

**Mining Hidden Gems: Building a Latin American
Open Archives Portal for Scholars**

PART III: APPLICATION NARRATIVE

A. Meeting the Purpose of the Authorizing Statute.

Latin America is the focus of ever more research and study. This growing interest reflects deep historical roots and profound cultural resonances, as well as today's apparently unstoppable imperatives of free trade and economic interdependence. Easy transportation and communications have encouraged massive population movements, among them those which have poised people of Latin American origin to comprise America's largest "minority" group. Our Hemispheric connections are intimate as well as intellectual, personal as well as political, cultural as well as commercial. The results are as apparent in the academic arena as anywhere else, for instance in the large and growing numbers of college students studying Spanish, or in the ever-expanding activities of scholarly organizations like the Latin American Studies Association.

Latin American studies encompasses scholarly, strategic, instructional, commercial, cultural, and civic concerns. Each of these impulses requires a solid information base, which the nation's research libraries for at least the past century have strived to build and sustain. Our traditional collections of Latin American trade books are by now quite strong—stronger, in fact, than most collections in the countries of origin. The production of and demand for other kinds of information have mushroomed as well, but our response remains less impressive. Students and scholars increasingly seek new kinds of non-traditional resources, just as Latin America's informal organizations, often operating outside of established commercial channels, have vastly broadened the range of available materials. New formats for information, perhaps most notably

electronic publications, have also significantly complicated the tasks of identifying, providing access to, and preserving information resources.

The Latin Americanist library community has already mobilized in order to address these challenges. One major initiative is the Latin Americanist Research Resources Project (LARRP), a consortial effort that was launched in 1994 under the joint sponsorship of the Association of American Universities and the Association of Research Libraries. LARRP now includes forty-seven member institutions from the United States and Canada, plus five Latin American partners. The Project's initial activities, conducted within this country, were to digitize presidential messages from Argentina and Mexico; create a (still-growing) table-of-contents database for sparsely held Latin American journals and a complementary mechanism for expedited document delivery; and devise voluntary arrangements through which participants reallocate monographic acquisitions funds in a coordinated effort to strengthen the national base of unique titles. (See <http://www.lanic.utexas.edu/project/ar1>.)

LARRP's successful application to the first round of the "Technological Innovation and Cooperation for Foreign Information Access" grants program enabled us to move ahead in several areas. Technical improvements to the Latin American Periodicals Tables of Contents (LAPTOC) database have simplified user consultations and offered additional features while ensuring full compliance with new technical standards for interlibrary loan transactions. We have also expanded our journal table-of-contents coverage from three "test countries" to the entire region, primarily by creating new partnerships with selected Latin American institutions. This work with Latin American partners has demonstrated the benefits of international cooperation in expanding access to the region's information.

Despite our achievements, access to Latin America's so-called "grey literature," publications and working documents of research institutes, peripheral agencies, and many non-governmental organizations, remains elusive. We likewise are still struggling to identify, capture, and preserve the increasing amount of electronic information produced within the region. The project here proposed will address these gaps through a new phase of expanded partnerships and technical activity. Our primary goal is to improve access to Latin America's grey literature—materials that are published in hardcopy and electronic formats by agencies and institutions, that rarely enter the book trade, and that are both evanescent and difficult to obtain. Even the digitized materials that have been mounted on the Web tend to remain hidden away for unpredictable lengths of time on often-fragile institutional websites, without clear-cut descriptions or straightforward means for broad-based access. Many other items are only available in low quality photocopies or even mimeographs, often in limited printings. Paradoxically, since most of these materials are produced in order to share research findings or broadcast political viewpoints, rights for distribution or digitization are typically easy to obtain.

In the broadest terms, grey literature as defined by the Fourth International Conference on Grey Literature in Washington DC, in October 1999 is as follows: "That which is produced on all levels of government, academics, business and industry in print and electronic formats, but which is not controlled by commercial publishers."

In general, grey literature publications are non-conventional, fugitive, and sometimes ephemeral publications. They may include, but are not limited to the following types of materials: reports (pre-prints, preliminary progress and advanced reports, technical reports, statistical reports, memoranda, state-of-the art reports, market research reports, etc.), theses, conference proceedings, technical specifications and standards, non-commercial translations,

bibliographies, technical and commercial documentation, and official documents not published commercially (primarily government reports and documents) (Alberani, 1990).

Our three-year project will address these challenges through three separate but interrelated initiatives:

1. We will form a new partnership with FLACSO-Chile, a well-established unit and highly respected within the research network of the “Facultad Latinoamericana de Ciencias Sociales,” and expand our collaboration with the Centro de Investigaciones Regionales de Mesoamérica (CIRMA) in Guatemala. (See <http://www.flacso.org> and <http://www.cirma.net>.) These alliances will enable us to digitize those of FLACSO-Chile’s and CIRMA’s research publications that are not now available online. We will apply the “Open Archives Metadata Harvesting Protocol” to these documents as we bring these materials online in order to systematize and simplify access to these resources. (See <http://www.openarchives.org>.) Working with FLACSO-Chile, we will also explore migrating their information-rich to the Web for broader access. LANIC will host digital files for FLACSO-Chile since it does not have its own Web server. We will expand the partnerships with FLACSO-Chile and CIRMA in two directions, focusing both on FLACSO’s nine other offices throughout Latin America, all of which produce their own research publications; and on other non-governmental organizations within Chile, Guatemala, and then all of Latin America. While we expect that most of our work will involve textual products, we hope to experiment as well with image, video, and sound files. All offer their own technical and operational challenges. By the end of the grant period, we will have substantially expanded the quantity of online resources that are readily available to our students and scholars. We will also have identified additional organizations whose materials would be appropriate for similar efforts.

2. We will sustain and expand our continuing partnership with the Latin American Network Information Center (LANIC), which is based at the University of Texas at Austin. (See <http://lanic.utexas.edu>.) LANIC already hosts the Latin Americanist Research Resources Project's LAPTOC database and the digitized presidential messages from Argentina and Mexico. Its responsibilities, especially for LAPTOC, involve the technical administration and continuing operational upgrades needed to support this very dynamic resource. LANIC more generally serves as the premier portal for online information from and about Latin America. LANIC will develop the Open Archives Metadata Harvesting Protocol infrastructure to support the distributed networked information services of FLACSO-Chile, CIRMA, and the other organizations that we identify during the project, creating an MHP portal service for harvesting the metadata from the participating repositories storing the full text materials moved online through this initiative. We will also ensure straightforward access to the newly-digitized materials of these organizations through standards-based scanning. As part of this process, LANIC will train staff at FLACSO, and other possible partner sites, in file conversion and application of the metadata harvesting protocol. This person will then help to train staff at other FLACSO sites. The goal is to present a new model for treating grey literature that can be implemented uniformly across institutions and that feeds into a centralized repository for effective searching and access by scholars, students, and policy makers.

