



**EAST AFRICAN COMMUNITY SECRETARIAT**

**REPORT OF THE STAKEHOLDERS WORKSHOP**

**ON THE**

**DETAILED PRE-INVESTMENT ANALYSIS/STUDY ON EAST  
AFRICAN COMMUNITY BROADBAND ICT INFRASTRUCTURE  
NETWORK (EAC-BIN)**

**Kibo Palace Hotel  
ARUSHA, TANZANIA**

**24<sup>th</sup> Sept 2009**

**EAC SECRETARIAT  
ARUSHA, TANZANIA  
Sept 2009**

## **1 PRELIMINARIES**

### **1.1 Background Information**

The Stakeholders Workshop on the East African Community Broadband ICT Infrastructure Network (EAC-BIN Workshop) was organized in fulfilment of the Terms of Reference of the EAC-BIN Detailed Feasibility Study. The purpose of the workshop was to allow stakeholders to validate the findings and recommendations of the study

### **1.2 Opening Remarks**

#### East African Community Secretariat

In his opening remarks, the Director of Planning and Infrastructure at the EAC Secretariat welcomed the participants to the workshop and gave the background information on the EAC-BIN project. He called upon the participants to participate effectively during the workshop and expressed the commitment of EAC towards regional ICT infrastructure development.

#### African Development Bank

The Chief ICT Engineer at the African Development Bank (AfDB or the Bank) explained to the workshop the role of AfDB in ICT development in Africa. In particular, he explained the Bank's role in the achievement of the five goals of the Connect Africa Initiative. With respect to the EAC-BIN project, he outlined that the Bank's involvement in the project began in January 2008 and culminated into the signing of a Grant Agreement with EAC in June 2008. He called upon the stakeholders to support the project.

### **1.3 Participants**

The List of Participants at the workshop are in Annex 1.

### **1.4 Adoption of the Agenda**

The Agenda was presented and adopted as attached in Annex 2.

## **2 PRESENTATION OF THE DRAFT FINAL REPORT OF THE EAC\_BIN STUDY**

The Consultant gave presentations on the Draft Final Report as in Annex 3 (EAC-BIN Workshop Presentations). The presentations covered Executive Summary, Technical Network Design, Economic and Financial Analysis,

Environmental Impact Analysis and the Legal, Regulatory and Institutional Matters.

### **3 DISCUSSIONS ON THE DRAFT FINAL REPORT**

After the presentations, stakeholders were given the opportunity to make comments, ask questions and make recommendations on the Draft Final Report. The EAC Secretariat and the consultants responded to the comments and questions as appropriate. The following are what transpired during the discussions.

#### **3.1 Technical Network Design**

##### **The Workshop noted that**

- (a) In a number of cases the technical data on optical fibre cable (OFC) routes, rollout completion dates and submarine cable network connectivity to the hinterland is not correct
- (b) The proposed network does not adequately address the requirements of Connect Africa Initiative – Goal 1 (i.e. to provide broadband connectivity to all major cities and towns in Africa by 2012). In particular, the city of Nairobi is not included in the technical network design
- (c) The distribution of international traffic to be carried by the network is not realistic. For example, it is only Burundi which will have all of its international traffic carried by the network

##### **Therefore, the Workshop recommended that**

- (i) The consultants should obtain the most recent data to update the technical design
- (ii) The proposed network should provide direct links to national capitals and major towns in the region in accordance with the requirements of Connect Africa Goal 1. In particular, the city of Nairobi should be included in the network design
- (iii) The network traffic dimensioning should cater for both intraregional traffic and more international traffic from the region.

#### **3.2 Economic and Financial Analysis**

The Economic and Financial Analysis concluded that the project is financially and economically viable and should therefore be implemented. However, it advised that, for best prospects, the project should be implemented by the year 2011.

