etc.)
c. Status information (received, etc.)
d. Library/branch/copy/fund information
e. Invoice information
f. Vendor information
g. Vendor report information (such as vendor performance statistics).
h. Basic fund accounting information
i. Requester
j. Location (destination)
l. Instructions to vendor (the operator should be able to include a text message)
m. Internal processing instructions (the operator should be able to include a text message; non-printing on order form).

5.14 An acquisition record shall be accessible online through at least the following access points:

a. Purchase order number
b. Main entry
c. Title
d. Author/title key
e. Library of Congress Card Number
f. ISSN/ISBN

5.15 Data in MARC format can be retrieved from external sources and used to overlay the short bibs created from order records.

5.16 The system shall permit the recording of holds against titles on order and in process.

5.17 The system shall provide for the retention of records under conditions such as: item out of print, publication canceled, order canceled, etc.

5.18 An acquisitions record shall be created for each title on order or received.

5.19 The system shall permit and maintain records of out of print and other canceled orders, and shall provide for purging the same in individual or batch mode.

5.20 The system shall accommodate desiderata files.

5.21 The desiderata file should be searchable.

5.22 The desiderata file shall generate "consider for re-activation" reports based on dates incorporated in desiderata records.

5.23 The system shall display the appropriate screen format and prompts for bibliographic information to be entered or transferred from elsewhere in the system.

5.24 No re-keying of information already in the system shall be required.

5.25 The display for an acquisitions record shall include:

a. Bibliographic information
b. Acquisition type
c. Status (activity) information
d. Library/branch/copy/fund information
e. Invoice information
f. Vendor information
g. Handling information
h. Basic fund accounting information
i. Requester
j. Location (destination)
k. Instructions vendor (the operator should be able to include a text message)
l. Internal processing instructions (the operator should be able to include a text message; non-printing on order form)

5.26 The status (activities) information element shall include:

a. Status
b. The date the status was set
c. A free text message area for further description of the status

5.27 Valid statuses (activities) shall include:

a. Record ready to have purchase order produced
b. Entered partial
c. Claimed
d. Canceled
e. Received partial
f. Received complete
g. Report information received from the vendor
h. Returned partial
i. Returned complete
j. Invoice received
l. Received without invoice
m. Invoice claimed
n. Invoice overdue
o. Invoice paid
p. Reorder

5.28 All of the statuses referred to in item 5.27 above can be ascertained viewing the activities which have occurred for each line. These activities can be viewed in summary or in detail for all or selected lines of an order.

5.29 Items are to be created at order time, receipt time, or on demand, depending on the setup designated by the LRC. Items are not created based on completion of an order. However, the user may create items on demand based on the completion of the order.

5.30 Any change in an acquisition file shall result in appropriate amendment of copy or copies of that record in the bibliographic database.

5.31 The system shall be capable of accepting new bibliographic information about a title at any time after order placement or when its receipt is recorded.

5.32 The system shall produce outputs in individual or batch mode, including, but not limited to:

a. New or revised purchase orders
b. Claim letters/notices/lists
c. Cancellation notices
d. Return notices
e. List of cancellations
f. Selection lists
g. New title reports
h. Purchase alert notices
i. Hold availability notices
j. Lists of invoices not cleared
k. Vendor lists
l. Vendor performance reports
m. Open order reports
n. Fund status reports
o. Payment vouchers

Fund Accounting

5.33 The system shall be able to create an unlimited number of multi-level fund accounts.

5.34 The fund file shall be updated automatically to indicate file encumbrances and debits as a result of actions on the Acquisition file.

5.35 The system shall provide fund information updated in real time.

5.36 The system shall provide periodic, cumulative fund activity and commitment reports.

5.37 The system shall be capable of accommodating multi-fund shared acquisitions.

5.38 The system shall identify funds by codes of up to 7 characters and a year.

5.39 Encumbering should be automatic if a budget is identified.

5.40 Fund file records shall include the following information:

a. Amount budgeted
b. Amount encumbered
c. Amount expended
d. Uncommitted balance
e. Cash balance

5.41 When a proposed transaction would either over-encumber or overspend an account (that is, draw the balance below zero), the user is warned by the system, but not prevented, from proceeding.

