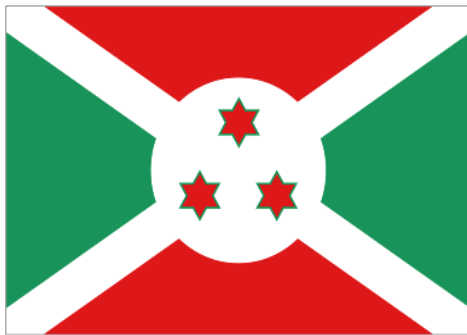


Burundi Internet Exchange Point BurundiX A.S.B.L.



The 4th African Peering and Interconnection Forum, AfPIF-2013



Burundi



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Sheraton Casablanca Hotel & Towers, 04 September 2013

PRESENTATION OUTLINES

1. The Context
2. IXP in Poverty reduction
3. The Burundian Information Society
4. Local Internet Traffic Exchanged outside of Burundi, the current situation
5. Local Internet Traffic Exchanged within Burundi, projected situation
6. BurundiX A.S.B.L.
7. Conclusion

1. The Context

- **The IXP project is about to be implemented thanks to the partnership between the Government of Burundi, African Union and ISOC.**
- **An Internet Exchange Point (IXP) is a physical infrastructure that allows local networks to exchange information effectively to a common point in a country without exchange local Internet traffic abroad.**
- **The main benefits are:**
 - **Cost Optimization and cost savings of international capacity**
 - **Latency Incidence Optimization**
 - **Bandwidth Optimization**
 - **Security of the Internet traffic**
 - **Establishment of Effective Burundian Information Society**
 - **Cost reduction in e-Government Information Exchange via local IXP & FO**
- **IXP on National Backbone**
- **Brief, poverty reduction for Burundi**

2. The IXP in Poverty Reduction

- For this person, the problem is to connect to CELL for INTERNET USE & services
- Think about Local IXP as a prior and eminent solution



Thinking about the access cost to ICT, Universal Access, Telecoms, Internet, ...!

3. The Burundian Information Society

Verticale Dimensions

- 1- Burundi Vision 2025
- 2- National Policy for ICT Development (PNDTIC)
- 3- e-Government Strategy
- 4- GovNet Strategy
- 5- Universal Access Strategy
- 6- Other Strategies, etc.

1. Burundian Legal and Regulatory Framework
- **IT Law**

2. Infrastructure:
- **National Backbone**
- **Town Metropolitan Networks**
- **Public and private Networks (GovNet, LAN, FTTx**
- **Procurement of IRU Bandwidths, ...)**
- **Electricity and Service**

