Ministry of Posts and Telecommunications
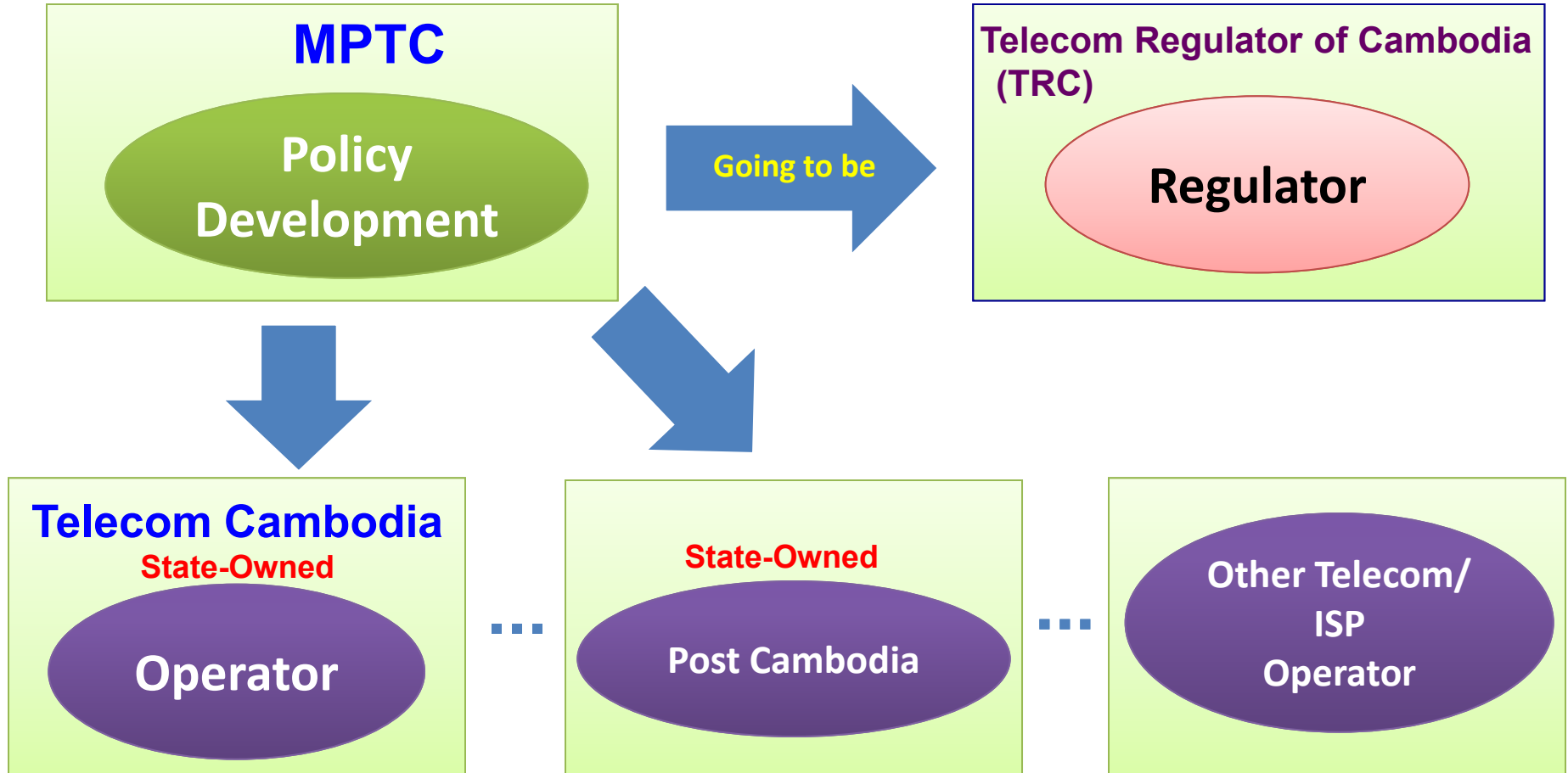
TELECOMMUNICATION INFRSTRUCTURE & SERVICES in CAMBODIA

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

Going to be →

Telecom Regulator of Cambodia (TRC)

Regulator

Telecom Cambodia
State-Owned

Operator

...

State-Owned

Post Cambodia

...