5.42 The system shall permit closing of accounts.

5.43 The system should be able to close out the prior year's accounts with or without moving encumbrances from the prior year forward as part of the close-out process.

5.44 The system should be capable of creating new accounts for a current or new year.

5.45 The system shall have the capability of producing reports for all funds for a specific account or budget period.

5.46 The system shall be capable of reporting the number of items and titles received against a particular fund over varying periods of time.

5.47 The system shall be capable of producing vouchers for payment to vendors.

5.48 The system shall provide vendor name and address information for mailing by the LRC.

5.49 The system shall handle the conversion of foreign currency prices.

5.50 Lists of invoices not cleared or not cleared within a specified period after receipt shall be available upon demand.

5.51 Invoices shall be accessible by vendor invoice number.

5.52 The system shall accommodate refunds and partial order payments.

5.53 The system shall permit the sharing of order costs between funds.

5.54 The system shall be capable of calculating average annual costs for categories of materials by fund.

5.55 The system shall be capable of retaining fund accounting information online for period specified by the LRC.

5.56 Once fund information is no longer required to be retained online, the system shall provide for output onto tape.

5.57 The system must be able to record expenditures not associated with online orders, for example: for items selected from vendors' warehouse shelves.

5.58 The system must provide a fund audit trail for any financial changes to the funds made by LRC staff.

5.59 The audit trail should track who made manual changes to fund balances, when they made the changes, on which fund the changes were made, and by how much the changes were made.

5.60 The system should enable a report generator to compile custom reports on the audit trail.

Ordering

5.61 The system shall permit online and off-line communication with, and ordering from, suppliers.

5.62 The system shall be capable of printing purchase orders in a format determined by the LRC.

5.63 The system shall be able to output purchase orders on paper forms or on magnetic tape.

5.64 The system shall be capable of transmitting an order outline such as accords with the NISO online ordering standard (BISAC).

5.65 It shall be possible to key in new acquisition records.

5.66 The system shall be able to handle reorders from another vendor.

5.67 The system shall accommodate the following order types:

a. Firm order
b. Prepayment
c. Selection list
d. Gift
e. Exchange
f. Membership acquisitions
g. On approval
h. Blanket order
i. Standing order
j. Subscription
k. Continuation
l. Deposit Account
m. Government Document

5.68 The system shall provide a PO screen on which Acquisitions titles can be entered. Printed POs are to be produced on demand.

5.69 Vendor and item information shall be accessible and modifiable from the PO.

5.70 The system shall be capable of storing orders entered for later review and release by an authorized person.

5.71 The system shall support both the production of one purchase order for each title and the combination of orders to one vendor.

5.72 The system shall prohibit the assignment of duplicate order numbers, whether entered manually or assigned automatically.

5.73 The system shall allow the librarian to conduct a "pre-order search" to see if a title has been ordered.

5.74 It shall be possible to order the output of the following subsets of purchase orders:

a. All purchase orders
b. All orders for a particular vendor
c. All orders for a particular fund or funds
d. All orders for a particular order type or types
e. All orders for a particular location or locations

5.75 Printing of purchase orders on paper forms shall be available (online or off-line) in batch mode. At least the following items shall be included on printed order forms:

a. Author
b. Title
c. Edition (note field)
d. Publisher (note field)
e. Date of publication (note field)
f. Series (note field)
g. Number of the volume or volumes being ordered
h. Price
i. Total number of copies being ordered
j. "RUSH" indications (note field)
k. Name of jobber
l. Date of order
m. System-supplied order number
n. The operator should be able to include a text message (for example: "do not catalog")

5.76 The following activities shall be performed concurrently with the production of purchase orders:

a. Addition of purchase order number to vendor file
b. Updating encumbrances in the fund file
c. Sorting the purchase orders by vendor number

5.77 Online POs should closely resemble an actual printed PO.

5.78 The system must accommodate multiple LRC billing and shipping addresses. (For example: on a purchase order items can be shipped directly to specified departments instead of the LRC's main receiving area.)