3. ICT Equipments
(**Computers & Accessories, ...**)

4. Applications/ Software
- **e-Government applications**

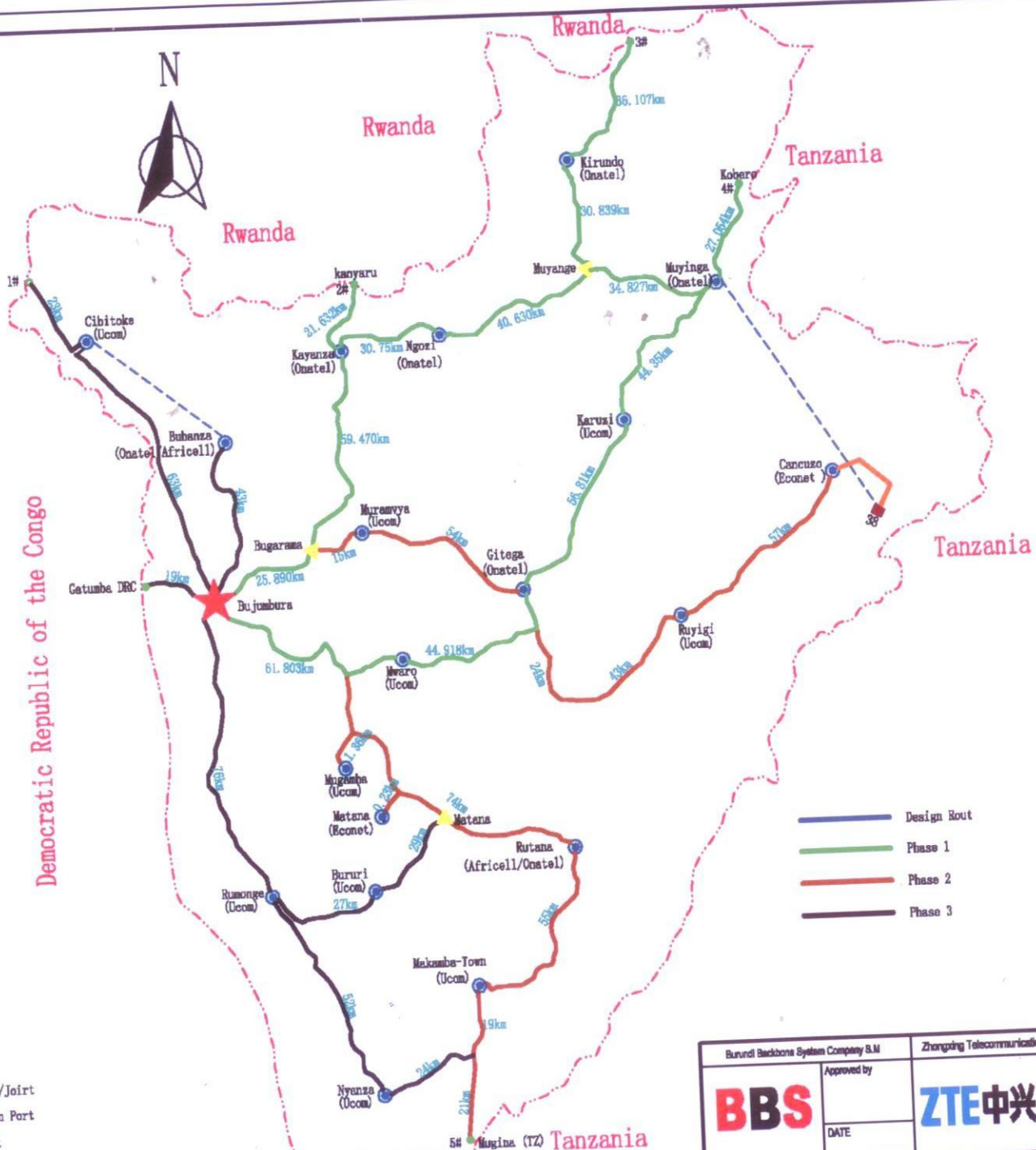
5. IXP

6. Contents, e-Government

7. IT Standards

8. HCB&D

Horizontale Dimensions

