

## **THE EAST AFRICAN COMMUNITY ELECTRONIC LIBRARY: DOCUMENTING THE REGIONAL INTEGRATION PROCESS**

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Presented at the 2<sup>nd</sup> International Conference on African Digital Libraries and Archives (ICADLA-2), University of Witwatersrand, Johannesburg, South Africa, 14<sup>th</sup> – 18<sup>th</sup> November, 2011

### **Abstract**

The East African Community (EAC) is a regional intergovernmental organisation with a membership of five countries. Since its establishment in 1999 the Community has generated a lot of information and knowledge through its various integration processes of a Customs Union, Common Market and Monetary Union. The Community has therefore embarked on the process of digitizing its information resources and knowledge and making these available online. The existing library will be transformed into an electronic information resource centre that will act as a central access point for EAC information and knowledge. The digitization project is a collaborative effort of the various organs and institutions of the Community, aimed at documenting the East African regional integration process for preservation and prosperity. The project will benefit the various stakeholders, including partner states, students and researchers. The paper will discuss the planned digitization process, methodology and anticipated challenges.

### **Background**

The East African Community (EAC) is a regional intergovernmental organization established under Article 2 of the Treaty for the Establishment of the East African Community that came into force in July 2000 (East African Community, 1999). The membership of the Community comprises the Republics of Burundi, Kenya, Rwanda, Uganda and the United Republic of Tanzania. The EAC aims at widening and deepening cooperation among the partner states, in the political, economic and social fields, for their mutual benefit. The EAC countries established a Customs Union in 2005 and a Common Market in 2010 (East African Community, 2005, 2010), and are expected to achieve Monetary Union by 2012 and a Political Federation thereafter.

Since its establishment, the EAC has generated a lot of data, information and knowledge including Summit guidelines, Council policy decisions, technical and mission reports, policy briefs, speeches, photos, documentaries and various studies on the integration process. These records represent the corporate memory of the EAC integration process, providing information on its achievements. Under Article 71(f) of the EAC Treaty (East African Community, 1999), the EAC is responsible for promoting and disseminating information on the Community to the stakeholders, the general public in the partner states and the

international community. The information resource centre plays a central role in implementing this article.

### **EAC Information Resource Centre**

Shortly after its establishment the EAC began to focus on the need to strengthen its information and communications systems in order to enhance the capacity of the Council to deliver its co-operation programmes. An information Communications project was implemented, and an Information Resource Centre was among others components established in 1999. The EAC Information Resource Centre was established with the aim of collecting, organizing and disseminating EAC information to the stakeholders to support the EAC integration process.

Since 2000, the EAC Information Resource Centre has initiated and completed a number of projects aimed at finding suitable mechanisms for disseminating information to partner state stakeholders including a computerized library catalogue; a directory of information sources database; printing and publishing of EAC reports; a bibliographic database of Lake Victoria Basin information resources; and the establishment of EAC deposit libraries in partner states.

A project on "Information sharing and networking with the partner states" is currently being implemented by the Centre. The project is establishing Information Resource Centres in EAC coordinating ministries in the five partner states as central access points for EAC information and the EAC information systems have been mirrored in these centres. It is envisaged that, when the project is completed, information will be easily accessible for stakeholders in partner states, and implementation of decisions will be faster in partner states.

### **What is a digital library?**

A number of definitions have been advanced by various authorities including the European Union, Library of Congress, National Diet Library and Wikipedia. According to Wikipedia, (2011) a digital library is a library in which collections are stored in digital formats (as opposed to print, microform or other media) and are accessible by computers. The digital content may be stored locally or accessed remotely via computer networks. A digital library is also referred to as a type of information retrieval system. Candela (2008) defines a digital library as an organization, which might be virtual, that comprehensively collects, manages and preserves for the long term rich digital content, and offers to its user communities specialized functionality on that content, of measurable quality and according to codified policies. The terms "electronic library" or "virtual library" are also used interchangeably. A distinction is often made between content that was created in a digital format, known as "born digital", and digitized objects which are the digital form of physical collections.

### **Why digitize?**

According to Geertz, (2000), digitization has numerous advantages, including needing less physical space and offering no boundary, multiple access for the same resource; providing a user-friendly interface for information retrieval; digitization also adds value to certain types

of collections, such as images, by enhancing legibility and removing discoloration. Ubogu and Pickover (2011) further enumerate various benefits of digital projects.

