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

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**Outcomes Sector Reform: Fixed-Mobile Comparison**

<table>
<thead>
<tr>
<th>Service</th>
<th>Teledensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed line operators</td>
<td>1</td>
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<tr>
<td>Subscriber connections</td>
<td>281,764</td>
</tr>
<tr>
<td>Mobile Operators</td>
<td>2</td>
</tr>
<tr>
<td>Mobile Subscribers</td>
<td>4,611,970</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service</th>
<th>Teledensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>About 0.88</td>
</tr>
<tr>
<td>Mobile</td>
<td>About 14.4</td>
</tr>
</tbody>
</table>
Outcomes Sector Reform: Fixed-Mobile Comparison

Year 1999 2000 2001 2002 2003 2004

0 500,000 1,000,000 1,500,000 2,000,000 2,500,000 3,000,000 3,500,000 4,000,000 4,500,000 5,000,000

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

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!