

**INTERNATIONAL TELECOMMUNICATION UNION  
TELECOMMUNICATION DEVELOPMENT BUREAU (BDT)**



**MISSION REPORT  
CHALI TUMELO, SENIOR ADVISER FOR NETWORK MANAGEMENT  
AND DEVELOPMENT FOR EASTERN AND SOUTHERN AFRICA**

**SATA WORKSHOP ON VOICE OVER INTERNET PROTOCOL AND  
OTHER INTELLIGENT NETWORK PLATFORMS, Action 8293**

**ANGOLA-LUANDA  
25<sup>TH</sup> – 30<sup>TH</sup> OCTOBER, 2005**

**MISSION REPORT**

**BY**

**CHALI TUMELO, Senior Advisor for Network Management and Development, for Eastern  
and Southern Africa**

### **1.0 Purpose of mission:**

The purpose of the mission was to implement Action 8293, participate in information sharing, deliver presentation on the overview of circuit and packet networks and organise other ITU presentations during the SATA workshop on Voice over Internet Protocol and other intelligent network platforms.

### **2.0 Duration of mission:**

Left Addis Ababa for Luanda on 25<sup>th</sup> October, 2005 and left Luanda for Addis Ababa on 29<sup>th</sup> October, 2005.

### **3.0 Mission Objective:**

The objective of the mission was to technically assist the members of Southern Africa Telecommunication Associations to plan, build, operate, upgrade, manage and maintain the technologies used in their networks and services by:

- Identifying factors surrounding the future of telecommunication industry
- Identifying methods of assuring revenues to the SATA member operators
- Providing the fundamentals of IP Networks and presenting in detail the circuit and packet switched technologies
- Identifying risks and difficulties in migrating to packet-switched networks
- Tackling technical and commercial issues of relevance to SATA and addressing key Regulatory issues regarding commercialization of IP/NGN networks

so that the members delegates could finally come up with recommendations to SATA CEOs

### **4.0 Main Activities:**

The workshop started with opening remarks by SATA Executive Secretary followed by the opening speech by the Acting CEO of Angola Telecom. In both the opening remarks and speech the following were emphasized;

- That we all need to agree that VoIP is currently the hottest issue in the history of telecommunications and that Broadband technology is a catalyst, it is an enabling technology to facilitate economic growth;
- That millennium goal acknowledges ICTs importance to alleviate poverty by making our governments more responsible and accountable to the people;
- Failure or delay to develop broadband has a negative impact to economic growth and may create community divisions; and
- That SADC Region has not yet found a common formula for new technologies.
- The challenges of technological changes affect all areas of the telecommunications industry, wireless and fixed;
- We all expect to have greater Tele-penetration through IP technology;
- We also all know that mobile operators have a greater advantage over fixed wire-line operators due to rapid roll-out and VAS;
- New Services must aim at generating revenue and creating jobs;
- Although we are aware of its existence, VoIP has not been all that successful; and
- SATA is holding this workshop at the right time and we all hope that delegates will come up with positive and executable resolutions.

The Executive Secretary expressed his hope that the workshop would address currently available avenues of deploying VoIP and Broadband technologies.

The main activities included presentations by ITU, Huawei and ZTE and SATA Secretariat as follows;

- Overview of VoIP and broadband deployment in SADC Region by SATA Secretariat
- Overview of Circuit and Packet Switched Networks by ITU
- NGN concepts, Network Elements and quality of service Issues by ITU
- New Network Convergence Strategy (Trends of Broadband, Enabling User-Centric Broadband Network, Broadband deployment in Sub-Sahara Africa) by Huawei
- NGN Services and VoIP, Market and Business Analysis by ITU
- Wireless broadband – A Case Study (Analysis, Strategy and how to run broadband network by Huawei
- Network Architecture, Migration towards NGN by ITU
- Convergence Strategy for Universal operators in competition by ITU
- IP Traffic Characterisation and impact on Regulation by ITU
- Way Forward – Recommendation by delegates.

Detailed presentations are attached in the e-mail and will soon appear on the website.

## 5. CONCLUSION

The clear conclusion was that operators needed to offer a bundle of services in order to remain in business otherwise the business with one type of service would wind up. However, the operators raised concerns involving the speed at which Regulators were responding to the telecommunication/ICTs evolution especially in the area of convergence, as regulators were still offering licences for single services. Delegates requested ITU to seriously assist Regulators with convergence issues. The issue of quality of service reference units in packet switched networks was raised and it was observed Engineering formulae were not yet available for IP traffic for quality of service and ITU was urged to seriously look into this as this would cause serious problems in SLA (Service Level Agreement) between networks. Seven (7) out of Twelve (12) Members were represented at the workshop. Observations and resolutions by the delegates are listed in Annex 1 below.

## 6.0 FOLLOW UP ACTIONS

ITEM No.	Activity Description	Date of Coordination	Initial Coordination given to	Person(s) responsible	Deadline	Completed date
1	Engineering formula for IP traffic for quality of service	Open	Ms. Chali Tumelo	Ms. Chali Tumelo	Open	Open

2	Reference traffic unit proposed for NGN	Open	Ms. Chali Tumelo	Ms. Chali Tumelo	Open	Open
3						
4						

## ANNEX 1

### 1. OBSERVATIONS

During the Workshop, the following major concerns were observed:-

- 1.1 VoIP alone is not going to increase revenue for the incumbent operators but for the newly emerging service providers. However, by not introducing VoIP, incumbent Operators will lose more revenue.
- 1.2 Incumbent Operators need to be defensive but positive to implement newly emerging technologies at a reasonable pace.
- 1.3 Billing in packet switched services is complex.
- 1.4 Incumbent Operators should not only rely on mono-service provision.
- 1.5 Quality of service of VoIP and other Next Generation Network Services is still low.
- 1.6 The existing transmission infrastructure in the Region is still insufficient.

### 2. WORKSHOP RESOLUTIONS

Arising from the above observations and concerns, the Workshop resolved as follows:

- 2.1 SATA members to embrace the introduction of VoIP and other new technologies with a view to bringing down costs and call charges.
- 2.2 For effective VoIP and other IP traffic routing, SATA members need to have national Internet Exchange Points (IXPs), and a *Regional clearing house concept*.
- 2.3 SATA to mandate ITU to assist in providing engineering procedures/formulae for Quality of service of VoIP and other NGN services. The mandate be presented to the ITU study Group for discussion at the World Telecommunication Development Conference (WTDC-06) in Qatar.
- 2.4 SATA members should approach the implementation of VoIP as a group of operators on all issues common to the Region.
- 2.5 Through SATA, the information and deliberations should be made available at SADC Telecom SCOM meetings.
- 2.6 SATA members must adopt convergence and the Regulators through TRASA should consider multiple service provisioning of licence.
- 2.7 Implementation of infrastructure (SR II Project) must be given precedence for a smooth migration from narrow to broadband services.

- 2.8 SATA is urged to have a strong marketing philosophy for the new technologies including VoIP and other NGN services.
- 2.9 SATA Secretariat to liaise with CEOs on the imperatives of implementing regional strategies including resolutions made at workshops and meetings.