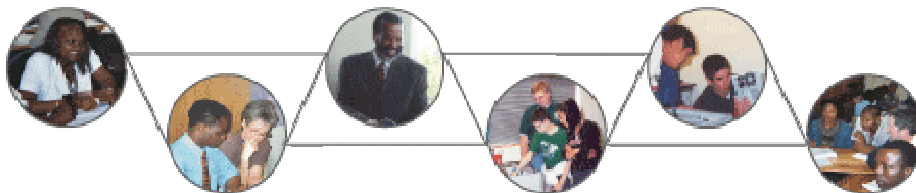Final

Network for Capacity Building and Knowledge Exchange in the Telecommunications Sector (NetTel@Africa) Project

We Help People, Communities and Institutions Apply Information Technologies

14th Quarterly Progress Report (1 September 2005 to 30 November 2005) for the Dot-GOV Associate Award No. GDG-A-00-02-00008-00 through the Leader with Associates Cooperative Agreement No. GDG-A-00-01-00009-00

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I. INTRODUCTION

This 14th Quarterly Report (1 September 2005 – 30 November 2005) provides an update of the key outcomes of the four NetTel@Africa project components (see Box 1). The planned completion date of 1 June 2005 has been extended to 31 December 2006, however, the final estimated obligation of almost $794,987 for the Project has not been forthcoming necessitating the scaling back of activities.

During this Quarter the Project concentrated on:

- Transitioning overall Project coordination to Makerere University, with academic management and coordination retained by University of Dar es Salaam, and peering coordination by the Uganda Communications Commission.

- Initiation of peering among policymakers.

- Laying the groundwork for research on key performance indicators.

- Mobilizing additional resources to carry out ICT applications.

Box 1. NetTel@Africa Components

The Africa-based **Training Program in ICT Policy and Regulation** includes: development of ten courses at the basic level for the post-graduate diploma and ten courses at the advanced level for the master's degree at African universities; and development of an Executive Development Program focused on Regulators and individuals from the Private Sector.

The **Peer-to-Peer (P2P)** exchanges focus on three types of relationships among and between Africans and their non-African peers: academic-to-academic (closely tied to the training program above); regulator-to-academic (linked to the training program); and regulator-to-regulator (fostering reciprocity agreements for training and knowledge sharing among regulatory bodies within Africa, complemented by sharing between African and non-African regulatory bodies.)

The **ICT Applications** demonstrate the relationship between ICT/telecommunications policy and regulations with key sectors critical to the economic development process, particularly education. The notion is to highlight for policy makers and regulators concrete ICT applications for development that can benefit from good policy and regulation within the context of a competitive telecommunications market.

The **Research Program** provides an opportunity for students to research the ICT sector that can then add to the knowledge base of the courses that compose the Training Program. The research also serves as a platform for benchmarking the experience of African regulators and for tracking the performance of the sector.

II. GOVERNANCE

During this Quarter, the Center to Bride the Digital Divide (CBDD) of Washington State University (WSU) continued to focus on formalizing governance processes that will allow for the sustainability of the NetTel as a Network that can implement selected activities.

A.   EXECUTIVE COUNCIL

The next NetTel Executive Council meeting was scheduled to come before the next TRASA AGM in February 2006. However, because an important part of the agenda requires decisions to be made by TRASA, ERITREA, WATRA, and ARICEA at each of their respective Annual General Meetings (AGMs) a decision was made to postpone the meeting after the various secretariats have had the chance to check in with their various constituencies. [1]

B.   ACADEMIC BOARD

Preparations for the second Academic Board to be held on 20-21 February 2006 are underway. Academic management issues related to a common calendar, management of homework and final exams, release of grades within two months of the final exams will be discussed. The MOU will also be reviewed for possible revisions.[2]

C.   UNIVERSITY OF DAR ES SALAAM: ACADEMIC COORDINATION

Academic coordination functions to maintain and sustain NetTel include: registrar functions to identify which students from which universities are taking which courses and to collect grades for coursework and final examination results. To better manage the process, the University of Dar es Salaam (UDSM) has developed a database to:

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[1] *The first Executive Council meeting was held on 29-30 July 2005 in Maseru, Lesotho. The Executive Council reached agreement to register NetTel as a COMPANY LIMITED BY GUARANTEE AND NOT FOR PROFIT in Tanzania. The Articles of Incorporation state that the Executive Council will govern the NetTel@Africa network, formulate Policies and programs of the Network, supervise implementation by the Secretariat of the policies and programs of the Network, evaluate implementation of the policies and programs of the Network, approve the budget of the Network, and appoint and/or dismiss Directors of the Secretariat of the Network. Papers are available at http://cbdd.wsu.edu/edev/execcouncil/index.html. Back to back meetings for the Executive Council, the Academic Board and the lecturers are planned in February 2006.*

[2] *The first Academic Board meeting was held in February 2005 at the University of Western Cape (UWC), South Africa. The members of the Academic Board are all the Deans of the African universities that have signed the MOU. The following academic management issues were discussed: a common calendar for the on-line courses, management of homework and final exams, and release of grades within two months of the final exams. Some universities continue to register their students later than the deadline set in the common calendar and some lecturers continue to have problems with deadlines related to the release of grades.*

- generate a list of students registered by university; and

- generate a list of students registered by course.

Working with UWC, UDSM is testing the *KewlNextGen* (KNG) feature that will be a secure place for lecturers to upload their exams and for the other NetTel coordinators to download these and give it to their students. Another possible discussion during the next Academic Board meeting in February 2006 is the idea of open book exams.

UDSM was chosen as the academic coordinator in July 2001. UDSM will continue to fill the position until February 2006 when the Academic Coordinator Position will be advertised by the Executive Council through Drum Beat Classifieds and other media.

C. MAKERERE UNIVERSITY: ACTING OVERALL DIRECTOR

At the Executive Council meeting held in Dar es Salaam, Tanzania in April 2005, Makerere University was appointed as the Acting NetTel Director as well as the Peering Coordinator. This is an interim arrangement until the registration of NetTel as a *COMPANY LIMITED BY GUARANTEE AND NOT FOR PROFIT* in Tanzania. As part of its new mandate, Makerere University has instituted a strategic planning exercise, the results of which will be shared at the next Executive Council meeting scheduled for February 2006.

D. WASHINGTON STATE UNIVERSITY: INTERNEWS PROJECT AND FINANCIAL OVERSIGHT

A third year internal assessment was submitted in October 2005 (see **Attachment 1** for a copy of the complete report) with the following key assessment questions:

1. Does NetTel represent the vision of a USAID Global Development Alliance? What are the key success factors?

2. As an alliance, how did NetTel meet its capacity building objectives? What results were achieved at the output and outcome levels?

3. How are the outputs and outcomes contributing to the longer-term capacity-building results and impact: (a) improved investment climate and (b) improved delivery of services to the public in countries where NetTel is active.

The planned completion date of NetTel was extended to 31 December 2006 although without the final estimated obligation of almost $794,987. The Center to Bridge the Digital Divide at WSU continues to honor it commitment to Nettel by providing twenty-five percent of Dr. Maria Beebe's time, fifty percent of Dr Ryan Sain's time, and fifty percent of Mr. Matthew Kloes' time, from other resources as of 7 August 2005.

During this phase out and final year, WSU will focus on a an orderly hand-over of NetTel management activities to Makerere University, continue to mentor UDSM in its academic management role, and provide financial oversight for existing sub agreements until the USAID NetTel project completion date in December 2006.

III. PROJECT COMPONENTS

A. SUMMARY OF ANTICIPATED OUTCOMES

The status of each of the four components is summarized below:

1. Training Component

- Module and Coursework content development (completed for 20 courses).

- Delivery of Program via eLearning (pilot year for postgraduate diploma completed 2004; another batch of students to start postgraduate diploma courses and Masters' level courses in July 2005).

2. Peering Component

- Exchange programs and field attachments (underway).

- Secondments (underway).

- Executive Development Program (pilot tested in June 2005)

3. Collaborative Research Component

- AfricaDotEdu (completed 2003).

- Policy and regulation symposia (July 2004).

- Survey of Telecenter use in Kenya and Rwanda (ongoing).

- Student mini-thesis (underway).