##### **The workshop noted that**

- (a) The analysis gives no consideration to the progress made in the implementation of the East African Backhaul System (EABS).
- (b) The assumption that dark fibre will be available in all segments of the proposed route is not realistic. Some segments will not have any OFC deployed at all; hence there will be need to construct own fibre. In other segments, the lease of dark fibre from existing OFC owners won't be guaranteed.
- (c) The analysis needs to clearly indicate that the proposed EAC-BIN will be only one operator amongst many others; thus the economic feasibility of the company in a competitive environment needs to be well articulated.
- (d) The customers of the proposed EAC-BIN network should be identified in the analysis.
- (e) Whereas the analysis assumes that leasing dark fibre is more economical than constructing own OFC, experience shows that this is not always the case.
- (f) In a competitive environment, consumer choice count more than the predictions of analytical models. Thus the marketing function of the proposed company will matter.

**Further, the Workshop sought to know**

- (a) The potential secondary economic impact of the project in the region (i.e. employment creation, GDP growth, etc)
- (b) If it would be economically feasible for the EAC-BIN and EABS initiatives to be implemented concurrently. Would it be better if the two initiatives were merged into one?

**Therefore, the Workshop recommended that**

- (i) EAC should establish the implementation progress of EABS and consequently adjust the economic and financial analysis of the EAC-BIN project accordingly
- (ii) The consultants should perform an additional economic and financial analysis based on a worst case scenario where dark fibre does not exist in some segments and new OFC have to be constructed instead.
- (iii) The consultants should demonstrate the feasibility of the project in a fiercely competitive environment
- (iv) Due consideration should be given to the marketing function of the proposed institution to help shape and channel consumer choice.

**3.3 Legal, Regulatory and Institutional Matters**

The key recommendation of study on the Legal, Regulatory and Institutional Frameworks is that a company be set up via a Protocol to build and operate the proposed network.

**The Workshop noted that**

- (a) Notwithstanding the expressed political interest in the project, negotiating and executing a Protocol is normally a long and tortuous process.
- (b) There is risk of the proposed company getting undue political support hence distorting competition in the regional broadband carrier market.
- (c) The preferred mix of Public Private Partnership (PPP) arrangement of the proposed company is not properly explained.
- (d) Whereas the proposed EAC-BIN network espouses the Open Access principle, realizing this principle in a commercially operated private company is not easy.
- (e) Within the EAC Partner States, OFC owners cannot be legally compelled to lease fibre. Thus, realization of the proposed network depends on the willingness by OFC owners to lease dark fibre.
- (f) Past initiatives for Public Private Partnerships (PPPs) within the region faltered due to lack of cooperation between governments and the private sector (e.g. the EASSy submarine cable initiative). Thus, there is fear that the EAC-BIN project might suffer similar fate.
- (g) There are good prospects of the proposed network leasing dark fibre from non telco OFC owners (e.g. power companies) since they have expressed willingness to lease dark fibre to telecom network operators.
- (h) The proposed institutional arrangements should maximize the use existing institutions. For example, strengthening East African Communications Organization - formerly EARPTO - rather than strengthening the EAC Secretariat.

**Therefore, the workshop recommended that**

- (a) The position of the proposed company within the framework of existing telcos be spelt out in the institutional analysis. In particular, the customers and suppliers of the proposed company need to be identified.
- (b) The study should devise practical mechanisms for sharing dark fibre within the framework of existing legal and regulatory regime (i.e. 'soft' versus 'hard' regulation)

### **3.4 Environmental Matters**

**The workshop noted that**

- (a) the project does not anticipate the construction of OFC hence there are no serious environmental concerns
- (b) occupational health concerns related to operation of optical equipment are not adequately addressed in the environmental study

**Therefore, the Workshop recommended that**

- (a) the report should recommend complete environmental impact assessment and environmental management plans should there be need for OFC construction
- (b) occupational health concerns related to operation of optical equipment be adequately addressed in the study

