

ECA CHANGE MANAGEMENT TEAM

CHANGE AREA: *Integrated Information Management Function*

PROJECT BRIEF NO. 4

IMPROVING LIBRARY AND INFORMATION ACCESS

AT

ECONOMIC COMMISSION FOR AFRICA

***Addis Ababa
April 1996***



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1. BACKGROUND

The ECA Library, though established in 1959, is today, the only remaining UN Regional Commission Library which is not automated and which has levels of facilities and services which fall far short of those expected of a modern library and documentation service facility. It is among the oldest special, research libraries in the African region with an accumulated stock and holdings of about a quarter of a million items, including UN mimeographed materials etc. It subscribes to over four hundred periodicals, journals and newspapers and it is a depository both for materials/publications of the UN and the UN specialized agencies (e.g. UNESCO, FAO, World Bank etc.) and also for the official government publications of its member States. It maintains extensive exchange agreements with over one thousand research institutions and libraries (both in and out of Africa) from which it receives several important publications in exchange for ECA publications and documents.

It currently collaborates closely with UN/HQs (Dag Hammarskjöld Library in the supervision and coordination of those UN depository libraries which have been designated for Africa. Among its clientele are the staff of the ECA Secretariat and of the UN agencies located in Addis Ababa; the diplomatic missions; the staff of the Organization of African Unity (OAU); government offices both in Ethiopia and elsewhere in Africa. Through inter-library loan arrangements with major libraries and institutions in Addis Ababa, the ECA Library also extends its services to the faculty and students of Addis Ababa University and to many other researchers and other groups located in the city. Present technical constraints do not allow the Library to extend its services to all potential users in the Africa Region, but query/answer services are provided through the mail, when requested for. Through on-line linkage to the UN Bibliographic Information System (UNBIS), at the Dag Hammarskjöld Library (UNHQs), the ECA Library assists in the global dissemination of UN documentation as do other UN system libraries. The Library also provides access to UNBIS through CD-ROM format.

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The Library's traditional library services encompass lending services, query/answer services, reference and referral services and other related activities. Acquisitions lists, special bibliographies, guides and indexes are routinely prepared and disseminated widely to promote awareness of the information resources and holdings of the Library. Over the last year, the Library has also been electronically disseminating information about its new acquisitions using the e-mail in a service entitled LIBALERT aimed at alerting ECA personnel with electronic mail access about useful acquisitions. As part of the Library's effort to disseminate and create greater awareness of ECA's publications and documents among policy-makers, planners and other categories of users, exhibitions and displays are organized from time to time to support major ECA conferences and seminars. Additionally, the Library maintains a permanent display area in the Library to strengthen its dissemination functions.

These and all the other services currently provided by the Library are done manually, by the small size of library personnel thus taking several man-hours of staff-time, and leading to rather inefficient utilization of, and in-accessibility to the total information resources of the Library. Since most of the staff have not benefited from any training and skills-upgrading opportunities in decades, there has been some 'rusting' and obsolescence in staff skills resulting in low motivational levels and inadequate familiarity with modern library and documentation approaches to information handling and management.

The equipment base is low and primitive: there is only one photocopier (installed only last year); there are no microfiche readers or printers; no audio-visual facilities; no binding facilities; no microforming facilities. Though the Library has a reasonable number of PCs, current computerized operations are limited to the use of either word processing or spreadsheet. CDS/ISIS, as a bibliographic software package, is used on a very limited basis both in view of that software's own limitations for general application to library operations and also because of non-familiarity by the Library staff. The lack of an automated environment has aggravated the Library's isolation from many of the benefits in information exchange and networking.

The collection base is not comprehensive and sufficiently diversified: there is insufficient budget for acquisition of up-to-date library materials and other information resources. This has led to the Library having outdated collections which are made up largely of books, periodicals and UN documents. It does not systematically collect reports and other unpublished (ephemeral) materials, which constitute very valuable, up-to-date sources of information for research. Nor does it acquire electronic media (e.g. CD-ROMs etc.), films, maps and other non-book materials.

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2. CONTEXT

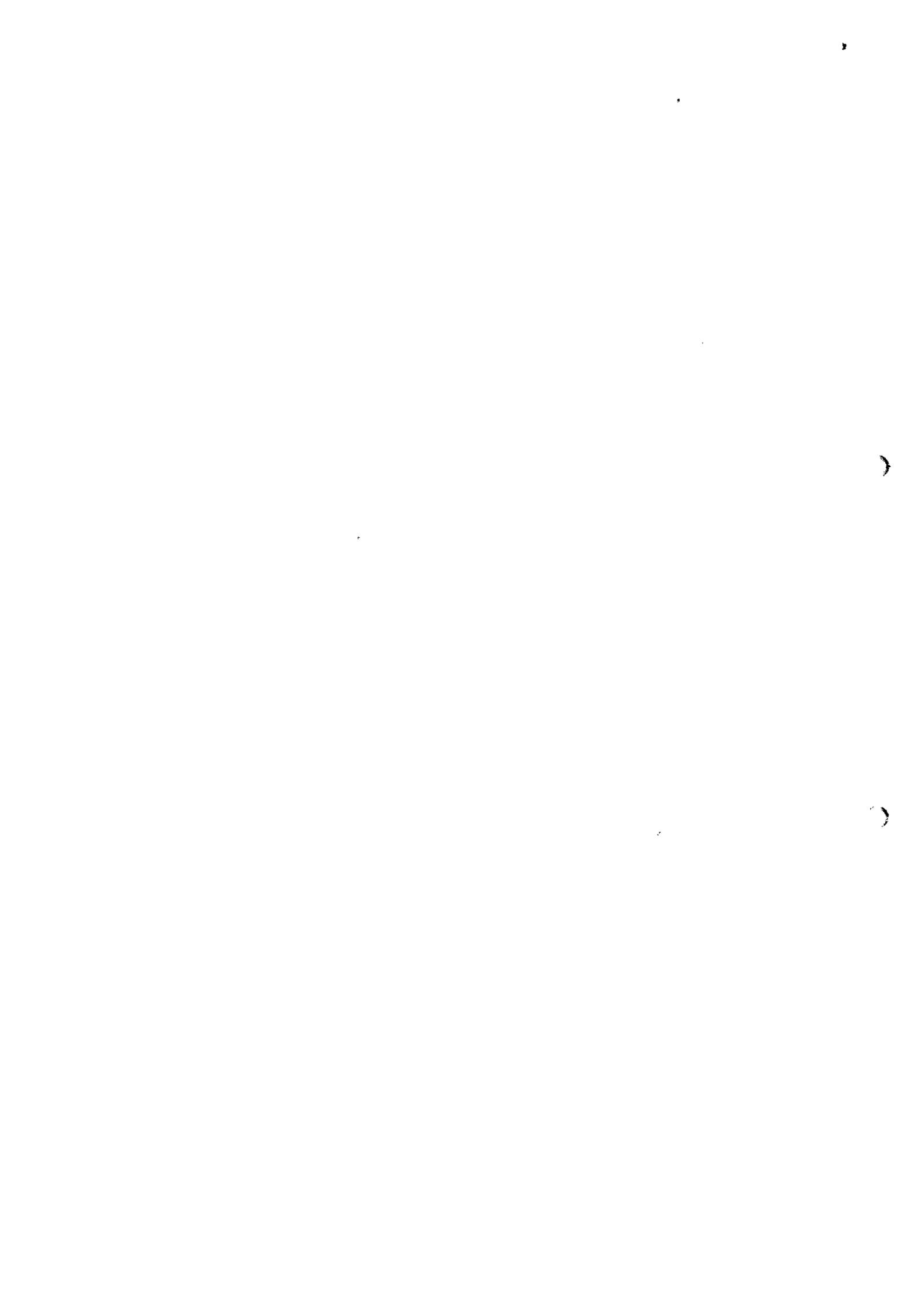
It is obvious from the foregoing that given some of its present limitations, the ECA Library is not being utilized optimally be it for collection, processing or dissemination purposes. To liberate the Library and enable it to offer value - added outputs and services, requires new orientation to how the very many facets of information resources at the ECA are managed. Over the recent years, particularly since 1994, the Library has initiated some actions to get the processes at the Library automated. Resources, however have not been available and organizational commitment has been somewhat lacking.

