



**Ministerio de Educación y Cultura
División de Ciencia y Tecnología
&**

**Programa Regional para el Fortalecimiento de
la Cooperación entre Redes y Sistemas
Nacionales de Información para América Latina
y el Caribe
(INFOLAC)**

Project for development of a Cooperative
Cataloguing System in Internet for Latin
America and the Caribbean

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PROJECT DESCRIPTION

1. Long term objectives

- ?? To operate a regional cooperative system among the national agencies of cataloguing and specialized agencies, based on the international standards of interchange of bibliographical, archival and museum records that allows to have the standardized descriptions of the records of the intellectual and cultural production of the Region, the identification of the authors, and the institutions.
- ?? To publish the data bases of catalogues in Internet and CD-ROM, and that these records can be copied by all the institutions of the system without having to pay rights and having no restrictions for the use, distribution and adaptation of these records, in order to really obtain one of the historical goals of the PGI, i.e. the *Universal Availability of Publications*.
- ?? To provide an affordable way, according to the conditions of the Region, the computational and technical means, and the technical qualification, so that the catalographic systems of the Region in the national networks of public libraries, school libraries, university libraries, etc., can be standardized.
- ?? To extend the flow of information among the countries of the Region as well as between these countries and the developed countries. In this sense the use of operation models that privilege the public access of catalogues will be prioritized.

2. Immediate objectives

- ?? To develop an OPAC (Online Public Access Catalog) with Z39.50 interface on CDS/ISIS and/or other platforms of bibliographical data management in the public dominion, that allows the cataloguing, retrieval, download, and conversion of records, between the main variants of MARC and UNISIST.
- ?? To develop a basic methodology, and the needed software applications, for the retrospective conversion of existing catalogues in the diverse formats of the Region in order to take them into the international standards of the MARC and UNISIST family.
- ?? To implement a pilot project for two (2) years in the Region in three to five National Libraries and/or selected focal or thematic Libraries. A WWW Site will be set up in each Library of the project, and the equipment to produce CD-ROMs.
- ?? To train the human resources of the National Libraries or focal Libraries of the pilot project so that they will be able to:
 - a. train in its countries the professionals who work in the systems of public libraries, school libraries, etc., so they can perform the "cataloguing by copy" from electronic supports;
 - b. administer the WWW Site with the OPAC of the Library and the programs for conversion of formats;
 - c. produce CD-ROMs to distribute the available catalogues;
 - d. customize the programs to the needs and standards of the national use of their own country.

?? To prepare guidelines to adapt this pilot experience to the archival and museums systems using the ISAD(G) and CIDOC-CIMI standards for its eventual implementation after the culmination of this project.

Background and justification

In the beginning of the 1980s, the cooperative networks began to take form in the library world impelled by three main forces: the restrictions of budget, the technological possibilities of telecommunications and the professional conscience of cooperation.

Nevertheless, this new paradigm of information did not settle down totally in the developing countries so early in that time, specially in Latin America and the Caribbean, because: either (a) there were no facilities of remote and reliable connections; or (b) there were at not accessible prices; (c) the degree of automation of the institutions and the qualification of its human resources was almost nonexistent.

Thanks to the efforts of the UNESCO/PGI which provided the CDS-ISIS software for free, of which in the Region have been distributed more than 14,000 licenses, and of the regional organizations like ECLAC and BIREME/PAHO that took the leadership in the training of professional human resources, as well as the price reduction of the personal local network and computer systems, by the end of the years ' 80s the Region obtained a degree of partial but important automation of their resources of information, fundamentally in local area networks of PCs (LANs).

Nevertheless, the real impossibility to work in telematic networks and the insufficiency of the informatic infrastructure, prevented that the National Centers of Cataloguing could, to the interior of its national systems, fulfill in an effective way its objectives. Consequently, countless procedures arose from the automation of services that not always complied with the international standards because they were, either oversimplifications of these standards or the standards were total absent in the consideration of the projects; specifically the standards based on the ISO-2709 or formats derived from MARC, ISAD(G), etc.

With the advent of Internet and the developments of the technology of communication during the last five years, there is now the suitable instrument and a real possibility of standardizing the national records of information of the systems of public, school and university libraries, as well as archives, museums, etc., and for the first time the possibility of building real networks of cooperation and interchange of bibliographical information.

The possibility of sharing and of interchanging information allows for the technical processes necessary to describe a bibliographical piece to be made only once and for this information to be shared between all the institutions of the network. This is the philosophy of the existing networks of cataloguing in the developed countries, like the networks supported by the Library of Congress, RLIN, OCLC, etc.

