Participants in the March 2004 UC Libraries Electronic Resources Management Planning Meeting agreed that identifying and implementing a collaborative electronic resource tool to manage the UC Libraries’ $25 million shared digital collections was an immediate and high priority. Painful, time-consuming, and inadequate CDC and CDL experiences making shared collection decisions for electronic resources contract negotiations have demonstrated the need to implement such a tool.

The Electronic Resources Management Systems Task Force (ERMS-TF) was charged by SOPAG to investigate a consortial ERMS solution for the UC Libraries. As this is a very new area, the ERMS-TF prepared, issued and evaluated an RFI to which seven vendors responded. The RFI provided invaluable information that was then used to issue an RFP to which five vendors responded. The ERMS-TF evaluated the five RFP responses and offers four recommendations to SOPAG.

Recommendation #1: The UC Libraries enter into contract negotiations with Ex Libris to license their Verde ERMS.

Ex Libris-Verde was the apparent successful bidder, having the lowest cost per quality point. Whether Verde is the ultimately the winning bidder will depend on a successful outcome to contract negotiations.

Recommendation #2: All UC Libraries commit to use the Verde ERMS under a set of best-practices for creating and managing data related to electronic resources.

The full value of a consortial ERMS will only be achieved if the CDL and campus libraries agree to work together on the same ERMS platform. The effectiveness of system-wide collection development decision-making will be severely undermined if even one member of the consortium does not maintain the accuracy and currency of their local data in the shared ERMS. Having a single campus not fully participating in the shared service would undermine the value of the shared service for all.

In addition, it is critically important that all libraries use a commonly accepted set of best-practices to name, enter and manage data elements. Adherence to this recommendation ensures that all tiers of electronic resources will be represented in the ERMS in a manner that all users can see and understand the data input by others.

Recommendation #3: Create an ERMS Implementation Team managed by the CDL.

The CDL is the pivotal partner in this implementation, as it will be responsible for installing the Verde platform and for managing Tier 1 electronic resources on this ERMS. We therefore
recommend that the CDL create an ERMS Implementation Team which includes CDL and campus library representatives who together will:

- Define and communicate implementation roles and responsibilities for the CDL and the campus libraries;
- Create best-practices for entering and managing data in the ERMS;
  (Note, the sooner this is completed, the sooner the CDL and campus libraries can start cleaning-up their local data for eventual ERMS loading.)
- Draft specifications for the joint development of consortial ERMS services, as outlined in the RFP; and
- Prepare implementation plans, documentation, phasing and schedules.

**Recommendation #4: SOPAG communicate realistic expectations of the time and amount of work it will take to implement a consortial ERMS to the UC library community.**

ERM systems are still relatively new and immature. This is most apparent when looking at consortial services provided by the ERMS that responded to the RFI and RFP. The results of the RFI made it clear that the consortial services section of the RFP would have to be written as a joint development with the successful bidder. Clearly, a joint development activity will take considerable time and resources from both UC and the successful bidder to develop detailed functional and technical specifications. It will also take time to program the new services into the ERMS.

The ERMS-TF feels that consortial services that are appropriate to the UC Libraries’ needs will not be a development priority for vendors in the normal course of the maturing of these products. Therefore, it is necessary to “jump start” this work with a joint development effort that will influence the market and create the working standard for managing electronic resources in a consortial environment.

**Benefits of a consortial ERMS**

While this process will take time, the results will be worth the effort, as a consortial ERMS will deliver core functionality to the UC Libraries including, but not limited to:

- Collection development and e-resource management will be integrated using a common set of data - reducing the need for consulting multiple "silos" for decision making - e.g. spreadsheets, multiple web pages on the CDL site, data in the ILS. Campuses will also eventually have the ability to view each other's local resources, further facilitating decision making. There will also be "authority" in the data – reducing the problems with version control, outdated lists, etc. This greater efficiency for our staffs also carries with it the responsibility to maintain clean data that is contributed according to agreed standards.
- Provision of an authoritative record of titles available to our users, under what terms and conditions and from what sources. Includes titles that are under consideration, in trial, pending cancellation. Provides historical record of titles no longer available.
• Support for collaborative collection development activity by: showing titles that are currently and previously included in a given E-product; providing or pointing to usage data, etc.; presenting the data in a consistent format across all titles; and identifying potential cost savings opportunities by showing overlap in content among E-resources.

