

# Unpacking Cyber Issues to Tailor an Appropriate Response

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# Overview

1. Stats
2. Current Threat
3. Complex Problem - Multilayered Approach

# Stats: SA's Internet Usage

- 25 million Internet users in South Africa (Internet World Stats, 30 June 2014)
  - 51.5% penetration
  - Second in Sub-Saharan Africa behind Nigeria
- 100% broadband by 2020?
- Government ICT spend R15bn in 2017/2018
- Free Wi-Fi in City of Tshwane, the Western Cape and Limpopo (Project Isizwe)
- 32.3 million mobile Internet subscribers by 2017 (PWC)
- Africa's largest smartphone market (CNN)

# Stats: Is SA a Cybercrime Hub?

- 3rd highest cybercrime victims (Norton)
- 6th most active for cybercrime (FBI)
- Reported costs of R5.8 billion per year (McAfee)
- 84% of SA adults have been victims of cybercrime (Santam insurance)
- One billion pieces of personal data lost in 2014, leading to costs of R432 256 000 (IBM)

# Current Threat

- Why are they attacking (intent)?
  - Cyber espionage
  - Cyberwar
  - Cyber terrorism
  - Hacktivism
  - Cybercrime
- Who is attacking (attribution)?

# Current Threat - Cybercrime

- How are they attacking?
  - Phishing (spear phishing)
  - DDoS attacks
  - Malware
  - Point of sale card skimming
- Physical borders are irrelevant
- All entities and sectors are at risk

# Complex Problem - Multilayered Approach

- Gather impartial stats
- Policy framework-roles and responsibilities
- Legislation - define cybercrime
- Computer Emergency Response Teams (CERTS and CSIRTS)
- Coordination hubs - information sharing
- Train law enforcement, judges and government officials
- Attract and build workforce

# Multilayered Approach (continued)

- Education/Cyber Centres of Excellence
- Public awareness campaigns
- International coordination and cooperation
- Promote R&D
- Cybersecurity standards