



## **Report on the Southern Africa Regional Infrastructure Sharing Workshop for Regulators and Policy Makers**

**20 – 21 May 2015,  
Johannesburg, South Africa**

### ***Communication Regulators Association of Southern Africa (CRASA) and Association for Progressive Communications (APC)***

#### **Background**

Limited telecommunications network development represents one of the major obstacles to making the internet available in rural and geographically isolated areas, and also contributes to high prices and slow speeds for many of the connected. One of the key ways to improve broadband network development is to make use of Infrastructure Sharing (IS). To support increased awareness of the potential opportunities and challenges with sharing infrastructure, APC commissioned Deloitte to carry out global research on the topic and to produce report. Called “Unlocking broadband for all – Infrastructure sharing policies and strategies in emerging markets”, the report found that IS has a number of benefits, including:

- Better connectivity
- Major Cost savings
- Increased Revenue generation
- Improved Competition

To build on the report’s findings and recommendations, on May 20-21<sup>st</sup> 2015 the Communications Regulators Association of Southern Africa (CRASA) and the APC co-hosted a two-day regional workshop for policy makers and regulators in Southern Africa, with additional support from Google, the Internet Society (ISOC) and the Alliance for Affordable Internet (A4AI). The workshop brought together 30 participants from all the SADC countries except Mauritius who discussed the potential policy and regulatory implications for encouraging IS. Breaking into four parallel working groups, each developed a set of recommendations for SADC, CRASA and Member States, which are synthesized below. The link to the workshop page and report, along with the agenda and participant list are included at the end of the document.

## Synthesis of Working Group Recommendations

### **1. Regional Policies, Guidelines and Templates for regulation on infrastructure sharing - General**

- a. SADC secretariat should establish policies and model/laws to be adopted to enable countries to regulate infrastructure sharing.  
In particular there is a need for:
  - i. A policy and regulatory framework that defines and harmonizes procedures for negotiating Infrastructure sharing agreements and conformance
  - ii. Common strategies that make permitting and authorizations easier and faster when operators wish to lay cross-border infrastructure interconnecting SADC member states
- b. Infrastructure sharing policies should:
  - i. Make use of existing facilities where there is sufficient capacity
  - ii. Support open access to infrastructure and services
  - iii. Provide for entities which operate passive infrastructure but are not retail network operators, for example tower and dark fibre operators
  - iv. Enforce accounting separation and billing platforms where operators provide wholesale and retail services
  - v. Encourage wholesale pricing of passive and active elements of operator networks
  - vi. Incentivise collaborative investments in infrastructure sharing
  - vii. Encourage competitive national roaming
  - viii. Encourage private public partnerships
  - ix. Enforce licensing of all communication infrastructure and service providers
  - x. Provide a unified licensing framework
  - xi. Enable sharing of infrastructures in building projects (e.g housing estates)
  - xii. Ensure that conditions of licenses encourage operators to share infrastructure on an open access basis
  - xiii. Encourage co-location of equipment by different operators to discourage proliferation/ duplication

### **2. National standards for infrastructure deployment**

Capacity available and standards for deployment of backbone infrastructure should be set and benchmarks adopted, covering both passive and active infrastructure using standards in line with international trends/standards. Policies should:

- Ensure the country has standards for network deployment (i.e it should adopt a national policy on standards)
- Encourage national regulators to develop IS standards and drive the process in consultation with the operators
- Prioritise prescription of duct quality - sizing and standards with capacity to accommodate future operators' cables
- Emphasise monitoring, evaluation and enforcement of IS standards
- Empower the national regulator to enforce standards by taking punitive measures where non-compliance of the standards takes place

- Apply to all infrastructures across sectors and allow each sector (telecoms, energy, transport etc) to have its own standards; where regulators in that sector will monitor and enforce the set standards
- Include a standards review process.

### **3. Funding Strategies for infrastructure sharing**

- Universal Access Funds can be used to incentivize operators willing to share infrastructure on an open access basis in remote areas making these more accessible to competing operators
- Government loans can be used to foster shared infrastructure deployment
- Joint investment initiatives by operators can be encouraged by development of a partnership policy
- All sectors should be levied

### **4. Commissioning of multi- sectoral infrastructure databases linked to GIS systems**

There is a need to develop a database for infrastructure deployment to encourage sharing and coordination which is GIS enabled containing relevant infrastructure information from telecom operators, local authorities, power and water utility agencies, railway operators and roads agencies.

One authority should be responsible for collecting and storing information on infrastructure. Regulations are required to allow that authority to enforce data collection when an organization or company does not provide the required information. Data must be provided at prescribed dates and in agreed formats for easy input of information into the database.

The platform should include a web enabled data access portal and a security mechanism to secure sensitive information, i.e. encryption mechanisms.

