Fixed Mobile Convergence: Regulators' response

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What is FMC?

- Simply, it's the coming together of fixed and mobile services
  - Driven by **convergent technologies** that enable voice, data and multimedia applications to be provided over common core networks,
  - Delivered over range of **wireless** and **wireline** access networks
  - Accessible from **common end-user devices**

What drives FMC?

- High penetration of **wireless** and **mobile** services
- **User demand** for **Service Ubiquity** and **convenience**: one number, one handset, one bill.
- **Comparative Fixed mobile pricing** resulting in fixed-mobile call substitution
- Operators seeking to reduce CAPEX through network level integration using **convergent technologies** (VoIP, Wi Fi)

Is FMC happening?

- Launch of **bundled services**: e.g. BT Fusion Service
- **VoIP** over wireless local area network (WLAN)
- **Industry consolidation**: M&A, Cross-sector shareholding,Cross-jurisdictional operations
- **Integration of networks** and platforms around Internet Protocol (IP): Cross-product and cross-platform development
- Heavier **branding** to create customer loyalty: Discount schemes and multi-use calling – e.g.Brasil Telecom

FMC for Africa?

FMC presents potential for:

- **Low telephone density**: FMC potential for service and coverage extension
- **Young population**: FMC potential for innovative and creative offerings
- **Low income**: Affordable pricing schemes
- **Vast sparsely rural areas** and difficult geographic terrain: FMC potential for ubiquitous coverage

FMC for Africa?

- **High levels of illiteracy**: FMC potential for One, user-friendly and simple device
- **Relatively small share of the global market**: FMC an opportunity for market growth and transformation and increase regional and global competitiveness

Source: http://www.cdg.org/

FMC for Africa?

- Opportunities for FMC:
  - The increased **need of basic telecommunications** services:
    - explosive growth of mobile services
    - average penetration rate remains relatively low & number of fixed lines has fallen in certain countries

FMC for Africa?

  - Relatively **new regulatory frameworks:**
    - Numerous benchmarking opportunities
    - Amenable to change and able to take advantage of new technologies
  - **Most GSM-oriented market outside Europe:**
    - Pan-African mobile operators and presence of international groups: MTN, Celtel
    - Mobile lines surpass fixed line connections
    - High level of fixed by mobile substitution
    - Pre-paid services

Regulators' Reactions

Regulators' Reactions: OFCOM

Office of Communications, UK

- Separate regulatory approach to fixed and mobile markets
- Universal service requirements becoming obsolete: no plans to ask mobile companies to deliver USO
- Seeking areas of regulatory withdrawal.
- Introduction spectrum liberalization and trading: removed artificial regulatory barriers to FMC

Regulators' Reactions: OFCOM

- – Fixed and mobile substitution is not an inherently virtuous outcome
- – Protect consumers: pricing
- – Ensure effective competition

Regulators' Reactions: OFTA

- **Office of the Telecommunications Authority, Hong Kong**
  - – Consultation paper 21 September 2005 for FMC
    - – Licensing regime - unified licensing and Ex-post regulatory regime
    - – Rights & Obligations of fixed and mobile operators – access to buildings, rights of way
    - – Interconnection charging btw fixed and mobile services

Regulators' Reactions: OFTA

- Local access charge arrangements
- Fixed/mobile number portability (FMNP)
  - single subscriber number
  - Unified directory and enquiry services
- Numbering plan: Any-to-any connectivity

Regulators' Reaction: CCK

- Progressive Sector Reform:
  - Kenya Communications Act of 1998
    - Sector-specific legislation
    - Liberalization and creation of a regulator
  - Sector Policy Statement : issued in April 1999, revised in Dec 2001
    - Technology specific policy and market segmentation

Regulators' Reaction: CCK

- Kenya Communication Regulations, 2001
- ICT policy review 2005

Outcomes Sector Reform:

- Liberalization: Increased **competition**
- Reduced prices: Improved **accessibility**
- Private sector **investment**
- Improved **quality** in service delivery

Outcomes Sector Reform:
Fixed-Mobile Comparison

Fixed line operators	1
Subscriber connections	281,764
Mobile Operators	2
Mobile Subscribers	4,611,970