LANIC's role as a scholars' portal will be consolidated and enhanced as it absorbs the digital files and metadata produced during this project. LANIC will also serve as a mirror site for the new electronic resources that we produce or capture. As necessary, it will directly host digital files for Latin American institutions whose server capacities are limited, or whose Internet connections are poor.

3. The economics of creating, describing, and sustaining long-term digital information are not yet clear. The Latin Americanist Research Resources Project also faces the more immediate challenge of ensuring its financial future. Our Project has demonstrated its vitality as it has rapidly expanded beyond its original membership, and as its activities and services have become ever more inclusive. Nonetheless, its long-term success depends on a stable and continuing revenue stream. Existing business models for this kind of service are both wildly disparate and difficult to square with LARRP's specific ambitions and goals. Our third project component thus comprises research into the economics of information delivery and the formation of a business model that will address revenue streams for grey literature and for other information products developed through LARRP. We will also address the impact of Web-based access to grey literature that in print format carries a nominal purchase price to help research institutions defray costs as well as monitor additional costs for metadata mark-up. Research findings will be posted to LARRP's Web site. In particular, efforts would result in a fair cost recovery business plan appropriate to LARRP's audience and objectives, and that therefore pays particular attention to issues of equity, sustainability, and open access among an international membership of institutions with widely varying financial resources and operational capabilities.

We will elaborate on each of these components in the "Project Design" section, below. We here address how our proposal responds to the seven "Authorized Activities" associated with the TIFCIA grant program:

1. "Facilitate access to or preserve foreign information resources in print or electronic forms."

This project will employ electronic technology to expand access to "grey literature" produced by non-governmental organizations and other agencies whose publications are poorly

represented in the commercial book trade. Materials will be digitized in accordance with current technical standards and “best practices” concerning matters like file formats, resolution, and compression schemes. The Open Archives Initiative (OAI) has taken a lead role in ensuring that digital data providers utilize consistent metadata, descriptive elements, and searching protocols, so that their products are readily accessible. The result, in essence, is a cataloging system that can be applied to many digital products at many different locations, and that allows the sophisticated searches of the “Deep Web” that commercial browsers and search engines cannot support. Application of the “Open Archives Initiative Metadata Harvesting Protocol” to the digital materials included in this project, whether through scanning from hardcopy originals or the capture of existing online resources, will provide advanced online search capabilities increasing intellectual access to Latin American scholarship. Our work will emphasize textual materials, reflecting the current preponderance of text-based documents. But given CIRMA’s large photograph collection of over 300,000 photographs, negatives, and plates, we will be able to review the challenges of working with images as well. All of these can be accommodated within OAI. As with any cooperative endeavor, a crucial piece of the work will center on training our partners and developing a model for Web access and search that is easily incorporated by institutions with limited budgets.

2. “Develop new means of immediate, full-text document delivery for information and scholarship from abroad.”

The digital resources created or captured during our project will be mounted on servers at the host institutions and also made available through a mirror site at the University of Texas’s Latin American Network Information Center. LANIC will host and maintain on its servers the digital files of Latin American agencies that lack strong Internet capabilities. Descriptive metadata that

conform to the Open Archives Initiative will ensure that users can readily identify and retrieve these digital resources. LANIC will create an MHP portal service for harvesting the metadata from the participating repositories hosting full text materials moved online through this initiative. The bilingual portal site will guide access to the related archives, explain search parameters, and facilitate file download. Scholarship produced but not widely distributed by non-governmental organizations, research institutions, and agencies will thus become readily available to our students and scholars.

3. “Develop new means of shared electronic access to international data.”

The Open Archives Initiative is a rapidly emerging international response to the increasingly daunting task of finding and effectively utilizing research resources on the World-Wide Web. OAI has established norms for the creation of standardized metadata that ensure access to digital information located in the “deep Web,” particularly within specific websites, that is not readily accessible using commercial browsers or other common navigational tools. OAI thus centers on the provision of consistent cataloging elements and access information that are appropriate to the special characteristics of electronic products in which, for instance, users must be aware of file formats in order to retrieve and work with specific materials. OAI is quickly taking root in North America and Europe. It remains new to Latin America, where a plethora of isolated institutions and homegrown digital initiatives, in a context of often sporadic funding and inconsistent technical support, has generated a rather chaotic array of electronic materials with unreliable long-term access. The project will begin to bring order to these important resources.

LANIC will develop a methodology for online access to documents that includes standards for digitization, file conversion, and application of the Dublin Core metadata to relevant content. The project will provide the opportunity to explore with Latin American partners the adequacy of

the Dublin Core for describing grey literature in the social sciences and if refinement is necessary.

Our project's emphasis on creating a viable business model also addresses the issue of providing shared electronic access to international data. We by now know full well that the costs of creating digital materials are dwarfed by the expenses of describing, maintaining, and providing continued access to these resources. Many digital projects have attracted external support to cover digitizing costs, only to founder in the face of long-term expenses. Library budgets for electronic resources, even in wealthy institutions, compete with funds for traditional acquisitions and operations. An international initiative that pairs developed-world institutions with their less affluent counterparts further complicates the picture. This project, by pinpointing all the costs associated with technologically-enhanced access to Latin American information and then exploring a full range of revenue options, will both strengthen LARRP's long-term prospects and provide an analytical model that might then be applied within other digital initiatives. "Shared electronic access to international data" needs also to endure over time: we'll find out how.

4. "Support collaborative projects of indexing, cataloging, and other means of bibliographic access for scholars to important research materials published or distributed outside the United States."

Our research libraries lack the staff and other resources to acquire and provide adequate bibliographic access to the kinds of grey literature that this project addresses, whether in printed or electronic formats. In many cases, haphazard distribution arrangements mean that we are not even aware that materials exist. The project's partnerships, first with FLACSO-Chile and CIRMA, and then with other Latin American organizations, will enable national and

international collaborations in describing and providing access to these materials. Our collaboration with LANIC will likewise ensure that project metadata, and the digital information itself, are organized and accessible through the most important portal for regional information.

Current bibliographic standards, even for printed materials, are often poorly understood and indifferently applied within Latin America. The MARC format, for instance, is an international norm whose use in Latin America is still spotty. Metadata for electronic products are even less familiar. LANIC staff will therefore develop methodology and procedures, provide hands-on training, and oversee the operational plan to ensure high-quality work. We will also explore application of “crosswalks” software for utility in mapping the Dublin Core metadata tags to an online system based on MARC or other established standards. This would be useful for institutions whose library catalogs are not yet available online, such as FLACSO-Chile.