5.79 The system must be able to transmit electronic orders using the EDIFACT protocol.

5.80 The system must support EDIFACT and Enhanced EDIFACT (for order acknowledgement and order processing messages).

5.81 The system must support order templates that contain default data in order to speed the ordering process.

5.82 The system should print and display the PO line number on the printed purchase order, for easy integration with book vendors.

5.83 The system should be able to download MARC records with order information included in tags and subfields defined by the LRC. This is to enable easy integration with Web-based book vendor tools such as Baker & Taylor's TitleSource II.

Receiving

5.81 The system shall be capable of maintaining routing records and producing routing slips.

5.82 The system shall be able to identify different copies from different sources.

5.83 The system shall be capable of handling receipt of items with invoices and invoices without items.

5.84 When receipt of an item is recorded, the system shall update all files, including vendor and financial files.

5.85 When the receipt of an item is recorded, the system shall automatically update the display associated with the copy of the acquisitions record in the bibliographic file from "on order" to "in process."

5.86 Upon entry of receipt information, the system shall update the vendor file, including vendor report statistics.

5.87 When receipt of a purchase order is complete and the invoice has been received, the acquisition record shall be flagged to allow its later deletion from the acquisitions file.

5.88 The system should support the creation of acquisitions workslips that perform the following:

a. Allow staff to enter workslip notes in a PO line record.
b. Allow staff to enter a priority code in a PO line record.
c. Display workslip note in the "receive" dialog window when an item is received in the acquisitions system.
d. Allow the staff to add to or modify the existing workslip note at receiving and when invoicing simultaneously.
e. Allow staff to specify when/how workslips are printed.
f. Allow entire workslip to be viewed online in acquisitions.

Vendor File

5.89 The module shall accommodate an online vendor file.

5.90 The vendor file shall accommodate vendor names and addresses, including order address, remittance address, claims address, and returns address.

5.91 The vendor file shall accommodate vendor performance statistics.

a. Titles Ordered and Received by vendor
b. Copies Ordered and Received by vendor
c. Amounts Paid (by vendor) with subcategories for extra charges and materials
d. Amounts on Account (by vendor)
e. Actual Cost vs. Unit Prices
f. Average Fill Time (by vendor)
g. Average Percent Fill Time (by vendor)
h. Number of Claims by vendor

5.92 A formatted screen shall be provided for entry of vendor file data.

5.93 Appropriate prompts shall be provided for keying of vendor file records.

5.94 Records in the vendor file shall be accessible by both vendor name and ID.

5.95 Vendor file records shall include the following information:

a. Vendor name
b. Vendor address (order and remittance)
c. LRC supplied vendor claim period indicator
d. Vendor statistics
e. Discounts, by vendor
f. LRC's vendor account number

5.96 It shall be possible to determine vendor performance as manifested by supply times and discounts.

5.97 The system shall be capable of printing the vendor file to provide a hard copy listing of all vendors used by the LRC.

5.98 The system shall be capable of supporting a default vendor option.

5.99 The system should generate vendor statistics by vendor and by date.

5.100 Vendor discounts should show actual expended/encumbered funds when discount percentage is profiled.

5.101 The system should support Primary and Secondary Vendor categories, which enable the LRC to determine which category of vendors should be included in a vendor search.

Claiming

5.102 Claiming shall be based on the vendor.

5.103 Claims may be forced or suspended by the operator.

5.104 Each vendor record shall contain a claim cycle default value.

5.105 The system shall automatically produce claim notices for purchase orders for which material has not been received by the time indicated by the claim cycle recorded in the vendor's record.

5.106 Vendor performance data shall include the number of items claimed and canceled.

5.107 The claim cycle shall be capable of being overridden for a particular purchase order.

6. Serials

The vendor will provide a brief summary of the system's Serials module.

