AfricaCERT Five Years review.

Backgound

The AfricaCERT (AfricaCERT) is nonprofit organization incorporated in Accra, Ghana in 2012 to provide leadership in cybersecurity related issues in Africa in general but in particular in Assisting African countries developing and strengthening their cyber readiness by providing cyber expertise, advice and assistance in formulating initiatives, programs and projects, related to forging Cybersecurity professionals, the establishment of Incident Response capabilities, building and strengthening CSIRTs in African countries and coordinating cooperation among CSIRTS and the actors in the African Cyber domain. AfricaCERT is expected to fostering and supporting education and outreach programs in ICT Security in and among African countries

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.

AfricaCERT provides a platform for collaboration and coordination. Participating in AfricaCERT enables Computer Security Incident Response Teams and alike organizations to more effectively respond to security incidents. As a Global Connector, AfricaCERT connects computer security incident response teams from government, commercial, and educational organizations. AfricaCERT aims to foster coordination and cooperation, and to promote information sharing among members and the security community."

Overview of Programs

Technical Assistance

The program provides predetermined Cybersecurity capability development as follows: Security strategy definition, prioritization, and roadmap development, Security Tools and Software, Risk and Security Assessment, Security Policy Development, Assistance and sponsoring in participating and joining cybersecurity associations, collaborative projects and forums (eg. APWG, FIRST etc.…)

Education and Capacity building

The program provides aims to provide more proactive and efficient training to support incident response teams. Since AfricaCERT started its training and support activities, the importance of managing information security incidents has grown to become a top priority for companies, government institutions, universities, schools. CSIRTS are emerging in all sectors and countries, and the number of national and governmental CERTs is continuing to grow with the requirement to provide more effective training that can support day to day operations.

Threat Intelligence Feeds and Cleanup activities

Assistance to CISRTS and Operators to get threat intelligence feeds for cleanup activities

Legal and policy programs.

Participating in public policies debates related to CSIRT operations and Cybersecurity to enable an environment that support cyber readiness of African counties.

➕ Management and Organization.
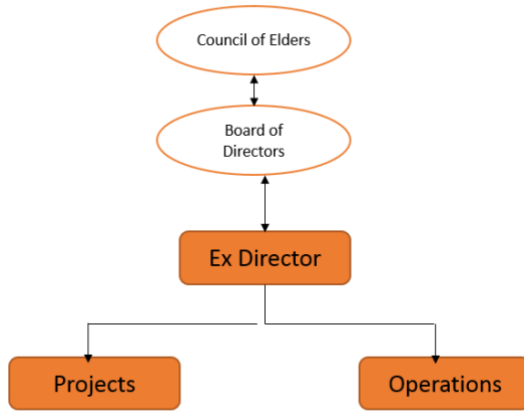
The Executive Director is responsible for overseeing the programs and strategic orientation of AfricaCERT. Other key duty includes community outreach. The position reports directly to the Board of Directors.

The Operations Manager is responsible for managing, coordinating, supervising and evaluating AfricaCERT's operational activities.

The Project Manager has the responsibility of the planning, and execution of AfricaCERT's projects.

➕ **Funding and Beneficiaries by year.**

	2012	2013	2014	2015	2016	2017	
AfNOG	$14,600	$13,500	$21,000	$28,700	$30,000	$32,500	
OIF	$0	$0	$19,950	$11,950	$73,150	$26,300	
Internet Society	$0	$0	$0	$0	$5,000	$0	
Iservices Systems	$0	$0	$0	$0	$0	$1,700	
ICANN	$0	$0	$0	$3,500	$0	$0	
NCA Ghana	$0	$0	$0	$20,000	$0	$0	
ecrime Bureau Ghana	$0	$0	$0	$870	$0	$0	
FIRST (Air Ticket)	$0	$0	$0	$1,400	$0	$0	
Symposium participants	$0	$0	$0	$1,050	$0	$0	
	$14,600	$13,500	$40,950	$67,470	$108,150	$60,500	