4. ICT Applications for Development

- Knowledge Exchanges and Learning Partnerships (four established by South African Partner institutions)

- eEducation White Paper for South Africa (completed 2004)

- Online learning management system (KEWL and KEWLNEXTGEN; ongoing 2005)

- Youth for Business and Information Technology in Rwanda (pilot completed in 2004)

In addition, there are two cross cutting themes:

1. Gender-sensitive monitoring and evaluation (course developed December 2004)

2. Network Development and Information sharing program (completed 2004)

   - Information website http://www.nettelafrica.org
   - Online learning website http://elearn.nettelafrica.org

B. ACCOMPLISHMENTS

1. Training Component

- Worked with the University of Dar es Salaam Academic Coordinator to:

    o Begin planning for NetTel lecturers meeting and Academic Board meeting to be held in Dar es Salaam on 19-21 February 2006 (November-December 2005).

    o Schedule final examinations on 16-20 January for current batch of students (December 2005).

    o Plan review of Series 600 courses (November-December-January). See the draft course catalog, available at http://www.nettelafrica.org.

    o Plan a mentoring program at WSU/Center to Bridge the Digital Divide for Mercy Mbise, one of the NetTel academic coordinators at the University of Dar es Salaam, on 9-14 January 2006.

- Worked with the Nettel Coordinator in Nigeria to plan the roll-out of courses in 4 Nigerian universities.

- Worked with the National University of Rwanda to develop an ICT applications program as an USAID Last Mile Initiative/Rwanda activity.

French Translation (underway)

One of the participating regional regulatory associations in NetTel, The West Africa Telecommunications Regulatory Association (WATRA) requested that the existing NetTel courses be available in French for West African students. In 2004 the Cheick Anta Diop University in Senegal offered to coordinate this effort which is anticipated to be completed during December 2005. Given the lack of the final estimated obligation, only the postgraduate level courses will be translated.

Telecommunications Management (underway)

A new set of post graduate courses on Telecommunications Management were identified by the Nigerian Communications Commission for development by four NetTel participating Nigerian universities: OAU at Ile-Ife, University of Lagos, University of Nigeria at Nsukka, University of Jos. These courses originally planned to be completed in July 2005 have been rescheduled for completion in December 2005. These courses were identified as part of the stakeholder consultations in Nigeria which included industry representatives.

With the Project time extension to December 2006, NetTel will work with Makerere University and University of Dar es Salaam to fine-tune academic management procedures across the 20 universities and fully embed the degree programs within the relevant academic structures.

The NetTel Cooperative Agreement stipulated partnerships with eight African institutions. With additional funding provided by the UK Department for International Development (DFID) and Swedish International Development Cooperation Agency (SIDA) channeled through Makerere University and bilateral funds from two USAID Missions (USAID/Rwanda, channeled through the University of Maryland and USAID/Nigeria, channeled through the GSA), the number of African institutions now participating as NetTel partners has increased to twenty.[3]

2.   Peering Component

The peering component began with regulator to academic peering in order to get input from practitioners into the on-line course content development and to respond to urgent requests for peering from regulatory agencies.   The peering component has continued to stimulate the regulatory associations' sustained interest in the training component, and in gaining the skills needed to address new policy challenges. Moreover, the focus of the peering component has shifted to "regulator to regulator" and "policy maker" exchanges.

In the time remaining in the project, NetTel will strengthen the ties between regional African regulatory associations and the National Association of Regulatory Utility Commissioners (NARUC) state-level public utilities commission, all of which was anticipated in the original NetTel Program Description.   Activities occurring this Quarter include:

- Work with Makerere University and University of Maryland to plan the NetTel Executive Dev Programme (planned for October 2005) to be convened by the Ethiopian Telecommunications Agency and the College of Telecommunications and IT in February 2006. Course content is cross-referenced with in-depth digital resources from the NetTel

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[3] *Prior 2005 Quarterly achievements*

A Grand Workshop hosted by Delft University, Netherlands was held to summarize lessons learned from the first year of on-line learning (2004, the pilot year), get hands-on training on the refined e-learning platform "KewlNextGen," and build capacity of all the lecturers from all 20 universities through the Executive Development Program was done on 6-10 June 2005. This workshop was hosted by Delft University of Technology in the Netherlands, now a NetTel partner institution. The primary reason for why Delft is interested in NetTel is a strategic fit with Delft's mission "To make a substantial contribution to the design of efficient and effective governance structures for infrastructure industries (like ICT, energy, water, transport & logistics) at the interface of economics and technology."