• Management and tracking workflow for newly-licensed titles and those up for renewal.

• Facilitation of troubleshooting by providing key contacts and recording status messages and problem-solving steps already undertaken, which can be viewed by everybody.

**Potential limitations of a consortial ERMS**

It is also important that SOPAG help the UC Libraries understand some potential limitations to a consortial ERMS. This system will provide critical core services, as documented above, to manage our shared electronic resources. However, it’s not a panacea – a system that will do everything for everyone. Some examples follow.

- The ERMS will be a standalone system. The Task Force does not believe it is feasible to import order, payment and fund information from local acquisition systems into the ERMS. This information is too complex and dynamic. However, we do believe that the amount of data that needs to be duplicated in both systems can be minimized. This has three advantages. First, it becomes clear to staff where to look for data: in the ERMS for license and business terms; or the acquisitions system for order, payment and fund information. It also reduces the amount of potential double maintenance. Finally, it simplifies the automatic updating of duplicated data between systems.

- In the same manner, it may be difficult to interface information from a standalone ERMS to local OPACs (e.g., notifications of service outages and licensing/business terms display). The ERMS-TF was very sensitive to this issue and saw Verde as the system that provided the greatest amount of openness to work with our disparate ILS systems through standards such as web services. However, we realize that the significant progress can only be made if the vendors of our campus ILS systems are willing to cooperate. On the positive side, Verde should be able to offer a very high degree of integration with Melvyl, UC-eLinks and MetaLib.

- Our investigation into the requirements for an ERMS has exposed areas in which ERMS and local acquisition system data will require normalization and enhancement in order to support a shared serials decision-making ERMS. For example:
  - We will need to establish a unique ID for a title that exists in both the ERMS and acquisitions systems to enable the programmatic transfer of data (ISSNs will probably not be adequate);
  - Some campus ILS systems have no easy way to manage (or even count) active print subscriptions, so a clean-up of serial holding records to reflect currently-paid, currently-received statuses may be required;
  - Normalization may be necessary to impose systemwide authority control for the names of vendors, platforms, etc; and
There will be a substantial effort required by Technical Service Units and the CDL to enter, normalize and/or recode data in existing acquisitions systems and the new ERMS to conform to the best practices mentioned in the formal recommendations. While the new ERMS provides the impetus and framework for this effort, we should note that normalizing data is to our collective advantage in managing collections and the benefits will extend well beyond the ERMS. Also, rethinking existing procedures and workflows to minimize data that would need to be moved between systems helps to reduce the size of this project.

- Looking at the issues of redundant effort in the context of the systemwide ERMS has exposed ways in which systems that complement the ERMS--and their respective data flows--might be altered to achieve cost savings.
  - Maintenance of campus e-journal access systems. There are opportunities in the near term to minimize redundant data entry and systems maintenance by migrating to a shared services model for "journal A-Z lists".
  - Maintenance of bibliographic data is currently done in separate systems: ILS, local e-journal directory, SFX instance. There may be opportunities in the long-term to rethink these data flows.

Clearly, there are some limitations to what a standalone, consortial ERMS can accomplish. However, it’s also apparent that UC needs a central data warehouse to manage the complex journal package decisions that are ongoing as part of CDL negotiations and individual campus collection development decision-making. It is vital to collaborative collection development that we have a tool that supports selection, evaluation, and both shared and individual campus decision-making. Effective and efficient shared collection development of digital collections and coordination of digital with paper collections is critical to support sustainable changes in scholarly communication within UC and to provide the highest quality collections to the University community.