Yet the necessity to automate and modernize the ECA Library to serve as a major information provider is as pressing as ever. This need derives not only from ECA's internal imperatives for greater information accessibility, but also from the many recommendations of the UN Joint Inspection Unit (JIU) on the subject. In its 1992 report which dealt with UN systems libraries networking the JIU recommended among others, that "it is imperative to establish an effective and integrated library network within each organization, with the necessary leadership, services and support provided by the central library. The leadership role, responsibilities and functions of the central library within the overall information system of each organization have to be clearly defined. Appropriate linkages between central libraries and other information units of the organizations need to be established as a matter of priority which would, among other things, avoid duplication of incompatible software, duplication of acquisitions etc..."^{1/}

Against this global mandate, and its internal imperatives the ECA Library has accordingly proceeded to reorganize its services to be better able to serve as an information provider to both its internal and external clientele. Last year, the Library assessed the user needs of the Secretariat staff (in terms of frequency of use of the facilities of the Library; the adequacy of library collections and holdings; subject areas of interest etc.). A similar assessment has also recently been done of the ECA Divisional reference units and their collections/holdings in order to determine areas of convergence and duplication with the ECA Library. These efforts at streamlining library and documentation functions at the ECA are aimed at helping to strengthen the management of information resources at the ECA.

Much impetus for the Library's continuing efforts in this line came during the Open Space exercises organized last year by the Executive Secretary of the ECA. For the first time in the history of the Secretariat, staff members were able to openly articulate their needs for adequate information support for their work. Among the

^{1/}United Nations. Joint Inspection Unit. Towards an integrated library network of the United Nations System. New York: 1992. 38p. (A/47/669)



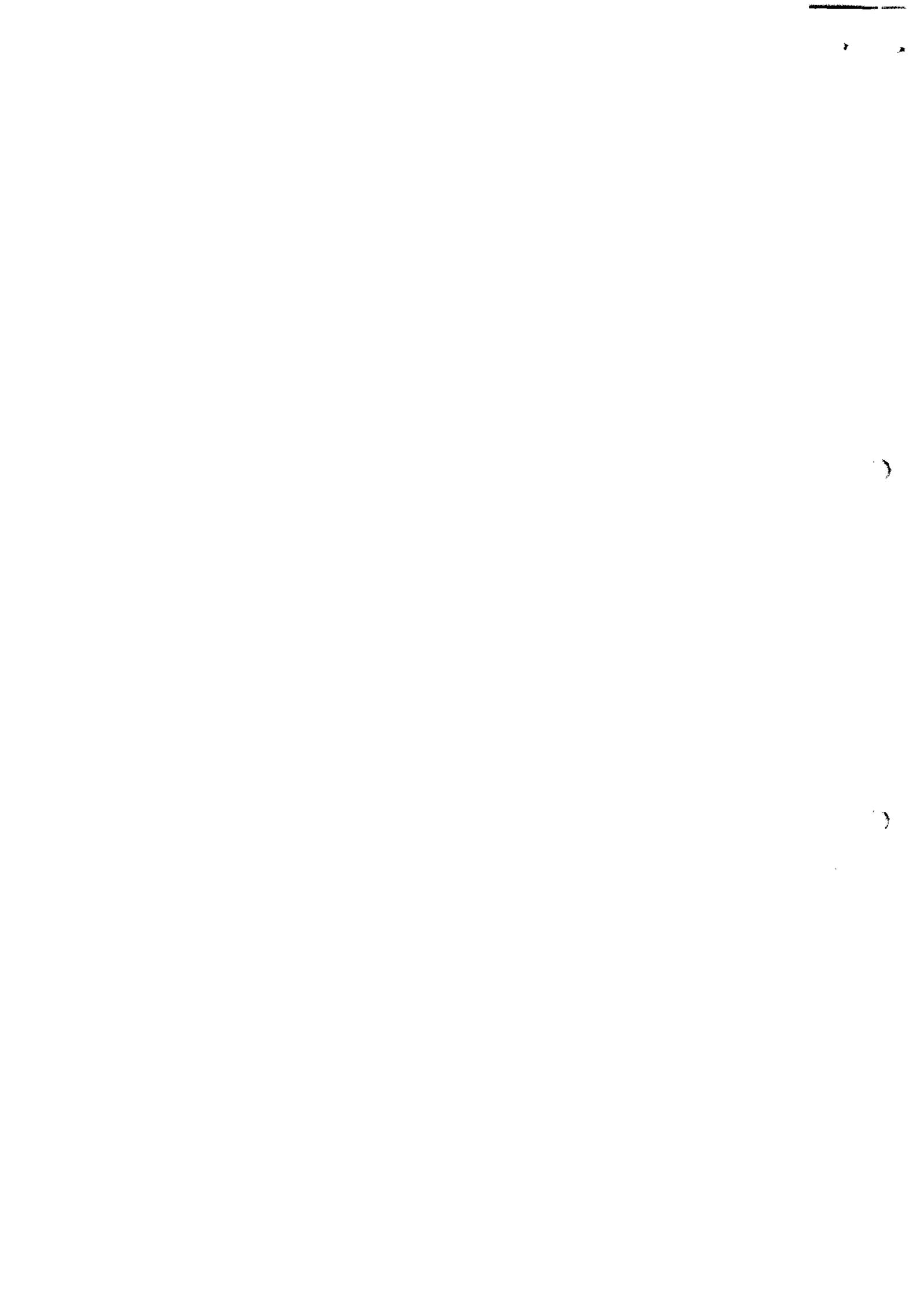
many recommendations made were that "the operations of the ECA Library should be computerized... The automation programme should encompass strong ECA reports and publications on diskettes and CD-ROM and other electronic media. Information on new acquisitions and materials should be announced via E-mail, and electronic bulletin boards, where feasible"2/. In other parts of the report on the Open Space, it was further recommended that "in order to facilitate collection, retrieval and dissemination of information, the ECA Library should be the main repository for all information collected or produced by ECA". In fact, the recommendations in that report went on to propose that "a publications/ dissemination unit should be set up and linked to the Library to facilitate the announcement, dissemination and distribution of ECA publications... Such a move will also ensure that indexing, information analysis activities, preparation of bibliographies and other listings will be readily prepared to announce ECA's productions for inclusion in UNBIS, INTERNET etc...".

The Open Space indicated clearly that the modernization and automation of the ECA Library are priority concerns on which actions should be instituted within the next two years to bring about greater accessibility to information resources. These concerns have been further highlighted in ECA's current renewal process, guided as it is, by the three principles: excellence, greater cost-effectiveness, and more effective partnerships. Given ECA's mandate to provide intellectual leadership and technical support to African countries, the demand for excellence is more pre-eminent than ever before. In the Executive Secretary's new strategic directions for the ECA, the role of the Library in helping to disseminate African information is noted thus echoing the priorities indicated in the Open Space exercises - "One important component of this effort will be to make the resources of ECA's Library, including all its publications, accessible to Africa's academic community, policymakers and research institutions through electronic connectivity. This will include transmitting the abstracts of ECA's new acquisitions, publications and other reports through electronic media..."3/.

To crown all this, when the Ninth Session of the Conference of African Planners, Statisticians and Population and Information Specialists recently convened here in Addis Ababa from 11-16 March 1996, its Information Committee made the following recommendation - "As part of its new strategic focus area of Harnessing Information for Development, ECA should secure sufficient human and financial resources to enable the ECA Library to automate its operations and improve its services in order to transform it into a model library for ECA member States to serve the region better. ECA should report on the progress made in this area to the next

2/Economic Commission for Africa. Report of the Open Space on "Sharpening our focus, strengthening our partnership and increasing our impact, Addis Ababa, 25-27 September 1995 (Synthesis report). 35p.