### **5. Role of Government in national wholesale broadband network deployment**

- To ensure fair competition government should ensure that it is not permissible for a network operator to operate at both wholesale and retail levels
- Government should establish mechanisms for dispute resolution
- Coordination between sectors must be made compulsory
- Policy and legislation is required that provides direction on national broadband wholesale network development. This should include a master plan which will cover how it will be funded and implemented, including timeframe, facilities to benefit from the deployment, open access conditions for usage, and how it shall be used
- Provide an enabling policy environment including incentives for appropriate network deployment and a Universal access fund with clear rules
- Provide rules for tariff setting for wholesale networks based on transparent, non-discriminating cost oriented principles which emphasise infrastructure sharing

## **6. Planning requirements**

Planning requirements are needed for all new infrastructure and public/commercial buildings which ensure:

- Provision of sufficient capacity for ducts and cable entry points in public and commercial buildings (including residential apartments) and in housing estates
- Provision of ducts takes place during the planning phase of the project
- Road/railway/ power construction works consider provision of ducts when constructing and/or (re)paving
- Inclusion of communications needs in the building code alongside power, water etc.
- A coordinated planning approach for development in new areas
- Implementation of dig-once policies with clear standards/specifications

## **7. Rights of Way (ROW)**

Policies and regulations are required to ease access to rights of way which limit the costs and procedures for ROWs by setting up one stop shops for obtaining permits where land belongs to the government. Other requirements include:

- ROW policies should be standardized between different cities and municipalities
- A maximum time frame for responding to ROW requests
- Regulations which set the maximum tariffs that can be levied - fairly priced and cost based – which encourage a level plain field and an open access regime (non discriminatory).

## **8. Regional Infrastructure sharing policy harmonization and cross border infrastructure deployment procedures**

SADC should be the responsible agency to:

- Enable/ facilitate procedures for permits when transiting from one country to another across borders
- Develop model standards and enforcement procedures in close collaboration/coordination with Member States
- Encourage infrastructure sharing based on open access principles and cost based charges

## **9. Environmental Impact Assessments (EIAs)**

EIAs are necessary to decrease proliferation of Masts/towers and to ensure that the deployment of telecommunications infrastructure is environmentally friendly. Therefore undertaking of comprehensive EIA's should be included in the requirements for infrastructure deployment and infrastructure sharing. However EIAs should be provided in a timely manner with fair pricing of the process. And the Environment Authority should specify the Terms of Reference for the EIAs.

**Workshop Web Page (including links to the Infrastructure Sharing Report)**

<https://www.apc.org/en/events/infrastructure-sharing-stakeholder-validation-work>

## Participants List

FIRST NAME	LAST NAME	ORGANIZATION	Job Title	E-mail address	Country
Eduardo	Sebastiao	Ministry of Telecommunications and Information Technology	National Director	edsebastiao@hotmail.com	Angola
Bontle	Mogotlhwane	Department of Broadcasting Services	General Manager	bmogotlhwane@gov.bw	Botswana
Antony	Chigazira	CRASA	Executive Secretary	antony@it.bw	Botswana
Martin	Mokgware	Bostwana Communications Regulatory Authority	Director of Broadband & Universal Services	ce@BOCRA.ORG.BW	Botswana
Thari	Pheko	Bostwana Communications Regulatory Authority	CEO	ce@BOCRA.ORG.BW	Botswana
Kamogelo	Kwada	Ministry	Policy Maker	kkwada@gov.bw	Botswana
Michael	Jensen	Association for Progressive Communications	Internet access specialist	mike@apc.org	Brazil
Blaise	Fundji	Ministry of ICT & Telecommunications	Minister's Advisor	blaiseaz@yahoo.fr	DRC
Nthabiseng	Pule	Lesotho Communications Authority	Executive Secretary	npule@lca.org.ls	Lesotho
Emily	Khamula	Malawi Communications Regulatory Authority	Deputy Director	elungu@macra.org.mw	Malawi
Fredrick	Ndala	Ministry of Information	Technical Advisor	frederickndala@gmail.com	Malawi
Jacob	Munodawafa	Southern Africa Telecommunications Association	Executive Secretary	jacob.munodawafa@sata-sec.net	Mozambique
Joaquim	Zindoga	National Communications Institute of Mozambique	Economist	jzindoga@incm.gov.mz	Mozambique
Elroy	Diergaardt	Powertel Namibia	Supervisor: Passive Infrastructure	Elroy.Diergaardt@Powercom.na	Namibia
Stanley	Similo	Telecom Namibia	CEO		Namibia
Seydina	Diop	Google	Africa Policy Lead	sdiop@google.com	Senegal
Daley	Ernesta	Department of Information Communications Technology	Senior Regulatory Analyst	d.ernesta@ict.gov.sc	Seychelles
Fanette	Albert	Seychelles Planning Authority	Deputy CEO	falbert@gov.sc	Seychelles
Anriette	Esterhuysen	APC	Executive Director	anriette@apc.org	South Africa
Yolanda	Mlonzi	APC	Intern	yolanda@apc.org	South Africa
Emilar	Vushe-Gandhi	APC	Africa Policy Programme	emilar@apc.org	South Africa
Richard	Majoor	Telkom	Executive: Regulatory Affairs	GottsES1@telkom.co.za	South Africa
Juanita	Clark	Fibre to the Home Council Africa	Executive Director	juanita@ftthcouncilafrica.com	South Africa