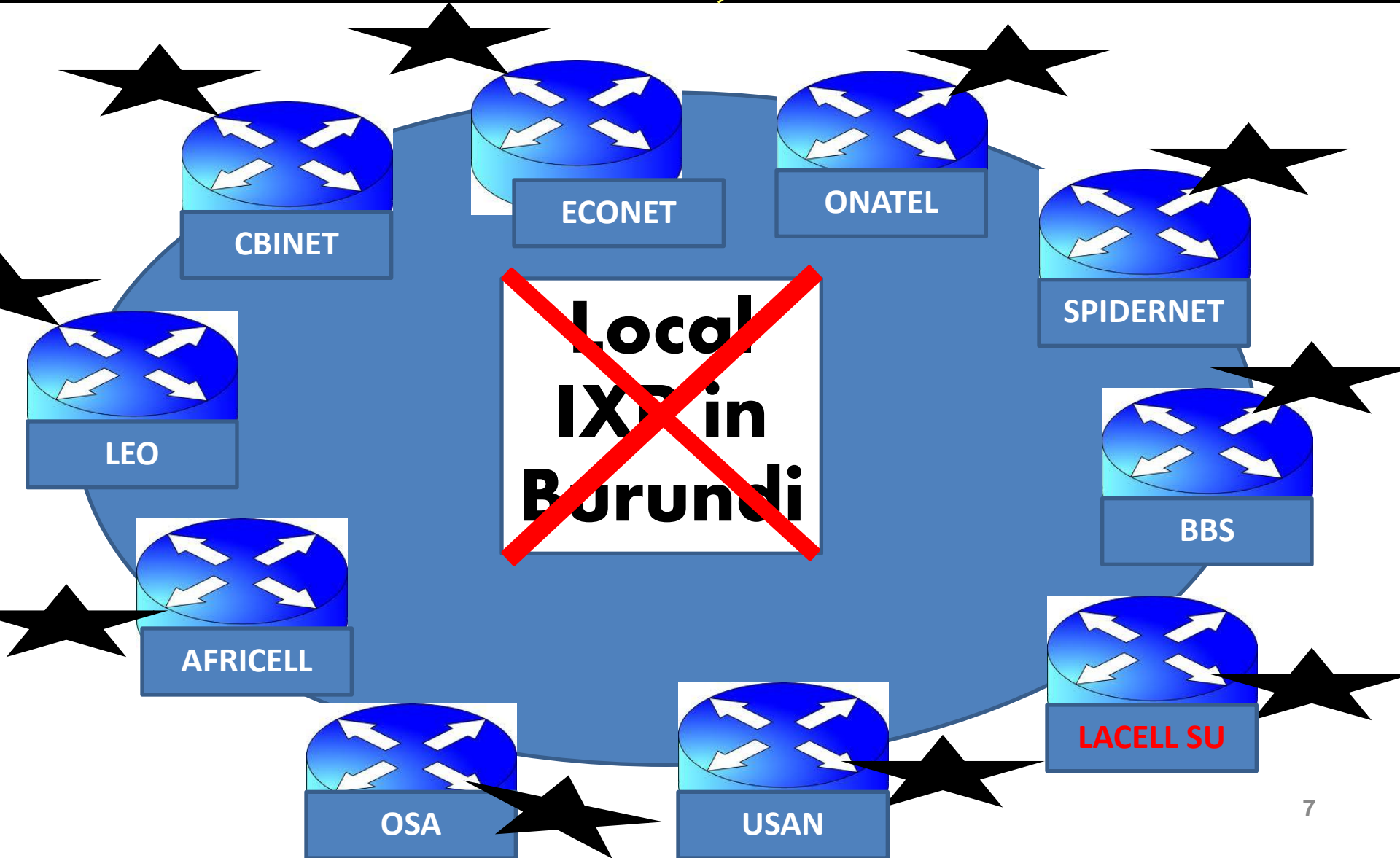


- Design Rout
- Phase 1
- Phase 2
- Phase 3

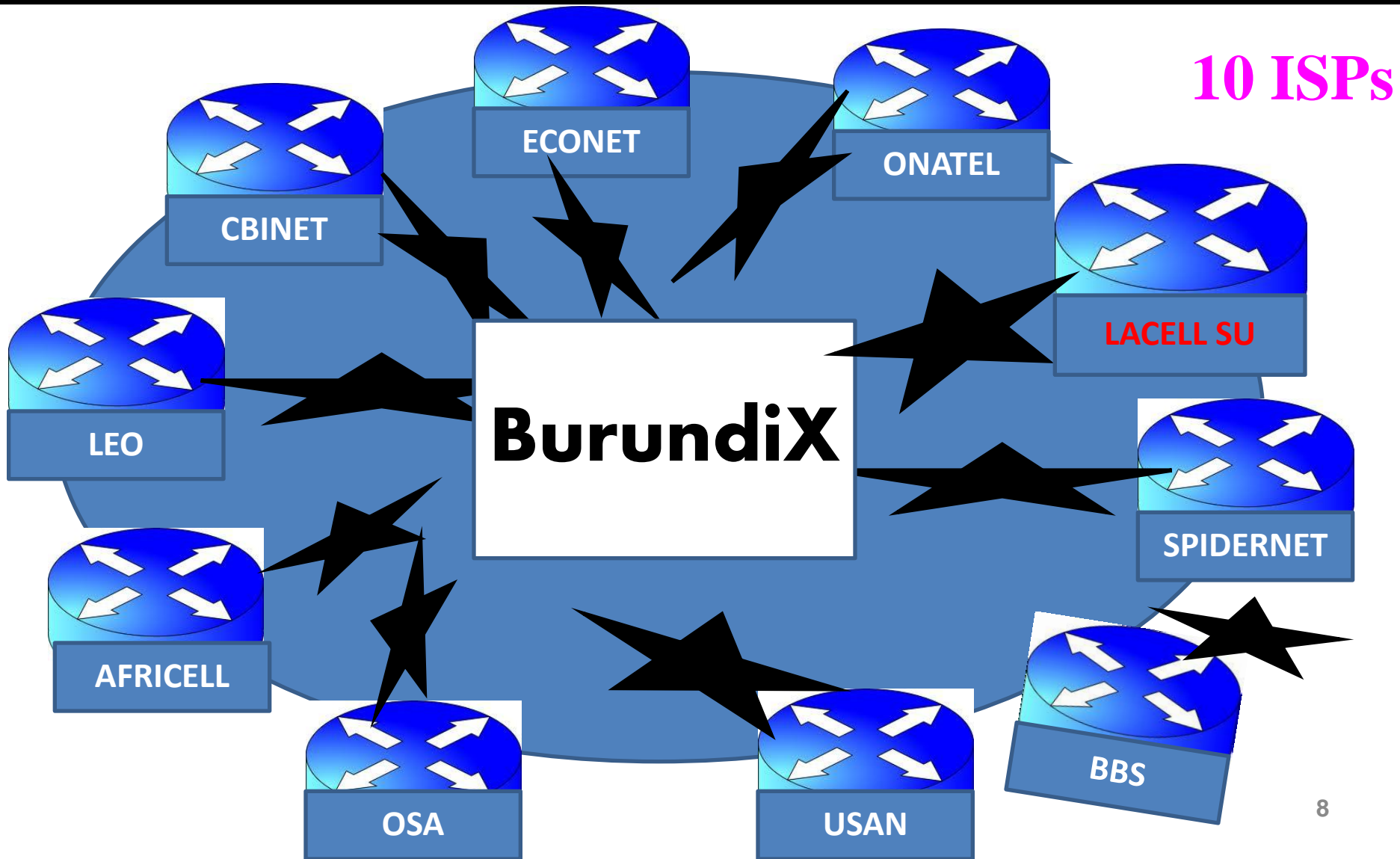
- Legend:
- Backbone Node
 - ▲ Cable Junction/Joint
 - Interconnection Port
 - Microwave Link