Standards and Environment

6.1 The Serials module must be graphical. Commands must be issued via pull-down menus and command buttons.

6.2 The Serials module must be intuitive and easy to learn.

6.3 The serials control module shall be available from all staff workstations to all who have the appropriate passwords.

6.4 Interactive records shall be maintained so that transactions in one record cause changes in others.

6.5 The system shall include the following serials control capabilities:

a. Check in
b. Claiming
c. Routing
d. Summary holdings, by copy
e. Bindery preparation
f. Report generation.

General Functionality

6.6 The system shall have the ability to accommodate all types of serials, including, but not restricted to:

a. Periodicals, including online electronic journals
b. Continuations
c. Law reports
d. Newspapers
e. Annuals
f. Governmental
g. Memoirs
h. Proceedings
i. Transactions
j. Indexes
k. Supplements
l. Online databases
m. Loose leaf materials.

6.7 The system shall be able to handle pocket parts, replacements, supplements, and other pieces related to a serial.

6.8 The system shall provide the ability to search for serials records by at least:

a. Title
b. Variant title
c. Call number
d. ISSN
e. Publisher
f. Vendor
g. Budget number
h. Purchase order number
i. Location
j. Uniform code
k. Corporate author/title
l. Conference title
m. System assigned number

n. government document number
o. Linked title
p. Keyword
q. Subject
r. Language
s. Bibliographic utility number

6.9 The system shall have the ability to distinguish among multiple copies from the same or different sources.

6.10 The system shall be able to accommodate records of various numbers of screens.

6.11 The system shall be able to list the holdings of individual facilities and locations separately, with a symbol for the location.

6.12 The system shall be able to output brief subsets of bibliographic and holdings records for online or tape reporting to external union lists.

6.13 The system shall have the ability to produce a variety of statistical reports including, but not restricted to:

a. Number of titles
b. Number of volumes, reels, sheets, etc.
c. Number of copies
d. Number of issues checked in by period
e. Number of claims issued by type, by supplier, etc., recorded in the system
f. Number of titles purchased
g. Number of titles received on deposit
h. Number of titles received by gift or exchange
i. Number of back issues or added copies received
j. Statistical reports available by determined time periods, for example: quarterly, semi-annually, or annually.
k. Titles without current subscriptions
l. Total number of titles on subscription

6.14 The system shall provide access to specific issues of a particular title without requiring scrolling through all of the holdings record.

6.15 The system shall distinguish between bound and unbound volumes.

Serials Control

6.16 Records shall contain current issue status separate from other holdings, binding records, and routing instructions.

6.17 The system shall have the capability to show gaps in holdings.

6.18 The system shall have the ability to print listings of gaps in holdings, for example: lists of missing issues.

6.19 The system shall provide for records to note unwanted titles, withdrawn titles, canceled titles, and other negative acquisition decisions.

6.20 The system shall provide an area within each record for special instructions, such as retention, special routing or handling, special check-in procedures, etc.

6.21 The system shall be able to produce lists of subscriptions due for renewal within a time period specified by the LRC.

6.22 The system must include a Staff Note field in all copy records.

6.23 The system must support the reverse chronological display of serials issues, to aid in quick location of the most recently acquired issues.

Checkin

6.24 For those titles that follow a predictable pattern of publication, the system shall base checkin procedures on the prediction of the expected chronology and enumeration of the next expected issue.

6.25 The system shall support the checkin of multiple copies of an issue on a single checkin screen even when these copies are accommodated in separate copy records.

6.26 For titles with a predictable pattern of enumeration and chronology:

a. Checkin of issues earlier or later than the next expected issue shall be possible by using a minimum number of keystrokes.
b. The operator shall not be required to key any data onto the checkin screen, except to indicate the number of copies received when this is more or less than the number of copies expected by the system.

c. Checkin of issues earlier or later than the next expected issue may be accomplished by the operator keying adjustments to the expected issue information displayed.
d. Accept change of pattern of enumeration or chronology by authorized operator.
e. The system shall be able to archive old checkin information and automatically create new checkin screen.

6.27 For titles that do not have a predictable pattern of enumeration or chronology, the system shall function so as to require minimal keying of data by the operator.

