

# **Telecommunications in the TPKM economy**

### Challenges, Practices and Achievements A decade's Retrospection

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## Outline

#### First Reform – From Monopoly to Competition

- ✓ Objectives
- ✓ Challenges
- ✓ Best Practice
- ✓ Achievements

#### Second Reform – To Create a Competent Regulator

- ✓ Objectives
- ✓ Challenges
- ✓ Best Practice
- ✓ Achievements

Conclusion



# First Reform 1996-2001



### First Reform (1/4)

### Why?

- Create a Liberalized and Competitive Telecom Market
- Plan to Access WTO

Objectives:
WTO Accession

#### First Reform (2/4)

#### **Challenges:**

From Monopoly to Competition

Establishing an Independent Regulator

Pro-competitive Regulatory Measures
 Guiding principles: Fundamental spirit and rules of WTO
 Liberalizing to strengthen
 competitiveness

### First Reform (3/4)

#### **Best Practice:**

Learned from peer regulators worldwide

Adopted phased approach for liberalization

#### Achievements:

Overhaul of the Telecommunications Act – Feb 1996

⇒ Several Amendments were made subsequently

Establishment of the independent regulator, DGT – Jul 1996

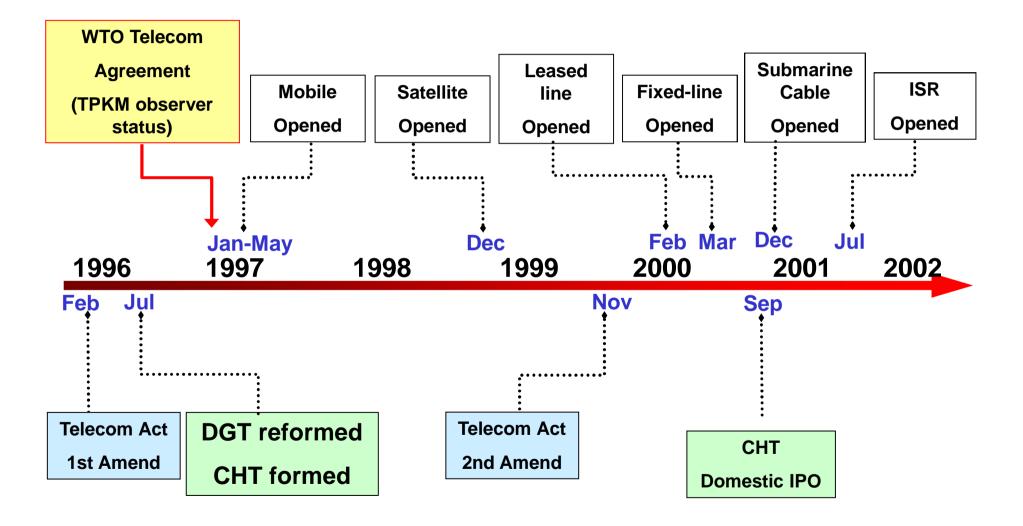
Regulations for network interconnection – Oct 1997

Regulations for governing tariffs – Sep 2000

Regulations on universal services – Jun 2001

DGT : Directorate General of Telecommunications

#### First Reform Milestones 1996 - 2001



### **Checklist – Key WTO commitments**

Sector	Limitations on market access	Limitations on national treatments	Compliance
BASIC TELECOMMUNICATION SERVICES	<ul> <li>Mode 3: None except:</li> <li>A service supplier shall be a Company Limited by Shares incorporated in Chinese Taipei.</li> <li>Investment by non-Chinese Taipei persons in a service supplier max: Direct 20 %, Indirect 60 %</li> <li>The aggregate percentage of shares held by non- Chinese Taipei persons in Chunghwa Telecom, including direct and indirect</li> </ul>	<ul> <li>Mode 3: The chairman and a majority of the board of directors shall be Chinese Taipei nationals.</li> <li>Mode 4: Unbound except as indicated in the horizontal section.</li> </ul>	~
	investment: <b>max. 20 %.</b> Mode 4: Unbound except as indicated in the horizontal section.		×
VALUE-ADDED TELECOMMUNICATION SERVICES	Mode 4: Unbound except as indicated in the horizontal section.	Mode 4: Unbound except as indicated in the horizontal section.	~

#### First Reform (4/4)

Achievement - full compliance with WTO Telecommunications Reference Paper !