3/Economic Commission for Africa. Serving Africa better: strategic directions for the Economic Commission for Africa. Addis Ababa, 1996. 53p. (E/ECA/CM.22/2)



meeting of the Conference of African Planner, Statisticians and Population and Information Specialists". It is hoped that the forthcoming Conference of Ministers will adopt this recommendation during its twenty-second meeting in May 1996.

Having come this far, the stage is now fully set for the final take-off, the ingredients of which are as outlined below.

3. PROJECT OBJECTIVES

3.1 Long-Term Objective

- to establish the ECA as the major source of both original data and analytical products and up-to-date information on African social and economic development through the systematic collection, processing, establishment of credible data bases, and the timely dissemination of such information resources in an integrated manner.

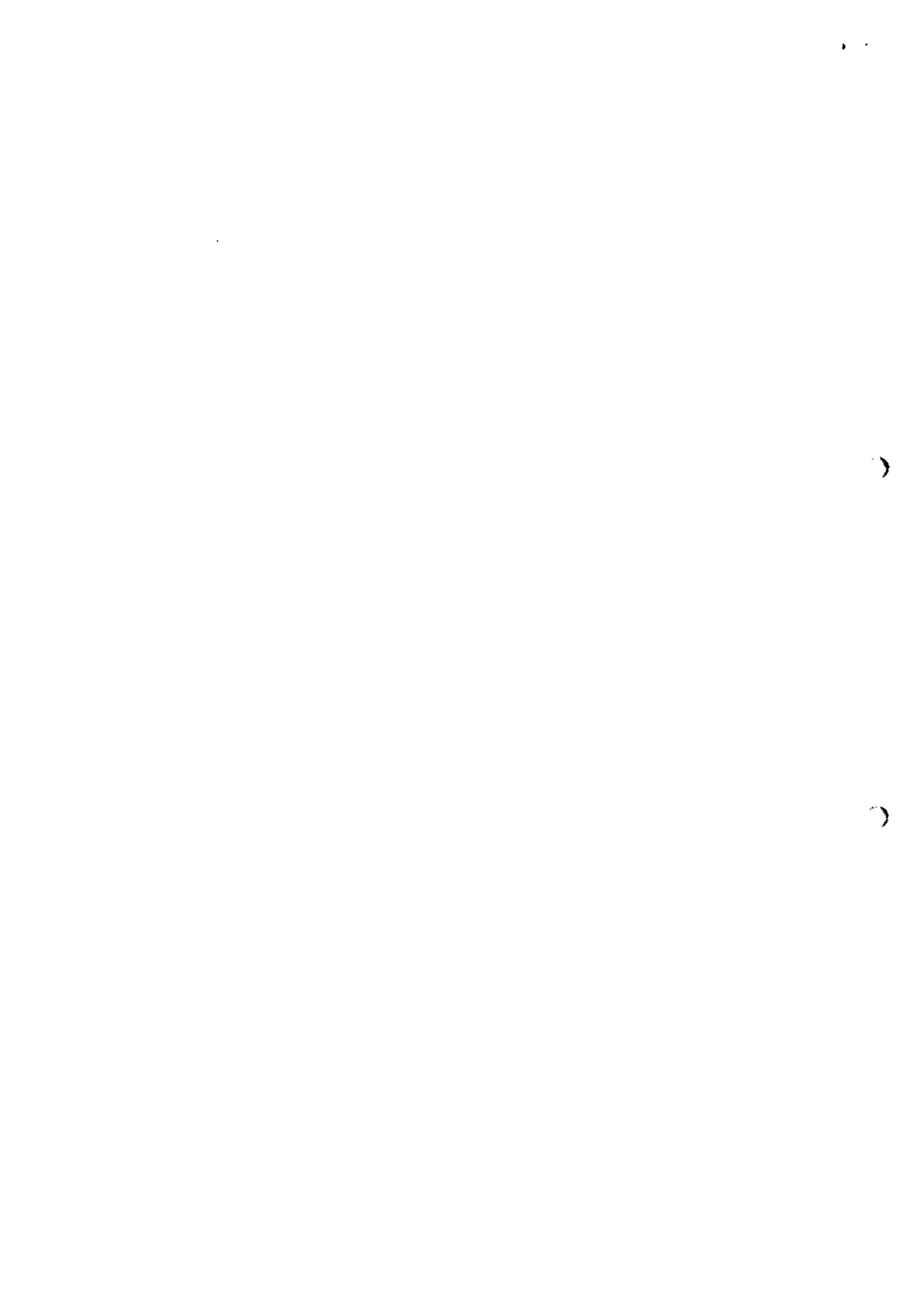
3.2 Immediate Objectives

3.2.1 - to reorganize the ECA Library as part of an integrated library, documentation and information central facility for the joint collection, processing and dissemination of the whole gamut of information resources (irrespective of format i.e. books, journals, documents, reports, films, maps, data sets on diskettes etc.) collected on African development issues thus enabling users (both internal and external) to access information under the same umbrella;

3.2.2 - to make the resources of ECA's Library, irrespective of format, accessible to Africa's academic community, experts, policy makers and research institutions through print, electronic connectivity and other media;

3.2.3 - to automate and modernize the services of the ECA Library to become a model library and documentation service capable of better serving the Secretariat and ECA member States in the provision of information resources;

3.2.4 - to enhance the co-ordination and management of the total information resources at ECA through the upgrading of the skills and expertise of the library and information personnel in line with the requirements of a modern regional library and documentation service.



4. SUMMARY OF CURRENT PROBLEMS

4.1 Internal problems

4.1.1 - repetitive, time-consuming manual processes in library operations leading to operational inefficiencies and dissatisfaction;

4.1.2 - collection base: outdated, traditional library collections (books, monographs, periodical issues past due); sporadic missing issues; inadequate budget for acquisition of library materials; underutilization of the existing stocks; need to also expand collection base by collecting research reports and other non-published materials;

4.1.3 - overdue materials not easily tracked by manual methods; notification of library patrons for overdue not done on a timely basis;

4.1.4 - permanent backlog in cataloguing; staff unable to cope with increasing work load; standardization concerns;

4.1.5 - patrons dissatisfied with the manual, antiquated card catalogue system which does not provide consistent multiple access points and is time-consuming to consult;

4.1.6 - access to library holdings limited to physical visits to the Library and ECA working hours, resulting in underutilization of the collections;

4.1.7 - current system not able to generate routine statistics on library transactions without having to hire more staff or eliminate necessary library services;

4.1.8 - Library not having systematic access to what is produced by the Commission even though it is the central repository for ECA's published materials, documents and publications); lack of bibliographic control of ECA publications;

4.1.9 - lack of an archiving system to allow for the proper conservation, storage and management of ECA's archival collection (records, documents and data);

4.1.10 - fragmentation of information and documentation services at ECA divisional reference units thus making it difficult to access the totality of ECA's information resources. No uniform collection and



processing of materials to ensure wide coverage and accessibility to the valuable information resources held by the Divisions and the MULPOCs;

4.1.11 - inadequate security of library materials thus leading to thefts and book losses;

4.1.12 - inadequate staffing of library and documentation services; need for higher calibre of library and documentation personnel to provide efficient library, documentation and information services.

