



Security and Regulatory Issues/Challenges the South African Perspective

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Outline of Presentation

- Introduction
- Information Security
- Legislative Framework
- Legislative/Regulatory Convergence
- Other Regulatory Issues
- Conclusion

INFORMATION SECURITY

- **Cyber-security**
 - Frame work for Critical Information Infrastructure
 - Framework for Computer networks
- **Internet Governance**
 - Spam in particular
- **e-Applications**
 - e-commerce, e-government, etc
- **Education and Awareness**

LEGISLATORY FRAMEWORK

- Electronic Communications Transaction Act 2002

ECT Act Checklist Table

Description	ECT Act Provision	Issue/Challenge
Cybersecurity	No Provision	ECT Act to be amended. SA signed Convention on Cyber Crime Council of Europe (Not ratified yet)

LEGISLATORY FRAMEWORK...

ECT Act Checklist Table

Description	ECT Act Provision	Issue/Challenge
Internet Governance (SPAM)	Yes	■ Jurisdiction ■ Identity of Spammers
e-Applications (Confidence and Trust)	Yes e-commerce, e-government	Align PKI model and Infrastructure with standards. CA, Registration, CCA, etc

LEGISLATORY FRAMEWORK...

- Awareness and Education
 - Efforts made to promote awareness. However, awareness level low.
 - Improve promotion of awareness

LEGISLATORY CONVERGENCE

- Electronic Communications ACT, 2005
 - ➔ ICT industry Framework, excludes information security issues
- Electronic Transaction ACT, 2002
 - ➔ Information security issues
- ➔ Separate legislations governing ICT issues
- ➔ Need for a single efficient ICT regulatory environment
 - Lack of resources
 - Infrastructure to carry out the mandate
 - Effective Compliance and enforcement issues

OTHER REGULATORY ISSUES...

- National Spectrum Policy
 - No policy in place yet. Process has started.
- National Broadband Policy and Strategies
 - Setting targets or goals for rollout of BB services
 - Universal Access
 - Defining Broadband
 - Encourage investments in both National/Rural/Urban Networks
 - Content Issues [Local vs Abroad]
 - Cocktail of Services [Health, education, entertainment, etc]
- Need for Regulatory Framework to address Spectrum Issues for provision of BWA

OTHER REGULATORY ISSUES...

■ Digital Migration

- Set-top Boxes standards and manufacture-Tight Schedules
- Timeous licensing of National Digital Mobile TV- Tight Schedules
- Scarcity of spectrum in the VHF: 174 – 216 MHZ band for Mobile TV services before 2010 (DMB)
- Scarcity of spectrum when expanding the legacy networks, especially in the access network (2010)

OTHER REGULATORY ISSUES...

- Timeous assignments of frequency spectrum to allow introduction of mobile digital TV services, fixed broadband wireless services
- Timeous digital switch over to free-up valuable spectrum that could allow for provision of new services during 2010

OTHER REGULATORY ISSUES...

- Ensuring Access to digital services by people with disabilities
- Ensuring Affordable tariffs for access to mobile TV services and products by the marginalized

OTHER REGULATORY ISSUES...

- Technology Neutrality
 - Equitable assignment of high demand spectrum for competing applications and services. Eg. 2.6 GHz (mindful of WRC-07 recommendations)
 - Promoting new entrants in the market
 - Promoting competition in the ICT market
 - Promoting universal access
 - Band-sharing between Broadcasting and non broadcasting services
 - Introduction of services using other technologies (eg. CDMA2000 and other technologies using non Region 1 allocations)

OTHER REGULATORY ISSUES...

- **Licence conversion *in terms of ECA***
 - Delays
 - Inadequate Resources
 - Legal challenges
 - Supporting regulation (Numbering, NP, Interconnection, USO, etc)
- **Competition Issues**
 - SMP determination
 - Introduction of Fixed number portability after MNP
 - Revised carrier pre-select regulations
 - Interconnect regulations *in terms of convergence*

OTHER REGULATORY ISSUES...

■ **Local Loop Unbundling**

- ➔ Alternative for delivering competition to the Broadband market [access to the market]
- ➔ Affords new entrants and other fixed line operator with opportunities for innovation to provide product and price differentiation: Significant driver for creating open and competitive broadband market

OTHER REGULATORY ISSUES...

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- Contributes to the long term viability of internet service providers and ECS providers
- Allows competitors to dictate their own pace of technology and business development
- Stimulate uptake of broadband services
- Employment Opportunities
- **Regulatory Framework—Tight schedules**

Conclusion

South Africa is determined to meet the challenges in ensuring that:

- The South African ICT market is fully liberalized in a converged environment
- Spectrum is managed in the most efficient manner, as a scarce resource
- Information security is in compliance with (world best practice) standards
- Effective regulations are in place
- There is continued co-operation with regional and international ICT community



*"What we anticipate seldom occurs,
what we least expect generally happens"*

Benjamin Disraeli

THANK YOU