Previous to NetTel, there was not a single African or US university teaching a full degree program in policy and regulation when the program began in June 2002. Thus, the first two years of the project were focused on building the capacity of African lecturers to develop content on ICT/telecommunications policy and regulation; work on an online learning management system (KEWL); and to teach and learn with technology.

Content development for the ten post-graduate diploma-level courses was completed by eight universities to implement a pilot year of delivery via eLearning in 2004. Students register at a host university, usually where the students reside, and lecturers from other universities act as "adjunct" lecturers to each other. Twenty percent of the students for the first cohort were women.

postgraduate diploma courses and additional online reading materials and a weblog for interaction.

- Work with Rwanda Utilities Regulatory Agency to begin planning their Executive Development Program. The dates have been moved from November 2005 to March 2006.

- Work with USAID/Ethiopia to develop a NetTel@Ethiopia program (October-November-December 2005, January 2006). An outcome is a decision to host an Executive Development Program (see Task 3).

- Work with Makerere University to begin planning for the Johannesburg Policymakers workshop and identifying resource speakers (October-November-December 2005). See **Attachment 2** for next to final agenda for this workshop.[4]

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[4] *Prior 2005 Quarterly achievements*
Attachment of Rwanda Regulators to Nigerian Communications Commission. *Two regulatory staff from the Rwandan Agency for the Regulation of Public Services were attached to the Nigerian Communications Commission (NCC) for several weeks to observe normal day to day functions. Funding was provided by the CATIA Project Component 1(e).*
Workshop for Judges. *The second workshop held for judges from Nigeria and hosted by the Nigerian Communications Commission January 24-26 at Abuja. NetTel helped identify agenda items and peers from the U.S. (Federal Communications Commission and NTCA) to act as facilitators. Unfortunately, last minute changes did not make it possible for the U.S. participants to travel. This workshop helped improve Nigerian Judges knowledge in the application of Telecommunications laws; increased awareness of emerging trends in telecommunications, and created a forum for the exchange of ideas on topical issues in Telecommunications.*
AFRINET Conference. *The theme of the 2005 AFRINET Conference held at Abuja on 22-24 February 2005 was "Sustaining the Growth of ICT Access in Africa." Project Director Dr. Beebe's presentation "Capacity Building and role of International partner organizations in ICT Development in Africa" provided tangible examples of how peer-to-peer experiences had increased capacity and understanding on both sides of the relationship on the need for policy reform and the impact of policies, such as eRate.*
Universal Access. *The workshop on Universal Access was hosted by the Kenya Communications Commission in March 2005. Planning for a workshop followed discussions in 2004 with the Benton Foundation and the dot-GOV Cooperative Agreement implemented by Internews regarding NetTel participant's interest in lessons learned from implementation of Universal Service Obligations as a means of increasing rural access. NetTel helped design the agenda, identified facilitators and planning for logistics. This workshop is a regulator to regulator peering component as the notion is for regulators to share their experiences with each other and to then develop a manual for universal service access. As well, Project Director Dr. Beebe shared lessons learned on the use of SMS for business and government in the Philippines.*
TRASA and ARICEA AGMs. *At TRASA and the Association of Regulators of Information and of Central and Eastern Africa (ARICEA)'s request, the NetTel Project Director attended the pre-AGM meetings held in Gaborone, Botswana which laid the foundation for the Executive Council meeting to be convened by TRASA and to be held in April 2005. The Peering Coordinator from the Uganda Communications Commission attended the ARICEA AGM.*
Spectrum Management. *In response to a request by the Communications Authority of Zambia, NetTel helped plan a spectrum management workshop held in April 2005. NetTel cosponsored the event, supplied facilitators, and designed the agenda. Mr. John Murray from Applied Spectrum Research, along*

3. Research Component

Key Performance Indicators

A follow up workshop was held with four WATRA focal countries (Ghana, Mali, Nigeria and Senegal) to develop a framework for country reports on the status of the telecommunications sector (October-November-December-January 2005). See **Attachment 3** for the outline of the country reports. In response to an earlier request from WATRA, a review of current indicators was completed in August 2005 by the CBDD. The review looked at the following topics: World Bank Benchmarking Regulators; ITU indicators; and OECD Indicators of Telecommunications Competitions. A small working group comprised of Nigeria, Ghana, Guinea, Senegal, Ivory Coast, and Mali have agreed to meet in October to narrow down the indicators, define the indicators, and identify next steps to do pilot studies in possibly Nigeria and Senegal.