In addition to the global trend there are particular reasons that have inspired the need to digitize the EAC information knowledge sources. These reasons include:

- **Institutional reasons**

In addition to the organs of the EAC, that is the Summit, Council, Secretariat, Assembly and Court, the institutions of the community have been growing in numbers. Currently there are five institutions that are fully operational and more have been proposed for establishment. The partner states have established specific ministries responsible for coordinating EAC Affairs, and other regional professional bodies such as the East African Law Society, East African Publishers Association and the East African Trade Union Association have also been established. These various organs, institutions and associations require information about the EAC in order to follow up developments in the region.

- **Learning from past experience**

The defunct 1966-1976 East African Community (which comprised three countries, Uganda, Kenya and Tanzania) had a wealth of information spanning several decades. While part of the information is still maintained in the Tanzanian National Archives, it has not been digitized and is not easily accessible, yet the information is quite relevant and vital for the new community to build on what previously existed as it takes shape and consolidates the integration process.

- **Expanding membership**

The original founders of the EAC were Kenya, Uganda and Tanzania; however, in 2008 they were joined by the Republics of Rwanda and Burundi (East African Community Summit, 2007). This year has seen new applications submitted from the Republics of Sudan (East African Community Council, 2011). Whenever a new member joins, information is needed to update the new member on the status of the integration process. This entails reprinting all information, which is not feasible given the amount of resource material involved.

- **The widening and deepening of the integration process**

The EAC is deepening its integration process at a faster pace than was originally anticipated. In 2005, the community achieved a Customs Union, in 2010 a Common Market and Monetary Union are expected to be operational in the next two years. The information that is generated at every stage of integration needs to be well documented, preserved and disseminated.

- **Tripartite Free Trade Area**

The Heads of State for member states of the three intergovernmental organizations, EAC, COMESA and SADC, have agreed to work together to develop and enhance implementation of tripartite integration programmes (East African Community Summit, 2008). The negotiations for the Tripartite Free Trade Area were launched on 12 June

2011 in Johannesburg, South Africa, and preparations are progressing well towards the commencement of the negotiations, (COMESA, 2011). Information on the EAC integration programme therefore, needs to be easily accessed and shared by the tripartite members.

▪ **Technical and operational reasons**

The cost of printing and publishing documents continues to skyrocket and it is not possible to satisfy the growing information needs of the various institutions and individuals. The EAC deposit libraries, including libraries in coordinating ministries in partner states, that act as central access points for EAC information, are very few in number and cannot effectively provide information to wider sections of the community.

The paragraphs above provide general justification for digitizing and documenting the EAC integration process. In addition, digitizing EAC information resources would secure EAC heritage for future generations and would extend and enhance a functional service for EAC citizens, partner states, researchers, students and others to identify and use the digital content regardless of their location. The EAC digitization project will further provide a model for use and cooperation between by other regional intergovernmental organisations in Africa that plan to start digitization projects.

**The EAC Electronic (Digital) Information Resource Centre**

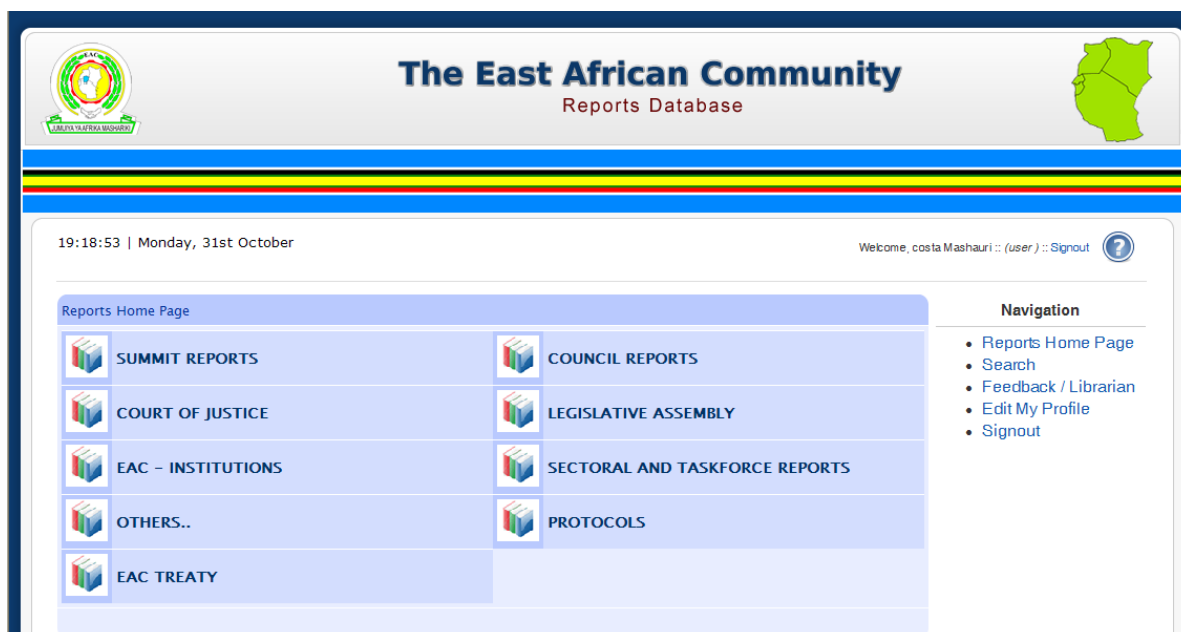
Digitizing the EAC information resources is being implemented in two major phases with sub-phases, subject to availability of resources. The major phases include the digitization EAC Reports (policy documents), 2006-2010, transforming the current Information Resource Centre into a digital information resource Centre 2011-2016.

