Pricing strategies for the Mobile Services

Seminar on Costs & Tariffs
Niamey, April 2001

This document has been prepared mainly by Dr. Tim Kelly. The views expressed in this paper are those of the author and do not necessarily reflect the opinions of the ITU or its Membership. Dr Kelly can be contacted by e-mail at Tim.Kelly@itu.int
Pricing mobile services: Agenda

- A Mobile Revolution
  - Worldwide and in the sub-region
- Pricing Mobile
  - Options
  - Price comparisons and trends
  - Price trends
  - Average Revenue Per User (ARPU)
- Fixed-Mobile Interconnect
- A Mobile Future
A Mobile Revolution

Fixed Lines vs. Mobile Users, worldwide, Million

- **Mobile Users**
- **Fixed Lines**

Source: ITU World Telecommunication Indicators Database.
Mobile subscribers per 100 inhabitants

Year-end 1999

Sub-region

<table>
<thead>
<tr>
<th>Country</th>
<th>Subscribers per 100 inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niger</td>
<td>0.01</td>
</tr>
<tr>
<td>Ethiopie</td>
<td>0.01</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>0.04</td>
</tr>
<tr>
<td>Mozambique</td>
<td>0.06</td>
</tr>
<tr>
<td>Kenya</td>
<td>0.08</td>
</tr>
<tr>
<td>Sénégal</td>
<td>0.95</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1.51</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>1.77</td>
</tr>
</tbody>
</table>

Source: ITU World Telecommunication Indicators Database.
Mobile subscribers as % of total telephone subscribers

Year-end 1999 Sub-region

Source: ITU World Telecommunication Indicators Database.
The secret of mobile success

- Why is mobile currently growing ten times faster (~55% p.a.) worldwide than fixed lines networks (~5.5% p.a.)?
- Why is the average mobile user much younger than the average fixed-line user?
- Why do users make calls using a mobilephone even when a fixed-line telephone is available and cheaper?
- What is the secret of the success of mobile?

Price Options
## A selection of price options
**From Orange (UK)**

<table>
<thead>
<tr>
<th>Plan name</th>
<th>Monthly charge for single phone</th>
<th>Standard talk time included (per month)</th>
<th>Peak time call charges (per minute)</th>
<th>Off-peak call charges (per minute)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat 60</td>
<td>£17.63</td>
<td>60 off-peak minutes</td>
<td>40p</td>
<td>5p</td>
</tr>
<tr>
<td>Talk 30</td>
<td>£17.50</td>
<td>30 minutes</td>
<td>30p</td>
<td>5p</td>
</tr>
<tr>
<td>Talk 120</td>
<td>£25.00</td>
<td>120 minutes</td>
<td>24p</td>
<td>5p</td>
</tr>
<tr>
<td>Talk 400</td>
<td>£58.75</td>
<td>400 minutes</td>
<td>22p</td>
<td>5p</td>
</tr>
<tr>
<td>Talk 1300</td>
<td>£176.25</td>
<td>1’300 minutes</td>
<td>17p</td>
<td>5p</td>
</tr>
<tr>
<td>Talk 3700</td>
<td>£470.00</td>
<td>3’700 minutes</td>
<td>15p</td>
<td>5p</td>
</tr>
<tr>
<td>Talk 7500</td>
<td>£940.00</td>
<td>7’500 minutes</td>
<td>15p</td>
<td>5p</td>
</tr>
<tr>
<td>Everyday 50</td>
<td>50p/day</td>
<td>50 minutes/day</td>
<td>40p</td>
<td>1p</td>
</tr>
</tbody>
</table>

*Source: [http://www.uk.orange.net/kit/index.html](http://www.uk.orange.net/kit/index.html).*
Price of 100 minutes per month mobile usage, in US$

- Ethiopie: 11,3
- Zimbabwe: 15,46
- Kenya: 18,76
- Niger: 24,48
- Sénégal: 37,32
- Burkina Faso: 45,51
- Mozambique: 58,03
- Côte d'Ivoire: 64,16

Note: Price basket based on monthly subscription plus 50 mins peak and 50 mins off-peak use.
Source: ITU World Telecommunication Indicators Database.
Declining prices for mobile access, global average, in US$, 1992-98

Connection charge, US$

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US$</td>
<td>547</td>
<td>410</td>
<td>231</td>
<td>180</td>
</tr>
</tbody>
</table>


Monthly subscription, US$

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US$</td>
<td>44.9</td>
<td>38.1</td>
<td>34.2</td>
<td>31.3</td>
</tr>
</tbody>
</table>

CAGR, 1992-98 = -5.8% p.a.

