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IMPACT THROUGH INSIGHT

Advancing Regional Cyber Security and Stability in Africa



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Critical Information Infrastructure (CII) Protection Challenges and Opportunities in Africa



Source: metamorworks/stock.adobe.com.

Dr. Nate D.F. Allen
Africa Center for Strategic Studies
Africa Center for

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Impact through Insight

Roadmap

CII Threat Landscape

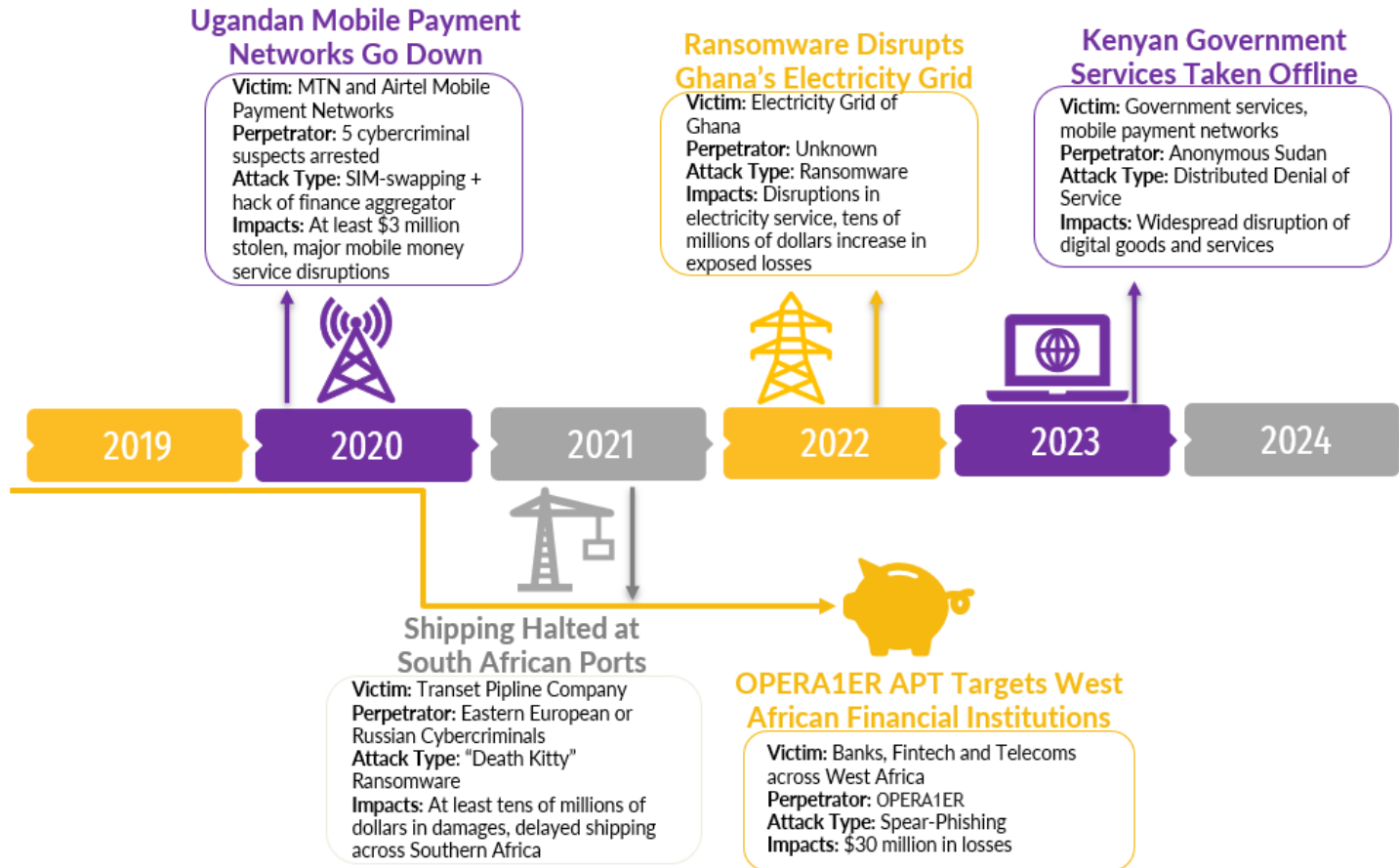
Challenges in Protecting CII

Importance of Regional Institutions

Recommendations

CII Threat Landscape

Figure 1: Recent Attacks Against CII Across Africa



CII Protection Challenges

Figure 2: Cyber Physical Infrastructure of Nigeria's Power Grid


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ajspim.oauife.edu.ng

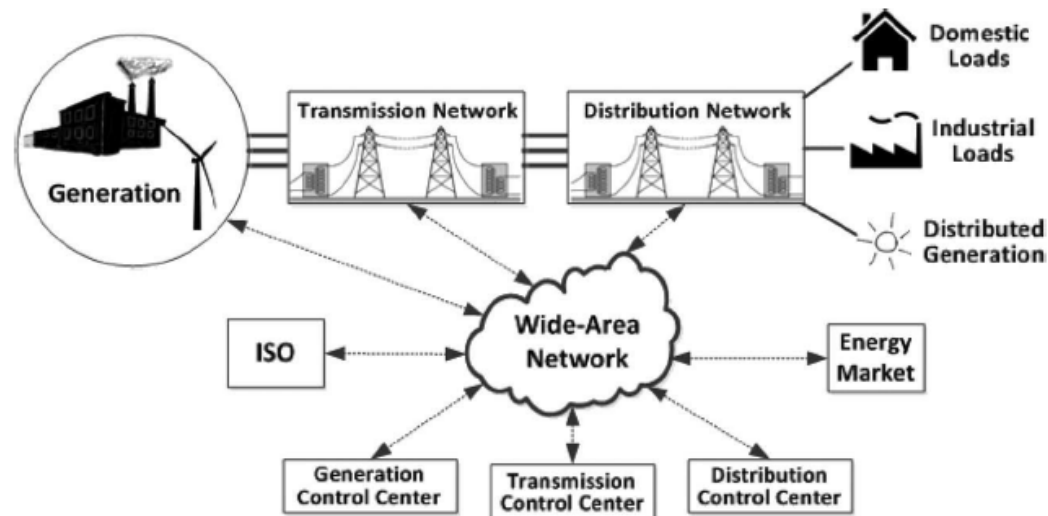


Figure 4: Electric power supply grid cyber-physical infrastructure
Source: (Sridhar *et. al.*, 2012).

Ogundari, I., Otuyemi, F., Momodu, A., & Salu, L. . (2021). CYBER SECURITY ASSESSMENT OF NIGERIA'S ELECTRIC POWER INFRASTRUCTURE. *African Journal of Science Policy and Innovation Management*, 1(2), 87 - 104. Retrieved from <https://ajspim.oauife.edu.ng/index.php/ajspim/article/view/79>

Regional Institutions: Norms of State Behavior and CII Protection

The 11 Norms of Responsible State Behavior in Cyberspace

- Interstate cooperation
- Consider all relevant information
- Prevent misuse of ICTs in national territory
- Cooperate to address cybercrime and terrorism
- Respect human rights
- Do not damage critical infrastructure
- Protect critical infrastructure
- Assist states whose critical infrastructure is attacked
- Ensure supply chain security
- Report ICT-related vulnerabilities
- Do not harm CERTs

- * Critical infrastructure mentioned in norm
- * Norm essential to CII protection
- * Norm tangential to CII protection

Recommendations



Implement UN Norms of Responsible State Behavior



Adopt model CII protections laws, policies, strategies



Identify and bolster protection of key continent-wide CII



Enhance cooperation between CERTs and regional institutions



Establish regional centers to build technical capacity to address CII threats



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