

2013

**Norway Registers
Development AS**

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CONFERENCE REPORT: CYBER DEFENCE EAST AFRICA 2013

Executive Summary

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1 Contents

1	Contents	2
2	Summary	2
3	The conference.....	3
4	Key Note Speeches.....	3
5	Trainings.....	5
6	Strengthening Cyber Security Community.....	5
7	Call for Action.....	6
7.1	The Government of Tanzania should play a greater role in regulation of the digital environment in Tanzania	6
7.2	IT specialists should actively participate in cyber security discussion	6
8	Sponsorship of the Event	7

2 Summary

Importance of cyber security in East Africa is rising due to region's rapid development. In order to assist organisations in creating a secure digital environment in the region NRD together with ISACA Tanzania Chapter organised Cyber Defence East Africa 2013.

The conference was attended by almost a hundred information security professionals, information systems auditors, IT risk professionals, IT enthusiasts and guests of honour from Tanzania, Uganda, Kenya and Zimbabwe. During the event, participants increased their capacity in the field of cyber security, and a steering group for the good practice exchange - Cyber Defence East Africa Community - has been established. In addition, it has been brought up that the most important cyber security issues in Tanzania today are lack of regulations and resources. Therefore, it has been concluded that the Government should play a greater role in regulation of the digital environment and IT security professionals should advocate cyber security at all times.

3 The conference

In order to assist organisations in creating a secure digital environment in the East African region NRD together with ISACA Tanzania Chapter organised Cyber Defence East Africa 2013 - a three-day conference that took place on the 28th-30th August in Morogoro, Tanzania. The main purpose of the event was to help organisations to get up to speed in information security and create a community of IT security professionals ready to protect their networks and handle security incidents appropriately.

The main reason behind the conference is the rising importance of cyber security in East Africa due to region's rapid development. East African region has a huge potential to increase its competitiveness by modernizing services and providing them online. However, it means that organisations are increasingly reliant on data and IT infrastructure's availability and are increasingly vulnerable to cyber attacks. While many Western countries had years to adapt to these threats and slowly increase their capacities, East Africa cannot afford to grow slowly and lose confidence of its societies in opportunities that the Internet can provide. For this reason, creating a secure digital environment is mandatory in order to maintain the current pace of development.

The conference was attended by almost a hundred information security professionals, information systems auditors, IT risk professionals and IT enthusiasts from Tanzania, Uganda, Kenya and Zimbabwe. Among the attendees, there were representatives from the Bank of Tanzania, Tanzania Revenue Authority, National Identification Authority, Social Security Regulatory Authority, Tanzania E- Government Agency, Tanzania Communications Regulatory Authority, PPF Pensions Fund, Ministry of Home Affairs, Tanzania President's Office, National Social Security Fund, Mzumbe University, PricewaterhouseCoopers and many other local and international organisations. The event lasted for three intensive days and the participants had a chance to practice Critical Security Controls and Penetration Testing, attend technologies demonstrations, network and form a community of information security professionals.



4 Key Note Speeches

Member of Parliament in the Tanzanian National Assembly and Deputy Minister - Communication, Science & Technology at the Government of the United Republic of Tanzania Hon. January Y. Makamba welcomed the initiative to organise this conference and expressed his gratitude for NRD and ISACA. During his speech,

Hon. Makamba invited the participants to be a part of a discussion, a process of new cyber security legislation in Tanzania. He encouraged the audience to help government understand the magnitude of the problem, help understand the risks associated with cyber security, make as much noise as possible - “your job is advocacy for what you do”.



Other keynotes:

Mr. Boniface Kanemba, ISACA Tanzania Chapter President, highlighted that the country has no Cyber Crime Framework in place, leaving a huge vacuum for internet users all over the country. He reminded everyone that the Memorandum of Understanding has been signed between NRD AS and ISACA Tanzania Chapter on the development of a consultative Tanzanian Cyber Security Framework and urged the participants to participate in its implementation.

Dr. Vilius Benetis, ISACA Lithuania Chapter President, Senior Cyber Security Consultant at NRD covered latest cyber security trends and highlighted the importance of planning organisation’s path for cyber defence and resilience, acquiring capabilities and being prepared for getting hit (see, respond, defend). He advised that the community of cyber security professionals is the core which must make sure that cyber security works in Tanzania.

Mr. Ala' Khalil, Regional Channel Manager of FireEye, spoke about the changing threat landscape, how traditional defenses fall short to advanced persistent threats and what are the ways to protect against them.

Mr. Stanley Ayittah, general manager of SimbaNET, encouraged participants to think about the consequences of a disaster and whether their organisations are prepared to recover.

5 Trainings

Critical Security Controls and Penetration Testing trainings, that were the key part of this conference, were highly concentrated, based on the best security practices, standards of business ethics, legal regulations and principles of business continuity, real life examples and hands-on experience.

