Ministry of Posts and Telecommunications

TELECOMMUNICATION INFRASTRUCTURE & SERVICES in CAMBODIA

ITU Regional Seminar on Costs and Tariffs for Member Countries of the Regional Group for Asia and Oceania (SG3RG-AO)

Bali, Indonesia, 28-30 May 2012
Telecom Sector Reform

MPTC
Policy Development

Telecom Regulator of Cambodia (TRC)
Regulator

Going to be

Telecom Cambodia
State-Owned
Operator

Post Cambodia
State-Owned

Other Telecom/ISP Operator

...
### Numbers of all telecom operators as Jan 2012

<table>
<thead>
<tr>
<th>No.</th>
<th>Services</th>
<th>Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mobile (2, 2.5, 3G)</td>
<td>08</td>
</tr>
<tr>
<td>2</td>
<td>Fixed WLL</td>
<td>08</td>
</tr>
<tr>
<td>3</td>
<td>International Gateway</td>
<td>03</td>
</tr>
<tr>
<td>4</td>
<td>ISP</td>
<td>27</td>
</tr>
<tr>
<td>5</td>
<td>VoIP</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>VSAT</td>
<td>01</td>
</tr>
<tr>
<td>7</td>
<td>DNS (.KH)</td>
<td>1,461</td>
</tr>
<tr>
<td>8</td>
<td>Internet Cafe</td>
<td>304</td>
</tr>
</tbody>
</table>
Telecom Market

• **Fixed Line Operators**
  – Telecom Cambodia
  – Camintel (KTC)
  – Mfone (WLL)
  – Viettel (Cambodia)

• **International Carriers**
  – 001 : Telecom Cambodia (T.C.)
  – 007 : Royal Telecom International (R.T.I.)
  – 009 : Viettel (Cambodia)
Mobile Phone System for all Operators

1. CamGSM : GSM900/1800MHz and 3G
2. MFone : EGSM900/GSM1800MHz/CDMA450MHz and 3G
3. CADCOMMS : 3G,
4. HELLO : GSM900/1800MHz and 3G
5. Viettel (Cambodia) : GSM 900/1800MHz/3G and LTE
6. GT-TELL : CDMA 800MHz
7. Latelz : GSM 1800MHz, and 3G
8. Sotelco : EGSM 900 and GSM1800MHz
9. Camintel (KTC) : WCDMA 800MHz (Not in operation)
10. XinWei : SCDMA/McWill (Just starting operation)
TELECOMMUNICATION NETWORK IN CAMBODIA

Mobile Operator Access Codes
- CAMSHIN: 036, 011, 099, 076, 085, 061
- CADCOMMS: 013, 083, 084, 080
- CAMGSM: 012, 017, 089, 092, 077, 078, 014
- CAMINTEL: 023
- EXCEL: 018
- LATELZ: 010, 093, 086, 098, 069, 070, 096
- Axiata : 015, 016, 081, 87
- TC (Telecom Cambodia) : 023
- VIETTEL (Cambodia): 097, 88
- Beeline : 090, 068, 067, 082

NOTES
- TC TGW: TC Transmission Gateway
- O/F: Optical Fiber
- SNG HUB: Singapore Hub
- IP: Internet Protocol
- IP-GW: Internet Protocol Gateway
- PSTN: Public Switched Telephone Network
- VoIP: Voice over Internet Protocol
- VSAT: Very Small Aperture Terminal
Nation Optical Fiber Backbone Network

Optical Fiber Backbone Operators (03)

– Telecom Cambodia (TC) : 1,200 Km
– Viettel Cambodia : 16,000 Km
– CFOCN (Cambodia Fiber Optic Cable Network): 5,180 Km

❖ Total national wide backbone: **22,380 Km**
❖ Completed Connection of GMS Countries.
Telecom Statistic Dec 2011

- Mobile: 15,678,829 Subs.
- Penetration: 108.13 %
- Fixed WLL: 559,381 Subs.
- Penetration: 3.86 %
- Internet: 1,689,389 Subs.
- Penetration: 11.65 %

* Penetration: % Per 100 inhabitant

* Population: 14,500,000 in 2011
Regulation and Policy on Telecom and IT technologies

- Law
  - Telecom Law and Related law on Telecom / IT
  - Competition and Quality of Service
  - Cyber Law
  - Radioncommunication Law
  - KHNIC will be implemented in near future to manage .KH domain and IP address
  - IP Address Management is under progress to prepare the policy
  - Cyber security
  - Property on Content
Strengthen the Regulation and Policy

- Policy and technical standardization following ITU recommendation and other world organizations.

- Encourage the fair competition in according to local and world market.
Regulation and Policy on Telecom and IT technologies (Con’t)

• **Readjusting on license issuing**
  - Standardization on service policies
  - Other condition on services
  - Revenue sharing with government

• **Following the 2015 ASEAN ICT Master Plan responding to the large number of users**
Key Action Items for Immediate Term 2010-2015

1. Sharing of Best PPP Models
2. Promote Secure Transactions within country
3. Reward ICT Innovators
4. Ensure Every Child has Broadband Access
5. Cambodia CIO Forum
6. Establish Cambodia Broadband Network
7. Establish and DIX & IIX Network
8. Develop a Framework for Network Security
9. Develop ICT Skills Certification & Skill Upgrading
10. Develop USO sub-degree and USO Policy
11. Improving the quality of service (QoS) and products
Thank You!