



Global Symposium
for Regulators

NGN Enabling Environment

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Why are Wireline Providers Deploying NGNs?

- Cost efficiencies derived from a single all IP-based network vis-à-vis traditional networks
- Consumer demand: the “need for speed”
- Competition from facilities-based providers:
 - Cable providers
 - Power utilities
 - Municipality projects
 - Alternative service providers

How Should Regulators Enable the Migration Towards NGNs?

- Regulators will need to strike the right balance between promoting competition on one side and efficient investment and innovation on the other
- Regulatory certainty is crucial for this transition
- Should NGNs be regulated under existing frameworks: *ex ante* obligations on dominant providers?
- Will this deter investment?
 - NGN deployment in the UK v. Australia
- Do NGNs give rise to new/emerging markets? Should NGNs be free from legacy regulation?
 - Permanent forbearance: U.S. and Hong Kong, China
 - Regulatory holidays: Germany

Is the Regulatory Framework Ready for NGN?

Checklist of Issues for Regulators to Consider Regarding NGN

- 1) Does the regulatory framework present any market entry barriers?
- 2) Does the current licensing framework facilitate different services over different platforms (i.e., technology neutrality)?
- 3) How are VoIP and other IP-based services regulated?
- 4) What are the regulatory policies for these new technologies and services with regard to numbering, spectrum, interconnection, universal service, and rights of ways and shared deployment?
- 5) Does the regulatory framework promote diversification of access networks?
- 6) Are institutional and structural changes of the regulatory authority required to address an NGN environment?
- 7) Does the regulatory framework encourage and facilitate public (municipal) initiatives?

Modifications to Regulatory Frameworks

Market Barriers

- Introducing regulatory changes to **eliminate or modify restrictions** that impede operators from entering other markets

Licensing

- Shifting to **more flexible licensing regimes** with broader category of licenses (e.g., Malaysia, Uganda) in some countries and to **unified licensing** system in others (Argentina, Peru, EU, Morocco, India (proposed))
- Adhering to **technology neutrality** in licensing
- **Simplifying** licensing processes (shift from individual license and class licenses to notifications, registrations and/or deregulation)

VoIP Regulation

- Numerous jurisdictions are introducing **VoIP-specific regulation**

Modifications to Regulatory Frameworks

Interconnection

- **Symmetrical interconnection** approach
- Considering whether to **extend ad hoc interconnection** to network infrastructure via direct access or resale (local loop unbundling and bitstream)
- **Capacity-based** interconnection

Numbering

- Assignment of **numbering resources to new technology** services providers (e.g., VoIP)
- **Inter-modal portability** between different services (fixed-to-mobile and vice versa)
- **ENUM** initiative

Rights of Way and Shared Deployment

- Facilitating use of **public/municipal infrastructure** (ducts, poles, etc.) or **public property** (federal land)
- Promoting **shared NGN deployment** to reduce costs

Modifications to Regulatory Frameworks

Universal Service

- Modifying the **scope** (from voice to data service and broadband services, where it is required by the market)
- Modifying **sources of funding** (to include IP-based services, such as broadband and VoIP)

Spectrum

- Introducing **flexible spectrum** use (technology neutrality, trading, in-band migration);
- Following technological developments **regarding IMT-2000 and beyond IMT-2000 systems** (WRC-07)

Institutional Change

- Governments are merging broadcasting and telecommunications responsibilities into **one entity**

Involve Stakeholders in the Transition to NGNs

- Awareness raising campaigns are currently seen as a prime course of action for regulators (e.g., TRAI of India)
- NGN deployment involves complex issues and decision (technical, commercial, etc.) that service providers are better equipped to address than regulators
- Industry consultations are an essential part of regulator's decision-making process, allowing them to establish more robust guiding principles for the transition to NGNs (e.g., Ofcom/UK and OPTA/Netherlands)
- The use of industry bodies/self regulation is a valuable tool to determine the way forward within the boundaries of the regulator's guiding principles (e.g., NGNuk initiative)

Conclusions

- Migration to NGNs is a further step on the road to convergence in the ICT sector
- Regulators must strike the right balance between promoting competition in the market and not deterring efficient investment and innovation
- Regulatory certainty is a fundamental requirement to transition to an NGN world and frameworks should be flexible in order to allow for the provision of multiple services over a single network
- Specific reforms to legacy frameworks are necessary to enable all-IP based networks and services
- Awareness raising, and industry participation (via consultation and industry bodies) is of outmost importance for a smooth transition to NGNs

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Thank You

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