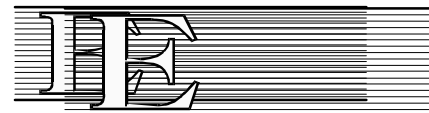




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## **ECONOMIC COMMISSION FOR AFRICA**

Second Meeting of the Committee  
on Development Information (CODI)

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### **Building the African Virtual Library and Information Network: Concepts, Issues, Challenges and Opportunities**

#### **Summary**

The African Virtual Library and Information Network (AVLIN) will be a collaborative of libraries that contribute vision, policy, principles, advocacy and professional services and use information and communications technologies (ICT) to deliver development information resources. It will be a service to Member States in capacity building in development information area. In its basic format, AVLIN will be a network of Internet-based professionally conceived services that form a web of virtual libraries. Having computerized library operations and services will be a pre-requisite capacity for participation by an institution. AVLIN will provide an enhanced information platform for African research and knowledge-based institutions and a hub for the exchange of knowledge and information among researchers and policy makers. It will provide access to e-books, policy documents, bibliographic databases, and institutional profiles. Its physical structure will include powerful search engines, collaborative software (knowledge exchange engine), and links to a variety of information objects. When it is fully developed, participating institutions may choose to be linked in a wide-area network (WAN) or use common application service providers for high value-added collaborative activities.

For maximum impact, ECA is seeking broad-based collaboration with other regional institutions in Africa and the library community.

### **The AVLIN Vision**

The African Virtual Library and Information Network (AVLIN) will be a web of networked information resources and services developed by African libraries and accessible to the people of the region and others engaged in African development sectors. It will be a means of reliable and interactive access to information from a variety of sources in easily useable formats, and sustained through collaborative and leveraged sharing of human and financial resources of all participants. AVLIN will be a collaborative project of the Economic Commission for Africa (ECA), other interested regional institutions, and the African library community. A tool for bridging the digital divide between Africa and developed world, it will enable electronic access to resources of the libraries in the region and elsewhere. Information related to the various economic and social sectors will be covered including agriculture, population, education, transport and communications, health and environment. It will facilitate the creation, dissemination and exchange of content and knowledge developed in Africa for the benefit of the wider academic, business and development community.

### **The goals AVLIN**

- To enable the building of the capacity of the African library to adopt ICT, deliver Internet-based information services, and participate in the global information revolution;
- To expand access to critical development information through institutional networking and linkages, especially in the context of the fledging African regional cooperation and integration framework;
- To expand content development and content provision in the region;
- To create sustainable platform for exchange of knowledge objects among researchers and policy makers;
- To develop the capacity of the AVLIN clientele (African policy makers, professionals, managers, etc.) to use information as a developmental resource; and
- To influence public policy by indicating a role for libraries in national and regional information policies and strategies.

## **Why AVLIN ?**

In 1999, ECA organised the highly successful first African Development Forum (ADF, 1999), which brought together high level policy makers and professionals to discuss the challenges of ICT and globalisation in the context of African development. This conference identified policy options and priorities for accelerating the development and application of ICT in African economies. ECA is also executing the African Information Society Initiative (AISI), a regionally mandated programme on ICT and development, and facilitates the Partners in Information and Communications Technology in Africa (PICTA), a consultative group. AVLIN is designed to serve as an executing tool of these high level initiatives. Libraries being well-established purveyors of knowledge and information are in the best position to propagate the essence of ICT in development across the whole economically active spectrum of society, thereby concretizing the benefits ICT for the African people.

ECA is aware of, and welcomes the existence of several initiatives in the areas of digital libraries and virtual libraries in Africa. AVLIN is not designed to replace them, rather it will strengthen them as well as stimulate the development of new initiatives across the region. It will be an incubator as well as a network of virtual library and information initiatives, and will exist to develop and share knowledge and experience in the area.

AVLIN will seek to accommodate the African development situation and ensure that it brings the benefits of the Information Society to the people of Africa by promoting the establishment of access centres in relevant public and research institutions.

## **Features and Opportunities**

- Connections to AVLIN will be through various telecommunication options with the necessary capacity to provide regular and reliable access to a variety of systems and content.
- Concerted content development by each member of the network.
- International cooperation on standardization and system development to ensure interoperability.
- Vigorous capacity building and competencies development at individual, institutional, national and regional levels.