#### **4 WAY FORWARD**

##### **The Workshop**

- i. Agreed that the EAC-BIN project should progress to the implementation stage in order to address the persisting challenge of affordable and reliable broadband connectivity within the region
- ii. Recommended that
  - a) EAC should take the initiative of meeting with the promoters of EABS project by December 2009 to harmonize the two initiatives.
  - b) The Consultants should obtain the most recent data from the stakeholders to update the report.
  - c) Incorporate the issues raised at the Workshop into the Final Report

#### **5 CLOSING OF THE WORKSHOP**

During closing of the workshop, Senior Engineer - Communications at the EAC Secretariat thanked the stakeholders for their attendance and valuable participation at the workshop. He assured the workshop that the Secretariat will ensure that all the issues raised at the workshop will be incorporated into the Final Report and that follow-up activities will be implemented.

**Stakeholders Workshop on the East African Community Broadband ICT  
Infrastructure Network (EAC-BIN): 24<sup>th</sup> September 2009 – Arusha**

**Annex 1: List of Participants**

**6 REPUBLIC OF RWANDA**

**1. Sebera Antoine**

Director of Network Infrastructure  
Rwanda Development Board/IT  
P.O Box 6239, Kigali

**Rwanda**

Tel: +250-788-306461

[tonys@rita.rw](mailto:tonys@rita.rw)

**7 UNITED REPUBLIC OF TANZANIA**

**1. Eng. Dr. Zaipuna Yonah**

Director of ICT  
Ministry of Communications, Science and Technology  
P.O Box 2645, Dar es Salaam

**Tanzania**

Tel : +255-22-2137265

+255-784-786429

[zaipuna.yonah@mst.go.tz](mailto:zaipuna.yonah@mst.go.tz)

**2. Upendo Haule**

ICT Project Manager  
Tanzania Telecommunications Company Ltd (TTCL)  
P.O Box 9070, Dar es Salaam

**Tanzania**

Tel : +255-22-2142248

+255-732-920054

[upendo.haule@ttcl.co.tz](mailto:upendo.haule@ttcl.co.tz)

**3. Erasto Raphael**

ICT Officer  
Ministry of East African Community  
P.O Box 9280, Dar es Salaam

**Tanzania.**

Tel : +255-22-2120488

+255-713-525338

[rasto\\_za@yahoo.com](mailto:rasto_za@yahoo.com)

**4. Jan Kaaya**

Frequency Management Engineer  
Tanzania Communications Regulatory Authority (TCRA)  
P.O Box 15675, Arusha

**Tanzania.**

Tel: +255-27-2548947

+255-787-955455

[jkaaya@tcra.go.tz](mailto:jkaaya@tcra.go.tz)

**8 REPUBLIC OF UGANDA**

**1. George Lwevoola**

Principal ICT Officer  
Ministry of EAC Affairs  
P.O Box 7363, Kampala

**Uganda.**

Tel : +256-414-252289

+256-776-744645

[glwevoola@meaca.go.ug](mailto:glwevoola@meaca.go.ug)

**2. John Baptiste Walugembe**

Principal Communications Engineer  
Uganda Electricity Transmission Company Ltd (UETCL)  
P.O Box 7625, Kampala

**Uganda**

Tel.: +256-414-233433

+256-772-414950

[walugembe@uetcl.com](mailto:walugembe@uetcl.com)

**3. John Paul Bagiire**

General Manger – Strategy  
MTN Uganda Limited  
P.O Box 21688, Kampala

**Uganda**

Tel: 256-312-212313

+256-772-120313

[bagiirp@mtn.co.ug](mailto:bagiirp@mtn.co.ug)

**4. Donald Nyakairu**

Chief Legal Counsel  
Uganda Telecom Limited (UTL)  
P.O. Box 7171, Kampala

**Uganda**

Tel.: +256-414-333211

+256-712-428712

[Donald.Nyakairu@utl.co.ug](mailto:Donald.Nyakairu@utl.co.ug)