**Phase I, 2006-2010: Digitizing of EAC reports**

This phase was aimed at digitizing the EAC reports, Summit, Council policy decisions and technical and mission reports. The objective of the project was to provide easy access, follow up and implementation of decisions and directives emanating from of the organs of the Community, such as the Summit of the Heads of States and Council of Ministers. The process of digitizing the reports included

- project proposal writing;
- sourcing for funding;
- collecting and organizing all reports;
- engaging a consultancy /developing a database; recruiting of temporary staff;
- scanning of all documents; and
- data entry, editing and commissioning of the database.

The project was successfully completed and an on-line full text database of EAC policy reports was commissioned on the local area network in 2008. In 2009-2010, the database was redeveloped and expanded with a better interface and made web-based ([http://www.eac.int/reports\\_database](http://www.eac.int/reports_database))



Source: EAC Reports Database

The database has proved to be a very useful tool especially for those users who are responsible for following up and implementing decisions and directives of the organs of the Community.

### **Phase II, 2011-2016: Transforming the existing resource centre into an electronic Information Resource Centre**

In view of the reasons advanced for digitizing the EAC Library the EAC Development Strategy 2011-16 has set out broad strategic goals for transforming the current Information Resource Centre into a digital Information Resource Centre (East African Community, 2011).

#### **Vision**

Documenting and preserving the EAC regional integration process for prosperity.

#### **Goal**

Preservation and promotion of the EAC integration process and achievements through the establishment of an electronic Library

#### **Mission**

The mission of the electronic Information Resource Centre is to locate, collect, digitize, preserve, and make easily accessible EAC knowledge on regional integration and achievements.

#### **Broad objective**

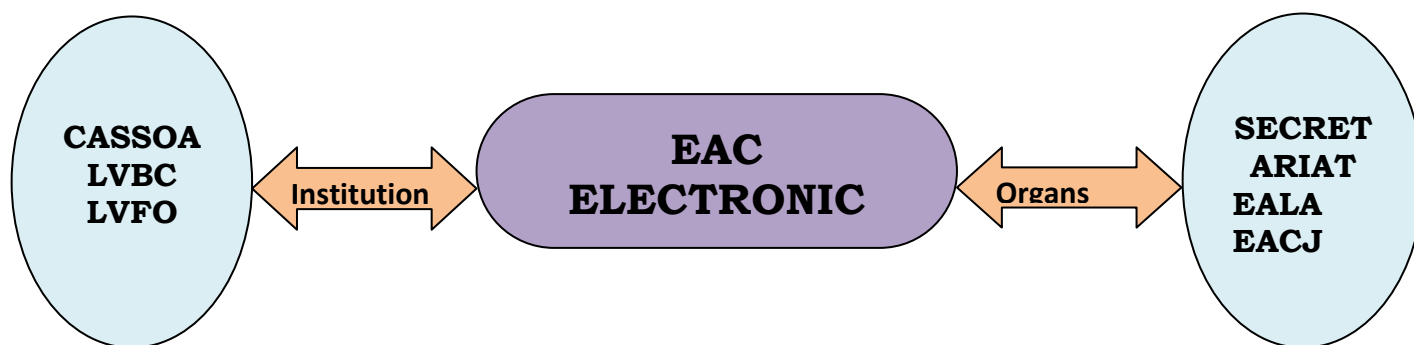
The broad objective of the project is to develop a digital museum documenting the EAC integration process, accessible from a single point. The project aims at digitizing and providing online access to the EAC's cultural heritage to remote users (policy makers, researchers, students and the general public) as well as preserving the EAC institutional

memory for posterity. The digitized collections are expected to chronicle the regional integration process of the East African Community.

