

Africa Top Level Domains  
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## African ccTLDs: - Issues and Challenges

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## Introduction

- The Internet is part of a Country's **Virtual Real Estate**
- The ccTLD is one of the virtual real estate's inherent **natural resource**
- The resource should be developed for the **benefit of all**
- As with any natural resource, **governance issues** are paramount
- Therefore the right **approach** is fundamental in overcoming the issues and challenges

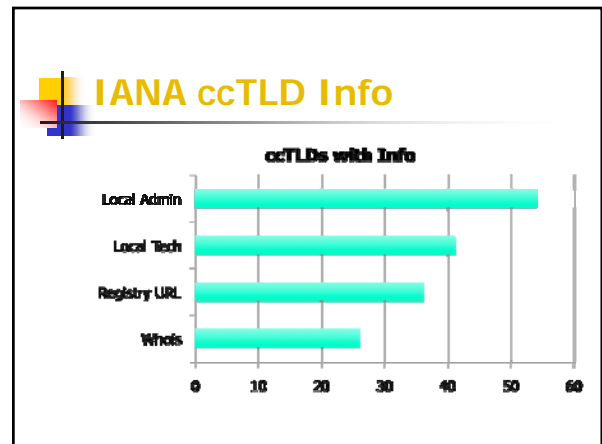
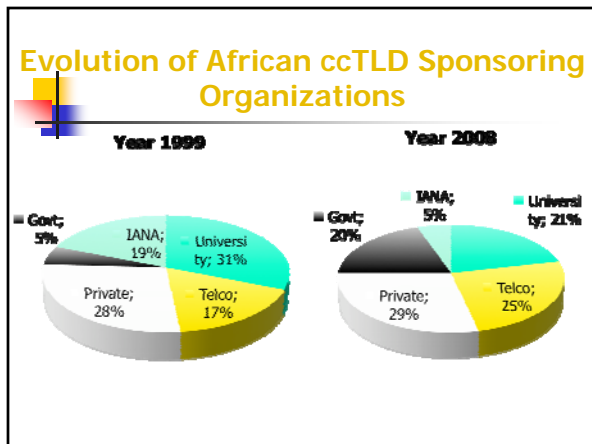
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## Background

- Country Code Top Level Domain (ccTLD)
- There are **249 ccTLDs** in the world
- There are **71.1 million** domain names under ccTLDs compared to 105.9 Million gTLDs
- Representing a **22% growth** in 2008
- Trend portrays the growth potential and opportunities for upcoming ccTLDs
- **.ZA is largest ccTLD in Africa** while .cn, .de, and .uk are top 3 in the world.

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- There are **56 ccTLDs** in Africa
- Oldest ccTLDs in Africa are **.EG** and **.ZA** entered in the root zone in 1990
- **.KM** (Comoros) is the youngest ccTLD entered in the root zone in 1998
- **.ZR** (Zaire) was deleted from the Root zone in 2001



## The Issues

- Legacy issues
- Modus operandi
- Collaboration and Co-ordination
- Social Political Issues
- The ICANN Process

## Legacy Issues

- There are at least 4 ccTLDs are managed abroad
- There are at least 14 ccTLDs with technical POCs abroad
- Limited information on ccTLDs
- Outdated information on IANA website
- Myths .com's are global ccTLDs are local ☹

## Modus Operandi

- ccTLDs are run as either volunteer/free services or monopolies.
- Registry's lack formal structures and development strategies (one man shows)
- Dependency on legacy systems and infrastructure.
- Lack of resources further complicates the bootstrapping process

## Collaboration & Co-ordination

- ccTLD managers remain largely invisible to their community, stakeholders, Govt etc
- As a result the value and role of ccTLD remains unknown and under-developed
- Community engagements and participation present important conduits to access ccTLD resources and best practices

## Social Political

- Social political stability is paramount for growth of ccTLDs
- Normally affects the technical and administrative operational stability of ccTLD
- Could cause the sunset and sunrise of ccTLDs (.zr case)
- In most cases propagates the myths

## The ICANN Process

- The issue is a lack of understanding of ICANNs role in the re-delegation process
- ICANN is a bottom up "process"
- This means that a representation of the "local Internet community" is a part of the process



## The process

- The entity seeking re-delegation **submits application for re-delegation**. The application is accompanied by;
  - A completed ccTLD template
  - Documentation showing the re-delegation serves in the interest of the Local Internet Community
  - Documentation showing the skills & capacities of the entity seeking re-delegation
  - Legal company documents
  - Demonstrate support from Government or provide contacts
- Upon receipt IANA **reviews and tests template data**
- IANA will seek re-delegation **approval from current ccTLD contacts**

## (Cont'd...)

- Thereafter parties may sign applicable agreements
- The IANA issues a report to the DOC and implements changes once they are approved
- New ccTLD manager verifies changes and proceeds with service provision

## Challenges

- Representation & Roles
- Neutrality & Autonomy
- Policy Development
- Technical Resources

## Representation & Roles

- Is the ccTLD an independent entity and how is it structured.
- Is the ccTLD representative of its local Internet community (LIC)
- Is the LIC involved in the ccTLD policy development process
- What roles are the LIC and stakeholders play in the ccTLDs structure

## Challenges

- Representation & Roles
- Neutrality & Autonomy
- Policy Development
- Technical Resources

## Neutrality & Autonomy

- Neutrality is key to a ccTLDs success
- ccTLDs neutrality yields autonomy
- Autonomy promotes acceptance and Ownership
- The ccTLDs location is a critical factor of neutrality
- The management and governance structure should be seen as neutral and balanced

## Challenges

- Representation & Roles
- Neutrality & Autonomy
- **Policy Development**
- Technical Resources

## Policy development

- **The ccTLD registry model**
  - A registry/Registrar, Open Registry or Hybrid registry Model
  - The dispute resolution, Whois Policy etc
- **The sustainability model**
  - Costing per Domain name
  - Other Revenue Streams i.e Membership support and contributions
  - ccTLD location during infancy stages

## Challenges

- Representation & Roles
- Neutrality & Autonomy
- The Policy development
- Technical Resources

## Technical Resources


- **Technical Skills & Capacity**
  - Acquiring relevant skills
  - Sufficient staffing
  - Developing and maintaining technical capacities
- **Technical infrastructure**
  - Access to stable and reliable infrastructure
  - Access to local Internet Exchange
  - Building redundancy and resilience
  - Implementing registry automation (Registry software)

## What's AfTLDs role?

- Delivers on the benefits of collaboration and co-ordination.
- To **provide information** on what it takes to setup a ccTLD or the re-delegation process
- Provide **best practices** based on case studies and experiences (knowledge sharing platform)
- Facilitate **technical capacity building** events that relate to management of ccTLD registries.
- Facilitate **Internships** with established ccTLDs
- Facilitate with establishing **secondary DNS servers hosts** amongst ccTLD members in the region

## Conclusion


- The issues and challenges are mainly resource oriented
- There's need for **collaboration and co-ordination** both locally and regionally to jump start ccTLD growth in the region.



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 Thank you 😊

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