Nevertheless, due to considerations of property rights, this information is not available to public use, but must be paid, with a cost in the order of USD 2 per record, accordingly to the different international suppliers, the type of collection, the antiquity, the amount or records, etc. In the case of libraries that have their collections automated, and want to convert their holdings to the international standards, the cost of conversion is in the order of USD 1 per record. Although the individual cost of a record that describes a work is of USD 2 and it seems to be low, if this record is bought for each one of the hundreds of institutions that belong to the

information networks of a country, and this is multiplied by the thousands or the tens of thousands of publications that each one of these institutions has, the immediate conclusion is that the cost "of buying" the information would cost to the Region an amount not easy to estimate but whose order of magnitude is in the hundreds of million dollars.

If to that fact, it is added that a part of the data that conform to MARC standard, (in anyone of the almost 50 existing variants), have been adjusted to the requirements of special softwares designed decades ago, that are maintained only for backwards compatibility with the implementations of the international suppliers of those softwares, it is concluded that the present market scenario does not respond to the best interests of the countries of the Region, and that are necessary alternative solutions that allow the access to the information without the payment of onerous costs, and unneeded in some cases.

The transference of information and technology under the present situation constitutes a transference of important resources from the developing countries to the countries of the first world.

It is necessary then to create a cooperative cataloguing system in the countries of the Region to assure that the access to the data of the library, archival and museum systems allows:

- a. that the holdings of the Region are registered;
- b. an alternative to the present costs of the international systems;
- c. to complement the international systems;
- d. the democratization of the information as an instrument for the education and development.

It is with these aims that it is considered a cooperative system, where the central paradigm is the idea that the bibliographical records constitute information without author right (copyleft). Each National Center of Cataloguing will put to disposition of the public the necessary technical description to constitute the catalographic records and these could be used by the information networks *urbi et orbi*, in order of which the bibliographical records progressively become into public properties.

Expected results

- ?? A software package with integrated modules, on ISIS client-server with Z39.50 interface, for non profit distribution (shareware), that allow to offer the catalographic records in electronic media.
- ?? Import/export utilities between catalogues of the Region and between these and the international catalogues.
- ?? A methodology with manuals and the needed software utilities, for the retrospective conversion of existing catalogues in the libraries of the Region in order to take them into the international standards of the MARC and UNISIST family.
- ?? All the manuals, software programs, and the methodology will be independent of the language and will work in the four official languages of the Region.
- ?? National libraries with WWW Sites that offer their catalogues in Internet without special costs to dowload their records, (between 3 and 5 libraries in the pilot stage).
- ?? Trained technical personnel (computer science and librarians) in National Libraries:
 - a. to train in its countries other professionals in this methodology;
 - b. to administer the WWW Site;
 - c. to produce CD-ROMs;

- d. to customize the programs to the needs and standards of their own country.
- ?? A Project to extend the pilot project to the archival and museum systems using the ISAD(G) and CIDOC-CIMI standards.

Plan of action

1. It will be developed on ISIS, in client-server and distributed processing version, a software package for non profit distribution (shareware), with the same philosophy that UNESCO has had with the CDS/ISIS.

This package will contain the modules of:

- a. Cataloguing with full data entry in compliance with the UNIMARC/MARC standards and control of consistencies, for all type of bibliographical objects, authority files for personal authors and institutions;
- b. OPAC for search and retrieval on Z39.50 interface;
- c. Download of records with ISO-2709 standard;
- d. Conversion between the main formats of MARC and UNISIST (UNIMARC, USMARC, UKMARC, CCF, Cepal, LILACS, etc.)
- e. Manual with technical documentation and documentation for users.

The system will be independent of the language.

1. A methodology will be developed, and the necessary software utilities, for the retrospective conversion of existing catalogues in the different formats of the Region in order to take them into the international standards of the MARC, CCF and UNISIST family. For this purpose will be used the existing software developments like FANGORN, distributed by UNESCO/PGI, and USEMARCON of conversion between variants of MARC of public distribution.
2. The project will be implemented as a pilot project for two (2) years in three to five selected National Libraries that agree to put their catalogues in the public dominion and without charging for its use. Preference will be given to those libraries that have a minimum of informatic infrastructure and Internet connection. If it is possible, one Library of each Region of Latin America and the Caribbean will be selected.
3. A WWW Site will be set up in each Library of the project, and the equipment to produce CD-ROMs.
4. The human resources of the National Libraries of the pilot plan will be trained so that they will be able to:
 - a. train in its countries the professionals who work in the systems of public libraries, school libraries, etc., so they can make the "cataloguing by copy" from the electronic supports;
 - b. administer the WWW Site with the OPAC of the Library and the programs of conversion of formats;
 - c. produce CD-ROMs to distribute the available catalogues;
 - d. customize the programs to the needs and standards of the national uses of their own country.
1. Manuals will be written with the necessary documentation on the methodology, the installation, mantainance, adaptation and use of all the modules of the system. The system will be in the public dominion.
2. The costs that each participant Library will assume will be the necessary ones to resolve the expenses of the training courses and the technicians who will make the installation of the system. Annual royalties for the use of the system will not be paid, there will be no limitations in the amount of users. The interfaces will be of free distribution within the country of the participant National Library of the project, whose only commitment will be to put its catalogues to the public use and to allow to copy its records without cost.

