Why are we doing what we are doing?
Africa Regional Bureau Team

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Africa in a nutshell
Large, Young, Fragmented and Diverse

- Its area is 3.1 times China or the US
- 1.2 Billion (was only 221 million in 1950!)
- Half of the population under 25 years
- 54/55 countries
- Official languages
  - French, English, Arabic, Portuguese, Spanish, Amharic, etc.
  - More than 2000 languages
Continental organizations

African Union (1963)

Regional Economic communities

Arab Maghreb Union (UMA)
Common Market for Eastern and Southern Africa (COMESA)
Community of Sahel-Saharan States (CEN-SAD)
East African Community (EAC)
Economic Community of Central African States (ECCAS)
Economic Community of West African States (ECOWAS)
Intergovernmental Authority on Development (IGAD)
Southern African Development Community (SADC)

Challenges
Overlapping => competition
Only a few are developed: ECOWAS, SADC and EAC

Other intergovernmental organization
UNECA, Regional bureaus of ITU, UNDP, World Bank, etc.
61 percent of Sub-Saharan Africans live in countries that were classified as:
• either free (12 percent)
• or partly free (49 percent)

There is freedom of speech in Africa ..... but you are not guarantied freedom after speech
African economy

- Major challenges since decolonization until the 2000s
- Considerable growth from 2000-2015
- Slow down of economy in 2016
- Fall of price of minerals and oil
- Not enough structural changes
Africa and the Internet
The Internet landscape (ITU)

Internet penetration rate for men and women, 2016

- Africa: Female 21.9, Male 28.4
- Arab States: Female 36.9, Male 46.1
- Asia & Pacific: Female 39.5, Male 47.5
- The Americas: Female 64.4, Male 66.6
- CIS: Female 65.0, Male 68.5
- Europe: Female 76.3, Male 82.0

Developed:
- Female 80.0, Male 82.3

World:
- Female 44.9, Male 51.1

Developing:
- Female 37.4, Male 45.0

LDC:
- Female 12.5, Male 18.0

Unconnected population 2016
Growth of Internet penetration in Africa

Figure 1 Internet penetration in Africa (Sources: http://www.internetworldstats.com/stats1.htm; ITU (2014), the World in 2014: ICT Facts and Figures)
International connectivity
Terrestrial connectivity is moving in from coasts
IXPs in Africa
Policy environment
African Internet Policy Issues

Access

- Increasing interest of government to improve access
- Liberalized Telecom environment that brought competition and growth in the sector
- Some countries with government control of the telecom and Internet sector
- Major concerns with regards to local Wikipedia article authors location content in local languages
  - 2.75% of the web pages targeting the African population use indigenous African languages
African Internet Policy Issues

Trust

- Cybersecurity is at the top of African ICT policy makers concerns (AU/ISOC survey)
- African Union Convention on Cyber Security and Personal Data Protection
- 30/54 countries do not have cybercrime laws
- Internet restriction is being used to limit access
Internet Society’s achievements in Africa

Most trusted, impactful and influential Internet organization
The most impactful organization in building tech. capacity

- Early INET workshops formed the pioneers in Africa
- 1,735 trained directly by ISOC
  - 381 Face to Face (since 2012)
  - 1,354 Online (since 2016)
- 1,485 trained through AFNOG
- 103 trained through AFCHIX
- 450 trained through AFTLD
- 1,169 through NOGs
Changed The Interconnection Landscape in Africa

- Peering increased 409 times from 2009 to 2017!!!
- 460 Gbps exchanged in April 2017
- Interconnection
  - More than 30 countries
  - 7 AFPIFs
  - Leveling up of IXPs
  - African IXP association
- Development of Community Networks since 2016

AFPIF 2016, Dar es Salaam, Tanzania
Working to build Trust

- Collaborative security in practice
- Guidelines on Internet Infrastructure Security with AUC
- Internet restrictions and shutdown

Internet Infrastructure Security Guidelines for Africa
A joint initiative of the Internet Society and the Commission of the African Union
1 June 2017

Anti-Shutdown-02

1. Summary of the problem being addressed by this proposal

Over the last few years we have seen more and more governments shutting down the free and open access to the Internet in order to push political and other agendas. These shutdowns have been shown to cause economic damage and hurt the citizens of the affected countries. Furthermore – we believe that the Internet is a human right – and the shutting down of the Internet may well impinge on aspects of Articles 12, 19 and 20 of the Universal Declaration of Human rights as proclaimed by the United Nations General Assembly in Paris on the 10th of December 1948.

2. Summary of how this proposal addresses the problem

While the authors of this policy acknowledge that what is proposed is draconian in nature, we feel that the time has come for action to be taken, rather than just bland statements that have shown to have little or no effect.