### Collaborative venture

The development of the EAC electronic library is a collaborative project between the organs and institutions of the EAC, i.e., Secretariat, East African Court of Justice (EACJ), East African Legislative Assembly (EALA), Lake Victoria Basin Commission (LVBC), East African Fisheries Organisation(EAFO), and East African Civil Aviation Safety and Security Oversight Agency (CASSOA).

Figure1: EAC collaborative model



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### What comprises EAC integration knowledge?

EAC integration knowledge comprises various information resources including treaties, protocols and memoranda of understanding, development strategies, reports of policy organs, technical and expert reports, studies, speeches, parliamentary debates, court rulings, photos, video and documentaries of key events and milestones, maps, architecture drawings and similar source material. These resources document research, projects, directives and decisions that have been generated by the various organs and institutions, while promoting the integration agenda of the community.

Developing the electronic library is planned to proceed step by step and to be implemented in sub-phases. Phase I will be a feasibility study, phase II will digitize the resources of the three organs and phase III will cover the EAC institutions.

### Phase I (II) 2011-2012 Feasibility Study

The first phase will be mainly data collection from institutions and organisations that are implementing digital library projects. Staff from the library and information technology departments will carry out study visits to those key institutions and organizations that are implementing digital libraries, such as the European Union (an intergovernmental organisation similar to the EAC), the Library of Congress and other institutions. The team is expected to learn from best practices of the European Digital Library initiative (European Union, 2011) and the Library of Congress National Digital Library Project

(<http://memory.loc.gov/ammend/dli2/html/lcndlp.html>). The study visits will gather information on the planning of digital libraries, including:

- planning tools;
- processes and procedures;
- workflows;
- resources required ( staff, finances);
- systems- equipment and software;
- standards for metadata;
- policies;
- access and security;
- maintenance;
- sustainability;
- institutional framework to manage and implement the project;
- any other information that is relevant.

## **Phase II 2012-2016: Digitising the resources of the three organs**

### **Preparation for digitisation**

Data collected from Phase I and principles and procedures that have been used in various digital projects elsewhere will form the basis for preparing Phase II of the EAC digital project. Some of the principles such as operation procedures, the digital information cycle, governance and management are discussed below.

### **Operating procedures and quality management**

To effectively reach standards that satisfy quality requirements, operation procedures and management are necessary to guarantee the quality of digitization results. Establishment of standard operation procedures also helps reduce cost on human and material resources. Quality management complements operation procedures as it inspects the accuracy and efficiency of digitization work. EAC plans to adopt the approach of learning from experiences and the standard operation procedures in place in other institutions and organizations. Care will be taken to supplement and improve procedures as may be required to meet the historical context and the logical requirements for documenting the EAC integration process.

### **Digital information Cycle**

According to Wang and Chen (2010), information, like all living things goes through a similar life cycle of creation, processing, storage and reutilization. Operation procedures in digital archiving also follow the digital information cycle, from non-existence to existence. Wang and Chen divide the digital information life cycle into four stages: data creation, data management; data preservation and data provision.

While the EAC digitisation project will take into account the four stages of digital information life cycle, other digital archiving operation procedures that have been used by different countries and institutions such as the Open Archival Information System (OAIS) reference model will also be considered.

### **Management of the project**

The success of the EAC digital project will depend upon the building of a strong foundation that will provide suitable and dynamic governance, with the necessary leadership to move the project forward and qualified management and staff working together to meet established goals. The governance and management model chosen will

- be designed to ensure that all stakeholders, including users, have the means to participate in the activities of the project and to set its goals and priorities;
- ensure that everyone involved clearly understands who is responsible for what;
- be regularly evaluated, particularly as the project moves through its initial phases of development.

Two main components in the governance and management structure of the digital project are planned: a steering committee composed of the Deputy Secretary General, the Registrar of the Court, Clerk of the Assembly, Executive Directors of Institutions and Director of Human Resource and Administration; and a technical working group, composed of members from departments of legal, records and archives, information and public relations, information technology and the library and support staff.

### **Infrastructure**

Suitable infrastructure to support the project products and services will be selected; issues of hardware and software will be critically examined, and the best known examples of software such as Greenstone Digital Library software, DSpace, Eprints and others will be compared and the most suitable selected.

### **Standards and policies**

Standards for the management of the digital information resources and policies of various aspects of digital knowledge, such as property rights and ownership of content, will be clearly spelt out.

### **Marketing and communications plan**

Strong marketing and advocacy campaigns to support the project and its collaborative partners will be put in place.