Other Telecom/ ISP Operator

Numbers of all telecom operators as Jan 2012

N0.	Services	Operators
1	Mobile (2, 2.5, 3G)	08
2	Fixed WLL	08
3	International Gateway	03
4	ISP	27
5	VoIP	15
6	VSAT	01
7	DNS (.KH)	1,461
8	Internet Cafe	304

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)
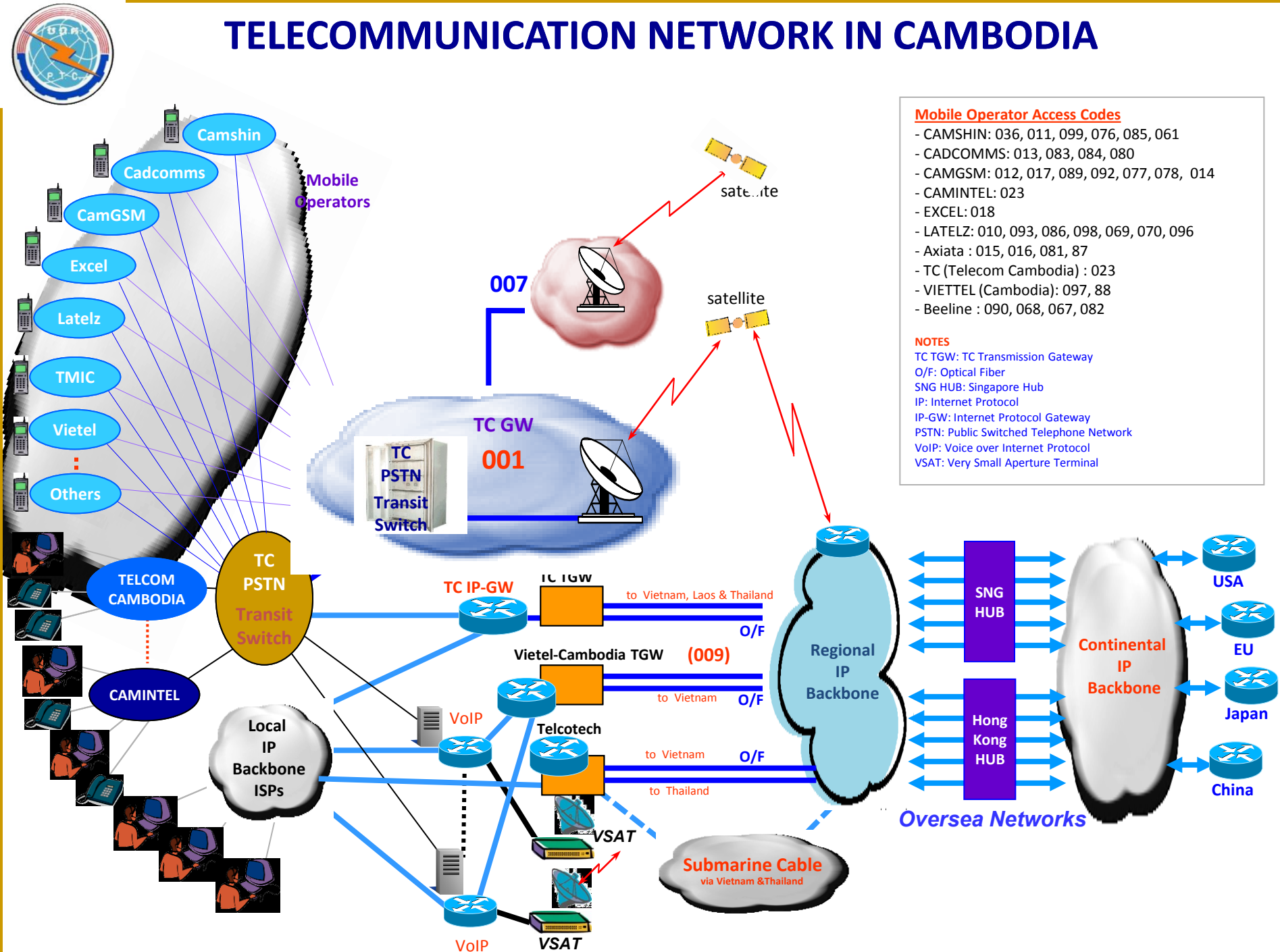
Telecom Market

- **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 Operators

- Camshin
- Cadcomms
- CamGSM
- Excel
- Latelz
- TMIC
- Vietel
- Others

TELCOM CAMBODIA

CAMINTEL

TC PSTN Transit Switch

007

satellite

satellite

TC GW
001

TC PSTN Transit Switch

TC IP-GW

TC TGW

to Vietnam, Laos & Thailand
O/F

Vietel-Cambodia TGW   **(009)**

to Vietnam   O/F

Telcotech

to Vietnam   O/F

to Thailand

VoIP

Local IP Backbone ISPs

VoIP

VSAT

VSAT

Submarine Cable
via Vietnam & Thailand

Regional IP Backbone

SNG HUB

Hong Kong HUB

Oversea Networks

Continental IP Backbone

USA

EU

Japan

China

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

- **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.

- **Readjusting on license issusing**

  - 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!