Core indicators on ICT infrastructure and access

How to establish an ICT Indicator database in Indonesia
Jakarta, 29 October – 2 November 2007
## Telco Operators in Indonesia

### Technology & Coverage...

<table>
<thead>
<tr>
<th>Technology</th>
<th>License</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile-8 Fren</td>
<td>CDMA (Cellular)</td>
</tr>
<tr>
<td>Smart</td>
<td>CDMA</td>
</tr>
<tr>
<td>Telkomsel</td>
<td>GSM &amp; 3G</td>
</tr>
<tr>
<td>Indosat</td>
<td></td>
</tr>
<tr>
<td>Excelcomindo</td>
<td></td>
</tr>
<tr>
<td>Natrindo</td>
<td></td>
</tr>
<tr>
<td>Cyber Access (CAC)</td>
<td></td>
</tr>
<tr>
<td>Telkom Flexi</td>
<td></td>
</tr>
<tr>
<td>Indosat StarOne</td>
<td></td>
</tr>
<tr>
<td>Bakrie Tel Esia</td>
<td></td>
</tr>
<tr>
<td>TELKOM</td>
<td>Fixed Wireline</td>
</tr>
<tr>
<td>BBT</td>
<td></td>
</tr>
<tr>
<td>Sampoerna Tel</td>
<td>NMT - 450</td>
</tr>
</tbody>
</table>
Customers & Teledensity Forecast

Fixed Phones

- Subscriber (mn)
- Teledensity

<table>
<thead>
<tr>
<th>Year</th>
<th>Subscriber (mn)</th>
<th>Teledensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>13.2</td>
<td>5.7%</td>
</tr>
<tr>
<td>2006</td>
<td>14.3</td>
<td>6.3%</td>
</tr>
<tr>
<td>2007</td>
<td>16.0</td>
<td>7.0%</td>
</tr>
<tr>
<td>2008</td>
<td>18.2</td>
<td>7.9%</td>
</tr>
<tr>
<td>2009</td>
<td>20.8</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

Source: BMI Q1/2007

Mobile Phones

- Subscriber (mn)
- Teledensity

<table>
<thead>
<tr>
<th>Year</th>
<th>Subscriber (mn)</th>
<th>Teledensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>48.4</td>
<td>22.0%</td>
</tr>
<tr>
<td>2006</td>
<td>60.2</td>
<td>28.2%</td>
</tr>
<tr>
<td>2007</td>
<td>75.2</td>
<td>35.2%</td>
</tr>
<tr>
<td>2008</td>
<td>95.5</td>
<td>38.5%</td>
</tr>
<tr>
<td>2009</td>
<td>106.9</td>
<td>40.0%</td>
</tr>
</tbody>
</table>
Customers & Teledensity Forecast
2005-2009

**Internet User**
- Subscriber (mn)
- Teledensity

<table>
<thead>
<tr>
<th>Year</th>
<th>Subscriber (mn)</th>
<th>Teledensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>16.0</td>
<td>7.2%</td>
</tr>
<tr>
<td>2006</td>
<td>23.7</td>
<td>11.2%</td>
</tr>
<tr>
<td>2007</td>
<td>31.5</td>
<td>13.9%</td>
</tr>
<tr>
<td>2008</td>
<td>40.4</td>
<td>17.7%</td>
</tr>
<tr>
<td>2009</td>
<td>48.7</td>
<td>21.0%</td>
</tr>
</tbody>
</table>

Source: BMI Q1/2007

**Broadband User**
- Subscriber ('000)
- Teledensity

<table>
<thead>
<tr>
<th>Year</th>
<th>Subscriber ('000)</th>
<th>Teledensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>200</td>
<td>0.0%</td>
</tr>
<tr>
<td>2006</td>
<td>500</td>
<td>0.2%</td>
</tr>
<tr>
<td>2007</td>
<td>900</td>
<td>0.4%</td>
</tr>
<tr>
<td>2008</td>
<td>1,490</td>
<td>0.6%</td>
</tr>
<tr>
<td>2009</td>
<td>2,300</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