3. Proposal

The policy proposal will modify the CPM as follows:

- [List of proposed modifications]
Making Internet Meaningful

• Africa – Regional Internet Development Dialogue

RIDD, Kigali, May 2017

• Internet and education for Africa study
Build communities

- 31 Chapters
- Close to 21,000 members
- NOG community
- IXP community
- CN community
- Organizational members

Chapters advocacy meeting 2017
Internet Society’s activities in Africa
2017 work plan
Strategic directions of the African Regional Bureau

Access
• Changing the Interconnection landscape
• Bringing access to remote communities
• Meaningful access

Trust
• Implementation of collaborative security and trust framework
• Addressing the problem of shutdowns/restrictions
• Partnerships (African Union, Access now, etc.)

IETF
• Increase Africans participation in IETF
2017 activities

Access
- Deploying Ubiquitous & Trusted Infrastructure
  - Interconnection and measurements
  - Community Networks in Africa
  - DNS Forum & ccTLD capacity building activities
- Develop Capacity of Communities
  - Supporting NOGs & Women Capacity Development
  - BCOP activities in partnership with AfriNIC
  - ION event during iWeek/SafNOG
- Empower Communities & Sustain Development
  - Publication: Promoting Internet and Education in Africa
  - Publication: Promoting an African Internet Economy
- Promotion of Policies
  - Africa edition of Regional Internet Development Dialogue (RIDD)
2017 activities …

- **Trust**
  - Promote the African Internet Security Infrastructure Guidelines’ implementation
  - Develop the African Personal Data Protection Guidelines
  - Develop an Anti-shutdown strategy
- **Communications**
  - Create relevant content and develop communication platforms
  - Implement and promote new ISOC Brand and Identity
  - Support and implement global communication campaigns in the region - Access and Trust
ISOC Chapters in Africa

31 Chapters / 20'883 members

- Benin
- Burkina Faso
- Burundi
- Cameroon
- Chad
- Congo
- Côte d'Ivoire
- Democratic Republic of Congo
- Egypt
- Gambia
- Ghana
- Kenya
- Liberia
- Mali
- Mauritania
- Mauritius
- Morocco
- Niger
- Nigeria
- Rwanda
- Senegal
- Sierra Leone
- Somalia
- South Africa
- South Africa (Gauteng)
- Sudan
- Tanzania
- Togo
- Tunisia
- Uganda
- Zimbabwe

16 English Speaking Chapters
15 French Speaking Chapters
Oldest Chapter: Morocco (1996)
Youngest Chapter: Tanzania (2015)
African community projects

Some facts & figures

- Community grants programme: 53 from Africa (Global total: 187)
- Beyond the net (as of 2015): 7 from Africa (Global total: 28)
- Small Grants (as of 2015): 12 from Africa (Global total: 49)

Creating local content on wikipedia, Uganda

Zenzeleni Community Network, South Africa

IoT training, Zimbabwe
Building and strengthening chapters

- Chapter advocacy workshops
- Involving chapters in at least 30% of bureau activities
- Chapters represent ISOC in regional and national meetings
- Staff members meet with chapters
- Online trainings for chapters
- Providing tools (Zoom, Livestream, etc.)
IETF Africa- An overview and 2017 Action plan

IETF Africa Initiative - increase Africans’ participation in IETF through various activities

Where we are with the initiative
- Active mailing list formed (ietf_africa – 200+ people)
- Various events in Africa (IETF BoF, Events by various Chapters, AFRINIC meeting, IETF material within ISOC Technical online courses)

2017 Action plan
- Viewing hubs for IETF 99 in Prague
- Webinars (raise awareness)
- IETF Hackathons (identify skilled individuals)
- Meetings at at least two IETF meetings this year
- Identify regional champions
- IETC materials in Universities and NRENs
- Produce short IETF materials for the region

Hackathon@AIS, Nairobi, 2017
Why are partnerships important to the ARB?

• We are a small team with a big region to cover. Partnering internally and externally enable the ARB to reach its goals

• Sharing costs, sharing knowledge and resources

• We are not alone in Africa with similar goals and a similar audience

• Partnering allows us to work with organizations, companies, friends/coworkers with similar objectives, avoid overlap and or avoid “turf issues”
Some organizations we work with

ANRT
AfTLD
.zadna
Public Interest Registry
WACREN
UbuntuNet Alliance
DNS.AFRICA
ICANN
AfRINIC
APNConvergenceHub
SimbaNET
.amsIX
DE-CIX
DE-CIX
angola cables
Kooba
Netnod
Colo.io
Google
ICANN
Akamai
SimbaNET
NETFLIX
Tera.co
Data Environments
CTV
Widening Horizons
FTTH
www.ctv.tz
ISPAP
SPICE.NET
Projects with our partners

- ISPs and IXPs
  - AfPIF workshops
  - Routing eg MANRS

- ICANN and AFTLD
  - Africa DNS Forum
  - ccTLD and DNS projects

- AFRINIC
  - IETF projects and increasing awareness on IPv6
Our Partners – Capacity Building

NOGs and NRENs
- Aggregating trainees for face to face and online trainings
- IETF awareness
- Women engineers
African Peering and interconnection forum
Thank you.

Hakuna Matata