Technology demonstrations, delivered by FireEye representative Mr. Ala' Khalil and experienced information security professionals, introduced the participants to the example tools they could use to implement cyber security in their respective organisations:

- FireEye (defence against advanced malware, zero day & targeted APT attacks),
- Balabit SCB (privileged users remote session auditing (recording) appliance),
- AccessData FTK (forensics toolkit for incident response),
- Lumension Risk Manager and LEMSS (risk and compliance management, effective endpoint security),
- QualysGuard Suite (vulnerability management),
- IBM Q1Labs QRadar SIEM (Security Information and Event Management).

At the end of the conference, participants were given certificates confirming completion of trainings.



6 Strengthening Cyber Security Community

In order to keep the network of information security professionals, formed during unofficial meetings and the Gala dinner, alive, enable the good practice exchange between them, and in this way improve the security of the digital environment in East Africa, a steering group - Cyber Defence East Africa community - has been established.

The group will stay in touch using a social networking platform and all of the members are invited to get engaged in the preparation of the Consultative Tanzanian National Cyber Security Framework. In addition, the participant questionnaires indicate that 100% of the respondents would participate in a similar conference again next year, if given the opportunity, confirming that there is a great demand for cyber security initiatives in East Africa.

For further information about the event, please refer to: www.cybersecurity.co.tz

7 Call for Action

During the conference, participants have discussed various cyber security issues and ways to solve them. It has been concluded that the biggest challenges in Tanzania today come from lack of regulations and lack of resources. In order to improve this situation, several measures have been suggested.

7.1 The Government of Tanzania should play a greater role in regulation of the digital environment in Tanzania

The main reason behind cyber security regulation is to force organizations to protect their information systems and data from cyber attacks adequately in order to mitigate potential harm to individuals and the state. It will also provide a legal mechanism to deal with cybercrime in Tanzania.

Existing cyber security related regulations in Tanzania are not specific enough; they use vague language instead of clear descriptions of the best practices, which leaves too much room for interpretations. Every organisation should be responsible for ensuring data integrity and confidentiality is achieved at the organization level. However, currently a very low level of security is required which puts the nation in a position where it is vulnerable to cyber threats.

Therefore, it was agreed that there is a need for the Government to take a more active role in development and implementation of mandatory framework which includes policies, principles, procedures, standards, and guidelines on information security nation-wide. Secure data handling, authentication and tracking of users, detection and prevention of unauthorized activity must be exercised and audited in every organisation while complying to the best practices of IT systems' implementation, maintenance and security.

In addition, more resources should be allocated to research and collaboration with the private-sector to write the cyber security standards.

7.2 IT specialists should actively participate in cyber security discussion

Hon. Makamba invited the participants to be a part of a discussion, a process of new cyber security legislation in Tanzania. He encouraged the audience to help government understand the magnitude of the problem, help understand the risks associated with cyber security, make as much noise as possible - "your job is advocacy for what you do". In addition, Dr. Vilius Benetis, ISACA Lithuania Chapter President, Senior Cyber Security Consultant at NRD added that the community of cyber security professionals is the core which must make sure that cyber security works in Tanzania.

8 Sponsorship of the Event

The event was sponsored by **BAIP** - a company with more than 20 years of experience in critical IT infrastructure and cyber security areas. BAIP is involved in various cyber security projects and cooperates with government, national regulatory institutions and educational institutions in the EU, CEE, East and West Africa. <http://www.baip.lt/>

Connectivity was provided by **SimbaNET** - a Licensed Public Data Operator in providing Voice, Video, data and Internet connectivity in East Africa. <http://www.simbanet.co.tz/>

The event was also sponsored by:

CTWO – a company making secure hardware encrypted USB drives SafeXs. <http://ctwo.se/>

BalaBit IT Security - a global leader in the development of privileged activity monitoring, trusted logging and proxy-based gateway technologies to help protect customers against internal and external threats and meet security and compliance regulations. <http://www.balabit.com/>

FireEye - inventors of a purpose-built, virtual machine-based security platform that provides real-time threat protection to enterprises and governments worldwide against the next generation of cyber attacks. <http://www.fireeye.com/>

Norway Registers Development AS (NRD) has been established in 1995 and has been specializing in helping governments and institutions in all continents to build vital economy facilitating infrastructure and achieving relevant, measurable results. Norway Registers Development provides solutions and tested know how for expansion of tax payers base and motivations to pay taxes. We focus in areas of Business registration, licensing and reforming of Business inspections; modernization of Public procurement, modernization of Tax collection with eFilling, etc.

NRD has been working on creating a secure digital environment for states, governments, corporations and citizens in Tanzania and the East African region. It is closely engaged with several national and regional level cyber security initiatives working with telecommunication regulatory authorities, national and regional CERTs and Cyber Security Strategy stakeholders. Furthermore, NRD has signed a MoU with ISACA Tanzania Chapter on cooperation in the development and implementation of consultative Tanzanian National Cyber security framework.

For more information about Norway Registers Development AS, visit www.nrd.no