4.2 External problems

4.2.1 - underutilization of new and emerging information and communication technologies;

4.2.2 - not linked to major bibliographic systems (UNBIS, RLIN etc.) or major African research institutions and other centres of excellence to facilitate dissemination of ECA outputs;

4.2.3 - non-accessibility/connectivity to global systems and networks to facilitate networking with regional and global networks such as Internet etc.;

5. PROJECT METHODOLOGY

- 5.1 establish project priorities, goals, and objectives;
- 5.2 analyze existing operations and indicate the current work flows;
- 5.3 identify requirements and specifications for the automated system by evaluating available hardware and software (compare existing UN/LIS packages as well as commercial packages noting issues of compatibility and networking);
- 5.4 determine needs and propose realistic time-table for the retrospective conversion (RECON) of existing bibliographic records (catalogue cards, shelflists) at the Library;
- 5.5 review feasibility for recruiting consultants to (a) conduct a detailed systems study for the Library's automation; (b) look at modalities for textual and data archiving; (c) for RECON; and (d) for the design of an interim circulations/loans system;

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- 5.6 set up second-level groups/task forces to deal with;
 - 5.6.1 system requirements and system selection;
 - 5.6.2 training and human resources requirements; (recommend training for those who will manage and operate the new system and specialized operations);
 - 5.6.3 modules e.g.acquisitions/serials control
 - catalogue/on-line public access catalogue
 - circulation/reports/statistics
 - archiving
 - library security system
 - other modules, as necessary
- 5.7 establish an implementation plan to cover:
 - 5.7.1 conversion of retrospective records (catalogue cards, sheflists)
 - 5.7.2 installation/delivery
 - 5.7.3 data entry
 - 5.7.4 acceptance tests/benchmarking
 - 5.7.5 training
 - 5.7.6 longterm hardware and software management

6. COMPOSITION OF PROJECT TEAM

Project Manager	Petrina G. Amonoo	
Team members	Robert Okello)
	Jennifer Karbgo)
	Assefa Belay) Users Group
	Amare Bekele)
	Hilary Nwokeabia)
	Saddik Solbi)
	Oladumiye Olatunde) Systems Group
	Joseph Abdul Faki)
	Karen Cassamajor)
	Zelleka Haile)
	A. Jeannette Ibino Ngay) Library Group
	Konjit Haile Selassie)

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7. PROJECT OUTPUTS

Immediate Objective 3.2.1: to reorganize the ECA Library as part of an integrated library, documentation and information central facility for the joint dissemination of the whole gamut of information resources (irrespective of format i.e. books, journals, documents, reports, films, data sets on diskettes etc.) collected on African development issues thus enabling users (both internal and external) to access information under the same umbrella.

Output 7.1: Standing Committee on the ECA Library and Documentation Service established

Activity 7.1.1: Establish TOR for a coordinating committee to to formulate an information policy, oversee implementation, monitoring and evaluation of all activities and services pertaining to library, documentation and information management at the ECA. The committee should have a broad representation of the relevant information sectors, services and users in order to harmonize, integrate and network related library and documentation functions at ECA.

Output 7.2: ECA Library reorganized and collections updated

Activity 7.2.1: Institute appropriate collection development programme/s to systematically acquire relevant materials (irrespective of format and including unpublished materials (ephemera)) to support the work of the Commission and member States.

Activity 7.2.2: Liaise closely with member States to encourage them to routinely deposit their official government publications, and other country-specific data and information, as published. Same also for inter-governmental publications.

Activity 7.2.3: Review existing exchange arrangements to ensure inclusion of all major African research institutions and other centres of excellence so as to benefit from their publications, reports etc.

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- Activity 7.2.4: Acquire modern information storage and retrieval facilities such as CD-ROM data bases, microforms, microform readers/printers, and other electronic media to enhance accessibility to the Library's vast information resources. Install appropriate document-image processing devices.
- Activity 7.2.5: Establish binding facilities to ensure the proper conservation of library materials, particularly completed runs of journals and periodicals.
- Activity 7.2.6: Intensify and ensure that a copy each of all ECA-produced documents and publications are lodged automatically with the Library as the central repository of the ECA.
- Activity 7.2.7: Harmonize cataloguing/classification/indexing functions to ensure uniform bibliographic records in order to enhance bibliographic control and information exchange.

Output 7.3: Documentation services established and/or enhanced

- Activity 7.3.1: Assist in the reorganization of all the divisional reference units (including those at the MULPOCS) by helping to process their collections and holdings and integrating their records with that of the central Library to facilitate access to the total information resources at the ECA.
- Activity 7.3.2: Establish a new branch library (reference unit) at the new ECA Conference Centre equipped with up-to-date reference materials and bibliographic data base/s to directly serve the information needs of delegates attending ECA conferences etc. Provide for dial-in access capability.
- Activity 7.3.3: Systematically index and abstract ECA documents, mission and other reports, as well as other ephemera using approved documentation norms and standards and tools (e.g. UNBIS Thesaurus). For consistency, and to facilitate information exchange with member States, PADIS methodologies could be adopted.



Activity 7.3.4: Establish and/or complement computerized data bases and harmonize them with other existing bibliographic data bases at the ECA to provide full access to relevant information resources at the ECA. Acquire CD-ROM data bases to help fill in information gaps.

Output 7.4: Archival services established

Activity 7.4.1: Design a system for archiving ECA's documents and for establishing a data archives facility to be linked to the Library for dissemination purposes.

Activity 7.4.2: Arrange for the microficheing of library materials by sub-contracting with appropriate commercial agencies either in Addis Ababa or elsewhere in Africa where the technical facilities exist. Liaise with the appropriate units at the ECA (ISS, DPS etc.) for access to Optical Disk System facilities when they become available at the ECA.

Immediate Objective 3.2.2: to make the resources of ECA's Library, irrespective of format, accessible to Africa's academic community, experts, policy makers and research institutions through print, electronic connectivity and other media.

Output 7.5: Accessibility to ECA information resources improved and expanded

Activity 7.5.1: Liaise with PADIS to acquire a copy of its databases on institutions and experts and adapt them to the Library's needs, expanding these with additions from list of participants at ECA conferences, workshops, seminars etc. and also with those institutions with which the Library maintains exchange arrangements. This will enhance contact with African institutions etc.

Activity 7.5.2: Introduce clearinghouse activities by offering reference, referral and research services, as needed, to member States.

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- Activity 7.5.3: Produce bibliographies and listings and disseminate both in printed form and via other electronic means, as appropriate to the level of sophistication of information technology utilization in individual countries in the Region.
- Activity 7.5.4. Provide global connectivity to ECA Library resources through e-mail, electronic bulletin boards, INTERNET, UNBIS etc.

Immediate Objective 3.2.3: to automate and modernize the services of the ECA Library to become a model library and documentation service capable of serving the Secretariat and ECA member States better in the provision of information resources.

Output 7.6: Automated library system installed

- Activity 7.6.1: Evaluate existing hardware and software capacities and capabilities. Upgrade physical infrastructure and acquire necessary equipment.
- Activity 7.6.2: Local Area Network (LAN) established at the Library to provide both local and remote access. Dial-in access to link ECA PC users directly to the Library.
- Activity 7.6.3: Plan and phase out the retrospective conversion of the ECA Library's public catalogue and shelflists.
- Activity 7.6.4: Select and install an integrated library management system to cover acquisitions, serials control, cataloguing, circulations and an on-line public access catalogue (OPAC).

Immediate Objective 3.2.4: to enhance the co-ordination and management of the total information resources at ECA through the upgrading of the skills and expertise of the library and information personnel in line with the requirements of a modern regional library and documentation service.

Output 7.7: Trained library/information personnel



Activity 7.7.1: Arrange appropriate short and medium term training (internships, on-site training, study tours, seminars) to assist in upgrading the skills of the present personnel in the Library, the ECA divisional reference units, and the MULPOC Reference Units.

Activity 7.7.2: Arrange intensive short term courses on specialized areas of operations (documentation, informatics, records and archives management etc.)

Output 7.8: Size and calibre of library/information personnel increased

Activity 7.8.1: Review current status of skills-mix at the Library and recruit high calibre personnel capable of more efficiently performing both current and projected activities.

Activity 7.8.2: Increase the size of the library/information personnel to match the full range of envisaged information functions and services.

8. PERFORMANCE INDICATORS

- 8.1 Increased productivity and enhanced skills level of library and information personnel in utilizing automated procedures;
- 8.2 Increased accessibility to, and utilization of library information resources;
- 8.3 Increased size of holdings of official and non-official government publications and enhanced access to indigenous information resources on Africa;
- 8.4 Enrichment and increase in electronic collections/holdings (CD-ROM databases, CD-ROMs etc.)
- 8.5 Additional information resources through global connectivity (e.g. Internet);
- 8.6 Increased awareness of information resources by users through easy and timely access to printed indexes and electronic media outputs (via e-mail, electronic bulletin boards etc.);

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- 8.7 Increased outreach and contact with users, particularly in ECA member States (research institutions, universities, government offices etc.) and elsewhere; and
- 8.8 Enhanced supervisory and inspection functions over the designated UN Depository Libraries in Africa in order to make them effective outposts for information dissemination and utilization of United Nations documentation in the Africa Region. By holding the documents and other publications of the ECA and promoting their effective use, the depository libraries will help to positively project the work of the ECA.