- Provision of a variety of information access options, including dial-in and WWW graphical Internet access.
- Free access to AVLIN information resources by members and for-a-fee utilization of commercial online resources accessible through the network.
- An interface which permits users to request, receive and exchange information will be an integral element of the AVLIN interface.
- Ability to search multiple databases with one request in the main languages used in Africa.
- Training, assistance and support for AVLIN users and libraries will be emphasized.
- Information organized in a user-friendly way to permit easy retrieval.
- Resources will be placed on AVLIN according to an approved collection development policy, however, content will be free of censorship.
- Free access to information resources by AVLIN partners, subject to licensing and intellectual property considerations.
- Access to government and intergovernmental information resources will be facilitated.
- Access to development information that is of interest and use to Africa.
- Encouragement of establishment of digital libraries, databases and special information

### **Elements of Sustainability**

- Ownership of content, hardware, operational strategies and human resources by partners and participants.
- Widespread awareness of AVLIN throughout Africa.
- Assistance will be provided on fundraising for project development and execution.
- Funding will be collaborative and innovative with a mixture of donor-institutional and public-private partnerships.
- AVLIN will facilitate research and developmental activities in both infrastructure and content resources.
- Mechanisms for evaluation, quality assurance and accountability will be put in place and used.
- Participation by a wide variety of interest groups, both public and private will be encouraged.

- Basically, making an online catalogue available through AVLIN will be synonymous with connecting it to the Internet

### **Technical Framework**

AVLIN will be a distributed network, meaning that its databases of information resources will not all be loaded onto a computer system of a single institution. Rather, databases, digital libraries and other information resources will be housed locally and AVLIN connects the user to the computer where the information resides.

Two ways may be used to make a library's resources accessible through AVLIN:

- connecting the local library system to the Internet; or
- adding the local library catalogue and other relevant content to an online catalogue or computer that is already connected to the Internet and AVLIN in a union catalogue arrangement which can be organized nationally or by sectors.

The use of standard metadata formats will be encouraged.

Access to information will be by dial-up from homes, libraries or offices using a computer and modem or by workstations located in Internet-connected institutions

### **Principles and Place of AVLIN in the Existing ICT Programmes**

The primary beneficiaries of AVLIN activities will be the African people in all walks of life. As a public good, AVLIN will be a vehicle for libraries to use to provide equal access to information and concretize the grassroots strategies and benefits of African Information Society Initiative (AIS).

The network will not become an institution. It will be an instrument of capacity building in the development and technical information field. AVLIN will be managed collaboratively by the Commission, development agencies, and the African library community, including regional organs of International Federation of Library Associations and Institutions (IFLA) and International Federation for Documentation and Information (FID). ECA's role will be facilitative and collaborative.

### **Dimensions of AVLIN Activities**

Five dimensions on which attention will be focussed are: infrastructure; databases and content; training, advocacy and public awareness; funding; and governance.

### **Infrastructure**

ECA collaborating with participating institutions will design and implement common interfaces to the AVLIN site, advise and advocate on infrastructure, and contract firms for the provision of common hardware, software and services, if any.

Private and public sector donors will provide equipment and telecommunications services at local sites, manage designated networks and provide relevant content.

Participating institutions will equip their libraries and information systems with requisite hardware and software, obtain connections to the Internet, and maintain local telecommunications links.

### **Databases and Content**

ECA will advise on information processing standards and systems; and approve projects related to the addition of commercial information resources.

African national libraries, government agencies and NGOs will provide relevant information resources, including government publications, digital libraries, resource banks, continuing education programmes, and get information resources on the Internet.

Libraries will have full authority over what resources are added, when they are added, when they are removed, and what search engine is used.

Libraries will bear all the costs related to the processing, storage and management of information resources in all formats, including country specific information and reference resources.

Libraries may serve as hosts for non-library resources with the contract specifics such as how the resources are loaded, kept current, and paid for by the user of the resources.

**Training, Advocacy and Public Awareness**

ECA will recruit and train consultants/advisers/trainers who will be available for the region, prepare training materials to be used, provide referrals in the area of training, evaluate training programmes, and provide worldwide publicity for AVLIN.

Libraries will provide training as much as possible for staff, library users and community groups, and provide local publicity about its programmes and those of AVLIN.

**Funding**

ECA will seek funding from donors and other sources to provide facilitative infrastructure and services, seek collaboration with similar institutions, and advise participating libraries on funding and fundraising for new development projects.

