

Competition, Interconnection and Pricing Module



Break Out Session B: 9h00 – 10h30

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How Markets Work™

Consortium



The following consortium worked on the
ICT Regulation Toolkit on “Regulating
Competition, Interconnection and Prices”:

- NERA Economic Consulting
 - www.nera.com
- Castalia Strategic Advisors
 - www.castalia.fr
- Kalba International
 - www.kalbainternational.com

Program for Break Out Session



- Presentation: Migrating today's tariff regulation to the NGN and VoIP environment
 - Identifying changes to laws or regulations that may be required
 - How can the Toolkit help?
- Simulation exercise: Roaming
 - How to respond when industry argues that roaming regulation is not necessary
- Identification of best practices

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Migrating today's tariff regulation to the NGN and VoIP environment



- Identifying changes to laws or regulations that may be required
- How can the Toolkit help?
 - Principles
 - Examples
- Let's look at the Toolkit.
 - <http://www.ictregulationtoolkit.org/>

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Migrating tariff regulation



- The Toolkit offers an entire chapter of Module 2 on the topic of “New Paradigms: Voice over IP and IXPs”
 - [ICT Regulation Toolkit: Competition and Price Regulation: 4 VOICE OVER IP AND IXPs](#)

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Chapter 4 VoIP



- [Background to the Internet](#) and its development,
- An overview of [Voice over the Internet Protocol \(VoIP\)](#),
- Opportunities for [arbitrage](#), that are creating pressures for change to existing regulatory and commercial models,
- The implications of VoIP for [regulators](#), and for [interconnection](#),
- [VoIP over wireless](#) technologies,
- [International benchmarking](#) of charges for network access, and
- [Internet Exchange Points \(IXPs\)](#).

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Related practice notes



- [Nigeria: Proposed Regulatory Treatment of Voice over Internet Protocol](#)
- [European Union: “Light Touch” Regulation of Voice over Internet Protocol](#)
- [Network Neutrality](#)
- [Kenya: A Middle Path to VoIP Adoption](#)
- [Japan: Market-Fostering Framework for VoIP](#)
- [Hong Kong: Regulation of Voice over the Internet Protocol](#)
- [Barbados: Policy on Voice over Internet Protocol](#)
- [Austria: Regulation of VoIP Services](#)

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Related Reference Documents



- [OFTA Services-Based Operator Licence \(359 KB PDF\)](#)
- [Barbados: Voice over Internet Protocol Draft Policy \(209 KB PDF\)](#)

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VoIP and Regulation



- Key implications of VoIP for regulators
 - Remove asymmetric regulation on incumbents?, or
 - Protect incumbents from competition?
- Trends in the regulation of VoIP services
 - Telephone numbering assignments
 - Telephone number portability
 - Access to emergency services
- The effect of differential regulation of VoIP and conventional telephony
 - Focus new investment into unregulated broadband networks
 - Migrate services onto those new networks

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Changing laws and regulations



- Authorization to be flexible in regulation is needed. The regulator needs to be able to forbear from regulation as market forces take over.
- To apply flexibility, the regulator needs to understand how to analyze the competitiveness of a market
 - Define the relevant market or markets,
 - Assess the level of competition in the market, without the behavior or act in question, and
 - Assess the level of competition in the market, with the behavior or act in question.

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Changing laws and regulations



- There will likely be a continuing role for the regulator in resolving interconnection problems.
- Most PSTN operators are still defining the price of interconnection in per call or per minute terms, but this is likely to give way to capacity-based interconnection arrangements that are typical in the Internet.
- Price regulation will need to adapt to permit greater flexibility as new services and technologies grow in size and influence. Tariff rebalancing helps minimize the impact of NGNs on vulnerable incumbents.

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Simulation exercise: Roaming



- How to respond when industry argues that roaming regulation is not necessary.
 - Prices are falling
 - Subscribership is increasing
 - In general, the argument would be that competition is solving the problem and regulatory intervention is not warranted
- Section 3.4 of the Module deals with Mobile Interconnection.
- Subsection 3.4.5 deals with Mobile Roaming.

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Simulation exercise: Roaming



- **Exercise #1: National Roaming**
 - Group A: NRA resolving dispute between established mobile operator and new entrant.
 - Group B: Established mobile operator that has nation-wide coverage.
 - Group C: New entrant that only has coverage in the capital city and is requesting that NRA require the established operator to offer roaming at national level to entrant.
- We will divide into groups for this role-playing exercise.

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Simulation exercise: Roaming



- **Exercise #2: International Roaming**
 - Group A: NRA in Country A.
 - Group B: NRA in Country B.
 - Roaming rates between the two countries are 5X higher than basic costs and 4X higher than retail domestic calling.
 - Group C: Industry.
- We will divide into groups for this role-playing exercise.

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