Note: CAGR = Compound Annual Growth rate.
Average revenue per user (ARPU)
Bell Mobility (Canada)

Revenue per sub/month
Cost per sub/month
Subscribers

Cultivate the high-spenders

14 per cent of high-spending customers generate 53% of revenue
22% 36%
24% 8%
40% 3%
40 per cent of low-spending customers generate 3% of revenue

Source: Price Waterhouse Coopers, based on Canadian data.
Mobile ARPU converging with Fixed-line ARPU, Japan (Yen ‘000s p.a.)

Pricing mobile and fixed: Monthly subscription charges (US$)

- Residential fixed-line
- Digital Cellular

Ratio: Cellular/Fixed

- Burkina Faso: 4.76
- Côte d'Ivoire: 5.27
- Ethiopia: 6.3
- Kenya: 1.97
- Mozambique: 2.09
- Senegal: 3.33
- Niger: 2.76
- Zimbabwe: 3.9

Countries: Burkina Faso, Côte d'Ivoire, Ethiopia, Kenya, Mozambique, Senegal, Niger, Zimbabwe.
**Pricing mobile and fixed:**

**Price of 3 minute local calls (US$)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Residential fixed-line</th>
<th>Digital Cellular</th>
<th>Ratio: Cellular/Fixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burkina Faso</td>
<td>8,8</td>
<td>20,6</td>
<td></td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>12,5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>8,3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>8,08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senegal</td>
<td>1,7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niger</td>
<td>8,6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>8,6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fixed-Mobile Interconnection

- Interconnect prices are a major determinant of retail prices
- Evidence of “market failure”
  - Interconnect prices are variable but generally very high
  - In Calling Party-Pays environments, caller may not be aware of the charge they will be paying
  - Calling party does not have a choice of operator to terminate the call
- Fixed-to-mobile and mobile-to-fixed highly asymmetric
- By 2005, 75% of all calls worldwide will involve a mobile
Pricing strategies for mobile calling opportunities worldwide

1993:
- 89.7% fixed-to-fixed
- 5.0% fixed-to-mobile
- 5.0% mobile-to-fixed
- 0.3% mobile-to-mobile

1998:
- 52.7% fixed-to-fixed
- 19.9% fixed-to-mobile
- 19.9% mobile-to-fixed
- 7.5% mobile-to-mobile

2003:
- 23.4% fixed-to-fixed
- 26.7% fixed-to-mobile
- 25.0% mobile-to-fixed
- 25.0% mobile-to-mobile

Source: ITU Fixed-Mobile Interconnect website: http://www.itu.int/interconnect
Fixed/Mobile interconnect rates in selected calling-party-pays countries

- Costa Rica: 0.017 (Mobile-to-fixed), 0.017 (Fixed-to-mobile)
- Malaysia: 0.034 (Mobile-to-fixed), 0.034 (Fixed-to-mobile)
- Guatemala: 0.047 (Mobile-to-fixed), 0.047 (Fixed-to-mobile)
- Mexico: 0.026 (Mobile-to-fixed), 0.064 (Fixed-to-mobile)
- Cambodia: 0.050 (Mobile-to-fixed), 0.070 (Fixed-to-mobile)
- Dom. Rep.: 0.042 (Mobile-to-fixed), 0.078 (Fixed-to-mobile)
- Philippines: 0.051 (Mobile-to-fixed), 0.205 (Fixed-to-mobile)
- Botswana: 0.052 (Mobile-to-fixed), 0.208 (Fixed-to-mobile)
- Antigua: 0.293 (Mobile-to-fixed), 0.293 (Fixed-to-mobile)

Source: ITU.
A mobile future

Actual and projected subscriber growth, fixed-lines and mobile, millions, 1990-2010

- Mobile has overtaken fixed-lines in Cambodia, Finland, Italy, Korea
- Mobile subscribers to overtake fixed-line worldwide before 2005?
- Mobile revenue to overtake fixed-line after 2004?
- Fastest growth in developing countries

The race for 3rd Generation mobiles: IMT-2000

Source: Adapted from Motorola.
For more information ...

- Publication launch: 10 October 1999 (TELECOM ‘99)
- Available on paper and online (PDF format)
- World Telecom Indicators Database available online
- Website: http://www.itu.int/ti

Other reports launched at TELECOM ‘99

- Direction of Traffic 1999: Trading Telecom Minutes
- Trends in Telecom Reform 1999: Convergence
- Internet for Development (updated with latest data)