Local libraries will foot directly or indirectly all costs of library resources, hardware, software, and connection to the Internet.

Government agencies and NGOs will pay all costs of maintaining information resources that promote their programmes which are placed on Internet-accessible hosts.

**Governance**

ECA along with collaborators will set up a technical advisory body and rule of participation, sign contracts for common access infrastructure, facilitate policy decisions and seek implementation action from partners.

National/sub-regional institutions and their libraries will be in total control over their own systems, content and connection to the Internet and other libraries.

ECA and professional library associations will oversee and coordinate all library resource sharing activities including operational networking.

AVLIN technical advisory body will provide technical advice on design issues related to infrastructure, databases, content and interfaces; advise and approve all policies relating to AVLIN, including principles, goals and strategies.

AVLIN staff will consist of project manager, coordinating librarian, system administrator, and consultants ( for standards, training, concepts, planning and development).

There will be a need for periodic evaluation. The evaluation report will present evidence of, and offer additional insights into, the effectiveness of strategies and instruments applied in execution of the aspects of the project already undertaken, and will also provide perspectives and guides for possible improvements in the networks mode and intervention methods used. It will also present appraisal of AVLIN's prospects as an instrument, and its future direction. The report should aid in reshaping thoughts on the issue of effective strategies and instrument for intervening in further capacity building processes and service delivery. Importantly too, the report will afford a much needed reference point for re-surveying the challenges facing capacity building in the information field in the region.

### **Feasibility and Possible Barriers**

The project will present a long-term challenge. A three year pilot phase operation should be carried out first to gain experience for wider application. Five possible challenges:

- Financial resources may be difficult to obtain, especially as aid-giving is becoming less and less popular. In-country sourcing of funds remains the most sustainable way to build and maintain capacity, but this is an uphill task for libraries.
- Challenge of building and retaining relevant technical competencies and skills. Poor salaries and benefits, and weakened educational programmes are obstacles.
- Short-termism: Emphasis on quick short-term results may hamper performance. Long-term objectives and perspectives should be emphasized.
- Ensuring complementarity with related projects: This is important in collaborative projects. Complementarity among the institutions engaged in the various aspects of information and communication technology for development and application area will be emphasized to ensure sound intervention. Consultation, coordination and effective partnership will be required.
- There is always a strategy challenge inherent in regional programmes and projects. If this project fits neatly into ECA's programme and those of its collaborators, it will have greater chances of success. To achieve the strategic fit, there would be need for the project to pass specific coherence tests, including coherence:
  - between ECA's various instruments of policy;

- between ECA's and Member States' policies;
- between various regional policies and projects;
- between ECA and other international bodies working in the area; and
- between policies of ECA and participating institutions.

### **Preliminary Tasks**

- Identification of strategies for donor participation, the political and institutional arrangements required, and the ways to utilize individual expertise;
- Systematic identification of the information needs of target users;
- Strategies for information dissemination and exchange among partners should be developed to overcome the difficulties associated with communications in Africa;
- Systematic elaboration of desired impact and utilization goals should be done; and
- Methodological design and identification of pilot projects.

**Proposed Implementation Outline**

<b>Phase</b>	<b>Time Frame</b>	<b>Remarks</b>
Conceptualization - preparation of concept paper, - Technical workshop and consideration at CODI-2, and - Setting up a steering committee and general guidelines.	January 1999 to September 2001	In process
Preparatory Activities - First meeting of the steering committee, - Feasibility studies, - Identification of, and contact with Partners and Pilot institutions, - Fundraising activities begin, and - Planning activities starts.	September 2001 to March 2002	ECA to provide seed funds.
Pilot Implementation - Second meeting of the steering committee, - Pilot implementation plan completed, and - Pilot implementation begins.	March 2002 to June 2003	Pilot may include at least 2 institutions per sub-region and should involve libraries from various levels of ICT development.
Evaluation of Pilot Phase - Evaluation studies and report completed, and - CODI-3 considers report.	June 2003 to September 2003	A governance activity.
Full Implementation - Third of meeting of the steering committee, - Full implementation plan completed, and - Actual implementation activities begin.	January 2004	This will depend on conclusions reached after the Pilot phase.
Progress Report	June 2005 to September 2005	
Full Project Review	September 2011	After 10 years.