# Second Reform 2002 - present



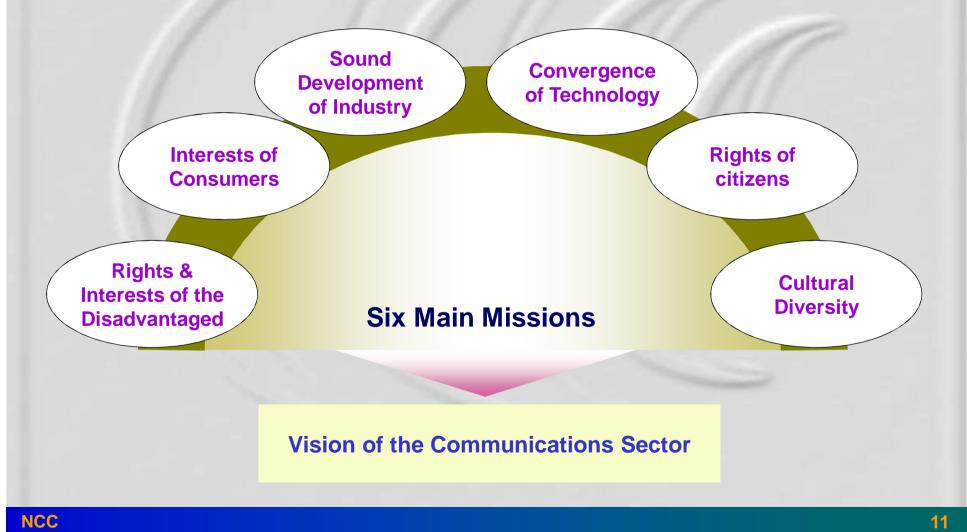
### Second Reform (1/19)

### Why?

Establish a more effective and restructured independent regulator to ensure impartiality and accommodate the trend of convergence between telecommunications and broadcasting

#### Second Reform (2/19)

#### **Objective: to establish a Competent Regulator**



### Second Reform (3/19)

#### **Challenges:**

Converging laws and regulations

- ⇒ The outmoded regulatory framework:
- The authorities for telecommunications and broadcasting affairs originally belonged to different departments and were governed by different laws
- Ied to a lack of consistency and efficiency in management for regulators

### Second Reform (4/19)

#### **Best Practice:**

NCC established in order to

- ⇒ effectively carry out regulatory affairs concerning communications
- ⇒ independently exercise its duties and powers in accordance with the laws

### Second Reform (5/19)

#### Achievement:

- NCC became operational on February 22 2006
  - ⇒ Laws and regulations dealing with communications came under the official responsibility of the NCC
  - The corresponding powers originally under MOTC, GIO, and DGT were transferred to NCC
    - This was also the case for the other laws and regulations that have come under the official responsibility of the NCC.
       Article 2 of the NCC Organization Act

MOTC: Ministry of Transportation and Communication

- GIO: Government Information Office
- DGT: Directorate General of Telecommunications

### Second Reform (6/19)

#### NCC Legal Framework

#### **Fundamental Communications Act**

- Defines the principles for the division of responsibilities between NCC and the Executive Branch
- Sets common regulatory principles for communications services

#### Telecommunications Act Radio & TV Broadcasting Act

 Substantive Laws: Explicitly provide regulation over communication & broadcasting businesses