ICT Policy and Regulation Symposium

NetTel is still trying to locate sponsors for a second ICT Policy and Regulation Symposium to be convened by UNISA.

Telecenter Uses. Based on requests to have baseline information, NetTel university partner institutions (University of Maryland, National University of Rwanda, and KENET) initiated a survey of telecenter uses. Based on the Rwanda and Kenya questionnaires a survey instrument was finalized and standardized. The standardized instrument will be made available to interested countries. These studies commenced in 2004 and the results are now being compiled into a single database.

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with Dr Ike Mowete, and Dr, Rob Lindsay provided pro-bono assistance during the workshop. The target audience was the board members of the Communications Authority of Zambia and TRASA member countries.
Executive Program: Pilot Test in Lesotho. *The Lesotho Regulatory Authority hosted an Executive Development Program in July 2005 for the TRASA member countries to pilot test the Modules for the Executive Development Program. Ms. Joan Smith, ex-Commissioner from the Oregon Public Utilities Commission served as one facilitator. Lesotho covered local costs and expenditures of their members. NetTel (Catalyzing Access to ICTs in Africa (CATIA), other bilateral funds through the University of Maryland) funded the travel of facilitators from the National University of Rwanda, University of Western Cape and University of Lagos. Agenda, presentations, and workshop evaluation are available at* http://cbdd.wsu.edu/edev/edp/index.html.
Uganda Communication Commission Expertise provided to the Ethiopian Telecommunications Agency. *The Uganda Telecommunications Agency provided the expert assistance of Ms. Ann Rita Ssemboga on price cap regulation and costing methodologies to the Ethiopian Telecommunications Agency on 22-26 August 2005.*

This research will regulators discern Internet use when available through a donor-funded community service oriented telecenter or a commercial entity like a cyber café. More information will be available in a separate report.

4.   ICTs for Development Component

This component focuses on demonstrating the relationship between ICT policy, specifically telecommunications policy and regulation impact key sectors critical to the economic development, particularly the education sector. Ongoing activities occurring this Quarter include the following. [5]

KewlNextGen

NetTel is still mobilizing resources to train computer technicians in server installation and management as well as train lecturers to upload courses on KEWL. KewlNextGen is operational except for two key features: local mirroring and local authoring. Work out a maintenance plan with the University of Western Cape.

Youth for Business

CDBB was able to leverage funding for a *Workforce Development for Rwanda: Focus on Youth* program. Our approach will assist the Government of Rwanda to (1) develop a national-strategic plan for building an ICT capable workforce, and, (2) assist the MinED to build up an ICT capable workforce through a unified plan for secondary school-to-work programs. As part of the unified plan, we will assist with the implementation of a Business and Information Technology (BIT) curriculum and a module on workforce competencies.

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[5] *Prior 2005 Quarterly achievements*
Knowledge Exchange and Learning Partnerships*. Close-outs were initiated of the Knowledge Exchange and Learning Partnerships managed by the University of Pretoria (Public Affairs Network), University of Fort Hare (Transformed Agriculture Education Network), University of the North (Management Network), and University of Zululand (Recreation and Tourism Network).*
eEducation*. A NetTel key success was assistance to the South African Department of Education in the formulation of an eEducation White Paper which was signed into legislation during 2004. Inclusion of an eRate discount for all public schools is part of the legislation. Upon request of the South African National Department of Education follow-on assistance was provided in 2005 with the formulation of an eSchool Technology Assessment Readiness and Targets (eSTART) as part of kick-starting the implementation of the e-Education policy. This document is being used to help implement the e-education policy by focusing on a self-assessment tool for schools to measure their progress toward integrating technology to improve education. The document is included in the course materials on ICT applications and ICTs for development.*

IV. PROJECT DIRECTOR FINAL NOTES

"You change your steps according to the change in the rhythm of the drum."

In anticipation of NetTel becoming a legal entity discussions are underway to mobilize resources that will enable NetTel to receive contracts or grants. Meanwhile, CBDD continues with transition activities, including, moving overall Project coordination and peering activities to Makerere University and academic management and coordination to the University of Dar es Salaam. CBDD has initiated peering activities among policymakers, laid the groundwork for research on key performance indicators, and succeeded in mobilizing additional resources to carry out ICT applications.