Service	Teledensity
Fixed	About 0.88
Mobile	About 14.4

Outcomes Sector Reform: Fixed-Mobile Comparison

| Year | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
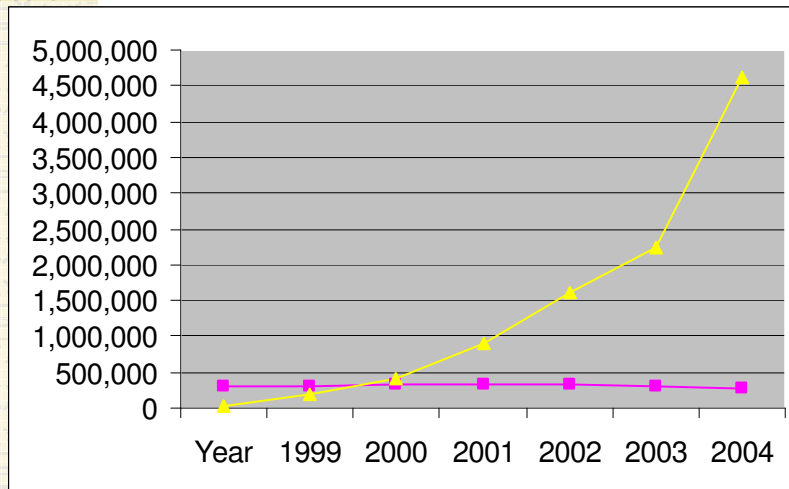
Regulator's Reaction: CCK

- Re-assessment of the regulatory framework
  - Introduction of **competition** in exclusive areas: End of monopoly in 2004
  - **Technology neutral licensing** framework 2004
    - Wi Fi (December 2004)
    - VoIP (August 2005)

Regulators' Reaction: CCK

– **Mobile Number Portability**: Public consultation
– **Network cost study**: Cost based interconnection and retail tariffs
– **X-border interconnection**: Pan-African mobile operators operating in East Africa
– **Unified licensing:** Public consultation on merger of International facility/infrastructure provider licences
– Planned introduction of **ENUM**: Seamless connectivity between IP and PSTN networks

FMC: Regulatory Challenges

- Licensing
  – Rights and obligations for licensees
- Wholesale (Mobile/Fixed) regulation
  – Interconnection regime
  – Fixed-to-mobile interconnection
  – Wholesale access

FMC: Regulatory Challenges

- Numbering
  - Number portability
  - Numbering schemes
- Universal service
  - Universal service provision and obligation
  - Fair and reasonable access and telephony charges

Basic Questions for Regulators

- What are the identified regulatory goals?
- Is framework appropriate for their achievement?
- Are competing interests being reconciled?
- Do we need more or less regulation?
- Any evidence of regulatory uncertainties?
- Is market structure adaptive to changes?

How is a regulator to react?

- **Need to re-assess the role of regulation** by:
  - Developing a **clear, flexible** and **predictable framework**
  - Enhancing **service provision** and **coverage extension**
  - Facilitating **technological evolution**
  - **Harmonizing** regulatory requirements
    - universal service obligation
    - licence rights and obligations

How is a regulator to react?

- Meet a range of **public interest objectives**
- Promoting **investment** particularly in new services
- Facilitating full participation of citizens in the **information society**
- Regulation should be limited to what is strictly necessary to achieve clearly identifiable goals
- Regulators need to be **proactive** and **responsive** and **flexible**! – OFTA

FMC: Regulatory Stages!

- Regulation should play a transitional role, enabling introduction of FMC in stages:

- Stage 0:
  - Sector reform:Introduce competition
  - Technology neutral licensing: VoIP, Wi Fi

FMC: Regulatory Stages!

- **Stage 1:**
  - Cost based interconnection
  - Number Portability
  - Universal service
  - Consumer protection
- **Stage 2:**
  - Unified licensing
  - Fixed/mobile interconnection
  - Fixed/mobile number portability

Way forward: The future shape of Regulation

- Optimise opportunities offered by convergence
- Need for an appropriate regulatory environment to complement trend of convergence
- Need to reconcile public interest and competition considerations
- Technological neutrality
- Focus on competition safeguards and consumer protection

Thank you!