**5. Samuel Okiring**

Manager – Strategy Development  
MTN Uganda Limited  
P.O. Box 24624, Kampala

**Uganda**

Tel.: +256-312-212871

+256-772-120871

[okirins@mtn.co.ug](mailto:okirins@mtn.co.ug)

**6. Kiryahika Willy K.**

Deputy Chief Executive Officer  
Uganda Electricity Transmission Company Limited (UETCL)  
P.O. Box 7625, Kampala

**Uganda**

Tel.: +256-414-349126

+256-772-200276

[willy.kiryahika@uetcl.com](mailto:willy.kiryahika@uetcl.com)

**9 REPUBLIC OF KENYA**

**1. Esther Wanjau**

Assistant Director – ICT  
Ministry of Information and Communications  
P.O. Box 30025 – 00100, Nairobi

**Kenya**

Tel.: +254-20-2219498

+254-722-867361

[esther.wanjau@information.go.ke](mailto:esther.wanjau@information.go.ke)

**2. Eng. John N. Kariuki**

Communications Technology Expert  
Ministry of Information and Communications  
P.O. Box 10758 – 00100, Nairobi

**Kenya**

Tel.: +254-20-2719953

+254-722-518877

[kariuki\\_jn@yahoo.com](mailto:kariuki_jn@yahoo.com)

**3. Appollo Otemo Muchilwa**

Principal ICT Officer  
Ministry of East African Community  
P.O. Box 8846, Nairobi

**Kenya**

Tel.: +254-20-245741

+254-722-286549

[headict@meac.go.ke](mailto:headict@meac.go.ke)

#### **4. Evelyn Rono**

External Affairs Manager  
Kenya Data Networks (KDN)  
P.O. Box 62499 – 00200, Nairobi

##### **Kenya**

Tel.: +254-20-5000000  
+254-724-255047/+254-733-730504  
[evelyn.rono@kdn.co.ke](mailto:evelyn.rono@kdn.co.ke)

### **10 REPUBLIC OF BURUNDI**

#### **1. Mfuranzima Gerard**

Chef de Cabinet  
Ministry of Information and Communication  
P.O. Box 1080, Bujumbura

##### **Burundi**

Tel.: +257-22-224666  
+257-79-654632  
[mfuranzima@yahoo.fr](mailto:mfuranzima@yahoo.fr)

#### **2. Nyongera Alexis**

Technical Advisor  
EAC Ministry  
P.O. Box

##### **Burundi**

Tel.: +257-22-257387  
+257-77-750823  
[nyongest@yahoo.fr](mailto:nyongest@yahoo.fr)

#### **3. Ntagaye Reverien**

DG  
ARCT  
P.O. Box

##### **Burundi**

Tel.: +257-22-210276  
+257-77-717777  
[reverientag@onatel.bi](mailto:reverientag@onatel.bi)

#### **4. Ntahondi Nathan**

Administration  
ARCT  
P.O. Box ....., Bujumbura

##### **Burundi**

Tel.: +257-22-244143  
+257-79-655619  
[Ntahonathan2005@yahoo.fr](mailto:Ntahonathan2005@yahoo.fr)

**5. Nizigiyimana Salvatore**

MD  
Onatel  
P.O. Box 60, Bujumbura  
**Burundi**  
Tel.: +257-22-218588  
+257-75-1685  
[dgonatel@onatel.bi](mailto:dgonatel@onatel.bi)

**6. Gaturage Sylvestre**

Engineer – Planning Department  
Onatel  
P.O.Box 60, Bujumbura  
**Burundi**  
Tel.: +257-22-266624  
+257-77-732430

**11 DEVELOPMENT PARTNERS**

**1. Jack Salieu**

Chief ICT Engineer  
African Development Bank (AfDB)  
13 Avenue du Ghana  
B.P 323  
1002 Tunis Belvedere  
**Tunisia**  
Tel.: +21-671-103000  
+21-622-220109  
[s.jack@afdb.org](mailto:s.jack@afdb.org)