#### NCC Organization Act

 Organization Act : NCC's Authorities
 & relevant operating rules

NCC

### Second Reform (7/19)

#### NCC's Challenge 1:

- Ensure its operations can better address the six areas covered by the WTO Telecom Reference Paper:
  - ⇒ Competitive Safeguards
  - ⇒ Interconnection
  - ⇒ Universal Service
  - ⇒ Public Availability of Licensing Criteria
  - ⇒ Independent Regulators
  - Transparent and Objective Allocation and Use of Scarce Resources

### Second Reform (8/19)

#### NCC's Challenge 2:

- Amending relevant laws and regulations in a transparent and consistent manner
  - ⇒ Policies & regulations
  - Approximately 10 Acts and hundreds of regulations and directions need amending
  - The alteration of regulation framework may affect the rights and interests of operators
  - ⇒ A change of traditional perspective is required

#### Second Reform (9/19)

#### NCC's Achievements:

 Communications Management Bill drafted for future 3-layer Regulation Framework

OSI Framework	3-layer Framework			
Application Layer				
Presentation Layer	Layer 3 Content-Application	Providing Services based on the Operation-management		
Session Layer	Content-Application	Layer		
Transport Layer	Layer 2	Providing communications services based on the facility of the		
Network Layer	Operation- Management	Networking-infrastructure layer		
Data Link Layer	Bottom Layer	Any wired, wireless, optical and electromagnetic facilities for		
Physical Layer	Networking- infrastructure	transmitting communications signals		

### Second Reform (10/19)

#### NCC's Best Practices:

- Act according to decisions made by a collegial system
- Make best use of multi-level regulation
  - ⇒ Self-regulation, Co-regulation, Regulation

#### Stages for Convergence

- 1. Abolish or revise unnecessary regulatory legislation
- 2. Respond to urgent industry needs, complete revision of laws on small scale
- 3. Respond to the needs of digital convergence, complete a comprehensive revision of the Telecommunications Act and the three radio and television laws

#### Second Reform (11/19)

#### NCC's Best Practices: Policy Planning System

Input	Method		
Internal	Discussions among Sub-Groups within the Commission.		
External	Conduct Public Consultation, Public Opinion Survey.		
International	Refer to International Benchmarks		

### Second Reform (12/19)

#### NCC's Challenge 3:

- Managing emerging telecom technologies and services sensibly
  - Continually evolving services require updating knowledge and awareness
  - Great deal of effort, increased budget and authorization required
  - Greater understanding of projected scope/success of new services

### Second Reform (13/19)

#### NCC's Challenge 4:

- Easing restrictions on telecom equipment imports and cross-certification agreements
  - ⇒ Requires greater international cooperation
  - ⇒ Needs active participation in international meetings
  - ⇒ Calls for a multilateral or plural agreement on both conformity assessment procedures and common criteria recognition arrangement for electronics and IT products

#### Second Reform (14/19)

#### NCC's Challenge 5:

Vacating Analog Television Frequencies

⇒ Fully vacating by 2010

#### **Best Practices:**

- Promote set-top box ~ Digital TV
- Close coordination with local governments
- Facilitate the construction of gap fillers for digital TV

### Second Reform (15/19)

#### NCC's Challenge 6:

#### Accelerate Digital TV development

- ⇒ Create incentives
- ⇒ Enhance diversity of channels and consumers' choices

#### **Best Practices:**

- Become a strong advocate of Digital TV
- Establish correct objectives draft proposals etc.

### Second Reform (16/19)

#### NCC's Challenge 7:

#### Becoming a formal member of international organizations

- Acquiring a fair channel of distribution for telecommunication resources
- Sustaining resources for acquiring and drawing up technical standards
- ⇒ Complete and thorough global cooperation

#### Second Reform (17/19)

#### NCC's Best Practices:

- Provide advanced telecommunication networks
  - Increasing significance and role in the region by becoming regional telecom hub
- Participate in international events under the multilateral mechanism
  - Joint effort to ensure interconnecting network of networks and interoperability

#### Second Reform (18/19)

# NCC' s Challenge 8: Providing Access to Universal Services

#### Achievements:

The first economy to achieve the goal of "Every rural community has broadband internet service"