6.28 The system shall be capable of locating a title for checkin by scanning SISAC issue identification printed on serials, as well as by operator keying.

6.29 The system shall provide support for the input of item specific control numbers in barcode or RFID form from labels affixed to items during checkin processing.

6.30 The system shall be able to print call number labels and routing slips at the checkin station immediately as an issue is checked in.

6.31 The system must accommodate default prefixes and suffixes on labels. For example, the LRC should be able to create a prefix such as "Location" to appear before the location line on the labels.

6.32 Printing of labels and slips shall be adjustable by an operator so that a group of products may be output at the end of a checkin session, or so that the capability can be suppressed altogether.

6.33 The system shall have the ability to detect an attempt to check in an issue that is in excess of the LRC's identified requirements.

6.34 The system shall provide the operator with direction as to appropriate action for handling the excess issue.

6.35 The system shall be able to automatically identify issues of a serial that are overdue (that is, issues that have not been checked in).

6.36 Recognition of overdue issues shall be available regardless of whether or not the title is received on a paid subscription, and might include the following situations:

a. Failure to receive any issues against a new order within a period specified by the LRC following the date of expected first receipt that was recorded when the order was placed.
b. Failure to receive the next issue within an expected time frame that is automatically determined by calculations based on publication frequency data and a grace period specified by the LRC.
c. In a title with a predictable pattern of publication, receipt of an issue later than the expected next issue.
d. In a title with a predictable pattern of enumeration, receipt of an issue later in the numeric sequence than the next expected issue.
e. For titles that the LRC receives in multiple copies, receipt of fewer than the required number of copies within an LRC-specified time period after check-in of the first copy.
f. For items that do not have predictable patterns of frequency or enumeration, identification of items for which there has been no checkin activity within a period specified by the LRC.

6.37 The system shall be able to display the checkin record with a minimal number of keystrokes.

6.38 The system shall record automatically the date an issue is received.

6.39 The system shall retain the receiving dates for at least the 105 most recent issues.

6.40 The system shall accommodate a copy checkin note of unlimited length.

6.41 System must allow serials to be checked in at multiple locations.

Routing

6.42 The system shall be able to maintain routing records and produce routing slips.

6.43 Routing lists shall be serial-specific. Checkin priority on copies will ordinarily cause the first copy received to go to the first route defined. The operator may override and force a specific assignment, as needed.

6.44 The recipient file shall accommodate recipients' names and locations.

6.45 The system shall accommodate both standard and customized routing lists.

6.46 The system shall have the ability to prioritize the order of recipients on routing lists according to the priority of the individual and, secondarily, the recipient's location.

6.47 The system shall be able to provide a display or printout of all individuals receiving specific titles.

6.48 The system shall be able to output printed routing lists at the checkin operator's terminal.

6.49 Such lists shall be available individually or in operator-defined batches.

Prediction

6.50 The system must allow staff to create a prediction pattern for every serial record.

6.51 Conversely, prediction patterns must not be mandatory; staff must be able to create a serial record without creating a prediction pattern for that serial.

6.52 Predictions may be created manually or from a template.

6.53 Predictions may be copied from another title's setup.

6.54 The system shall provide for all types of frequencies, and shall allow for easy adjustment if the frequency changes.

6.55 The system shall provide for up to seven hierarchical levels of serials holding enumeration.

6.56 The system shall be able to display the enumeration and chronology of the next expected issue of a title recorded in the system.

6.57 The system must accommodate free text enumeration for enumeration that is not predictable.

Summary of Holdings

6.58 For each copy, the system shall be capable of automatically summarizing individual issue holdings into a consolidated statement of holding.

6.59 The automatic summarization capability shall be available for each copy.

6.60 In the system, summaries of holdings shall be displayed separately for each copy, one after the other, in a single bibliographic display. Each material format is by definition a separate serial and, therefore, a separate copy.

