ITU Regional Cybersecurity Forum for Eastern and Southern Africa
Telkom South Africa

Regulatory Affairs

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Table of contents

- Introduction
- Challenges in the region
- Telkom's approach
- Change in market structure
- Telkom's strategy in the changing environment
- Cyber security and related legislation
- Way forward

Introduction

- Telkom is responsible for critical infrastructure

- corporate management is responsible for establishing and maintaining adequate internal controls

Challenges in the Region

❑ Cyber Security Regional Forum

- Play a role in formulation of best practices in cyber security
- This must include:
  - developing a culture of cyber security
  - demystify cyber security – not another prank (y2k)
  - fostering regional co-operation
  - encouraging and promoting information sharing

  There is therefore a need for the Regional Institutional Structure to address cyber security concerns

❑ Costs in ensuring cyber security – High : Where is funding?

Challenges in the Region II

❑ rapid advances in deployment of new technologies (NGN standards, LTE etc.)

❑ mapping legal and regulatory instruments with existing and new technologies

Challenges in the Region III

❑ Facilities leasing and interconnection Regulations normally provides that a request must be:

1. technically;
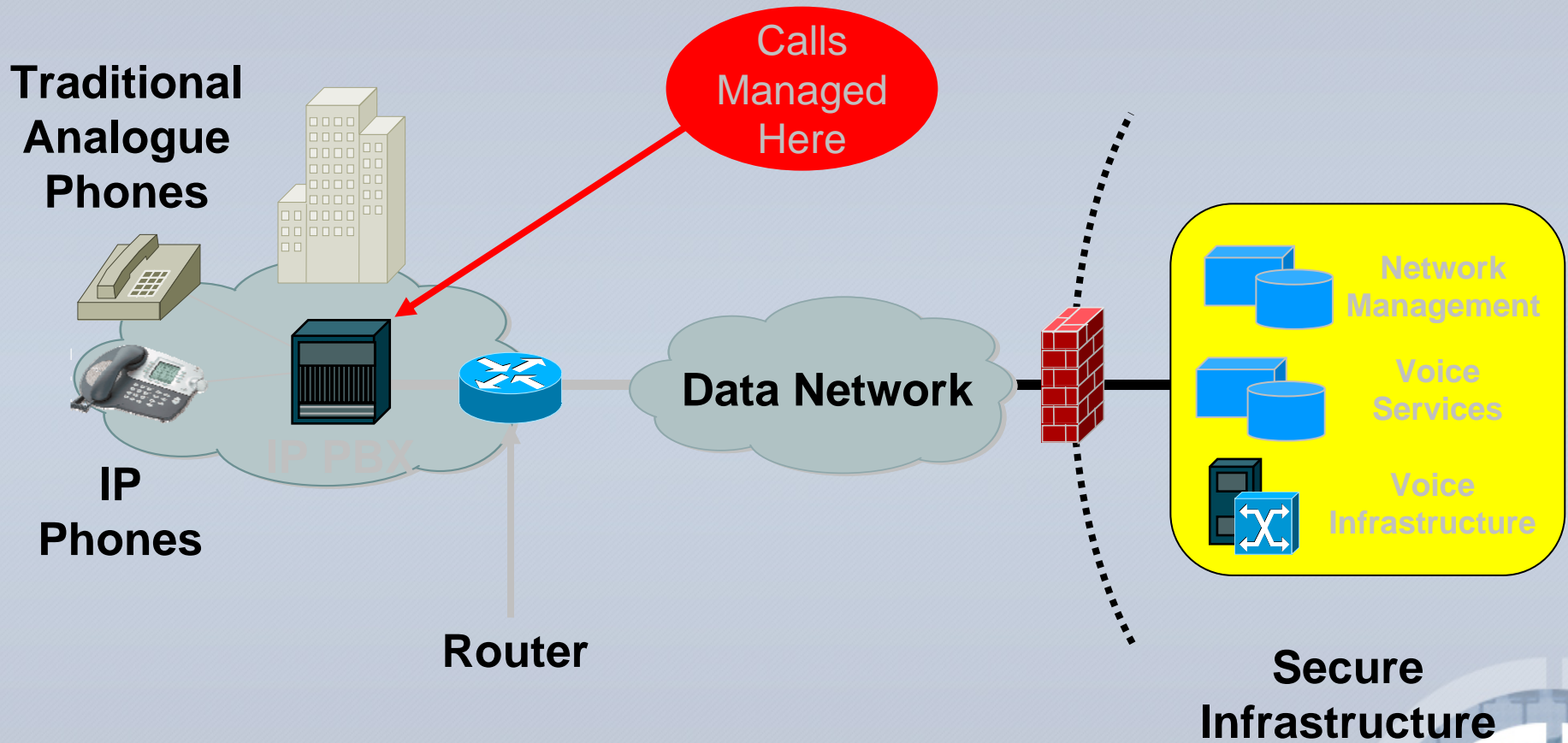
2. and financially feasible

Need to review legislation to include cyber security

National Network Operations Center (NNOC)

IP PBX

Traditional Analogue Phones

Calls Managed Here

IP Phones

Data Network

Network Management

Voice Services

Voice Infrastructure

Router

Secure Infrastructure

Analog or IPT on LAN. Data service (router) with IP PBX.

