

# Africa IETF initiative: The Role for NRENs



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Presentation title – Client name

# What is the Internet Society?

The Internet Society (ISOC) is a cause-based organization that works with governments, industries, and others to ensure the technologies and policies that helped develop and evolve the Internet will continue into the future.

Our programs cultivate an Internet that is open to everyone, everywhere and aim to ensure that it will continue to be a tool for creativity, innovation, and economic growth.

**MISSION:** To promote the open development, evolution, and use of the Internet for the benefit of all people throughout the world.

**VISION:** The Internet is for everyone

# Global Presence



**100+**

Chapters  
Worldwide

**65,000+**

Members and  
Supporters

**145+**

Organization  
Members

**6**

Regional  
Bureaus

**18**

Countries with  
ISOC Offices

# ISOC and NRENs in Africa

- Most activities around Capacity Building
  - Help with trainings around routing and IXPs
  - Help with offline trainings around UNIX and Internet Services
- Online Trainings:
  - Continually providing free online trainings on several topics including both technical and non technical courses in both English and French
  - Available any time!
  - Now hosted on the continent via AfriNIC

# Internet Standards

**SNMP**

**SSH**

**BGP**

**ICMP**

**IPv4**

**FTP**

**OSPF**

**IMAP**

**NAT**

**SPF**

**TCP**

**DNSSEC**

**IPv6**

**TLS**

**DNS**

**POP**

**HTTP**

**DHCP**

**HTTPv2**

**UDP**

**SMTP**

# Internet Engineering Task Force



**I E T F<sup>®</sup>**

<http://ietf.org>

# What is the IETF?

- The Internet Engineering Task Force is a large open international community of network designers, operators, vendors, and **researchers** concerned with the evolution of the Internet architecture and the smooth operation of the Internet.
- The actual technical work of the IETF is done in its working groups,
- **GOAL: To make the Internet work better**

- **Open**
- **Participation**
- **Technical**
- **Competence**
- **Rough Consensus**
- **Volunteer Core**



**OPEN**

# IETF and Africa

- Participation by engineers and researchers from the African region at the IETF is very low
- There are some from the region who have been following working groups, attended meetings, and even a few who have submitted documents for review
- However, participation is not a high enough level to encourage the IETF to host one of their meetings on this continent

# As a result.....

- Low awareness/adoption of some key Internet Standards in the region
- **Little research** on Internet Standards in the region
- Low participation from the region on how the Internet is evolving
- And sometimes, things don't work like they are supposed to because a service has not been setup in conformance to standards
  - For example, email