6.61 The system shall update holdings statements automatically by receipt of issue or bound volume.

6.62 The system must include a Staff Only note field in the Summary of Holdings.

6.63 The system must include a Public Note field of unlimited length in the Summary of Holdings.

Claiming

6.64 The system shall provide for forced claiming.

6.65 Manual intervention shall override system-generated flags, if authorized.

6.66 The time lag for second and third claims shall be defined on the vendor record.

6.67 The claim cycle shall be capable of being overridden for specific items.

6.68 The system shall provide for resetting the expected date or marking a particular issue as unavailable or not published.

6.69 The system shall be able to delete claims from the claim cycle.

6.70 Staff should be able to review claims before printing.

6.71 Claims shall be transmitted to vendors via the ANSI X.12 standard.

6.72 The system must provide for recording an address to which only claims for missing items are sent (a claim-to address).

6.73 The system must let the LRC specify a date for recovering and reviewing all the claims that were sent on that date.

Bindery

6.74 The system shall be able to indicate when an item is ready to be considered for binding.

6.75 The system shall support a variety of approaches for determining binding readiness, including:

a. Upon receipt of the first issue in a volume
b. At regular intervals specified by the LRC
c. Receipt of index and/or title page
d. Predictable receipt of binder furnished by publisher

6.76 The system shall provide the LRC with the option to delay flagging for binding readiness until any outstanding issues have been received or removed from the missing issues file.

6.77 The system shall provide access to lists of items identified as ready for binding for staff review both online and in print.

6.78 It shall be possible to select subsets of this file for review based on a variety of selection criteria including:

a. Name of bindery
b Range of dates during which items were flagged as ready for binding
c. Location

7. Reserve

The vendor will provide a brief summary of the system's Reserve module, including Electronic Reserve..

Standards and Environment

7.1 The Reserve module must be graphical. Commands must be executed via pull-down menus and command buttons.

7.2 The Reserve module must use the same database as the rest of the Library Information System.

7.3 The Reserve module must keep records concerning instructors and courses.

System Functionality

7.4 The system must accommodate electronic reserves.

7.5 The system must track and keep statistical information on reserve course materials.

7.6 The system must be able to place an item on reserve for more than one course.

7.7 The system must associate an instructor with multiple courses.

7.8 The system must be able to associate a course with multiple instructors.

7.9 The system must be able to track reserve statistics.

7.10 The system must maintain permanent item information in archive while material is on reserve.

7.11 The system must have the ability to archive and subsequently re-activate reserve records, both manually and with automatic reminders.

7.12 Reserve materials must be searchable by course instructor, course title, and course number.

7.13 The system must have automated workflows for flagging reserve materials.

7.14 The system must have automated workflows for withdrawing materials from reserve.

7.15 The system must accommodate shorter loan periods including minutes, hours and days.

7.16 The system must accommodate more than one course name in the same course record.

7.17 The system must accommodate default settings to reserve items with similar reserve information.

7.18 The system must include a Codes Lookup feature for data entry.

8. Interlibrary Loan

The vendor will provide a brief summary of the system's Interlibrary Loan ((ILL) module.

Standards and Environment

8.1 The ILL system should be graphical. Commands should be executed via pull-down menus and command buttons.

8.2 The ILL client should interface with many library information systems, such as Horizon, Dynix, and NOTIS.

8.3 The ILL system should comply with Z39.50 standards.

8.4 The system should be scalable and configurable by LRC staff.

8.5 The system should be built upon a relational database.

8.6 The system should be able to accept requests from any library information system via the ISO/ILL 10161 protocol.

8.7 The system should be able to search any Z39.50 source to retrieve information.

8.8 The system should automate borrowing and lending activity among libraries.

8.9 The system should manage all activity on one database.

8.10 The system should link to the local circulation and patron databases.

8.11 The system should search local and remote library catalogs.

8.12 The system should interface with external messaging utilities via the ISO/ILL 10161 protocol or SMTP standard Internet e-mail protocols.

8.13 The system should interface with commercial document suppliers via the ISO/ILL 10161 protocol or SMTP standard Internet e-mail protocols.

8.14 The system should communicate with other ILL systems regardless of hardware and software issues, so long as they comply with Z39.69 and Z39.70.

