

## NEW CHALLENGES >> IP AND NGN NETWORKS: NEW CHALLENGES FOR TELECOMMUNICATIONS REGULATION

The traditional economic regulation will have to adapt to changing technologies and market structures. Some of the older regulatory tools need to be adapted to face the current and emerging markets

- Evolution of the market
  - ✓ Convergence and NGN Development
  - ✓ Regulation of two-sided markets
  - ✓ Deregulation and competition law
- Key Issues in NGN Regulation

Regulators are preparing policies and regulations for an efficient transition to next generation networks (NGN) environment. ERCC provides essential tools for ensuring that countries achieve their important policy goals while facilitating the rapid advancement of technology.

- Voice, e.g., VOIP
- Access
- NGN Numbering
- Costing Issues
  - ✓ Different retail charging methods for NGN delivered services: e.g., Capacity based, Event based, Flat rate, Content based
  - ✓ Wholesale arrangements can be used: e.g., Volume based, sender keeps all, capacity based
  - ✓ Costs determination for NGN services
  - ✓ Interconnection charges be set for NGN networks

✓ NGN Costing Model

- Operators are introducing NGN, IP based networks in place of the historic legacy networks that current in terconnection and regulation has been based on
  - ✓ Definition of these networks
  - ✓ Implications for interconnection on the incumbent operators and OLOs
  - ✓ Regulatory challenges posed by the NGNs
  - ✓ How to regulate such technologies
  - ✓ How to price these services (e.g., Capacity based, Event based, Flat rate, Content based)
- The business models being used by incumbent operators to prepare themselves for the introduction of NGNs
- Voice in the NGN Environment
  - ✓ The commercial drivers for deployment of VoIP
  - ✓ Technical implementation of VoIP including voice encoding algorithms
  - ✓ Network technologies including routers
  - ✓ IPTV as a multimedia driver for NGN
- Commercial issues to be Regulated

The regulators have been regulating commercial issues of costing and charging for existing fixed and mobile networks. The deployment of NGNs introduces new challenges for both retail and wholesale costing and charging.

- ✓ Different retail charging methods used for NGN delivered services: e.g., Capacity based, Event based, Flat rate, Content based
- ✓ Wholesale arrangements: e.g., Volume based, sender keeps all, capacity based
- ✓ Cost determination for services in the NGN environment
- ✓ Interconnection charges for NGN networks