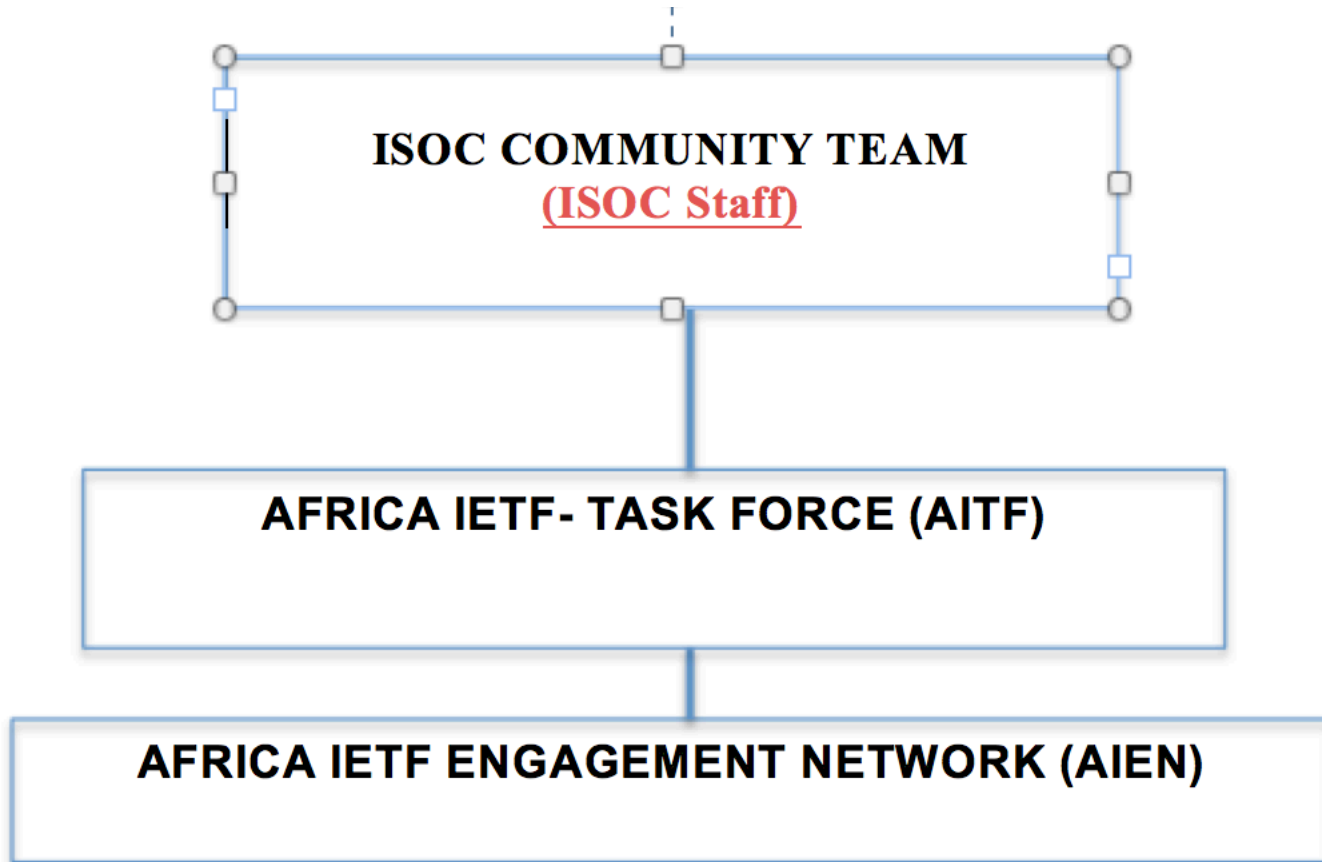
# Past IETF activity results

- There have been some successes but not sustainable in the long run
- ISOC African Bureau decided to go back to the drawing board and come up with with a more sustainable initiative with more involvement from the community
- We called this initiative the **“Africa IETF Initiative”**

# Goals and Objectives of the Initiative

- To increase the IETF's visibility in Africa
- To promote open standards on the continent
- Develop a strong community of individuals who contribute to the Internet Standards development process at the IETF
- To host one of the IETF meetings in an African city in the next 5 years.

# Structure



# What role NRENs can Play

- Support your staff to attend IETF meetings
- Provide expertise on IETF related topics in your country
- Support IETF events/get together locally
  - Provide a venue and connectivity
  - Provide expertise
- Abide by RFCs – Internet Standards
- Host IETF viewing hubs
- Join the ietf-africa mailing list and tell us what activities you are carrying out and what help you need

# What role NRENs can Play cont'd

- Encourage research into Internet standards by your community
- Assist them in organizing IETF related hacakthons for students and engineers
  - Provide a venue, connectivity
- Spread the word about the importance of deployment of Internet standards

# Hackathon Venue



# IETF CodeStand

- The IETF CodeStand marketplace brings together **students, researchers, professors**, open source development communities, vendors with proprietary implementations, and consumers of code bases.
- The objective is to both link existing implementations to standards and showcase opportunities to develop running code for IETF protocols.
- Each type of user benefits from increased collaboration that CodeStand enables.
- <https://codestand.ietf.org/codestand/>

# Are you a Lecturer/Researcher?

- Use IETF materials in your classes
- Encourage research into IETF work
- Promote IETF among ICT Clubs
- <https://codestand.ietf.org/codestand/>
- Join the ietf-africa mailing list and tell us what activities you are carrying out and what help you need
- Check out the Internet Research Task Force
- <https://trac.tools.ietf.org/group/irtf/trac/wiki/Teaching>

# Are you a University student/Engineer?

- Read about the IETF, select the Working Groups that interest you and follow them
- Tell your friends about the IETF and organize related activities
- Start a hackathon group and read about whats going on at the IETF Hackathons
- Join the ietf-africa mailing list and tell us what activities you are carrying out and what help you need

# How ISOC plans to help you

- Provide you with materials on the IETF
- Help co-ordinate viewing hubs on the continent
- Help you find IETF related expertise
  - When possible
- Fellowships for NRENs
  - Also via AfREN
- Tell you about what is going on at the IETF and IETF activities happening close to you

# The mailing lists

- [ietf<underscore>africa@elists.isoc.org](mailto:ietf<underscore>africa@elists.isoc.org) [ietf\\_afri  
ca@elists.isoc.org](mailto:ietf_afri<br/>ca@elists.isoc.org)
- For the NOGs and NRENS network engineers/trainers, there is also separate mailing list as we discuss other activities over and beyond the IETF.
  - If you are a NOG/NREN and not on this list please email me ([chege@isoc.org](mailto:chege@isoc.org))

# References

- <http://ietf.org>
- <http://irtf.org>
- <https://trac.tools.ietf.org/group/irtf/trac/wiki/Teaching>
- <https://codestand.ietf.org/codestand/>
- <https://www.ietf.org/hackathon/>
- <http://internetsociety.org>
- References
  - [https://en.wikipedia.org/wiki/List\\_of\\_RFCs](https://en.wikipedia.org/wiki/List_of_RFCs)
  - Photos from [here](#), [here](#) and [here](#)

# Thank You!

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**Internet  
Society**