⇒ 45 rural areas

⇒ Great deal of effort and manpower required to install network

#### Second Reform (19/19)

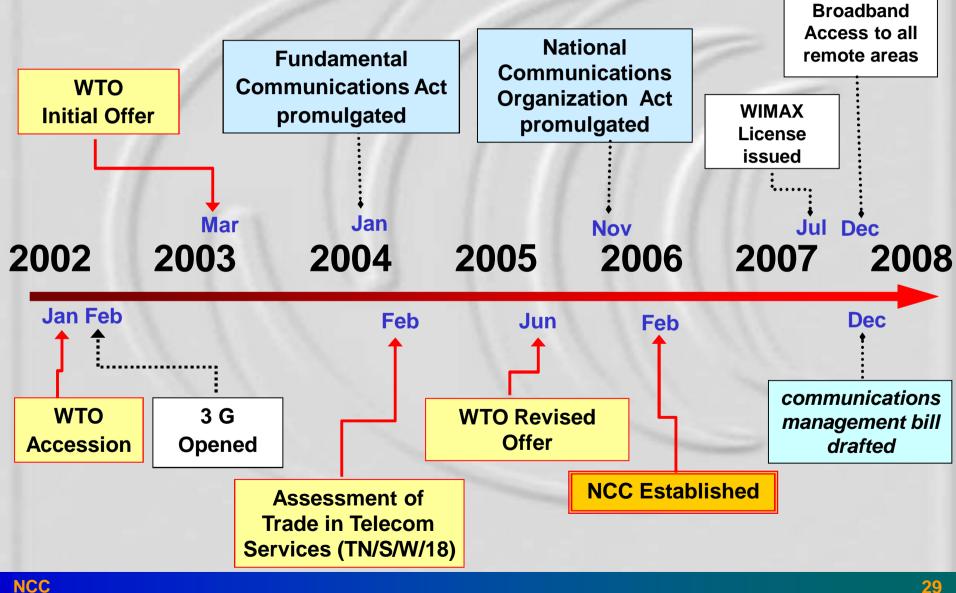
### NCC's Challenge 9:

 Implementing Asymmetric Regulations- Wholesale prices for telecom services

#### Achievements:

 Dominant Type I telecom enterprises shall formulate wholesale prices and refrain from unfair competitive practices

#### **Second Reform Milestones 2002 - present**



#### **The Effects of Liberalization**

Item	Category	1997	Sep 2003	Nov 2007
Operators	Туре І	1	95	97
	Type II	80	436	557
Subscribers	Local Phone	10.86	13.29	13.31
(Millions)	Mobile Phone	1.49	25.28	24.15
(11110110)	Internet (users)	1.66	8.77	14.76*
	Broadband Internet		2.72	4.62
Penetration	Local Phone	49.96%	58.86%	58.02%
	Mobile Phone	6.86%	111.97%	105.26%
	Internet (pop)	8.00%	39.00%	64.4%*
	Broadband/Internet		30.96%	70.19%
Total	NT\$ Billions	176.2	333.7 (2002)	371.6 (2006)
Revenues	Fixed Network Telephony	74%	26%	20%
	Mobile Phone	22%	56%	56%
	Data	4%	18%	24%
Average Price of IDD per minute (NT\$)		29.94	6.22 (Nov 2003)	5.28 (Sep 2007)

Main source: NCC

\* Source: www.find.org.tw



# Conclusion



### Conclusion

- Liberalization involves short-term pain, but long-term benefit.
- NCC's 3C: Convergence, Competition, Consumer protection
  - Regulations should be constantly reviewed to adapt to the development of market, needs of consumers and innovation of technologies
  - A mechanism under long-term strategy for safeguarding competition is essential
  - ⇒ The regulator should consider public opinions and international benchmarks, and hold periodic talks with stakeholders
- The Removal of Technical Barriers to Trade (TBT) on the issues of conformity assessment procedures and common criteria recognition for ICT products under the multilateral negotiations is necessary



# **Thank you for Your Attention**

