Telecom meets the Internet

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African Internet & Telecom Summit
Banjul, The Gambia
June 2000

Note: the views expressed in this presentation are those of the author and do not necessarily reflect the opinions of the ITU or its membership. The author can be contacted at minges@itu.int.
Threat or opportunity?

- Takes Jamaican ISPs with VSATs to court considering it a breach of its exclusive international license.
- Plans to move all its customers and services onto the new IP network. “I think within four years all our customers' voice traffic will be carried over IP.”

Source: The Economist, May 2nd 1998
The main “threat”

Incoming international traffic

<table>
<thead>
<tr>
<th>Country</th>
<th>Settlement rate</th>
<th>Traffic exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mauritania</td>
<td>0.82</td>
<td>0.26</td>
</tr>
<tr>
<td>Senegal</td>
<td>0.59</td>
<td>0.42</td>
</tr>
<tr>
<td>Lesotho</td>
<td></td>
<td>0.21</td>
</tr>
<tr>
<td>Gambia</td>
<td>0.32</td>
<td>0.29</td>
</tr>
<tr>
<td>Uganda</td>
<td>0.25</td>
<td>0.21</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>0.20</td>
<td>0.19</td>
</tr>
</tbody>
</table>

Price per minute (US$)

Source: FCC, Arbinet.
The demise of international

Source: Office of Telecommunications, Hongkong.
Another “threat”

Dial-up versus leased line cost for Internet access

Note: Dial-up includes monthly subscription & telephone usage. 
Source: ITU.
PTO as ISP

Bolivian local telephone operator

- Dial-up clients (left)
- Hours of use (right)

Source: COTAS.
Infrastructure for the Net

- Telephone lines
  - Customers
  - ISPs
- High speed lines
  - ISDN
  - Cable
  - DSL
- Leased lines
  - National
  - International

Source: CISCO.
Peering & transit services

Emirates Internet Exchange (EMIX)
E-business opportunities

- Web hosting
- Portals
- Advertising
- Consulting
From PTO to ICP

Internet initiatives

- **Access**
  - SingNet
  - SingTel Magix
  - mysingtel
  - e-ideas

- **Infrastructure**
  - NCS Media Hub
  - Consumer Connect
  - SingTel IX
  - ID.Safe

- **Content**
  - Lycos Asia
  - SESAMi.com
Be the leader!

- Web site
- ISP
- Peering
- Tariffing