NGN Policy and Regulatory issues

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o What are NGNs?

o Government policy-enabling environment

o Approaches to achieve government policy

o Regulatory issues

o Considerations

o Conclusion

Disclaimer:

The author is an employee of the Uganda Communications Commission. However the views in this presentation do not necessarily reflect the views of the Uganda Communications Commission

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o   *Next Generation Networks (NGNs)-*

- *Definition: (ITU recommendation Y. 2001)* "a **packet-based** network able to provide *telecommunication* services and able to make use of multiple broadband, **QoS-enabled** transport technologies and in which **service-related functions** are **independent** from underlying **transport-related technologies**".

  - *NGNs are networks(packet based) that deliver services(voice, data and video) using various access technologies (VoIP, WiFi, CDMA, GSM)*

  - *NGNs – mean convenience for the consumer (mobility, flexibility), more control in the hands of the consumer, intelligent end user terminals*

Government Policy

- o Enabling environment: *Government policy dependent on priorities* (evolving)

- o Government Policy Goals(1996)
- o Limited competition
  - Attract private investment
  - Improve telecom facilities and service quality
  - Increase penetration/tele density
  - universal access- Basic services (traditional voice telephony) to rural areas

- o Government Policy goals (2006)
- o Fully liberalised (Public-private partnerships, technology neutral and no barriers to entry)
  - Ubiquitous presence of telecom infrastructure and services (data access and national backbone)
  - Universal access- Full account of marginalised
  - Promote delivery of ICTs for development

o Approaches: Does the environment encourage deployment of NGNs?

- Monopoly

- Partial liberalization -Limited competition often comes with universal service obligations

  - Technology advancements may supersede pace of roll out

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o Are government objectives met ? e.g., penetration of services independent of technology(mobile network instead of the envisaged fixed wire line)

o Can NGNs be deployed extensively if left to the private sector? Under what circumstances?

o Full liberialisation(core and access network)

- Public-private partnerships (Eassy Project, National backbones (transport)

- Strategic intervention and incentives:
  - National backbone; choice of underlying transport network important
  - Tax policies(tax reliefs /reductions)

o **Regulator's focus based on government focus: Infrastructure/Services**

o **Market structure:**

—Licensing regime (licensing infrastructure and services separately, unified licensing, content/application etc)

—Licence obligations(QoS, tariffs , interconnection, access, standards etc)

—Planning, allocation, assignment and managing resources- spectrum policy, policy on numbering resource(number portability, carrier preselection, ENUM)

Regulatory issues

- Protection and empowerment of consumers(access services from different service providers using the same device)
  - o Education
  - o Awareness-guides

- Competition
  - — regulation on pricing
  - — market power
  - — interconnection and access
  - — unbundling of the local loop

- Migration approaches- which approach, should and can there be a timeline?

Considerations

o How does the regulator promote innovation by allowing technology neutrality in service provision given the technology dependent use of spectrum and capabilities of different transmission media- cable, wireless etc?- *e.g., in the case of access network technologies*

o What are the regulatory obligations?- QoS, Market power, consumer protection, social obligations, etc

o To what extent does the regulator encourage industry regulation?

o What are the governing policies and laws?: sector polices, laws and other supporting laws(access to information, content etc)

o Behavior of operators and consumers- *historic uptake of services e.g., mobile Vs fixed,*

o Regulation of converged networks/services and markets

o What is happening in the global NGN environment? work on standards etc,

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o Government policy dependent on priorities (evolving) and key in encouraging deployment of NGNs

o With introduction of NGNs comes- Deregulation, self/ Industry Regulation

o Emphasis on consumer protection and empowerment, competition and security issues

o Gaps in legal framework should be addressed

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