# Cyber Initiatives in the African Continent

**One Continent,  One Vision, One Team**

# Agenda

❑ **Introduction**

❑ **Let's brainstorm about What everyone is doing**

❑ **AfricaCERT**

❑ **AOB**

"If each custodian and each player on the African Internet Ecosystem can plug a hole, the African Cyberspace will become more resilient and will remain an engine of development , growth and opportunities."

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# **The African Union Commission**

- Cyber Security Trends and Government Responses in Africa
    - African Union Convention on Cyber Security and Personal Data Protection
    - Cyber Security Trends and Government Responses in Africa
    - Internet Infrastructure Security Guidelines for Africa (May 30, 2017)
        - Regional (AU Level)
        - Form an Africa-Wide Cyber Security Collaboration and Coordination Committee (ACS3C)
        - Engage in Capacity Building and Knowledge Sharing on a pan-African Level

        - National Level
        - Identify and Protect Critical Internet Infrastructure
        - Facilitate Information Exchange through a National Multistakeholder Structure
        - Establish and Strengthen National Level Computer Security Incident Response Teams (CSIRTs)
        - Promote Internet Infrastructure Resilience through Internet Exchange Points (IXPs)

        - ISP/Operator Level
        - Establish Baseline Security
        - Establish and Maintain Cooperation and Collaboration

# Regional Organisations

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## ▪ **ECOWAS**

- ▪ Enhancing the regional Cybersecurity posture of ECOWAS member country
- ▪ National CIRT/CERT programme as well as regional cyber drills
- ▪ Harmonization and enhancement of legislations
- ▪ Elaboration of national Cybersecurity strategies which entail the formulation and implementation of national frameworks for cybersecurity and critical information infrastructure protection (CIIP) through a comprehensive approach.

## ▪ **The OIC-CERT**

The Organisation of The Islamic Cooperation (OIC) has approved and accepted the Resolution on "Collaboration of Computer Emergency Response Team (CERT) Among the OIC Member Countries". The Resolution was approved during the 35th Session of the Council of Foreign Ministers of the OIC Meeting in Kampala, Uganda on 18 – 20 June 2008.

## ▪ **COMESA: Common Market for Easter and Southern Africa**
## ▪ **ECCAS: Economic Community of Central African States**
## ▪ **SADC: Southern African Development Community**

- **The ITU**

- **OIF: Organisation International de la Francophonie**
  - Regional cybersecurity observatory
  - National strategies
  - CSIRT program
  - Law Harmonisation

- **The Interpol**
  - No More Ransom Initiative
  - African Working Group Meeting For Heads of Cybercrime,
    - 4th meeting in Mauritius / 11-13 October 2017
    - Stakeholders engagement
    - Internet Governance engagement

- **IGFs: Local, Regional and Global**
  - Policies Makers engagement on Cyber issues

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# ICANN Africa.

- DNSSEC Activities in Africa – ISPs, Registries, and Registrars
- Supports SROC Courses and DNS Security with Aftld and AfriRegistrar
- Supports Number resources security
- Public Safety Working Group for African GAC representatives and LEA Agencies
- Identifier Technical Health Indicators (ITHI) Project
  - Registration accuracy
  - Domain name abuse

# The Internet Society

- Engagement of Policy Makers on Collaborative Security
- Internet Infrastructure Guidelines
- Chapter Engagement on Awareness raising activities
- CSIRTs workshops
- Mutually Agreed Norms for Routing Security among IXPs in Africa
- Antispam Initiatives
- IETF Hackathons
- DNSSEC
- Supports other organizations

# The Technical Community

- **AfriNIC**
  - Regional Internet Registry
    - Initiatives around clean POC, Abuse contact, Assignment
  - AfGWG to engage Policy Makers
  - Security issues related to numbers:
    - DNSSEC Activities in Africa
    - Number certification (RPKI)
    - IP Address hijacking
    - Legacy holders
    - IPv4 depletion and transfer issues
    - Reverse DNS
    - Cooperation with LEA Agencies via Interpol Head of Cyber Units in Africa.

- **AfTLD**
  - Engagement African CCTLD and ICANN Accredited Registrars in providing Secure Operations
  - Training on Secure Registry Operations Courses
  - Engage with stakeholders.

# AfNOG

- Operators
- Discussion, Security related trainings and CSIRT Trainings at Local NOGS and global NOG
- Discussion and alerts on different vulnerabilities or issues
- Education on secure operation

## Education Community

- # AfREN
  - CSIRTs in Education Institution
  - Security Courses and training
  - IETF program for Engineers

# The African Civil Society

❑ **Issues**
- Surveillance
- Privacy
- Human Rights issues
- Internet shutdowns

❑ **Transparency and accountability**
- Advocacy for balance in every one's interest to foster an environment of economic growth
- Representing the interest of users
- Involvement in Public Policy dialogue
- Watch role

❑ **Capacity building efforts and importance of involving all stakeholders**

❑ **Advocate for collaborative security environment**

# An Overview of AfricaCERT

**AfricaCERT**
United in promoting cyber security in Africa

❑ **Vision:**
One Continent, One Vision, One Team United
in Promoting Cybersecurity in Africa.

❑ **Mission:**
The African forum of computer incident response teams,
aims to propose solutions to Challenges for Internet Health
in Af* Internet Ecosystem.

❑ **Technical Assistance**
❑ **Education and Capacity building**
❑ **Threat Intelligence Feeds and Anti Abuse Initiative**
❑ **Legal and policy programs.**

| | |
|---|---|
| 1 | Understand the Africa Internet Ecosystem and the cyber security landscape in Africa |
| 2 | Develop research activities to contribute in solving Cyber Security threats |
| 3 | Promote the creation of CSIRTs in education, National teams, at regional level |
| 4 | Establish the Platform for training cyber security experts in Africa |
| 5 | Promote an environment for Policy Discussion |
| 6 | Promote Collaboration |

# Five (05) Years at a Glance.

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## Enhanced Accountability

- Organization documents established and approved through AGM
- 13 Members / Several Focal Points
- 02 Supporting Partners
- 04 Regional alike organization support.
- 15 Partners
- Engagement with Regional A like Organizations.
- Regional symposia co organized with FIRST and Countries.
- 42 events attended for outreach
- FIRST Membership
- GFCE CSIRT Experts
- Internet Governance CSIRT experts
- Joint Activities with ITU
- African Union

## Mature Training Delivery

- More than 400 people trained from 39 Countries
- 12 Annual events in 12 different countries

## Research on Open Source

- Ongoing Research activities on Open source tools
- 02 Partnerships established with tools providers for joint development.
- Ongoing research on Information sharing Platform.

## Incident reports & Abuse Statistics 2016

### Summary of Incidents

| Incidents Types | TOTAL |
|---|---|
| DoS | 16 |
| Phishing | 255 |
| Spam | 24 |
| Intrusion attempts | 21 |
| Bots | 7718 |
| Net. Scanning | 38 |
| Website Intrusion & Malware Propagation | 14 |
| TOTAL | 8072 |

# Thank You !