9. PROJECT COMMENCEMENT DATE

23 February 1996

10. PROJECT COMPLETION DATE

31 January 1997

11. RESOURCE REQUIREMENTS

The following requirements are indicative of the resources which will be needed to support the clusters of expanded outputs and activities which are graphically represented in Annex II (Proposed functional structure of the ECA Library and Documentation Service). Specific outputs and activities are indicated in Annex I (Project Objectives, Outputs and Activities). While serious efforts have been made to keep the requirements within realistic ranges, it is to be noted that these represent the minimum package of requirements necessary for efficiently and effectively implementing the project. Sight should not be lost of the fact that the ECA Library today lacks very many of the normal information technology infrastructure, human resources and information resources necessary for delivering and maintaining satisfactory modern information services.

11.1 Human resources

A re-ordering of the present staffing profile will be needed to bring about a balanced and more efficient distribution of professional, para-professional and support staff to those functions and services which can directly promote information access and utilization. The present total staff of twenty one (21) (including the vacancies

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from established posts, as indicated on the manning table) has only three professionals; the remainder is made up of general service staff, few of whom are trained. Most of them have become static and somewhat stale performing the same functions for decades and with very little mobility and real specialization. The preferred profile of library personnel should be a blend of professional librarians/documentalists/systems specialists; para-professionals (cataloguers/indexers/reference assistants); and support staff (library clerks, secretaries and data input personnel). Bearing in mind that what is being aimed at is an integrated service facility capable of providing greater access to information resources, not in isolation, but in collaboration with other information sectors and units at the ECA, eliminating duplication in collections, roles, and functions and bringing about savings in operational costs (staff and materials) and also maximizing user consultation time, the post requirements of the re-organized and expanded ECA Library and Documentation Service should be as follows:

(i) Professional

Chief, Library and Documentation Service (P5)	1
Chief, User Services (P4)	1
Chief, Collection Development and Acquisitions (P3)	1
Chief, Technical Services (P3)	1
Reference Librarians/Documentalists (P2/3)	2
Systems Specialist/Data Base and LAN Administrator (P3)	<u>1</u>
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(ii) Para-professionals(with Diplomas or equivalent in in Library science and related fields)

Cataloguer/Indexer	
Reference Assistants	4
Library Assistants (for Acquisitions & Exchanges)	2
Microform Technician	1
Archivist Assistant	<u>1</u>
	12

(iii) Support Staff

Data Entry Operators (for day-to-day running of an ILS) *	6
Library Clerks	3
Secretaries/Typists/Data Clerks *	3
(*Existing library staff can be oriented to perform these roles)	<u>12</u>

Total 31

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(iv) Consultancies

In addition to the above post requirements, the following consultancies will be required:

(a) Archivist Expert - one work month to study the modalities for the archiving of documents and data at the ECA. With regard to data, possibilities of establishing a data archives as part of the regional information resources at the ECA could also be considered, noting the possible contribution of the ECA Library to such a venture (in terms of cataloguing, indexing and dissemination of records on data sets);

(b) Library Automation Expert - two to three work months for a systems professional (with hands-on experience in library automation) to work together with the staff of the Library and other systems professionals at the ECA in order to come up with the detailed implementation plans regarding the automation of the ECA Library. Since the ECA Library, when automated, will need to be linked with the other UN Regional Commission Libraries, as well as with other UN system libraries, and since it is also desirable to interface the Library with other libraries, research institutions and centres of excellence within and outside of the Africa region, the search for appropriate software packages should be thorough-going with respect to issues of compatibility. The consultant will facilitate such a detailed study and help to move the project forward.

(c) Retrospective Conversion (RECON) Project Manager or Cataloguer - the Library will need an experienced cataloguer with extensive experience in automated library catalogues to assist the Library's team of cataloguers to plan and execute the conversion of the Library's manual bibliographic records (catalogue cards, shelflists) to MARC (machine-readable cataloguing) format. The RECON Project Manager will handle this as a separate but complementary process to the overall automation project to bring the Library's files up-to-date and allow the Library to share full MARC II format with other libraries. RECON is expected to be a very labour intensive process since it has to accommodate a variety of records - bibliographic, authority, item, user, vendor, fiscal, and indexes for all fields which are to be searched in the eventual database to be created for the Library.

The RECON consultant will thus help to enforce the application of appropriate standards (AACR II) by the Library and organize the entering of bibliographic information into machine-readable record utilizing MARC records on CD-ROM (i.e. Bibliofile by Library Corporation, or USMARC database by Library of Congress). The consultant will help to download matched records from these bibliographic sources to the new database of the Library. With the estimated volume of library collections standing at almost a quarter of a million

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items and also allowing for annual growth of the collections and holdings, it can be projected that approximately 750 million characters (750 mega-bytes) will need to be created and stored. The sheer volume and complexity of the records to be identified, matched and created demands dedicated attention and expertise. The RECON Manager will be expected to get the job done within a specified time-frame rather than allow the conversion process to drag on indefinitely thus becoming an expensive, never-ending liability of the overall automation project.

Training will be required for all categories of personnel to bring them in line with the new demands and challenges of providing increased access to the information resources at the ECA. For the professional category, intensive short term courses in specialized functions are recommended. These may be in the form of study tours, internships/attachments to libraries with required specialized facilities. This is on the assumption that those assigned to perform professional duties will already have the requisite academic training and background as well as relevant work experience in the library/documentation field. Familiarity with informatics is a pre-requisite. Cross-training should also be offered to enable all the personnel become conversant with the different functions. This will help create a mass of trained information personnel capable of rendering appropriate services. Attendance at professional workshops, seminars etc. will be particularly useful channels for professional dialogue and exchange in the new developments in the field.