AFRICACERT INVESTEMENT AND SOURCE OF FUNDING
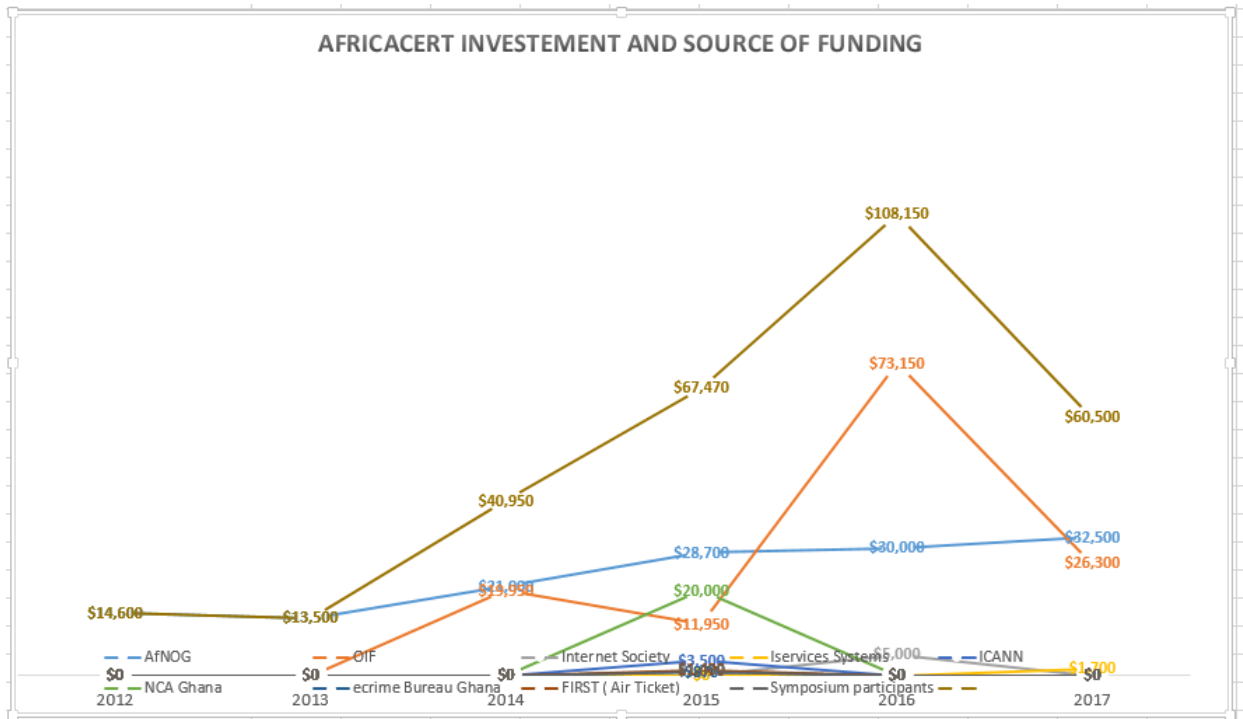
Details of funding.

Year	2012	2013	2014	2015	2016	2017
AfNOG	$14600	$13500	$21000	$28700	$30000	$32500
OIF			$19950	$11950	$73150	$26300
Iservices Systems						$1700

🔸 **Sponsoring**

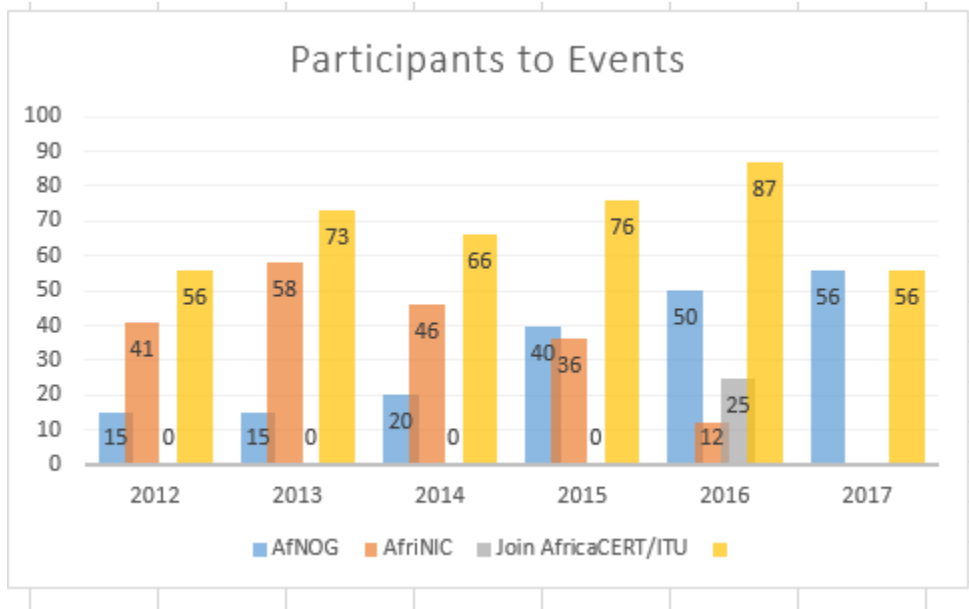| Year / Sponsor	2012	2013	2014	2015	2016
AfriNIC	Event Sponsoring	Event Sponsoring	Event Sponsoring	Event Sponsoring	Event Sponsoring
AfNOG					
FIRST	Training Support	Training Support	Training Support	Training + Travel Support	Training Support
CERT/CC - USDOS				Training Support	Training Support
OIF	Travel Support	Travel Support	Travel Support	Travel Support	Travel Support
Kilnam Chon					
INTERNET SOCIETY					$5000 Supporting Travel to FIRST Training

Korean Internet Security Agency/KrCERT		Travel and Accommodation to Korea	Travel and Accommodation to Korea		
JPCERT	Training Support	Training Support	Training Support	Training Support	Training Support
ANSSI FRANCE			Training Support	Training Support	Training Support
Dutch Minister of Foreign Affairs				Air Ticket and Accommodation to Amsterdam	
LACNIC					Air Ticket and Accommodation to IGF Mexico
National Communication authority				$20.000	
National Information technology Agency				Internet Bandwidth 20 Mbps	
ICANN				$3500	
e-CRIME Bureau Ghana				Media Sponsor	

