



**Subregional Telecommunication Ministerial
Forum for Cambodia, Lao PDR,
Myanmar and Vietnam**

Nha Trang, VietNam, 11-12 December 2009

**Financial Issues and Challenges on ICT
Development in Developing Countries**

**Rajendra Singh
Senior Regulatory Specialist
World Bank, Washington DC**

Financial Issues: View Point of-

- Investors
- Operators
- Consumers
- Governments

Investors Point of View

- Maximizing Return on Investment
- Foreign Investment limits
- Stable Policy and Regulatory Regime
 - Independent Regulator
 - Government as Policy Maker and Operator: Conflict of Interest

Operators Point of View(1/2)

- Competitive Pressure: Level Playing Field
- Ownership issues: FDI, Government and Private, Crossholding Limits
- MoU, ARPM, ARPU, EBITDA
- Taxation
- CAPEX and OPEX

Operators Point of View(2/2)

- Infrastructure Sharing: Demerger of Tower Business
- Covering Uncovered Areas: Co-Operation and not Competition
- Regulation: Tariff (Predatory, Forbearance), Interconnection- MTC, Spectrum- Pricing, Spectral Efficiency

Consumers Point of View

■ Tariff

- Affordability: Both Handset and Service
- Tariff Regulation: Per Second Billing

■ QoS

- Network Performance: Congestion, Call Drop Rate, Coverage
- Customer Care
- Billing

■ VAS and M-Apps

Governments Point of View(1/3)

- Maximizing Revenue From Telecom Sector: Taxation, Fees, and Charges
- Ownership Issues: FDI, Govt Holding, Private Sector Investment
- Consumers Interest: Rewards and Penalties
- M-Gov Services
- Efficient management of Finite Resources: Spectrum and Numbering

Governments Point of View(2/3)

- Promotion of Competition
- Security
- Licensing: Technology and Service Neutral
- Rural Telecom: Innovative Approach, Beyond Voice
- PPP: Backbone and Applications
- Broadband Growth
- Transparent Decision Making Process

Governments Point of View(3/3)

- **Regional Co-Operation: International Gateways, Submarine Connectivity, Land based international connectivity**
Eg- Eassy and RCIP Regional Submarine Projects in Africa, Cellular Roaming within CLMV Region
- **Synergy between Power, Transport, and Telecom Sector- OPGW, BPL, and RoW**

Challenges(1/2)

- Telcos may not be the front runners in the market-new players may emerge
- Full Utilization of Technological Developments
- Next Wave of Reforms on M-Apps: Govt as key player

Challenges(2/2)

- Telecom to help big brothers in Finance, Energy, Education, Health, Agriculture and Rural Development Ministries
- ICT and Climate Change
- Cloud Computing
- Net Neutrality

Summary

- Independence of Policy and Regulation
- Attraction of Private Sector Investment
- Promotion of Competition and level Playing Field
- Regional Co-Operation
- Usage of Mobile Platform for Various Services



Thanks!

Q&A

rsingh6@worldbank.org