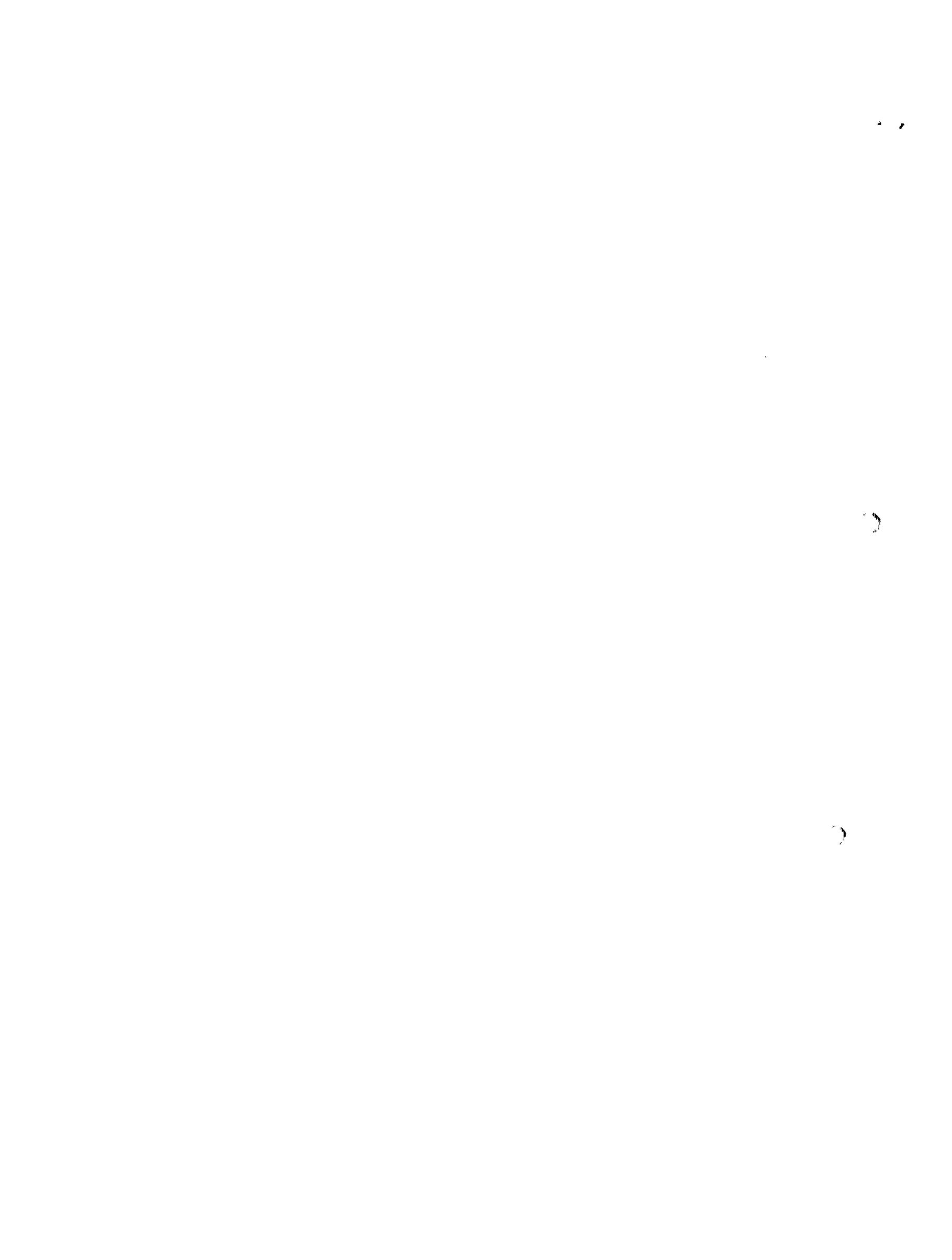
For the para-professionals, much more frequent training and up-grading of skills will be required to keep them up-to-date. In-serving training is indicated and supervisors should organize this as often as possible. Where possible, external training or study tours should be organized to expose them to current practices and broaden their perspectives on library and documentation work. Cross training will be useful to promote flexibility and mobility among this group of staff.

Training for other support staff will be modified by the introduction of new schemes (e.g. automated processes etc.). In-service training should be organized for them at appropriate intervals.

Since the eventual quality of library and documentation services will be determined by the quality of the personnel available to carry out the planned activities and outputs, no effort should be spared to ensure that library/documentation personnel acquire and get up-graded in the requisite skills so as to create cadres of skilled personnel.

11.2 Material (equipment)

In view of the present low level of utilization of information technology at the ECA Library, there will be need for increased investment in the acquisition of modern



equipment and materials to help transform Library into a model UN regional library capable not only of serving its immediate clientele (the Secretariat) but also of maintaining very high standards in information provision and dissemination among its member States. At a conservative estimation, the following will be required:

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| 1. | Microform equipment (i.e. for microfiche and microfilm) | |
| | - Microfiche reader/printer | 1 |
| | - Microform reproduction camera etc. | 1 |
| 2. | Audio-visual equipment | |
| 3. | Photocopying machine (with accessory for handling book spines) | 1 |
| 4. | Standalone PCs to accommodate CD-ROM Databases | 3 |
| 5. | Computer equipment | |

Note: the ECA Library currently has a total of eighteen (18) PCs - 12 Sirex (486s), and 6 NCRs accompanied by 7 Laserjet printers, and 11 Desk jet printers. Additionally, the Library is linked by one terminal to the ECA HP 3000 mainframe. With this configuration of computer equipment there is more than enough PCs and computer capacity to do the work. Now that the Library is wired and expected to be linked up with the housewide Local Area Network (LAN) which is expected to be activated in the third quarter of 1996, appropriate networking of the computers can be done to facilitate the installation of an Integrated Library System (ILS) in the very near future.

It should be possible to trade in some of the existing PCs in the Library for higher capacity equipment with larger memory to accommodate the bibliographic functions of an ILS covering the following:

- acquisitions and budgets
- cataloguing
- indexing and enquiries
- public access
- circulation and reminders
- serials administration

The automation of the ECA Library functions will consist of an open system, client/server architecture to be installed in a modular approach. The system as designed will be scalable, thus rendering the environment easy to expand, with all systems functions discrete.

Based on a preliminary assessment of the existing library functions, hardware and software configurations, the following is recommended:

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HARDWARE

- SUN Microsystems SPARC Server Model 5/220
- 64 MB Ram
- 2 * 1GB DD
- 2.0 GB DDS
- console and 101 keyboard
- parallel port
- 16 bit UTP Ethernet Interface Adapter

OPERATION SYSTEM

The choice could be made from any of the following:

- UNIX
- Novell Software
- Sun Solaris

WORKSTATIONS

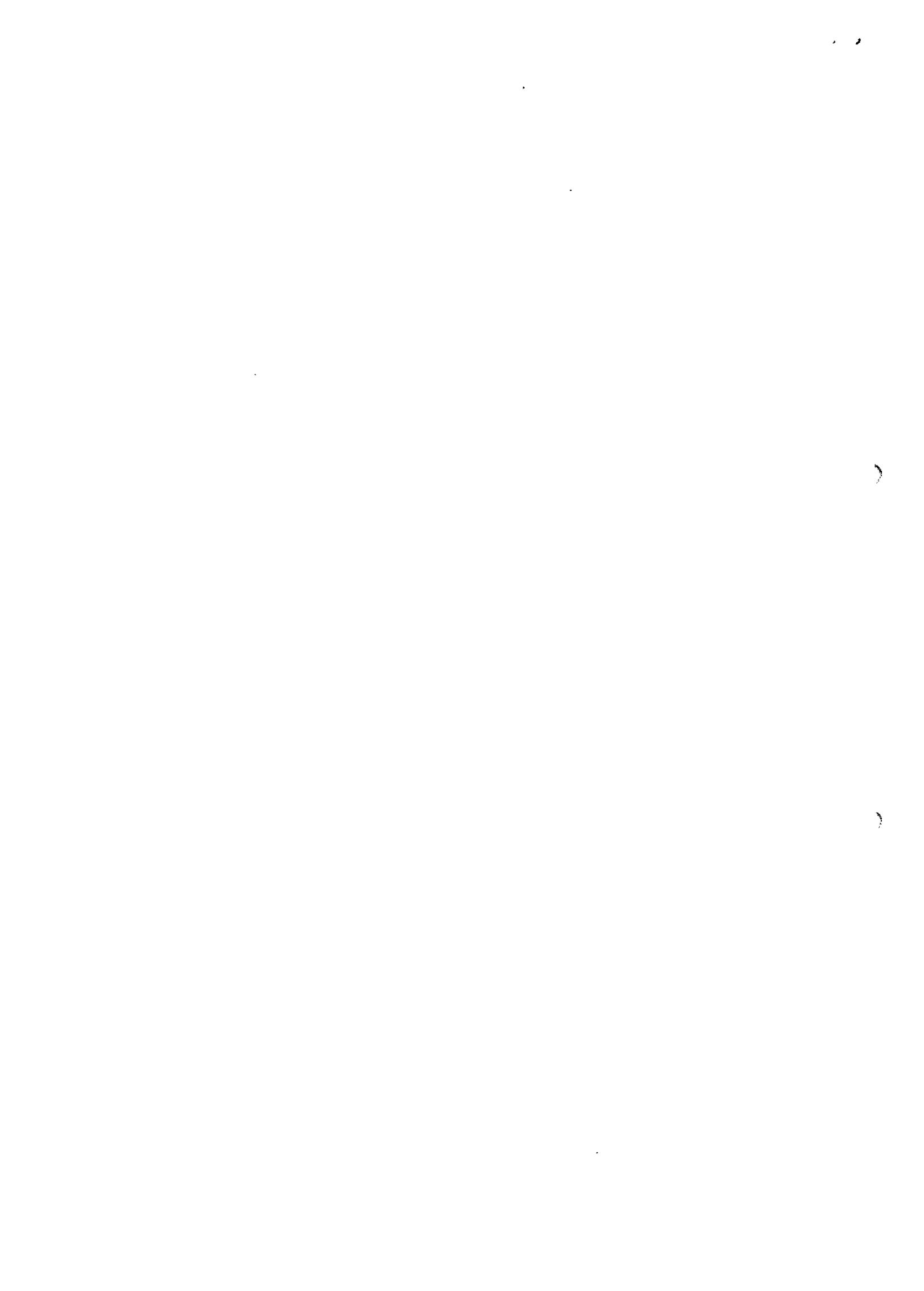
- 80486/DX2 - 50 mhz
- 8 MB Ram
- 1 * 270 MB Disk
- VGA screen
- 101 Keyboard
- Mouse
- Parallel Port
- 16 bit UTP Ethernet Interface Adapter
- MS/Windows 3.1
- TCP/IP package supporting VT/100 terminal evaluation

