

Innovative ICT Policies and Strategies Mobilizing ICTs for delivering on the 2030 Agenda and the SAMOA Pathway

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Symposium

21-23 February 2017
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Symposium on "Implementing the 2030 Sustainable Development Agenda for
Sustainable Development and the SAMOA pathway in Small Island Developing
States - SIDS: Equipping Public Institutions and Mobilizing Partnerships"

Protection of Information Systems – Critical

The Need to Build Resilient ICT Infrastructures in SIDS

- The impact of climate change on SIDS like The Bahamas
 - Hurricane Joaquin devastation on Southern Bahamian Islands in October 2015
 - Hurricane Matthew devastated The Northern Bahamian Islands in October 2016
 - Emerging CyberSecurity Threats with limited local skillsets to combat
 - Major ICT gaps resulted from the impact of natural disasters
 - Urgent need for an information policy on data placement of sovereign data



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SIDS need for Standards on Information Protection

NIST (National Institute of Standards and Technology Standards) **as a proposed Approach**

▶ NIST 800-34 on Data Contingency

- “Geographic area: distance from the organization and the probability of the storage site being affected by the same disaster as the organization’s primary site” (Contingency Planning Guide for Federal Information Systems)
- The functionality of a system may be highly critical and require a hot site to minimize the downtime and impact on mission/business processes.

▶ NIST Framework for Improving Critical Infrastructure Cybersecurity

- Organizations outside the United States may also use the Framework to strengthen their own cybersecurity efforts, and the Framework can contribute to developing a common language for international cooperation on critical infrastructure cybersecurity.
- Protect
 - Develop and implement the appropriate safeguards to ensure delivery of critical infrastructure services.
 - The Protect Function supports the ability to limit or contain the impact of a potential cybersecurity event.
 - Examples of outcome Categories within this Function include: Data Security; Information Protection Processes and Procedure; Protective Technology

A Proposed Solution to Information Protection in SIDS

- ▶ Development of ICT policies for placement of Information in Bahamian Embassies abroad
- ▶ International Sovereign Data Agreements so that sovereign information placed in other countries are left free from interception by other governments
- ▶ Follow strong standards (NIST, ISO, etc.) on information protection
- ▶ Use mature technologies such as geo-clustering, geo-IP addressing, replication to collocate and access data in real-time



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Answers to Guiding Questions

1. For which SDG Targets and SAMOA commitments can ICTs best accelerate implementation?
 - For The Bahamas, the use of ICT is important to ensure disaster risk reduction awareness is raised and computer aided models are produced to adequately plan land use
 - For the development of innovative and smart cities that could expand e-Gov initiatives and services to the rural areas of The Bahamas
2. What innovative policies and strategies have worked for deploying ICTs for SDGs?
 - An increased ICT infrastructure development within The Bahamas to cause greater access to high speed Internet (Fiber and Broad band cabling)
 - Fostering increased competition in the mobile sector to lower mobile access cost thereby foster innovation and future creation more mobile applications for Bahamians
3. How can governments mobilize the private sector, partnerships and cooperation for mobilizing ICTs including e-government for sustainable development?
 - The start must be the development of a digital identity strategy so that all the citizens have a verified presence online
 - The development of an e-integration strategy the could be lead by a Public Private Partnership (PPP)



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