Marcus	Raphela	Department Of Telecommunications & Postal Services	Director, Broadband Services and Costing	Mraphela@dtps.gov.za	South Africa
Sakhile	Dlamini	Ministry of ICT	Communications Engineer	Dlaminisak@gov.sz	Swaziland
Bahati	Zuberi	Ministry of Communication, Science and Technology	Telecom Engineer	bahatizuberi@gmail.com	Tanzania
Raynold	Mfungahema	Tanzania Communications Regulatory Authority	Director consumer and Industry Affairs	mfungahema@tcra.go.tz	Tanzania
Elliot	Kabalo	Zambia Information and Communication Technology Authority	Type Approval Engineer	ekabalo@zicta.zm	Zambia
Nkula	Mwanza	Ministry of Transport, Works, Supply and Communications	Principal Communications Officer	nkula14@yahoo.com	Zambia
Rumbidzai	Panavanhu	Postal and Telecommunications Regulatory Authority of Zimbabwe	Executive Officer Competition & Research	rumbidzai.panavanhu@potraz.gov.zw	Zimbabwe
Godfrey	Munyavi	Ministry of ICT Postal and Courier Services	Director, Research Infrastructure Development & Management	go_munyavi@yahoo.com	Zimbabwe

## AGENDA

### SADC/CRASA Infrastructure Sharing Stakeholder Validation Workshop May 20-21 2015

The Capital 20 West Hotel, Sandton, Johannesburg

Time Day 1	Activity	Details
8:30-9:00	Registration, Coffee	Participant arrivals
9:00-9:45	Welcome and Introduction to the Workshop	SADC, CRASA and APC, co-sponsors, and brief participant introductions (Country, Organisation, Title)
9:45-10:30	Infrastructure Sharing – the Key Opportunities and Benefits	Introduction to Infrastructure Sharing – the report and key benefits - APC
10:30-11:15	Refreshment/Networking Break	
11:15-12:00	Agenda and Meeting Strategy Discussion for securing outcomes	CRASA/SADC Chair – What happens at the end of the event? – Next Steps
12:00-13:00	SADC Country Roundup on Current & Planned Infrastructure Sharing Policies	Brief (2-3minute) informal verbal presentations of status of infrastructure sharing activities and policies in each country, and at SADC Secretariat & CRASA level
13:00-14:30	Lunch	
14:30-15:45	Infrastructure Sharing Policy implementation Experiences in Selected Developing Countries	Mike Jensen, APC
15:45-16:00	Discussion	
16:00-16:15	Refreshment/Networking Break	
16:15-17:15	Working Group Strategy and Initial discussions	Plenary convenes and then breaks into groups as suggested by the participants – e.g cross sectoral infrastructure group, operators group, regulator/policy makers group – sharing of personal experiences and views
17:15-17:20	1st Day Closure – Key Conclusions and Logistics Announcements	APC
18:30-20:00	Networking Dinner	Capital 20 West Dining Room
<b>Day 2</b>		
8:30-9:00	Coffee, new registrations	
9:00-10:00	Balancing Competition, investment and Regulatory Issues in Infrastructure Sharing – How can infrastructure sharing can foster competition?	Panel comprising 5 policy makers, operators and regulators. 5 Minute introductions by Panelists, discussion with Panel Members and Participants. Chair SADC

10:00-11:00	Discussion of plan for Working Groups for the rest of the day, Working groups start	CRASA, APC
11:00-11:30	Refreshment/Networking Break	
11:30-12:30	Working groups continue on Key Policy & Strategy areas required	Drafting of possible options to address IS in Member States - specifics as to what policy and regulations need to be developed/updated to ensure that IS is possible and implementable
12:30-14:00	Lunch	
14:00-15:00	Working group report backs and Discussion - Review of issues arising from working groups and background document	Rapporteurs
15:00-15:20	Refreshment/Networking Break	
15:20-16:45	Final Session – Key recommendations agreement and way forward/next steps	CRASA / SADC Chair
16:45-17:15	Closing remarks	CRASA, SADC, APC, co sponsors, Local & Regional Policy Heads

**Photo: Workshop Participants**