5. “Develop methods for the wide dissemination of resources written in non-Roman language alphabets.”

Latin America is a region whose languages, including its indigenous tongues, are represented in Roman script. Our project’s initial Chilean and Guatemalan foci will nonetheless enable us to incorporate materials—many in autochthonous dialects—produced in association with each country’s large and active indigenous community, Mapuches in Chile and Mayan groups in Guatemala. Other partners will eventually provide access to materials in other indigenous languages. Our focus on non-governmental organizations ensures that agencies engaged in advocacy for, organization within, and assistance to indigenous communities will be well represented. CIRMA has strong relations with OKMA focused on linguistic studies of the 24 languages spoken in Guatemala, the Instituto Lingüístico at the Universidad Rafael Landívar, and the Mayan Languages Academy. They will assist in identifying appropriate materials for

inclusion in the project. We expect to capture a good bit of material in the region's Indian languages.

6. “Assist teachers of less commonly taught languages in acquiring, via electronic and other means, materials suitable for classroom use.”

Internet access to Latin America's grey literature will ensure that information resources that were formerly very difficult to consult are easily accessible in classrooms, as well as at student and scholar workstations. Our focus on non-governmental organizations will highlight materials produced by think tanks and advocacy groups whose viewpoints, in many cases, complement and enrich the more widely disseminated positions of official agencies. Classroom units on, say, tribal identities and indigenous rights, or the hole in the ozone layer (an immediate concern for people in southern Chile), will thereby be enhanced by direct access to original resources in the languages of the region. The partnership with LANIC, a well-known site designed for higher education as well as K-12, will ensure that these materials are easy to locate on the World Wide Web.

7. “Promote collaborative technology-based projects in foreign languages, area studies, and international studies.”

This project is founded upon collaboration among U.S. research libraries, LANIC, and leading research libraries in Latin America. It brings together partners with a history of collaboration to work directly with their Latin American counterparts. The training component ensures that expertise is acquired by staff at partner institutions to facilitate implementation of project goals as new institutions within the region join the project. By introducing the Metadata Harvesting Protocol to document mark-up and file conversion and tagging for Web access, each partner institution will contribute a repository harvested by the LANIC MHP portal service

which collectively will be a regional resource for research in the social sciences. All of these connections will be sustained with electronic technology in applications employing state-of-the-art standards and “best practices” that will ensure continuing, straightforward, and robust access to information. We already have in place an effective organizational infrastructure to support cooperation and collaborative projects. Our efforts to develop a long-term business model will ensure that these connections endure. The ultimate goal is an improved capacity for research and teaching related to the languages, cultures, and societies of Latin America.

GENERAL SELECTION CRITERIA

A. Need for Project.

Latin American studies encompass scholarly, strategic, instructional, commercial, cultural, and civic dimensions. The nation’s research libraries have for at least the past century strived to build and sustain the solid information base which can support these concerns. Our traditional collections of Latin American trade books are therefore strong—stronger, in fact, than most collections in the countries of origin. However, the production of and demand for other kinds of information have mushroomed in recent decades. Despite growing interest from students and scholars, libraries have had mixed success in capturing materials produced by informal organizations, many of which operate outside of established commercial channels. New formats for information, among them websites and electronic publications, have further complicated the picture.

The Latin Americanist Research Resources Project, when it began in the mid-1990s, immediately sought to strengthen our coverage of grey literature through a cooperative program to identify non-governmental organizations and then acquire their materials. Unfortunately, this effort fell short: it was very difficult to establish communications and acquire materials, and it

then wasn't clear how best to share the few hardcopy materials that our participants did manage to receive. The need therefore remains, but two things have changed. In the first place, our work with Latin American partners has demonstrated that international cooperative efforts can very effectively expand our access to information produced within the region. Fluid communications, mutual trust, and rapid responses are all far easier to achieve when in-country organizations can take on these chores. Secondly, our overall technical capabilities to digitize, describe, and sustain access to electronic materials have become far more robust. We can more easily harvest resources that are digital to begin with, and also create Internet versions of hardcopy publications: the challenges of loaning out fragile originals have been superseded by the challenges of identifying archives and implementing a systematic approach to effective Web-based access. This project addresses those challenges. Finally, the project's reliance upon the Open Archives Initiative to provide a metadata framework for bibliographic access ensures that students and scholars will be able to identify and retrieve these materials.

This project also serves to jump start Latin American institutions that are keenly interested in taking advantage of new technologies to improve access to their holdings. In the late 1990s FLACSO-Chile they put together a four-stage proposal for modernization of the library which has been slowed by lack of funding for equipment and personnel. By leveraging off LANIC's infrastructure and expertise, and with support coming from this project, they will leap forward using the most advanced methods of accessing full-text documents via the Web. At the end of the project period, they will have trained staff in place to continue adding to their online repository. Moving forward with file conversion is also very timely in that many of their document files are stored on aging technology. Of the 826 publications under their Documentos de Trabajo series from 1975 to 1995, approximately half are on 5 1/4 inch disks. They still have

the equipment to read them, and estimate a 75% recovery rate. These files could be downloaded and sent to LANIC for standardized conversion avoiding the cost of scanning them.

This project thus promises a solid response to the intensifying need for access to grey literature by students, scholars, and citizens. At another level, the members of the Latin Americanist Research Resources Project are increasingly aware of and have great concern about the long-term financial requirements to sustain sophisticated electronic resources, enduring partnerships, and effective cooperation and service. We cannot now quantify all of the costs, nor anticipate how they will change over time. We will research the economics of information delivery and seek convincing business models that accommodate the particular circumstances of our project, with its diverse array of participants and users. A new kind of business model is crucial for our own long-term success. Our findings should prove useful to other projects as well.

B. Significance.

TIFCIA assesses project significance on the basis of five criteria:

B.1. This project is significant nationally in that it will substantially expand the range of contemporary research resources available to American students and scholars. Grey literature tends to convey viewpoints and analyses that fall outside the political and intellectual mainstream, or that represent the most current research on emerging topics. These materials are difficult to acquire, and therefore are poorly represented in our library collections. The project will enable more balanced research, as well as a more complete appreciation of the full diversity of Latin American positions and opinions.