Burundi Backbone System Company S.M		Zhongxing Telecommunication Equipment Corporation		Burundi Backbone
BBS	Approved by	ZTE中兴	Checked by	General OFC
	DATE		Designed by	DATE 1.Sep.2011
		Drawing Number		

4. Local Internet Traffic Exchanged outside of Burundi, current situation



5. Local Internet Traffic Exchanged within Burundi (Project Burundi, ISOC, AU)



Potential Partners of BurundiX

- Service Providers:
 - ISPs
 - Emails
 - e-Government Contents
 - Online Medias
 - Banks' Traffic
 - Web hosting
- Etc.

Bringing Down Terrestrial Capacity Costs



- Burundi National Backbone length: 1250 km
- All local ISPs interconnected to local IXP
- National Datacenter for e-Government Applications
- Local Cloud Computing
- Usage of ccTLD [.bi](https://www.burundi.gov.bj/) for all local public and private institutions
- Local Caches for Global Companies (Google, Youtube, Content Delivery Networks, ...)

6. BurundiX A.S.B.L.

- BurundiX will be:
 - an Non-profit Association
 - based at National University of Burundi
 - having an Executive Committee [6]
 - President & Deputy-president [2],
 - Secretary & Deputy-secretary [2], and
 - Treasurer and Deputy-treasurer [2]
- The estimated current Internet Capacity for all Burundian Mobile Operators and ISPs: between 3 & 4 STM-1s, so between 450 Mbps & 600 Mbps **but, this will change soon (BBS Phase 1, 2 & 3)**
- Open Peering Policy
- Approval of BurundiX as a recognized Non-profit Association in the Country, before end of October 2013

Current Potential Members of BurundiX

- Individuals:
 - 15 individuals working in ISPs and other institutions
- Corporation:
 - All 10 ISPs (9 ISP Retailers + BBS as a Wholesaler)
 - Burundi Central Bank (BRB)
 - National University of Burundi
 - REGIDESO (Water and Electricity)
 - Ministry of Higher Learning and Scientific Research
 - ARCT: National ICT Regulatory Agency

BurundiX Missions

- Setting up Local IXP in Burundi and other related infrastructures for the benefits of all actors
- Hosting IXP Services
- Sharing knowledge and Experience with local, regional and international organizations in order to build partnerships
- Promoting Research and Development

BurundiX Policies

- The following Policies will be applicable to all clients:
 - Interconnection Policy (To be defined soon)
 - Quality of Services Policy (To be defined soon)
 - Data Collection Policy (To be defined soon)
 - Data Access Policy (To be defined soon)
 - ...

BurundiX A.S.B.L. Challenges

- Budget for one permanent employee of BurundiX at the beginning (OPEX & CAPEX)
- Lack of financial support from the Government (ICT Regulatory Agency, ARCT)
- Are ISPs really ready to connect and pay for it?
- Developing news services for income generation
- Joining other IXP Communities

7. CONCLUSION

- *By working with our corporate and government partners, we will be able to reduce the cost by bringing Internet access to affordable housing properties and low-income residents in Burundi will benefit from the advantages of BurundiX.*
- **Invitation to everyone to support this initiative and to work with us for better implementation.**
- *BurundiX role is to bring together Public and Private Sectors by Developing National and Regional Interconnection (Partnerships) for the benefits of IXP.*
- **Promoting ICT as a Driver of Socio-economic Development by increasing accessibility and the quality of Internet Services for local & regional communities.**



- **Thanks**
- **Merci**

Contacts

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