Taiwan’s Strategy and Policy Toward Developments of Communication Industry

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Outline
1. Introduction
2. Industry Status
3. Government Policy
4. 3G CLUB & SIG
Introduction

- Guiding Principles of Ministry of Economic Affairs (MOEA), Taiwan
  - International Competitive Advantage
  - Investment Policy
  - Innovation-led Industrial Policy
    - Development of Key (Trillion NT$) Industries
      - Communication
      - Semiconductor
      - Image Display
      - Digital Content
      - Biotechnology

How? When?

Industry Status

Communication Manufactures

Telecom. Services Revenue

Taiwan’s 3G License Status
### Domestic and Overseas Production

**Unit: Billion NTD**

<table>
<thead>
<tr>
<th>Year</th>
<th>Overseas</th>
<th>Domestic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>147.7</td>
<td>195.6</td>
<td>343.3</td>
</tr>
<tr>
<td>2001</td>
<td>195.6</td>
<td>208.3</td>
<td>403.9</td>
</tr>
<tr>
<td>2002</td>
<td>208.3</td>
<td>311.4</td>
<td>523.7</td>
</tr>
<tr>
<td>2003</td>
<td>311.4</td>
<td>398.4</td>
<td>712.8</td>
</tr>
<tr>
<td>2004(e)</td>
<td>38%</td>
<td>38%</td>
<td>76%</td>
</tr>
</tbody>
</table>

### Export Percentage by Region (2004)

- **Japan**: 7.5% (7.8%)
- **China**: 16.2% (12.0%)
- **North America**: 26.1% (32.5%)
- **Europe**: 30.4% (30.0%)
- **Asian Pacific**: 12.2% (8.7%)
- **Others**: 3.2% (3.0%)
- **Domestic**: 4.4% (5.1%)
Telecommunication Services (1)

Data and Voice Revenue

Source: IEK, ITRI (2003/11)

Telecommunication Services (2)


Source: IEK, ITRI (2003/11)
### Taiwan’s 3G License Status

<table>
<thead>
<tr>
<th>License</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator</td>
<td>Far EasTone</td>
<td>Vibo</td>
<td>Taiwan Cellular</td>
<td>Chunghwa Telecom</td>
<td>Asia Pacific</td>
</tr>
<tr>
<td>Bidding Price (NT$b)</td>
<td>10.2</td>
<td>7.7</td>
<td>10.3</td>
<td>10.2</td>
<td>10.6</td>
</tr>
<tr>
<td>System</td>
<td>WCDMA</td>
<td>WCDMA</td>
<td>WCDMA</td>
<td>WCDMA</td>
<td>CDMA2000</td>
</tr>
<tr>
<td>Core Network</td>
<td>Ericsson</td>
<td>Nokia</td>
<td>Ericsson Motorola</td>
<td>Nokia, Siemens</td>
<td>Nokia</td>
</tr>
<tr>
<td>Payment for Core Network (NT$b)</td>
<td>Ericsson-2.055 Nokia-1.714</td>
<td>Ericsson-5.0</td>
<td>Nokia-2 Siemens-4.9</td>
<td>16.4</td>
<td>3.7</td>
</tr>
</tbody>
</table>

### Government Policy

- **National Telecom. Program (NTP)**
- **MOEA Tech. Dev. Program (TDP)**
- **Wireless Promotion Office**
National Telecom. Programs (5)

NTP-II Application Service Tech. Roadmap

Government Policy

Mobile Service Platform
- OMA Terminal Platform
- ENUM
- Messaging Service Technology for Cellular/WLAN Integration

Integrated Service Platform
- Internet Security
- PKI & PMI
- Overlay-Capable Middlebox
- Smarter & Faster DSL Access
- V2oDSL Dynamic and Automated Provisioning & Service Creation

Internet Security
- P2P Mobile Commerce
-价值链
- 1Gbps IPSec Accelerator
- 1 Gbps Pass-through IPSec Engine
- 10 Gbps Network Security Engine

Year
- '04
- '05
- '06
- '07
- '08

Secure: e-Taiwan

MOEA Tech. Dev. Program (TDP)

Government Policy

- Fundamental Research: Major Universities
- Applied Research: Research Institutions
- Development Research: Enterprises

Website: http://doit.moea.gov.tw
Wireless Promotion Office

Objectives
Promotion of Government’s Policy on Communication Industries

Policy
R&D Alliance, R&D Center, Global Cooperation

Industries
Wireless, IC, Optical, IT, SoC

Function
Channel for Government, Enterprises, and Academic & Industrial Research Organizations

Tech. Development Organizations

MOEA → DoIT

R&D Programs
- Universities
- Institutes
- Enterprises

3G CLUB

Wireless Communication Advisory Board
Wireless Communication Promotion Office
3G CLUB and R&D Alliance

3G CLUB & Special Interest Group

3G related R&D Alliances

3G CLUB and its SIG

Member Assembly

Secretarial Staff

Board of Executive & Evaluation Committee

Mobile Terminal
System on Chip
Terminal Application
System Operation
Mobile Service
Test & Certification
Beyond 3G
Ultra-Wideband
Service IOT

3G CLUB and R&D Alliance

3G CLUB & SIG

3G CLUB and its SIG

3G CLUB & SIG
Purpose & Types of R&D Alliance

**Purpose:**
To Gather Manpower and Funds from Private Sector to Invest Common Research Interest

**Types:**
- Vertical Enterprises
- Horizontal Enterprises

Successful Factors for an Alliance

**Innovative Ideas**

**Interested Enterprise**

**R&D Supports**

**Government Funding**

**Promotion Office**
Telecom. R&D Alliance

- Handset Application Platform
- SoC Development Platform
- Network Integration Platform
- Mobile Services Platform
- Services Interoperability Test
- More…

THANKS !