The project is also significant for the sheer number of students and scholars who are concerned with Latin America and are therefore likely to benefit from its results. The Latin

American Studies Association, the field's premier scholarly organization, has a vital and steadily expanding international membership of almost five thousand. (See <http://lasa.international.pitt.edu/>.) Its most recent congress, held in Washington, D.C. in September 2001, attracted a record attendance of about four thousand. Student interest in the region is likewise intense: figures from the Modern Language Association indicate that more than 475,000 college and graduate students were enrolled in Spanish-language courses in 1998, a number well above that for any other language. Traffic on LANIC reflects a loyal audience of Internet users focused on Latin America. LANIC receives about 3 million hits a month and estimates close to 200,000 unique users each month. On the library side, the Latin Americanist Research Resources Project has expanded from about thirty charter members to some forty-seven. Each participant has committed significant staff time and funds to Project activities. Each one also comes from an institution with an active interest in Latin American Studies.

Finally, the project is significant in that it will enhance access to information through the use of state-of-the-art technology. The Open Archives Initiative, which is rapidly taking hold among North American and European institutions, has set the mark for intellectual access to Internet resources. But its descriptive standards are essentially unknown in Latin America, where isolation and limited budgets have instead resulted in spontaneous and poorly controlled electronic materials. The project will apply these norms to international resources and bring our partners up to date, while broadening everyone's access to the resources they produce. We will likewise ensure that digitizing efforts are carried out in accordance with current standards and best practices.

B.2. The project will contribute to knowledge and theory, in the first place, by providing new research resources to American students and scholars. For students and scholars, access to

grey literature will fill in gaps in statistical data and in-country analysis adding depth to research and scholarship. The nature of the non-governmental organizations, advocacy groups, think tanks, and other agencies upon whose materials we will focus ensures a strong representation of local perspectives and viewpoints. More nuanced analyses, leading to more sophisticated models, theories, and—perhaps—policies, should follow as our academics consider these positions.

Our project will also contribute to the knowledge and theory of digital initiatives. We will apply contemporary digital “best practices” to on-site activities within Latin America, for digitizing per se and also to provide descriptive metadata. Our partners will be trained in scanning techniques and the standards associated with the Open Archives Initiative, creating a local knowledge base that will ensure high-quality products both within this project and for the future. By application of the Metadata Harvesting Protocol under a project that brings together leading U.S. and Latin American research libraries, we can move toward a standard for describing grey literature in the social sciences that has the credibility for wide acceptance and implementation.

Finally, we will develop a business model that will provide both an analytical framework and a practical response to the long-term financial requirements of digital information that is created and sustained within an international context. The results should prove relevant to many other digital endeavors.

B.3. This project is grounded in an insistence on enduring, high-quality products. Our partnership with LANIC ensures rigorous standards and a robust infrastructure for mounting, presenting, and maintaining data. Adherence to the OAIMHP ensures a state-of-the-art approach to bibliographic access. Any digitizing activities will likewise reflect current standards and “best

practices.” Our project will provide a model in terms of its equipment and staff resources, governance, technical underpinnings, and service standards. LANIC will develop a methodology for online access to documents that includes standards for digitization, file conversion, and application of the Dublin Core metadata to describe contents. This methodology will be transferable and we will produce a manual in Spanish for these different operations that can be used as a training tool. LANIC’s goal is to become a premiere MHP federated search service for the study of social sciences in Latin America. Though this is beyond the scope of this grant, the metadata portal service developed through this project will form the basis for this larger endeavor. LANIC is seeking funding from another source to fully develop this service.

B.4. Our project’s primary goal is to broaden access to Latin American grey literature through the use of electronic technologies. Web-based access, through LANIC as well as local servers within Latin America, will make full text of these materials available to students, scholars, and citizens. Standards established through the OAI will be applied to simplify and improve bibliographic access. On a different level, the project’s effort to devise a long-term business model will assure that the materials we address are available through time: “access” carries both temporal and geographic dimensions. We will also generate project publicity, descriptive articles, and Spanish-language technical materials that discuss the OAI and digitizing procedures. Since access to the grey literature will also serve NGOs and policy makers, we will publicize our activities both within and beyond the Latin Americanist academic and librarian communities.

Partnering with FLACSO enables us through their network to disseminate project results widely within the region. Because this dissemination will carry a model for participation we

expect to attract new partners and in doing so broaden the country representation in the online repositories. Greater country representation will serve scholars in comparative studies.

B.5. Spanish is the most heavily studied foreign language within American colleges and universities. America's Latino population is growing very rapidly. Academic programs and professional organizations are expanding as well. And matters of hemispheric policy remain very important. Materials in support of Latin American studies enjoy a huge potential audience whose sheer size, in and of itself, will enhance the many other benefits that our project will provide. The partners in this project: the 47 U.S. research libraries and 5 Latin American libraries that comprise the Latin Americanist Research Resources Project and their parent institutions; LANIC, the premier portal for Latin American studies; FLACSO, a leading research organization that brings together Latin American scholars in the social sciences; and CIRMA, a leading research institute with extensive Central American and Caribbean holdings, all represent a constituency seeking access to Latin American materials. It is in large part a concerted effort to meet the demands of this constituency that has prompted these institutions to come together to develop this project for improved access to grey literature.

C. Quality of the Project Design

C.1. When the Latin Americanist Research Resources Project was first launched, one of its objectives was to increase access to grey literature. Even though the initial attempts to address this goal were not successful, the experience gained and advances in technology have come together in the development of the proposed project design based on three interrelated initiatives.

Latin American partnerships with institutions that generate and/or collect grey literature

LAPTOC has proven that partnerships with Latin American libraries can be very effective for increasing access to publications if a mechanism for sharing materials is in place. With a focus

on grey literature we have identified two initial partners, FLACSO-Chile and CIRMA, both of which have expressed a strong desire to participate and a shared conviction in the importance of the project. FLACSO-Chile is principally dedicated to research in the field of social sciences and has an active publishing program. There are 826 working papers published from 1975 to 1995, and 45 published from 1996 to the present. In addition, they have published 236 books since 1980, and maintain several research-related databases. By working with FLACSO-Chile, we will also have access to a regional network with operations in ten Latin America and Caribbean countries: Mexico, Guatemala, El Salvador, Costa Rica, Cuba, the Dominican Republic, Ecuador, Brazil, Argentina and Chile.

CIRMA does not have a formal working papers publishing program, but they do have a series of about 100 research papers that due to lack of funding have not been published. Most of these 100 papers are already in electronic format. CIRMA's holdings include a collection of Presidential Messages, 7000 brochures and off-prints, and over 300,000 photographs, negatives, and plates.

Working with these well-respected institutions, we will establish a methodology for participating as an MHP repository that is viable within the context of a Latin American content provider. A strong institutional commitment is necessary to fulfill requirements for building an MHP repository and clear guidelines that include equipment and staffing needs will be provided to assist in the decision-making process. This project will draw on the expertise of leading Latin Americanist bibliographers to identify high-quality partners, and from LANIC to provide technical support and infrastructure, thus reducing the cost to participating institutions.

