



ITU 2021 Cyberdrill Africa- Europe Interregional Meeting

Critical Information Infrastructure protection, Identifying and Sharing Good Practices

Presenter:Ms. Connie FrancisDesignation:Director of ICT Applications and ServicesOrganisation:Tanzania Communications Regulatory AuthorityEmail:connie.francis@tcra.go.tz/ connie.francis@tzcert.go.tz





AGENDA

- 1. Introduction
- 2. Tanzania Perspective on Protection of Critical Information Infrastructure (CII) based on:-
 - ✓ Legal Measures,
 - ✓ Policy and Strategy,
 - ✓ Technical Measures,
 - ✓ Capacity Development,
 - ✓ Cooperation.
- 3. Conclusion





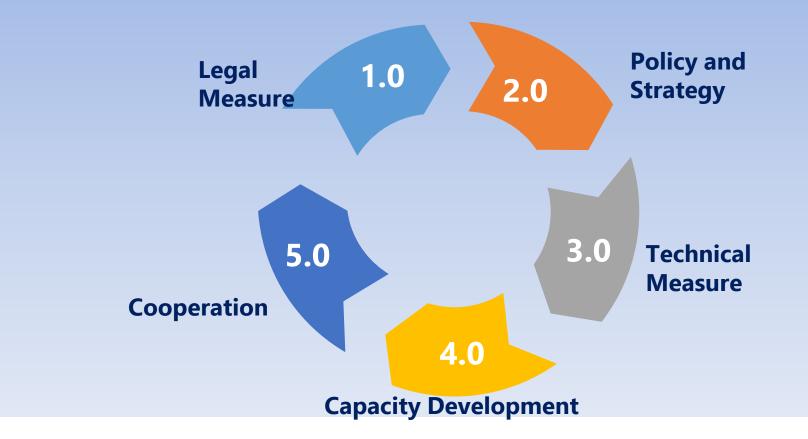
INTRODUCTION:

- ✓ Modern society can not evolve or operate without Critical Information Infrastructure (CII) which are mostly internet dependent for connectivity to facilitate management, communication and control functions. This puts critical operations and assets at risk.
- Tanzania, like many other countries around the world, rely extensively on computer systems and electronic data that require special protection.
- ✓ In 2015, Tanzania enacted Cybercrimes Act wherein CII both physical and virtual vital to the United Republic of Tanzania (URT) have provision. These are the ones that their incapacitation will affect national security, economy and social wellbeing of citizens.
- Progressive efforts have been undertaken to protect the CII in five pillars: Legal Measure, Policy and Strategy, Technical Measure, Capacity Development and Cooperation





Tanzania Perspective on Protection of Critical Information Infrastructure









1. LEGAL MEASURES

✓ In Tanzania, we have legal frameworks in terms of Legislations and Regulations that govern Cybersecurity activities and Protection of CII as well as Cybercrime activities.

Specifically Legislations and Regulation are:-

- □ Cybercrime Act, 2015 has a provision for criminalizing offences related to computer system and Information Communication Technologies. It provides for investigation, collection and use of electronic evidence and for matters related therewith.
- □ On Cybercrime Act, 2015; Section 28 & 29 provide legal measure for Identification and Protection of CII.
- The Electronic and Postal Communication Act, 2020 (EPOCA) section 124, provide provision on establishment of National Computer Emergency Response Team (TZ-CERT) that coordinate response to Cybersecurity incidents at the National Level and corporate with Regional and International entities involved with management of Cybersecurity incidents.
- □ EPOCA (CERT), Regulations 2018 applied to electronic communication operators, ISP and users; sets responsibilities of all key stakeholders in management of Cybersecurity incidents and protection of CII.





2. POLICY AND STRATEGY

Strategy

3.0

- The Ministry responsible with Communication and IT is responsible with formulation and monitoring of Policies and relevant Strategies for Protection of CII.
- **Policy and** The Policy and Strategy in place are:
 - □ The National ICT policy of 2016 which provides a comprehensive framework guiding development and growth of the industry to ensure optimal benefits to the nation and its citizens. Information Security issues are well addressed that trigger formulation of strategy to address Cybersecurity.
 - The National Cybersecurity Strategy 2018-2023 developed in the context of the National ICT Policy for the purpose of preparing the country to address the emerging cyber threats. Security of information resources and National Critical Information Infrastructure requires a coordinated approach that is systemic and holistic in nature.
 - □ The strategy call for coordinated efforts between the government, private sector and civil society, and further requires regional and international collaboration, as well as information sharing related to cybersecurity.



5.0

1.0



1.0

5.0

3.0

THE UNITED REPUBLIC OF TANZANIA TANZANIA COMMUNICATIONS REGULATORY AUTHORITY ISO 9001:2015 CERTIFIED



3. TECHNICAL MEASURES

- \checkmark In an effort of addressing security of communication networks, information systems and their availability, the Electronic and Postal Communications Act enacted in **2010**, its **section 124** provides for establishment of a National Computer Emergency Response Team (TZ-CERT) within the structure of the Tanzania Communications Regulatory Authority.
- ✓ TZ-CERT is responsible for **coordinating** response to cyber security incidents at the national level and cooperate with regional and International entities involved with the management of cyber security incidents. TZ-CERT started its operations in March, Technical 2014 with assistance from ITU.
- Measures ✓ TZ-CERT constituencies composed of sector specific CERT that are defined or determined by their specialization, domain as well as networks similarities. Currently the Government sector CERT (namely Government Security Operation Center -GovSoC) under eGovernment Authority provides CERT services to the country's governmental organizations (Ministries, Departments and Agencies (MDA)) and government related cyber community. Plans are underway to establish Academia, Financial and Banking Constituencies sector CERTs.





4. CAPACITY DEVELOPMENT

- ✓ In order to build the Cyber Culture among Internet users, Tanzania has done commendable work towards different groups through Cybersecurity awareness and technical capacity buildings.
- Through TZ-CERT, Trainings have been offered to different constituencies groups such as Government, Academia and Banks etc. on how to defend their Critical Information Infrastructure.
- ✓ To continue build constituents capacity in area of Incident Response, time to time TZ-CERT host National Cyber Drills that involves both private and public organisations.
- ✓ Tanzania has specific entity namely ICT commission responsible for accrediting cybersecurity professionals. ICT Commission has a role of coordinating and facilitating implementation of national ICT initiatives countrywide through promoting the ICT sector, recognizing and build capacity and skills of ICT Professionals, providing foresight and trends in ICT through research in collaboration with ICT stakeholders and foster strategic investment in ICT.

5.0

Capacity Development



1.0

Cooperation

5.0

2.0

3.0

THE UNITED REPUBLIC OF TANZANIA TANZANIA COMMUNICATIONS REGULATORY AUTHORITY ISO 9001:2015 CERTIFIED



5.0 COOPERATION

TZ-CERT cooperates with numerous organizations nationally and internationally such as Security research entities and other global CERTs.

National Cooperation

TZ-CERT cooperates with stakeholders in handling incidents and **sharing of cyber** security information, capacity building programs, awareness raising and sharing of technical expertise.

International Collaboration

TZ-CERT collaborates with International Telecommunication Union (ITU), Forum for Incident Response and Security Team (FIRST), AfricaCERT and Cybersecurity Alliance for Mutual Progress (CAMP), CERT/CC, Commonwealth CERTs, Team Cymru, Shadow Servers and CERTs under East African Communications Organisation (EACO).











17-Sep-21





THANK YOU 4 YOUR ATTENTION!