8.15 Patrons should be able to submit ILL requests via the Internet.

8.16 Patrons should be able to submit ILL requests via e-mail.

8.17 Patrons should be able to submit ILL requests via any system that supports the ISO/ILL standard.

8.18 Patrons should be able to track the status of their request or requests through a Web interface.

8.19 The system should automatically notify patrons of the receipt of their requested information.

8.20 The system should interact with OCLC's ILL system via the ISO/ILL 10161 protocol.

8.21 The system should allow staff to review patrons' ILL requests before they are transmitted.

8.22 Conversely, the system should not require staff to review patron's ILL requests.

8.23 The system should keep a broad range of statistics.

8.24 The system should be able to generate a broad range of reports.

8.25 The system should capture and store statistics concerning the fulfillment of lending transactions.

8.26 Use of the system should eliminate any need for an ILL paper trail.

8.27 The system must provide tools to assist the staff in determining the best and/or least expensive provider for the request based upon lending partner's profiles.

8.28 The system must provide tools for searching the local catalog for the item's availability.

8.29 The system must send patron notifications by mail, e-mail, or fax.

8.30 The system must be capable of sending image files of requested articles to patrons by e-mail.

9. Media Scheduling

The vendor will provide a brief summary of the system's Media Scheduling module.

System Functionality

9.1 The system must enable a LRC to set up a separate collection and circulation process for media-related items.

9.2 The system must employ a graphical user interface.

9.3 The system must be fully integrated with other modules in the system and must use the same database.

9.4 Audio-visual materials, media equipment, computer terminals, and conference rooms should be searchable and available for scheduling by authorized staff.

9.5 Users must be able to search for an item by title or date range and view reserve schedules for those items.

9.6 The system must use a single interface for both searching and scheduling.

9.7 The system must use hotkeys for easy adjustment to reservations.

9.8 The system must use pop-up calendars for date selection.

9.9 The system must accommodate session defaults to speed order entry.

9.10 The system must link to the main patron database for reservation purposes.

9.11 The pickup location, return location, and operator ID must default to those most recently used.

9.12 New reservation dates and times must also default to those last used since the program started.

9.13 The schedule timeline must appear on the same screen where reservations may be edited.

9.14 The scheduling capability must include a time bar that can be dragged to adjust reservations. User must be able to drag just the beginning, just the end, or the entire time bar.

10. Inventory and Offline Circulation

The vendor will provide a brief summary of the system's Inventory and Offline Circulation module.

Inventory Functions

10.1 Circulation must be able to monitor the inventory status of any portion of the LRC's collection.

10.2 The system shall support an inventory of any portion of the collections conducted by scanning items on the shelves using a portable scanner.

10.3 It shall be possible to load the inventory results into the system and have them compared against the database and the transaction file of the LRC. The system shall produce a listing of all items not on the shelf or in circulation by comparing the inventory against both database and circulation records.

10.4 The aforementioned comparison shall include:

a. items shelved out of order
b. items missing from the shelves but not checked out
c. items checked out but on the shelves.

10.5 The inventory date must be added to the item record for each item inventoried.

10.6 The system must be able to perform inventory and normal circulation activities simultaneously without affecting accuracy of the inventory or degrading response times for regular circulation transactions.

10.7 An inventory must also identify bar-coded items found on the shelves for which there are no item records in the database, such as items that belong to other libraries.

Offline Circulation Functions

10.8 Staff must be able to use the portable scanner to record items used in the LRC but not checked out by scanning barcode or RFID labels on the materials before they are re-shelved and batch load those transactions to the database.

10.9 In the event of a server or network failure, it must be possible to record charge and discharge materials offline on a circulation or portable workstation and to load these transactions into the online circulation system at a later time.

10.10 The files of ID numbers of the Server-Down Module should be batch processed to update the database when the server is brought back on-line.

10.11 The system must allow simultaneous loading of downtime batch files from different branches without degradation of response time when the system, or access to the system, becomes available.

APPENDICES

Appendix A - The Library Information System and LRC Goals
Appendix B - Overview: Prince Mohammad Bin Fahd University
Appendix C - PMU Learning Resources Center Organization