Open Archives Metadata Harvesting Protocol Infrastructure

LANIC will develop the Metadata Harvesting Protocol (MHP) infrastructure based on a three tiered architecture. The first tier includes a number of participating repositories developed or identified through the project, either located in Latin America or hosted on LANIC's central server, which will serve as data providers. The middle tier involves a variety of different services such as full-text indexing and search engines, which are external to the data providers and the MHP portal. The top tier is the LANIC MHP portal that harvests metadata from the participating repositories, processes the gathered data through information management tools, and organizes access to the original resources.

The focus of this project will be on the first and top tiers of the LANIC MHP architecture while exploring the interoperations of the scholars' portal and middle-tiered external services.

MHP Portal Services fall into four categories:

- ?? Harvest metadata from the participating repositories. Based on the state of the metadata harvesting technologies, LANIC will prototype an OAIMHP compliant harvester. The harvester will make requests to the participating repositories via the HTTP protocol, and encode all the valid responses in XML. It will provide not only full harvesting methods, but also incremental harvesting to avoid overwhelming the participating repositories and their bandwidth in Latin America. The scope of the prototype harvesting services during the project period will be limited to the participating repositories provided by our Latin American partners, and hosted at the LANIC central server.
- ?? Process the harvested data and information. Through automated backend processing of the returned metadata, LANIC will build value-added services such as internationalization of data management systems that performs language-sensitive sorting

and searching functions based on the language element of the Dublin Core metadata schema.

?? Organize access to the original information resources. The metadata records will be systematically classified and organized according to the user-selected criterion such as subject, title, creator, etc. The portal will be able to display dynamically the localized language interfaces such as English and Spanish based on the user's preference. The unique identifier element will be presented for the user to access full content from the participating repositories.

?? Explore the interoperations of the LANIC MHP portal and middle-tiered external services for effective access of participating open archives. The scope of the current OAI Metadata Harvesting Protocol is limited to exposing and harvesting metadata. If the users wish to conduct full-text searches based on harvested metadata, they have to rely on a traditional search engine. Exploring the interoperations of the MHP portal and full-text search engines may provide the best of both worlds.

Research into the economics of information delivery and the formation of a business model

Issues of sustainability and access often compete with Internet-based services. Very sophisticated indexing, news, and journal services provide excellent resources, but access to these services outside of large university libraries is often impossible due to substantial subscription costs. This issue is particularly relevant when dealing with partners in less developed countries. How can we strike a balance between the need to recover costs and the desire to provide sustained and open access? We will research and review different cost recovery models for information delivery. At the same time we will gather and analyze cost figures from project activity such as staff time to convert and tag files, cost savings in cataloging that can be

built into the process, increase or decrease in purchases of in-print version with full-text online availability, and on-going equipment costs. We will run cost projections from the information gathered and look for the best model or combination of models that will meet the objectives of equity, sustainability, and service to a wide audience, while not excluding Latin American institutions, in particular those which are serving as content providers.

C.2. The outcome of the proposed project will be a new methodology, or system, for accessing grey literature that bypasses traditional methods of acquisition. Current acquisition of grey literature is uneven and presents logistical difficulties. Use of the latest technology for full-text Web-based access with metadata search capabilities creates a single point of access that eliminates the need for interlibrary loan and duplicate cataloging and storage of materials.

Institutions within Latin America that generate or by their mission collect grey literature become content providers building their own repositories in the process. Once this system is in place within an institution, materials will not only be more readily available to scholars and students, but will also provide more timely access to date sensitive materials.

C.3. The proposed activities address a persistent problem for research libraries to provide access to a wide range of literature outside of commercial publishing. The project starts with very strong Latin American partners to jointly develop a methodology for using the latest technology for Web-based access and search without placing undue burden on partner institutions. Project development is designed to generate information on costs, staff commitment, and the effectiveness of in-house staff training as well as produce production manuals to best prepare new partners. Application of the MHP allows high level searches of material moved online and ties each repository into a greater whole, building a regional resource for Latin American social sciences. Research and development of an appropriate business model for sustainability will

ensure the MHP portal service allows the widest access by the community of scholars, students, and policy makers while ensuring its future over the long-term.

C.4. At the core of the project is building capacity within the partner institutions by training staff in standardized operations for digitization, file conversion, and application of the Dublin Core metadata to describe contents. LANIC has an on-going program for training key technical staff at Latin American institutions which will continue to operate beyond the grant period and will be open to new participating institutions (<http://lanic.utexas.edu/project/training/>). The project also serves to strengthen relationships between research libraries in the United States with strong Latin American collections and research libraries in Latin America which can only broaden opportunities for increased access to materials. The project activity to develop a business model for long-term sustainability directly addresses the vitality of the project after the grant period. In addition, LANIC's goal is to expand services developed under this proposal to become a premiere MHP federated search service for the study of social sciences in Latin America. The metadata portal service developed through this project will form the basis for this larger endeavor and set a standard for expanding the number of participating repositories.

D. Quality of Project Personnel

D.1. The proposed project work will be carried out primarily by the personnel at the Latin American Network Information Center at the University of Texas at Austin, under the guidance of the Advisory Committee of LARRP. LANIC staff will work closely with Latin American institutions that will provide content for digitization--specifically, FLACSO-Chile and CIRMA, both highly respected research institutes. Additional organizations also will be identified during the grant period. Consultants will be contracted to provide expert services in three distinct areas: organization of metadata, programming of MHP portal services, and research into economic

models of information delivery to develop a business model of cost recovery of services. The ARL and UCLA will provide administrative and institutional support to the cooperative project.

LANIC is well recognized worldwide as the most comprehensive directory service for Latin America. It recently was listed on the Forbes.com “Best of the Web” directory. This latest honor is added to a long list of awards. LANIC brings to this project the expertise of its exceptional staff and enthusiasm for the new challenges posed by the project proposal.

Dr. Ning Lin, Director of LANIC, will serve as the Principal Investigator for the LANIC subcontract of this project. Dr. Lin will provide technical leadership and MHP expertise necessary to achieve project goals. He will be responsible for technical innovations for OAI MHP portal services that enable harvesting the metadata from the participating repositories. Dr. Lin pioneered Internet portal technologies and services for the international community by initiating the portal idea in 1991 and creating LANIC in 1992 as the first pan-regional portal for Latin America. Based on LANIC’s successful model, Lin proposed in 1993 creating sister portals for Asia (ASNIC), the Middle East (MENIC) and Russia/East Europe (REENIC). These sites went online in 1994 and were quickly acclaimed as one of the best for each region. He has participated in XML development since 1997, and has extensive expertise in XML-related technologies, which is essential for developing the MHP portal services.