**2. Peter Silarszky**

Senior Economist  
World Bank  
P.O. Box ....., Washington, DC  
**USA**  
Tel.: +1-202-4560418  
[psilarszky@worldbank.org](mailto:psilarszky@worldbank.org)

**3. Chali Tumelo**

Senior Advisor  
ITU Regional Office for Africa  
P.O.Box 60005, Addis Ababa  
**Ethiopia**  
Tel.: 251-115-514855  
+251-911-253217  
[chali.tumelo@itu.int](mailto:chali.tumelo@itu.int)

## 12 CONSULTANTS

### 1. Mr. Mamoru Hirayama

Director – Planning, Research and Study Division  
Japan Telecommunications Engineering and Consulting Service (JTEC)  
7-25-9, Nihigotanda Shinagawa-ku, Tokyo

**141-0031 Japan**

Tel.: +81-3-3495-5215

[m.hirayama@jtec.or.jp](mailto:m.hirayama@jtec.or.jp)

### 2. Mr. Takao Ozaki

Senior Financial and Economic Expert  
Japan Telecommunications Engineering and Consulting Service (JTEC)  
7-25-9, Nihigotanda Shinagawa-ku, Tokyo

**141-0031 Japan**

Tel.: +81-3-3495-5215

[mineva@sky.sannet.ne.jp](mailto:mineva@sky.sannet.ne.jp)

### 3. Dr. Rubhera RAM Mato

Senior Environmental Expert  
Japan Telecommunications Engineering and Consulting Service (JTEC)  
7-25-9, Nihigotanda Shinagawa-ku, Tokyo

**141-0031 Japan**

Tel.: +81-3-3495-5215

[mato@aru.ac.tz](mailto:mato@aru.ac.tz)

### 4. Prof. Githu Muigai

Partner  
Mohammed Muigai and Company Advocates  
P.O Box 61323 – 00200, Nairobi

**Kenya**

Tel.:+254-20-2397401

[gm@mohammedmuigai.com](mailto:gm@mohammedmuigai.com)

### 5. Crispine Odhiambo

Partner  
Mohammed Muigai and Company Advocates  
P.O Box 61323 – 00200, Nairobi

**Kenya**

Tel.:+254-20-2397401

+254-722-856662

[codhiambo@mohammedmuigai.com](mailto:codhiambo@mohammedmuigai.com)

## 13 EAST AFRICAN COMMUNITY (EAC) SECRETARIAT

### 1. Philip Wambugu

Director – Planning & Infrastructure

EAC Secretariat

P.O. Box 1096, Arusha

**Tanzania**

Tel.: +255-27-2504253

+255-713-403477

[wambugu@eachq.org](mailto:wambugu@eachq.org)

### 2. Robert Achieng

Senior Engineer – Communications

EAC Secretariat

P.O. Box 1096, Arusha

**Tanzania**

Tel.: +255-27-2504253

+254-722-540768

[achieng@eachq.org](mailto:achieng@eachq.org)

### 3. Elias Bahanda

Project Coordinator – EAC-BIN

EAC Secretariat

P.O. Box 1096, Arusha

**Tanzania**

Tel.: +255-27-2504253

+256-752-242632

[bahanda@eachq.org](mailto:bahanda@eachq.org)

# **EAST AFRICAN COMMUNITY SECRETARIAT**



## **Stakeholders Workshop on East African Community Broadband ICT Infrastructure Network (EAC-BIN)**

**Arusha, Tanzania**

**24<sup>th</sup> September 2009**

### **Annex 2: Agenda**

1. Opening of the Workshop
2. Adoption of the Agenda and Organization of Work.
3. Background Information on EAC-BIN
4. Presentation of EAC-BIN Draft Final Report
  - Executive Summary
  - Technical and Financial Matters
  - Legal, Regulatory and Organization Matters
  - Environmental Matters
5. The Way Forward on the EAC – BIN Project
6. Closure of the Workshop