### **Budgets and time schedules**

There is a need to plan the scale of budgets to be invested in the digital project as well scheduling tasks to enhance work efficiency and performance.

### **Capacity building**

There is limited staff capacity, both in numbers and the required skills to plan and implement the EAC digitisation project. Efforts will be made recruit experts to support the project while various kinds of training will be conducted for the existing staff to acquire the relevant skills.



### **Project proposal and consultancy**

The report from Phase I and analysis of the preparation elements will form the basic input for developing the terms of reference for engaging a consultancy. The consultancy is expected to develop a five-year strategic framework and action plan for developing and implementing the electronic Information Resource Centre. The strategic plan is expected to include guidelines, tools, recommendations, infrastructure, architecture, standards, metadata, policies and strategies, human capacity, training requirements, funding mechanisms, sub-projects and implementation schedules among its elements.

### **Implementation**

The implementation phase will involve recruitment of an expert, key staff to key and encode texts, acquisition of equipment and installation of infrastructure. The established electronic library is expected to be launched in 2016. Digitisation of EAC institutions will follow as the next sub-phase.

### **Challenges**

Given the collaborative nature of the project involving different players, and the size of the project, a number of challenges are expected to be encountered during the preparation and implementation phases. These may include:

- lack of digitization policy, guidelines and knowledge;
- limited appreciation of the importance of the project and resistance to change;
- funding, with regard to the capital outlay for equipment, information technology infrastructure, that is required to start the project and the recurrent operating costs;
- insufficient human resource capacity to implement the project.

### **Conclusion**

Developing an electronic library to document the regional integration process is crucial for preserving and providing access to East African knowledge integration for future generations. However, there are both challenges and opportunities in implementing such a project. Learning from best practices to avoid the same pitfalls, will be crucial right from the start of the project. Sensitizing and raising awareness of the importance of the project and getting the buy-in of management is important for obtaining support from the decision makers. Involving all the key players at the design stage and at all other stages of the project will ensure team work and success of the project. Capacity building of the team should be a continuous process

While implementation of the project envisages collaboration and support from development partners, having relevant digitisation policies in place and the sustainability of the project should factored in at the inception of the project.

**References:**

- Candela, L. 2008. The DELOS Digital Library Reference Mode: foundations for digital libraries. Version 0.98, (PDF) (DELOS- European Network of Excellence on Digital Libraries).
- COMESA. 2011. *Final communiqué of the 15th Summit of the COMESA Authority of Heads of State and Government*. Lilongwe, Malawi.
- East African Community.1999. *The Treaty for the Establishment of the East African Community, Arusha, Tanzania*.
- East African Community .2005. *The EAC Customs Union Protocol, Arusha, Tanzania*.
- East African Community. 2007. *Report of the 5<sup>th</sup> Extra-Ordinary Summit of the East African Community Heads of State*. Kampala.
- East African Community.2008. *EAC Common Market Protocol, Arusha, Tanzania*.
- East African Community. 2008. *Report of the 9<sup>th</sup> Summit of the Heads of State*. Kigali.
- East African Community. 2011. *Report of the 23<sup>rd</sup> Meeting of the Council of Ministers, Arusha, Tanzania*.
- European Union. European Union Digital Library initiative.  
[http://ec.europa.eu/information\\_society/activities/digital\\_libraries/index\\_en.htm](http://ec.europa.eu/information_society/activities/digital_libraries/index_en.htm). Accessed October 03 2011.
- Gertz, Janet. 2000.Selection for Preservation in the Digital Age. *Library Resources and technical Services*. 44(2) (2000):97-104
- Greenstein, Daniel I., Thorin, Suzanne Elizabeth. 2000. *The Digital Library: a Bibliography*. Digital Library Federation.
- Library of Congress. Library of Congress digital library project.  
<http://memory.loc.gov/ammend/dli2/html/lcndlp.html>). Accessed 25 September 2011.
- National Diet Library. 1998. *The National Diet library electronic concept*. (PDF)  
<http://ndl.go.jp/aboutus/elib-project.html>. Accessed 03 October 2011
- Ubogu, F and Pickover, M. 2011. Digital library and archives developments in Africa. White Paper submitted for the Digital Library for the Maghreb Workshop, Washington, DC, January 24-25, 2011
- Wang, Ya-Ping and Chen, Mei-Chih Chen. 2010. *Digitization procedures guideline: integrated operation procedures*, Taiwan: Taiwan e-learning and Digital Archives Program
- Wikipedia. 2011. [http://en.wikipedia.org/wiki/Digital\\_library](http://en.wikipedia.org/wiki/Digital_library) Accessed 29 September 2011.