As the creator of LANIC, Dr. Lin was Director of Information Systems and Services during 1998-2001, and Technical Director during 1991-1997 at LANIC. He has been responsible for the overall direction and operations of LANIC, providing vision and technical leadership in international Internet services. Since 1994, he has been also responsible for overseeing the other international information systems initiated at UT-Austin: ASNIC, MENIC and REENIC. During

1995-1998, Dr. Lin was a Principal Investigator and Project Director at the Center for the Study of Western Hemispheric Trade.

As a pioneer in the international Internet community, Dr. Lin has served as a principal technical consultant to the Inter-American Development Bank since 1998, the Association of Research Libraries since 1994, and numerous other national/international organizations, corporations, and universities in Asia, the Middle East, and North/South America since 1988.

Dr. Lin conducted his dissertation research on the infrastructure and development of the Internet at the University of Texas at Austin during the late 1980s and early 1990s. His work served as the theoretical and technological foundation for creating LANIC.

Kent Norsworthy, LANIC Content Director, and Carolyn Palaima, LANIC Project Director, also will serve as key project personnel. Mr. Norsworthy is an award-winning author with over two decades of experience evaluating Spanish-language scholarly information. He is fluent in Spanish and has extensive experience working in Latin America, much of which was with NGO groups. Since 1994, he has worked at LANIC training staff and visiting Latin Americans, coordinating the work of graduate research assistants, converting databases, and updating and maintaining the LANIC web site, all of which is directly relevant experience to the proposed activities. Mr. Norsworthy's primary role under the grant will be to train staff at the Latin American institutions and on site at LANIC, as well as to provide support to convert files and to apply MHP. LANIC currently maintains a training program with four levels. In fact, the chief librarian at FLACSO's General Secretariat in Costa Rica took part in an intensive three-week training session at LANIC in spring 2001, further evidence of LANIC's reputation and strong connections with research organizations in Latin America.

Under the grant activities, Carolyn Palaima will be responsible for managing the LANIC subcontract budget and for reporting activities. As senior Program Coordinator at the Teresa Lozano Long Institute of Latin American Studies and as LANIC Project Director, she prepares reports and grants, oversees substantial budgets, recruits staff, and engages in strategic planning. Consequently, she is well versed in the requirements and procedures of grant administration, as well as experienced in project management. She also serves as a consultant to the Inter-American Development Bank.

LANIC has identified Grete Pasch as the consultant of choice on the organization of metadata. Formerly a Research Associate at UT Austin, she worked on the design and implementation of LARRP's data entry module for a nascent LAPTOC database. She is currently completing her doctoral dissertation at UT Austin on applying bibliographic principles to the design of metadata schemes for Internet resources. She has broad experience in web-based training, database and tool design, and management of automation projects both in Texas and in Latin America. Her current research interests combined with her experience and familiarity with LANIC systems and LARRP's programs make her a remarkably good fit with the skills needed to help design and establish metadata standards for the proposed project.

The Advisory Committee of the Latin Americanist Research Resources Project (see attachments for roster and resumé) is of a representative group of regional studies scholars, library directors, and area specialist librarians. The project as a whole continues to benefit from leaders in all these domains, whose contributions inform both policy decisions and day-to-day operations in a number of project activities. ARL, a not-for-profit membership organization comprising the libraries of 122 North American research institutions, sponsors and hosts LARRP. The resulting support and reporting relationship ensures involvement in the planning

and oversight by the nation's leading research library administrators. The area specialist librarians at the member institutions contribute to the management of project activities at the operational level, while working groups of selected project librarians provide leadership and operational oversight to project programs. The chairs of some of the working groups serve on the Advisory Committee. Eudora Loh, the project librarian at UCLA, is the chair of the Advisory Committee. As such she coordinates the activities of the various project components, the reports, evaluation surveys, and the preparation of the grant budget and application. She previously chaired the project's Serials Working Group during the developmental phase of LAPTOC. Thus, it was logical to designate UCLA as the applicant for this TICFIA proposal.

The Latin American institutions that have been selected as new partners in this initiative are both highly respected research organizations. FLACSO-Chile's library is one of the most complete collections in the social sciences in Chile and serves as a resource for researchers from Chile and abroad. Making the publications of FLACSO-Chile available on the Internet is a major goal of the library's strategic plan. Current research of FLACSO-Chile is in the areas of gender studies, international relations, peace and security in the Americas, the military and society, economics, and the environment.

The Centro de Investigaciones Regionales de Mesoamérica (CIRMA) is one of Central America's premier research institutes in the social sciences and on local indigenous peoples. Its research library has become an important repository for Central American materials, and already is a LARRP partner under the TICFIA-sponsored Latin American Partnerships program. The current research program of CIRMA focuses on interethnic relations in Guatemala and regional studies of race and "mestizaje." CIRMA currently receives funding from the Rockefeller Foundation and the Ford Foundation to support programs and scholarships.

E. Quality of Project Services

The universities and research libraries that comprise the Latin Americanist Research Resources Project, as well as the Association of Research Libraries and LANIC, are individually and jointly committed to diversity in employment and in provision of services. LANIC is sensitive to issues concerning Web access and its Home Page has been validated on Bobby 3.0 for accessibility to people with disabilities based on the W3C's WAI Page Author guidelines. Both UT-Austin and UCLA are an equal opportunity/affirmative action employer.

E.1. LANIC launched its Internet portal service in 1992 and its Web service in 1994, providing the first directory services for Latin America. LANIC is recognized for its leadership role in facilitating access to Internet-based information on, to, or from Latin America. LANIC began converting Latin American databases for Web access as early as 1994 and worked with CLACSO on the challenges of converting MicroIsis databases to the Web. LANIC has been a partner with LARRP since its inception. The LAPTOCs table-of-contents database was designed by LANIC's Director, Dr. Ning, who has also overseen subsequent enhancements. LANIC specializes in effective and innovative use of leading Internet technologies to deliver information services to a global audience, giving consideration to different levels of accessibility.

E.2. Utilization of the OAI Metadata Harvesting Protocol to provide the most up-to-date discovery and retrieval services for the scholarly community ensures that project activities prepare for the advances in deep Web searching that this protocol offers. The development and deployment of the LANIC MHP portal service will provide innovative methods for harvesting and indexing metadata from scholarly repositories, explore the most advanced technologies for interoperations between the pioneering MHP and established Web services for search and

retrieval of full-text documents, and set an internationalized standard for exposing metadata in the field of Latin American studies and for expanding the number of related open archives.