- A technical analysis will be made in the second year of the project for the feasibility of extending the methodology to the national archives systems and networks of museums using ISAD(G) and CIDOC-CIMI standards.

Inputs and budget

Inputs from the Participation Program

| Activity | Input | Time | Cost in USD |
|----------------------------|-------------------------|-----------|-------------|
| Analisis of methodologies | 1 consultant | 1 month | 2.000 |
| Software development | 2 programmers | 12 months | 36.000 |
| Data conversion procedures | 1 consultant | 2 months | 3.000 |
| Manuals and documentation | 1 consultant 1 staff | 2 months | 5.000 |
| Travels of coordination | | | 4.000 |

Input from each participant country

| | | | |
|--------------------------|--------------------------|------------------------------|------------------------|
| Intallation and training | 1 consultant per country | 2 weeks per country per year | 6.000 / country |
| Equimpment acquisition | | 1 st year | 15.000 /country |
| Working costs | | permanent | 5.500 / year / country |

Intitutional framework and responsibility

- ?? The project will be performed under the Program of Regional Participation modality.
- ?? The project will be administered as a partnership between the countries selected for the pilot implementation and BIREME/PAHO. One of the countries will assume the general administration of the project.
- ?? BIREME/PAHO will have the technical responsibility of the software and hardware developments to operate the catalogues and the coordination of the advanced training courses.
- ?? Each one of the countries selected for the pilot plan will contribute as counterpart of the project the necessary inputs for the installation in the selected Library of its country the hardware and software equipment, the expenses of operation, the costs of training of the technical personnel of the library assigned to the project, and will be responsible for the administration of those resources.
- ?? The national center responsible for the pilot project will have, among other tasks, to train to the participant centers of the project in its own country.

Country(ies)

BUDGET ESTIMATES FOR THE PROJECT

(In US dollars)

Date: March 1999

| | NATIONAL INPUT: CONTRIBUTIONS FROM | REQUIRED INTERNATIONAL INPUT: CONTRIBUTIONS FROM COMPLEMENTARY RESOURCES |
|--|--|--|
| | | |

| | HOST INSTITUTIONS | | | | | | TOTALS |
|----------------------------------|-------------------|--------------|---------------|---------------|---------------|---------------|----------------------------|
| | 1st year | 2nd year | Sub-total | 1st year | 2nd year | Sub-total | |
| Personel: | | | | | | | |
| Experts/Consultants | | | | 36.000 | 5.000 | 41.000 | |
| Administrative support | | | | | 5.000 | 5.000 | |
| Travel | | | | 2.000 | 2.000 | 4.000 | 50.000 |
| Each National Partner = N | | | | | | | |
| Training: | | | | | | | |
| Group training | 3000 | 3000 | 6.000 | | | | 6.000 x N |
| Equipment Expendable | 500 | 500 | 1.000 | | | | 4.000 x N |
| Non expendable * | 15.000 | | 15.000 | | | | 15.000 x N |
| Premises | 1.000 | 1.000 | 2.000 | | | | 2.000 x N |
| Miscellaneous: | 1.000 | 1.000 | 2.000 | | | | 2.000 x N |
| | | | | | | | |
| Total 1st year | <u>20.500</u> | | | <u>38.000</u> | | | <u>38.000 + 20.500 x N</u> |
| Total 2nd year | | <u>5.500</u> | | | <u>12.000</u> | | <u>12.000 + 5.500 x N</u> |
| TOTAL | | | <u>26.000</u> | | | <u>50.000</u> | <u>50.000 + 26.000 x N</u> |

* This input corresponds to the installation of a WWW Site: equipment, router, connection with a minimum line of 64 Kb, software, design of pages Web, etc. If the library already has its Web server, then its input will be of \$ 5,500 every year.