PRINTERS

- 1 HP Laserjet 4 Si for the LAN
- HP Laserjet 4L at the circulation counter

As far as the Integrated Library System (ILS) goes, the Team noted that there are several vendors of ILS software in use world wide, with a variety of products on the market. Popular among them are:

Erudite: Advanced Library Information System
Horizon
Dynix
Vista
Stylis



The choice of any particular one ILS will require an in-depth study of the various systems in use in order to decide which mix of packages is especially suited to ECA Library's peculiar circumstances (with special regard to compatibility issues and information exchange both in and out of the Region).

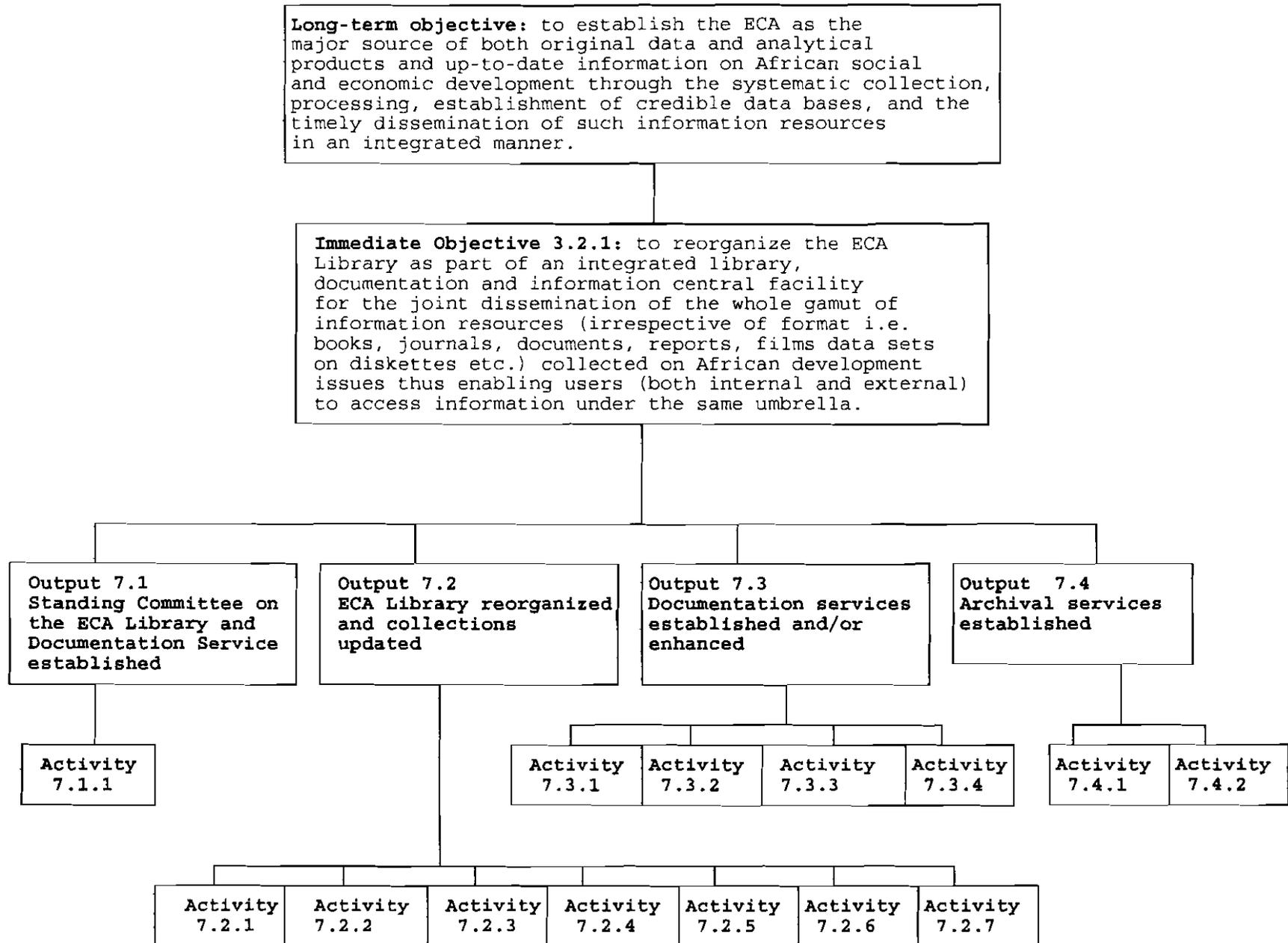
11.3 Financial: it is difficult at this stage of project identification/formulation to provide definitive figures on how much it will cost to automate, modernize and ensure adequate provision and accessibility to information resources at the ECA. The following is therefore only indicative of those components whose financing could be substantial but which are necessary to determine the success of the overall project.

- 11.3.1 Acquisition of appropriate ILS package
- 11.3.2 acquisition of Server (for the LAN and related accessories)
- 11.3.4 Acquisition of library materials (by purchase and through exchange arrangements). This will include acquisition of CD-ROM databases, etc.
- 11.3.4 Retrospective conversion (RECON) involving converting the bibliographic records from the Library's catalogue cards/sheflists to full MARC format.
- 11.3.5 Consultants
 - (i) Systems/Library Automation (4 w/ms)
 - (ii) Archivist Expert (1 w/m)
 - (iii) RECON project manager or cataloguer (initially 2 w/m)
- 11.3.6 Training
 - (i) Study/Familiarization tours
 - (ii) Specialized courses in documentation
 - (iii) Short term training in CD-ROM technology and its utilization for reference assistance
 - (iv) In-service training for cataloguers to upgrade their knowledge of bibliographic standards (e.g. AACR and others)
- 11.3.7 Equipment
 - (i) Photocopier
 - (ii) Microform equipment
 - (iii) Computer equipment (as indicated under 11.2 (above))
 - (vi) Audio-visual equipment