F. Adequacy of Resources

F.1. The value of the proposed project is the development of innovative technological capabilities to provide significantly increased access to potentially limitless amounts of contemporary Latin American research material. While grey literature in the social sciences will be the specific focus of the grant period, the MHP portal services and training program have potential application for Latin American resources in any discipline. The project is cost effective because it capitalizes on the expertise and infrastructure of established services provided by an international cooperative project through major research universities. The proposed plan draws on the talents of a committed and experienced staff at LANIC who have the right mix of applicable skills to direct and perform the work outlined in the proposal, thus obviating the need for a full-time project director. Their work will be supplemented by short-term contracts for specific tasks and assistance of graduate research assistants. This mix will ensure the highest quality of work for the best value. Approximately 19.5% of the federal direct investment will go into one-time expenditures for equipment, the bulk of which will increase the long-term capability and capacity of LANIC to accommodate the new MHP services.

F.2. Extension of access to grey literature in the social sciences in Spanish is significant to a very large number of potential users that far exceeds that of any other language area. The information will be useful to large federally-funded National Resource Centers, area studies faculty and students in small colleges, and to high school teachers and students alike. Commercial interests and policy makers are potential users also. The project will be especially

important to the user with time-constraints in obtaining information by making the material accessible on the Internet.

F.3. This proposal is the combined effort of major organizations and institutions supporting the Latin Americanist Research Resources Project. LARRP is a North American cooperative consortium with a proven track record of growth and success. Its member institutions represent the major Latin American studies programs in the United States and Canada. These libraries have committed substantial financial resources to support the activities and programs of the project. Their support has been visible in the form of a \$3,000 initial participant's fee to indicate an institutional commitment to the goals and objectives of the project, and in ongoing staffing and allocation of collection budgets to support the programs sponsored by the project. The project received a generous start up grant of \$90,000 from the Andrew W. Mellon Foundation, and received \$405,000 from the first three-year round of the TICFIA program to enhance its Latin American Periodicals Tables of Contents (LAPTOC) database and to initiate a Latin American Partnerships program. The five Latin American institutions that joined the project under the TICFIA grant now also contribute both staffing and allocations of their collection budgets to support the journals component of the project. Their commitment will continue beyond the conclusion of the grant period.

LANIC, as the primary recipient of the federal funding in the proposal and the key agent for accomplishing the work, also is important in providing matching support in the form of staffing and infrastructure. The foregone indirect costs of the officially negotiated rate at UT express in dollars the contribution of some of those institutional inputs.

For the current TICFIA proposal, UCLA has been designated as the sponsoring institution. Like The University of Texas at Austin (UT) General Libraries who served as the sponsoring institution for the first TICFIA grant, UCLA has committed senior staff.

The Association of Research Libraries, and in particular, its Global Resources Program, is the umbrella organization that sponsors LARRP. Most of the key personnel, the Project Advisory Committee and members of several working groups, conduct their project work without remuneration as part of their professional responsibilities. In addition, the staff of ARL provide professional and clerical support in the form of consulting services on many related library issues, design of web sites and printing work, maintenance of the listservs, and a variety of other administrative and clerical services.

F.4. All the participants of LARRP have signed a formal “Participants Agreement” indicating institutional commitment of continuing support. The document outlines the responsibilities and benefits of project membership. Measurable success continues to attract new participants to the project; four U.S. institutions joined in 2001 alone. With the well-established organizational framework in place, the project is positioned to continue functioning smoothly.

LANIC will develop and maintain the MHP portal service under the auspices of LARRP. The work plan focuses on the development of a training program and documentation to be used by data content providers in Latin America to ensure continued growth in archivable material long after the grant period.

Lastly, the project proposes research and development of a self-financing mechanism to prepare the project for sustainable online services to worldwide users. The project will research and review cost recovery models for information delivery and document the costs of converting and tagging files utilizing the OAIMHP.

G. Quality of the Management Plan

G.1. The management plan lays out the following timeline and milestones for accomplishing project objectives.

Year 1— Research and Design of MHP Portal Service and Open Archives

October –	Form committee to review metadata standards to be applied
December 2002	Project Advisory Committee and FLACSO-Chile prioritizes documents for processing
	Research and review MHP portal technologies
	Files sent from FLACSO-Chile to LANIC to test conversion and application of MHP
	Consultant trip to Austin to meet with LANIC staff and report to review committee
	FLACSO-Chile files converted to standard formats by LANIC Report from committee on findings
	LANIC launches project Web site in English and Spanish announcing project and partners
January–	Prepare manual for digitization, file conversion and standardization, and
March 2003	application of Dublin Core MHP
	Translate manual into Spanish
	Order workstation for FLACSO-Chile
	Site visit to FLACSO-Chile by LANIC trainer and Consultant

	Converted and standardized files returned to FLACSO-Chile for application of MHP to sample group
	Purchase and install Storage Array, host adapters, and expansion cabinet
	License or purchase related MHP tools and software
	Purchase Development Workstation
	Attend ARL Advisory Committee meeting
	Prepare TICFIA Performance Progress report
April–	Participate in MHP conference/workshop (LANIC Director)
June 2003	Committee and consultant review sample of metadata tagged files from FLACSO-Chile
	Presentation of project at Latin American Studies Association (LASA) Congress
	Manual revised based on feedback from committee and FLACSO-Chile
	FLACSO-Chile incorporates manual revisions into MHP tagging of files
	Hire contract programmers
July–	Design and prototype MHP portal service
September 2003	Send reports to PI
Year 2—	Develop MHP Portal Service Prototype and Open Archives
October–	Further develop MHP portal prototype
December 2003	FLACSO-Chile bibliographer/technical specialist visit LANIC for training
	Review document holdings and equipment needs at other FLACSO sites
	Identify new partner(s)
	Purchase scanner for FLACSO-Chile

	Purchase additional host adapters and backup tape libraries.
	FLACSO-Chile systematizes scanning, file conversion, and metadata tagging of new documents for inclusion in archive including reporting on staff requirements to ready files
	Begin collecting data for cost analysis of the impact of full-text Web access on sale publications
	Files from new partner(s) sent to LANIC for conversion to standard format
	Hire consultant to research economic models of information delivery
January–	Site visit to new partner by LANIC Trainer and FLACSO-Chile trainer
March 2004	Return converted and standardized files to new partner for application of MHP to sample group
	Deliver research consultant's report on economic models of information delivery to project Advisory Committee
	Attend ARL Advisory Committee meeting
	Committee, consultant, and FLACSO-Chile trainee review sample of metadata tagged files from new partner
	Prepare TICFIA Performance Progress report
	License required software for hosting MHP repositories
April–	Complete tagging of FLACSO-Chile documents
June 2004	Committee reviews sample of metadata tagged files from new partner