Telkom's approach

❑ IT Incident Centre

- rapidly responds to incidents by advising and participating in remedying incidents

- reducing vulnerability to attacks against critical infrastructure and its supports

- authenticating and maintaining authorised users of cyber systems

- ensure the use of secure operations and to properly configure the operating systems

- engaging and collaborating with external parties to counter cyber threats
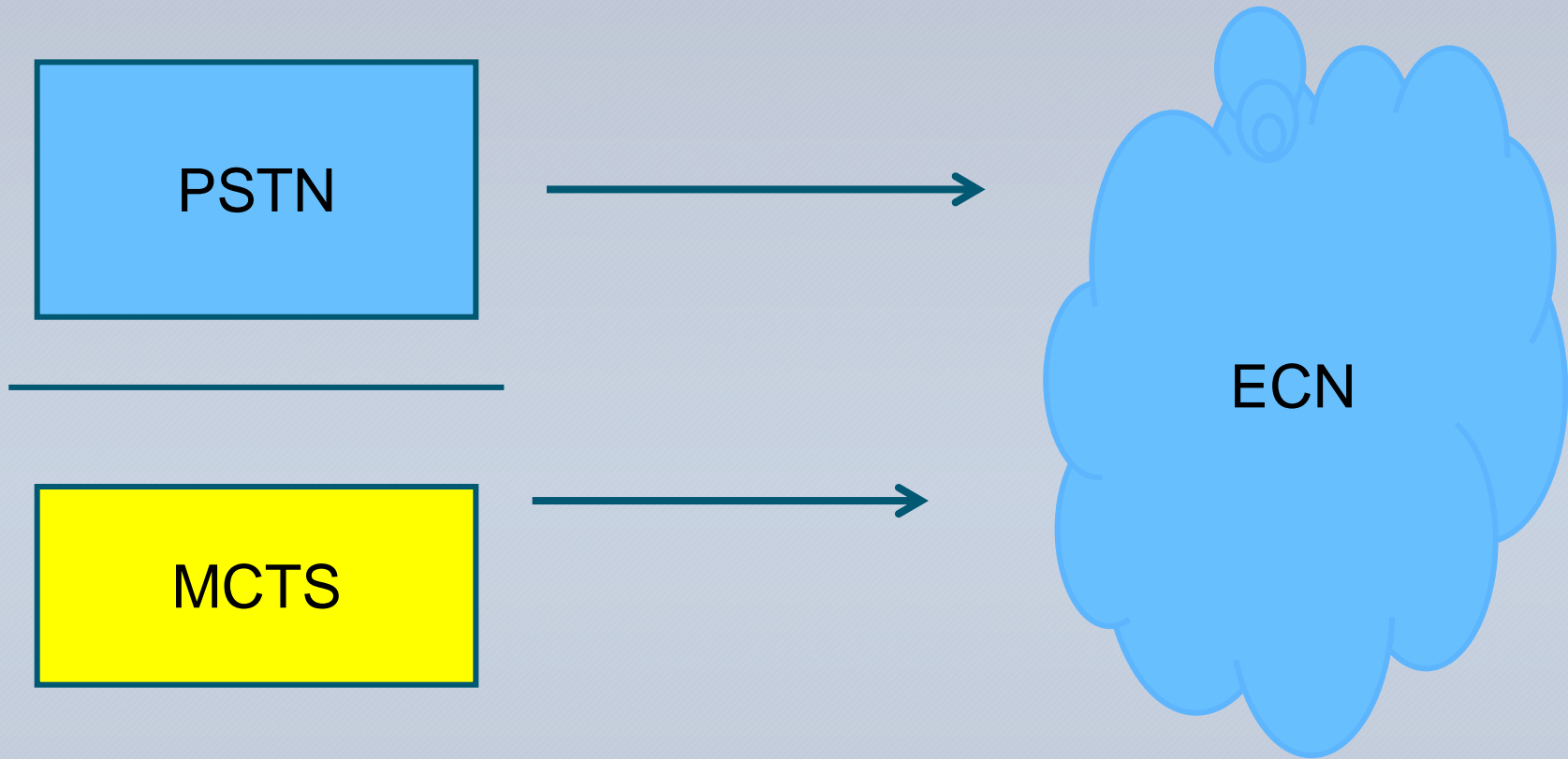
Telkom's approach II

✓Minimise damage and recovery time from cyber attacks that may occur

• ongoing routine tasks to assess threats and vulnerabilities on the system

• support the restoration of the infrastructure during severe disturbances

Change in the market structure

PSTN

MCTS

ECN

Telkom's strategy in the changing environment

❑ Security of telecommunications infrastructure as legacy network evolve to NGN

• compliance with the technology strategy and integration (TSI)

• the strategy deals with the protection of the end to end resource

• deals with seamless evolution of technologies

• stringent measures in outgoing and incoming network

Cyber Security and related legislation

✓Electronic Communications and Transactions Act 2002

Provides a framework to deal with cyber-crime

- ChXIII criminalises conduct such as:
  - unauthorised access to interception or interference with data
  - computer related extortion, fraud and forgery
  - attempt, aiding and abetting to commit an offence

Need for review to accommodate current situation

Cyber Security and related legislation II

✓ Regulation of Interception of Communication and provision of Communication Related Information Act 2006

- sets out the following obligations:

    – comply with interception direction or real time/archived communication related direction

    – provide an electronic service which has the capability to be intercepted and monitored

Cyber Security and related legislation III

- – store communication related information
- – register customers (e.g. cannot buy a Sim without some form of identification)

- ✓ **Films and Publications Amendment Bill**
- • It makes it an offence to distribute films and publications rated XX e.g. child pornography

No co-ordination between govt departments

Way Forward

❑ Propose an establishment of a Forum

 – To promote competitiveness, effective and more efficient and secure telecommunication infrastructure

❑ Foster Regional co-operation

 – Operators are increasingly engaged in cross border operations

❑ Training and education

❑ Sharing of information

THANK YOU!

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