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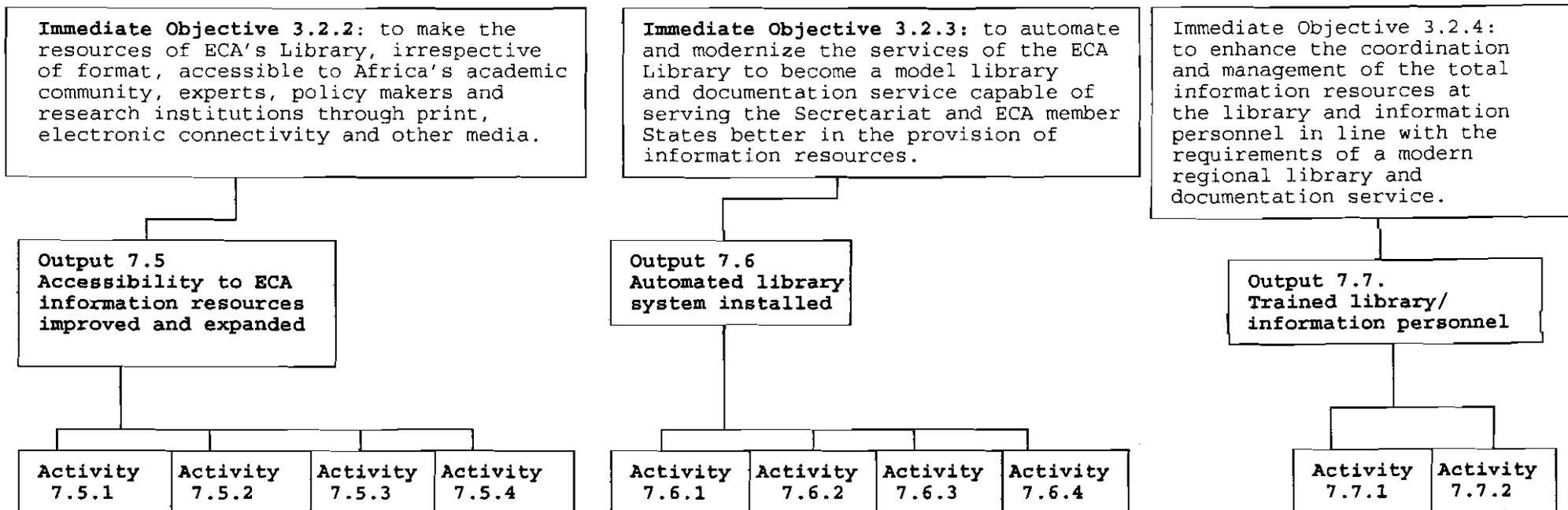
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PROJECT OBJECTIVES, OUTPUTS AND ACTIVITIES





PROJECT OBJECTIVES, OUTPUTS AND ACTIVITIES





Annex IV: Work Plan

A. Interim-measures

Since much expectation has already been built up at the ECA for improvement in present Library services (notwithstanding the existing limitations in resources) following the 'Open Space' discussions of last year, the Team recognized the necessity to keep up the momentum by instituting some interim measures/actions pending the full implementation of this project. These are briefly described below:

1. Automating the circulations process - this is a crucial process which needs to be automated as soon as practicable in view of the current bottlenecks in the loans and circulations processes at the Library. The benefits will be to:

- identify late returns and send out appropriate notices, complete with billing;
- provide statistics and reports on user transactions;
- allow Library personnel to acquaint themselves and become comfortable with automation;
- satisfy current expectations for an enhanced Library function at ECA and signal intent to tackle the problem effectively and expeditiously.

Software needed will be:

- Paradox and/or Visualbasic

Hardware needs will be:

- 2 Pentium class personal computers, each with minimum 16 megabytes of RAM, 1 gigabyte of hard disk space, 1.44 FD Drive and a CD-ROM Drive.

Human resources requirements will comprise:

- 1 Programmer/analyst at 4 work-months.

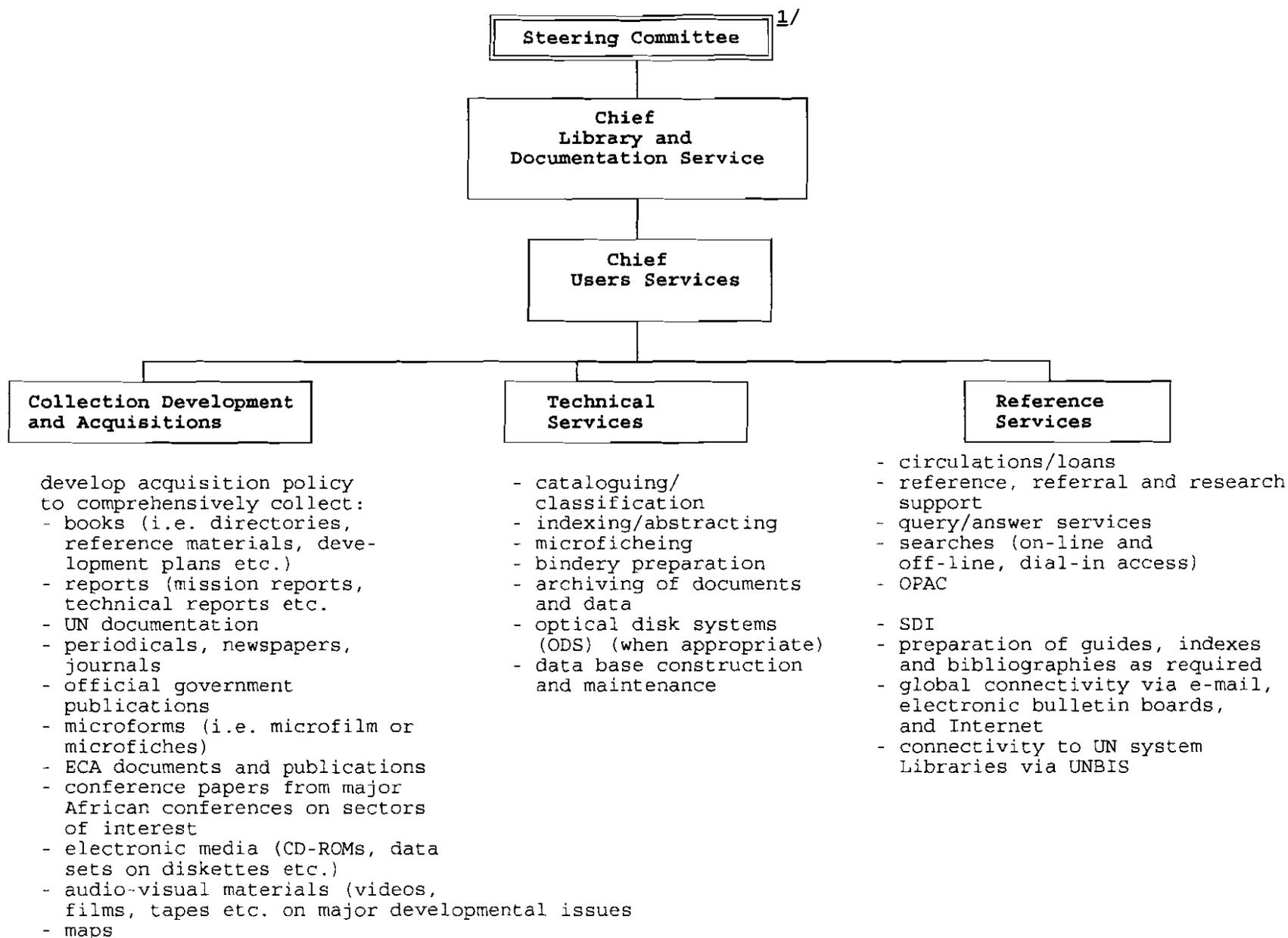
2. Providing access through CD-ROM Databases - the Library will need to acquire a number of CD-ROMS to enable it develop an electronic collection. This will enable it to fill in gaps in those information resources which it does not have physically. Major reference materials (dictionaries, encyclopedias, indexes, directories and the like) on CD-ROM format will be acquired and introduced to the Library's clientele.



Three standalone PCs (with build-in CD-ROM reading devices one for each floor of the Library) will be needed to access appropriate CD-ROM Data bases and CD-ROMs will be made available at the different reference areas of the Library. These CD-ROM Databases will constitute an effective transition, providing electronic access to major information resources while the Library progresses gradually towards the automation of its crucial functions, which could take several years.

Under the same arrangement, the Library will acquire CD-ROM cataloguing sources (e.g. MARC records on CD-ROM i.e. Bibliofile by Library Corporation or USMARC database by Library of Congress etc.) so that Library staff can begin to search and identify bibliographic records that match those of the ECA Library. Matched records could then be down-loaded into the Library's own cataloguing database. USMARC records on CD-ROM will be used to assist in converting post-1967 bibliographic records while other sources or vendors may be used for the conversion of all pre-1968 records. These interim measures will help upgrade the skills of the relevant personnel and enable them to become very closely involved in the implementation plans for the Library's eventual automation.

PROPOSED FUNCTIONAL STRUCTURE OF THE ECA LIBRARY AND DOCUMENTATION SERVICE



^{1/}Will comprise representatives of relevant ECA information sectors and services as well as users.

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