Malawi Communications Regulatory Authority (MACRA)

E-Transaction Security and the Public Key Infrastructure

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Outline

- The ICT Sector – institutional arrangement
- Legal Instruments
- Challenges
- Draft E-Legislation
- Role of the Regulator
The ICT Sector – institutional arrangements

- The ICT sector encompasses all aspects of Information and Communications technologies in respect of traditional modes of telecommunications, broadcasting, internet/data and postal services.

- Ministry of Information and Civic Education (MICE) is the overall ministry that oversees the sector including providing policy directives for the growth of ICT development.
The ICT Sector – institutional arrangements (cont)

- The Department of E-Government is mandated to facilitate ICT development within the public sector.

- Malawi Communications Regulatory Authority is mandated to regulate the sector by ensuring fair competition through leveling the playing field and ensure the provision of reliable and affordable communication services.

- Licensed Telecom Operators – responsible for network deployment
Legal Instruments

- The Communications Act (1998) and
Legal Instruments – cont.

- The Communications Act (1998)
  - The Act provides for the regulation of the sector and the operation of the establishment of MACRA.
  - The separation of powers on provision of telecom networks, regulation of the sector and policy formulation.
Legal instruments ..cont

- Current Legislation does not:
  - specifically/clearly stipulates cyber threats and cyber-security matters
  - recognize: electronic signatures, authenticity of electronic documents and admissibility of electronic evidence, etc
Challenges

- No protective legal framework:
  - Consumers do not have confidence to use electronic transactions because there is no protective legal infrastructure that exists for e-transactions.
Challenges .. cont

• Technology advances
• Admissibility of such Evidence
• Multi-jurisdictional nature of cyber crimes require international coordination
E-Legislation

- Government is developing an e-legislation, to be adopted in due course... By December 2014
  - This will address issues on Cyber-security and e-transactions and therefore deal with any issues related to cyber threats across the entire country
  - The Draft e-legislation recognizes all ICT processes and transactions - include recognition of electronic signatures as a valid authentication method for electronic transactions
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E-Legislation .. cont

- The draft cyber law:
  - To address Cybercrime and Computer Related Crimes.
  - To recognize electronic transactions, including electronic funds transfer which practice is very common in our local commercial banks:
    - No record should be denied legal effect just because it is in the form of an electronic record
  - Consumer is deemed to be a weaker party and ought to be more protected
The draft e-Legislation:
- Sets out principles of protection of personal information.
- It will protect the individual right to privacy with respect to the processing of data and ensures that personal data is only processed in accordance with the law requirements.
The Role of MACRA in Digital signatures

• Authority to issue digital certificates

• Authority to be liable for damages incurred due to reliance of a digital signature
Cyber Crimes

• MACRA appoint Cyber inspectors and issue Certificate of appointment (may be in electronic form)
• Functions of Cyber Inspectors - monitor & inspect online activity and report unlawful activity to MACRA, monitor & investigate activities of encryption suppliers
• Subject to court warrant search premises, inspect etc
• Data protection & privacy
Types of Cyber Crimes

• Unauthorized access
• Pornography
• Hacking
• Denial of service attacks
• Spamming
• Illegal trade
Institutional Measure

• Establishment of CERT (Computer Emergency Response Team) – address cyber security incidents

MACRA to establish CERT

Role of CERT

• Information infrastructure for protection actions against ICT security threats
• Coordination to respond to ICT threats
• Provision of reactive & proactive services
Data Protection & Privacy

Addresses collection & processing of personal data

Data subject

Data Controller

1. Principles of processing
   • Fairly & lawfully
   • Collected for specific purpose, explicit & legitimate
   • Adequate & relevant to the purpose
   • Accurate and up to date
   • Not kept longer than necessary

2. Requirement of explicit consent from data subject

3. Requirement to provide technical measures to protect personal data
Data Protection & Privacy

Circumstances where data processing might be necessary –

• Performance of contract
• Necessary for steps prior to entering contract
• For compliance with legal obligation
• To protect interest of data subject
• For public interest/official authority
Domain Name Management

Obligations of MACRA

• Administration & Management of ‘mw’ domain name in line with international best practices (Top Level Domain Names)
• Licensing & Regulation of Registrars
• Issuing of guidelines
• Dispute Resolution
Preparatory Tasks

- Identify areas for capacity building in new introduced by the E-Legislation Bill
- Identifying financing of the additional roles
- Accommodate the new roles within the institutional set up of MACRA
- Conduct international benchmark for best practices with other regional regulatory who have taken up similar roles
- Conduct awareness on e-legislation
- Establish coordination with other institutions with regulatory roles identified in the bill i.e. e-Government, Police, Reserve Bank & BAM, MRA, Financial Intelligent Unit, ISPs, Academia and Media
END PIECE

Thank you all for your attention

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