Workshops: number of workshops, number participants by year by country. Growth in workshop program over years

Year	2012	2013	2014	2015	2016	2017
Number of Meetings	2	2	4	3	4	1
Number of Participants AFNOG	15	15	20	40	50	56
Number of Participating countries AFNOG	4	9	10	15	19	19
Number of Participants at AfricaCERT/ITU					25	

Number of Participating countries AfricaCERT/ITU					13	
Participant AfriNIC November	41	58	46	36	12	
FIRST ACCRA SYMPOSIUM				80		

COMMUNITY BUILDING ACTIVITIES

Community building activities.

Year	2012	2013	2014	2015	2016
AfricaCERT Day at AIS	1	1	1	1	1
AfricaCERT Day AfriNIC	1	1	1	1	1
Co-Organizer of FIRST Symposium				1	1
Event with ITU			1	1	2
FIRST Events Attended			1	1	1
KISA/KrCERT		1	1		
APCERT			1		1
GFCE/GCCS				1	
TFCSIRT				1	
WACREN/AfREN					2

IGF					1
Regional Events	9	1	6	3	11
	11	4	12	10	21

Other contribution in community building activities.
- CSIRT Maturity Guide 2015, 2016
- IGF CSIRT Experts participation 2014, 2015
- OECD. Guidance For Improving The Comparability Of Statistics Produced By Computer Security Incident Response Teams (CSIRTS). 2015

PARTNERSHIP

Partnership

Year	Type
2013	Liaison at FIRST sponsored by JPCERT
	MOU with OIC-CERT
2014	ATI/WACREN
2015	TF-CSIRT liaison Member
	STOP. THINK. CONNECT
	JPCERT/CC - Japan Computer Emergency Response Center
	ANSSI France - The National Cybersecurity Agency of France
	International Telecommunication Union (ITU)
2016	Interpol. Observer status in the Head of Units working group
	CyberGreen
2017	Shadowserver

ACHIEVEMENTS

Achievements

1. **Management, organization and Operations achievements**

➕ **Technical Assistance**
- Point of Contact established with most of CISRTS and IXPS leadership for coordination
- Expert connection for technical assistance or tooling 11 countries.
- Recommended CICERT, TZCERT, GHCERT, UgCERT for the FIRST Suguru Yamagushi Fellowship Program

- OIC CERT Cyber drill registration for several CSIRTS
- Ongoing research with research partners on Open source tooling

Education and Capacity building

- Support to the TRANSITS Framework (Transit I and II)
- Support to FIRST Training material
- Other suitable training programs:
    - Malware Analysis
    - Network Forensics
    - Incident Response
    - Web defacement in the Incident response process

Threat Intelligence Feeds and Cleanup activities
- Provided Daily threat intelligence feed to several CSIRTS
- Cleanup activity and incident coordination
- Incident coordinated

Year	Total
2016	8072
2015	7399
2014	17073

Legal and policy programs.

- Input in the African Convention of Cybersecurity and Data protection
- Participated to the elaboration CSIRT Maturity Kit
- IGF CSIRT activities
- Global Forum of cyber expertise group of Experts
- Participated to the OIF Cybersecurity capacity building programs in cybersecurity
- Participated as expert in the Internet Infrastructure Security Guidelines for Africa A joint initiative of the Internet Society and the Commission of the African Union
- Participated in other relevant studies
- Enable the organization of cybersecurity activities in RENS

2. **Workshops achievement.**

- Increased the number of organized workshops (from 2 in the beginning to 4)
- Have now joint activities with ITU
- Successfully organized and supported FIRST Symposia and training in Africa

3. **Community building activities achievement.**

- Engage more effectively with relevant stakeholders in the Internet ecosystem
- Strengthen partnership with Regional and International organizations
- Enable the cyber security initiative of Research and Education Networks

4. **Partnership activities achievements.**

- Engagement with Relevant Partners critical to AfricaCERT's work areas success

CHALLENGES

Challenges.

1. **Management, organization and Operations achievements**
   - Staff rotation makes it difficult to keep continuous operation and to manage effectively contacts and programs
   - Requirement to revisit the budget
   - Funding issues

2. **Workshops**
   - Many participants requesting funding
   - Engagement model for sponsors

3. **Community building activities achievement.**
   - Difficulties to keep track of participants and to mobilize the community
   - Community request and Work areas too broad for AfricaCERT resources and therefore requirement to focus and prioritize
   - Not enough people involved in AfricaCERT to undertake some roles as community leads, instructors etc.…
   - AfricaCERT is not present enough in key events in its ecosystem
   - Major CISRTS are from Government and there is still a trust relationship between Governments and other sectors

4. **Partnership.**
   - Endorsement by Governments, Regional organizations and African Union
   - Difficulties to build continuous relationship with Partners and finding common ground.
   - Requirement to identify continuous activity with Partners with clear goals and objectives