	New partner systematizes metadata tagging of documents for inclusion in archive. Scanning needs and file conversion expertise reviewed. Reporting on staff requirements in place
	Participate in MHP conference/workshop (LANIC Director)
	Review CIRMA holdings
	Project Advisory Committee and CIRMA prioritizes materials for processing
	Develop revenue-generating model for services
July–	Alpha release of MHP portal service
September 2004	Test and request comments for further improvements
	Demonstration at LASA Congress (PI)
	Send reports to PI
Year 3— Deployment and Implementation	
October–	Acquire and install designated MHP portal server
December 2004	Purchase additional host adapters
	Purchase workstation and scanner for partner(s)
	CIRMA sends files to LANIC for conversion to standard formats
	Research and review MHP standards for image files and evaluate applicability
	Site visit to CIRMA by LANIC Trainer
	Converted and standardized files returned to CIRMA for application of MHP to sample group

	Committee and consultant review sample of metadata tagged files from CIRMA
January–	CIRMA systematizes metadata tagging of documents for inclusion in archive.
March 2005	Scanning needs and file conversion expertise reviewed. Reporting on staff requirements in place
	Review and license relevant performance evaluation tools
	Based on the feedback, develop and improve MHP portal
	Prepare promotional materials
	Gather reports from all partners
	Begin preparation of a “How To” document for recruiting new partners outlining rationale for participating as a repository, staff commitment and expertise required, impact on access and purchase of documents, support offered by LANIC
	Prepare TICFIA Performance Progress report
April–	Additional partner and CIRMA staff to LANIC for training
June 2005	Translation of “How To” document into Spanish
July–	Production release the MHP portal service
September 2005	Review and analyze performance evaluation data
	Target new partners
	Prepare final report

G.2. While the policy and direction of all project activities are set by the Advisory Committee, the operational work of this new initiative will be directed and executed primarily by

LANIC staff in consultation with the Advisory Committee. The LANIC Director will be responsible for the design, development, and deployment of the MHP portal service and LANIC central repository. He will provide technical specifications and performance review.

Programmers will be contracted for much of the programming needed for the new service. The LANIC Content Director will be responsible for training, as well as for overseeing file conversion and application of the MHP by partner institutions. He will also provide technical assistance to these institutions as they begin processing files. The LANIC Project Director will be responsible for budget management of the LANIC subcontract and for coordinating reporting and partner activities initiated by LANIC. The LANIC Graduate Research Assistants will support the LANIC Directors releasing their time. They will be responsible for digitizing materials, file conversion and coding, loading files, and gathering statistical data and performance information for reports.

Under the direction of the PI and in consultation with the Advisory Committee, the Chair of the Advisory Committee will coordinate activities of the subcontractors and their performance and reporting requirements. Information technology experts at UCLA will serve as additional resource consultants on metadata issues and MHP implementation. FLACSO-Chile, CIRMA, and other carefully selected Latin American partner will provide social sciences content selected for value to the scholarly community, policy makers, and educators. ARL staff will enhance visibility of the project and provide institutional support, especially in communication between the participating libraries, the Advisory Committee, key project staff, and research libraries in North America.

G.3. Shared responsibilities for accomplishing project tasks bring together a vast expertise. The key project personnel have enjoyed a productive and creative working relationship for many

years. Lines for communication and problem-solving are well-established, ensuring that high quality performance and delivery of products and services can be accomplished in this large, diverse, cooperative organizational model. Highly successful past experience with Latin American partner institutions provides a tested foundation for new ventures. Mechanisms for evaluation, feedback, and monitoring are built into the work plan to ensure the precision and consensus necessary for the establishment of a metadata standard for grey literature in the social sciences and effective application of the MHP. The metadata review committee will initially consist of five Latin American bibliographers, two scholars, and the consultant. It will operate through a listserv, which will also serve as a record of issues addressed and the decision-making process for finalizing the standard. Preparation of training manuals and other such documents will be the responsibility of LANIC. Input from area studies bibliographers, content providers, and technical experts is integrated into the project to draw from the full range of available expertise. Scholars on the Advisory Committee and in the research organizations providing content will be continuously engaged in the decision-making process and evaluation of the utility and effectiveness of the MHP services. Site visits are scheduled to provide training within the environment in Latin America in which the procedures will be implemented. Having a trainer on the LANIC staff also ensures consistent and available technical support.

All participants are required to evaluate and report on their activities on a regular basis. The LANIC Director and appropriate staff, the Latin American content providers (FLACSO-Chile, CIRMA, and other new partners), the consultants, and the staff at ARL will monitor and report to the Advisory Committee and to the principal investigator on project progress.

The project's long-established organizational structure provides the framework for continued accomplishments and efficient and effective performance. The annual meeting of the Advisory

Committee, usually in March, provides an opportunity for direct communication and discussion of policy issues and project implementation. It also is a convenient mid-grant year evaluation of progress of the work plan. Modifications can be made easily with the guidance and direction of the Advisory Committee. The LANIC Project and Content Directors will attend these meetings to provide updates, answer questions, and to raise issues and concerns for Advisory Committee action. Various listservs administered by ARL facilitate ongoing communication between members of the Advisory Committee, the librarian bibliographers, and the directors of participating libraries. Communication among all parties associated with the project will be facilitated by frequent e-mail contact. Lastly, regular project reports are made to the participating libraries and to interested professionals who attend the annual international conference of the Seminar on the Acquisitions of Latin American Library Materials.

H. Quality of the project evaluation.

H.1. Evaluation of the progress, accomplishments, and success of the project will be the responsibility of the Advisory Committee and the project directors at LANIC. Quantitative empirical data will be supplemented by evaluative comments solicited from participating organizations, librarians, scholars, and other users.

In terms of objective criteria for evaluation, a number of elements will have measurable outcomes: the quantity of documents made available on the Web with the OAIMP; the use of the portal site; labor costs in scanning, converting, and applying metadata protocols; the number of staff trained to apply MHP; additional potential Latin American partners; and the economic ramifications of applying a cost recovery model to project services.

Reports generated by LANIC will provide much of the statistical record of number of documents, size of files, use of portal, etc.

Three surveys are envisioned to assess more subjective areas of evaluation: a survey of content providers on satisfaction with the use of the new technology and its impact on their mission and programs; a survey targeting users to assess the effectiveness and usefulness of the enhanced access; and lastly, a survey of librarians to assess the impact on library operations and costs. Results of the surveys will likely be posted to the project's website to facilitate dissemination as they have been in the past.