Source: BMI Q1/2007
GDP vs. Penetration

Source: BMI
Cellular and Fixed Phone Penetration

**Fixed Phone Penetration**
as of June 30, 2006

- South Korea: 54%
- Japan: 48%
- Singapore: 46%
- Malaysia: 19%
- China: 17%
- Thailand: 11%
- Indonesia: 6%
- India: 4%
- Philippines: 4%

Number of subs.: 13 millions

**Cellular Penetration**
as of June 30, 2006

- Singapore: 98%
- South Korea: 79%
- Malaysia: 74%
- Japan: 70%
- Thailand: 47%
- Philippines: 43%
- China: 30%
- Indonesia: 22%
- India: 7%

Number of subs.: 47 millions

*Source: Investor Magazine*
Market Share Mobile (2006)

Mobile Phone
(Cellular & Fixed Wireless)

Fixed Wireless
Fixed Line Subscriber…

1H/07 Mio Subscribers:
- Fixed Wireless: 5,07 Mio
- Fixed Wireline: 8,33 Mio
- Total: 13,40 Mio

1H/07 Mio Subscriber:
- Residential: 6,63 Mio
- Business: 1,69 Mio
TELKOM Group Main Products...

- Internet Broadband
- International Call
- Fixed Wireless
- Mobile e-mail
- Pay-TV
- Satellite Services
- Dial Up Internet
- Cellular
TELKOM Group Penetration & Contribution
as of December, 2006

Fixed Wireline
- TELKOM 99%
- BBT <1%
Penetration 4%

Fixed Wireless
- TELKOM 71%
- Indosat
- Bakrie
Penetration 2.6%

Cellular
- Telkomsel 56%
- Indosat
- Excel
- Others
Penetration 28.6%

Internet
- Internet Kiosk 43%
- Campuses 3%
- Schools 1%
- Offices 41%
- Households 12%
Penetration 11.4%

Broadband
- Speedy 65%
- Wireless BB
- Others
Penetration 0.1%

Source: Telkom & Depkominfo
## TELKOM Group Coverage & Subscribers

### 30 September 2007

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Total</th>
<th>Coverage</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provinsi</td>
<td>33</td>
<td>33</td>
<td>100</td>
</tr>
<tr>
<td>Kabupaten</td>
<td>440</td>
<td>440</td>
<td>100</td>
</tr>
<tr>
<td>Kecamatan</td>
<td>5,641</td>
<td>3,102</td>
<td>55</td>
</tr>
<tr>
<td>Desa</td>
<td>71,555</td>
<td>23,759</td>
<td>33</td>
</tr>
</tbody>
</table>

### Coverage (30 September 2007)

- **TELKOM Subscriber**: 14 Juta
  - Java = 70%
  - The rest = 30%
- **Pelanggan Telkomsel**: 44 Juta
  - Coverage Kecamatan Java, Bali, Sumatera 100%
  - Coverage Kecamatan Kalimantan, Sulawesi, NUSRA, Maluku, Papua
  - >50%

### TELKOM Group Subscriber: 58 Juta

*Source: BPS July 2007*
• Fixed telephone lines per 100 inhabitants
• Mobile cellular subscribers per 100 inhabitants
• Percentage of population covered by mobile cellular telephony
• Mobile cellular tariffs (100 minutes of use per month), in US$, and as a percentage of per capita income

• Tendency: Fixed to Mobile
- ICT infrastructure and access
  - Internet -

- Computers per 100 inhabitants
- Internet subscribers per 100 inhabitants
- Broadband Internet subscribers per 100 inhabitants
- International Internet bandwidth per inhabitant
- Internet access tariffs (20 hours per month), in US$, and as a percentage of per capita income
- Percentage of localities with public Internet access centres (PIACs) by number of inhabitants (rural/urban)

- Mostly cause–effect conditions.
- What about Internet coverage (Wireless) and IP address (public).
Thank You

Contact Point

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