NetTel@Africa

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INTRODUCTION

NetTel@Africa (NetTel) is a transnational capacity development program focused on improving the policy and regulatory environment for the information communication technologies (ICT) and telecommunications (telecom) sectors. Originally, NetTel was developed as a programmatic response by USAID's Leland Initiative to a request for human resource development by the Telecommunications Regulators Association of Southern Africa. NetTel is aligned with the USAID. During the development of the program, it became evident that an expansion of NetTel beyond the Southern African Development Community (SADC) region would greatly improve the quality of capacity development in formulating policies and regulation. Recently, NetTel has expanded to priority Western and Eastern African nations.

The overall goal of NetTel is to expand access to ICT and telecom services for all citizens in Africa. To achieve this broad goal, NetTel seeks to leverage advanced level policy making and regulatory controls to stimulate private sector investment in services and infrastructure and to promote the adaptation and application of ICT and telecom services by governments, businesses, schools, and communities. This section provides an overview of the NetTel program, focusing on the structure, principles, practices, and lesson learned from this on-going initiative.

STRUCTURE

Formally established in 2002, NetTel is comprised of four interconnected components. The first component is an international peer network that links together ICT and telecom regulators from African countries with peers in the United States and Europe. The peer network has also expanded to connect researchers and instructors with specialization in ICT, telecoms, and public policy. Active participation in NetTel's peer network includes, among others:

- Association of Information and Communication Regulators in East Africa
- Botswana Telecommunications Authority
- Communications Authority of Zambia
- Communications Commission of Kenya
- Independent Communications Authority of South Africa
- Lesotho Communications Authority
- Nigerian Communications Commission
- Tanzania Communications Regulatory Authority
- Telecommunications Regulators Association of Southern Africa
- Uganda Communications Commission
- U.S. National Association of Regulatory Utilities Commissioners
- West African Telecommunications Regulators Association

Similar to the peer network, the second component is an international network established to connect community level ICT development projects. Outcomes of the community network include the sharing of knowledge and experience as well as the adoption of project designs in other communities. Currently four projects have been developed. The first is a skills development seminar series that focuses on the best practices in using ICT in the classrooms of secondary education. The second is a youth-based collaboration directed at building computers for community technology centers. The third is the creation of a professional e-learning diploma program in transportation operations management. The fourth is a network of South African universities studying the opportunities and challenges of implementing ICT-enhanced teaching methods in fields such as science, agriculture, management, and public policy. Current partners involved in designing and implementing these ICT-based community projects include:

- Malawi College of Accountancy
- National University of Rwanda
- University of Durban (South Africa)
- University of Malawi – The Polytechnic
- University of the North (South Africa)
- University of Pretoria (South Africa)
- University of Witwatersrand (South Africa)
- University of Zululand (South Africa)
- Washington State University (U.S.)

NetTel's third component is a research program that seeks to strengthen the quantity and quality of data relevant to ICT and telecom policy and regulation in

Africa. Outputs of NetTel's research program are widely distributed among interested parties and are included in the curricula of NetTel's training program in ICT/telecom policy and regulation, which is NetTel's fourth component. While this is the least developed NetTel component, examples of research output include the recently published book titled *Africa Dot Edu: IT Opportunities and Higher Education in Africa* (2003, Tata McGraw-Hill), as well as the 1st Annual NetTel@Africa Scholars Symposium held at the University of South Africa (conference proceedings forthcoming). The book, *Africa Dot Edu*, is an edited compilation of case studies documenting how ICTs are currently being applied in African institutions of higher educations and serves as a baseline for future research initiatives. The Scholars Symposium is part of NetTel's training program (the fourth component) and features presentations of recently completed research projects by NetTel's students and faculty as well as the delivery of papers by industry experts on cutting edge issues.

The training program is offered through three options: executive seminar series, a post-graduate diploma program, and a Masters degree program. All three options are offered through a networked alliance among a growing number of African universities and training institutions. Students enrolled in one of NetTel's training programs are experienced professionals from ICT-related fields such as policy making, regulation, service provider, and industries involved in telecommunications. And, for each option, the curriculum is problem-based; the learning communities are designed to international in scope (with a focus on the African regions), and the medium for teaching and learning blends face-to-face interaction with ICT-based instruction. The universities and training institutions actively involved with NetTel's training programs include:

- African Advanced Level Telecommunications Institute (Kenya)
- Jomo Kenyatta University of Agriculture and Technology (Kenya)
- Makerere University (Uganda)
- National University of Rwanda
- Nairobi University
- Obafemi Awoloyo University (OAU) at Ile-Ife (Nigeria)
- University of Botswana
- University of Colorado (U.S.)
- University of Dar es Salaam (Tanzania)
- University of Florida (U.S.)
- University of Fort Hare (South Africa)
- University of Jos (Nigeria)
- University of Lagos (Nigeria)
- University of Maryland (U.S.)

- University of Nairobi
- University of Nigeria at Nsuka
- University of South Africa
- University of Western Cape (South Africa)
- University of Witwatersrand (South Africa)
- Washington State University (U.S.)

The formation of this program's structure as an organizational entity was planned to allow for great levels of flexibility. From its inception, the NetTel program has been an aid-funded development project designed to provide capacity building and technological transfer that will result in increases in access to ICT and telecommunications for citizens in participating African nations. Because these types of programs have a tendency to stagnate after the initial aid funds are exhausted, specific steps have been taken to adapt NetTel's structure so it is adapted to the cultural conditions in which the program is designed to be sustained. Examples of this include: (1) customizing the curriculum's use of case studies to include experiences from other African countries; (2) connecting NetTel with other complementary initiatives in the Africa region; and (3) adjusting the presentation and management of NetTel to reflect the large diversity of ethnicities represented by NetTel's stakeholders. The designers of this program have focused on keeping NetTel African-centric and shaped by African cultures so that African leadership for the program will organically evolve rather than be procedurally installed.

The network of partners is the life of the NetTel program. Without active participation, the program would stall. The drive that keeps partners motivated and involved can be characterized by the widely shared vision that NetTel is a viable and effective vehicle for stimulating social and economic development through strategic changes at the far reaching levels of ICT and telecom policy making and regulatory practice. The modes in which partners participate in NetTel's components include informal collaboration based on areas of interest, formal face-to-face gatherings, and virtual engagement via NetTel's digital work spaces (e.g., list serves, discussion forums, and a learning management system).

PRINCIPLES

As NetTel is intended to emerge through a process where partners self-organize according to interest, expertise, practice, and need, there are several guiding principles established by the network's founders. First and foremost is a commitment that *learning processes and the sharing of knowledge must be broadly shared*. In NetTel, this commitment is articulated through active outreach to expand networks for sharing knowledge and experience

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