Catalyst for Change

CASE STUDY ON EFFECTIVE REGULATION: THE SINGAPORE EXPERIENCE

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PRESENTATION OUTLINE

➢ **Who is IDA?**

➢ **Liberalisation 2000: "The Big Bang"**

➢ **Singapore's Regulatory Philosophy**

➢ **Tools of Effective Regulation**

WHO IS IDA?

Who is IDA?

- **Merger of TAS and National Computer Board in 1999**

  → Singapore's recognition of the convergence of telecommunications and IT:– we now think in terms of "info-communications"

  → Need for an integrated perspective to developing, promoting and regulating the sector

Who is IDA?

- **IDA operates in a symbiotic relationship with its parent Ministry**

  → Ministry provides overall guidance and decides on major policy issues

  → IDA and Ministry adopt consultative approach to decision-making and policy formulation

  → New parent Ministry as of December 2001: ICT portfolio has moved from the Ministry of Communications to the Ministry of Information and the Arts to foster closer collaboration with the content and broadcasting sector.

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LIBERALISATION 2000 THE "BIG BANG"

LIBERALISATION 2000 – THE "BIG BANG"

In Jan 2000, Govt announced its decision to:

➢ Advance full market liberalisation by 2 years, from 1 April 2002 to 1 April 2000

➢ Lift all direct and indirect foreign equity limits for operators

➢ Lift all limits on the number of players in the market, except when there are physical constraints (e.g. land, spectrum)

LIBERALISATION 2000 – THE "BIG BANG"

- **Why did we do it?**

  - To safeguard and promote Singapore's competitiveness
    - openness of telecom environment is key to attracting new infocomm investments and players
    - Our former phased approach to liberalisation had made Singapore a less attractive place for companies to hub their Asian operations in

  - To spur innovation, increase choice for consumers and make services more affordable

Post "Big Bang"

More than 240 new licences granted since 2000, S$3 billion additional investments

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LIBERALISATION 2000 – THE "BIG BANG": Where are we today?

- **Fixed-Line Penetration**   **48.5%**

- **Number of Fixed-Line subscribers** **1,949,500**

- **Mobile Phone Penetration**   **76.6%**

- **Number of Mobile Phone subscribers**   **3,076,900**

- **Internet Penetration (dial-up)**   **47.8%**

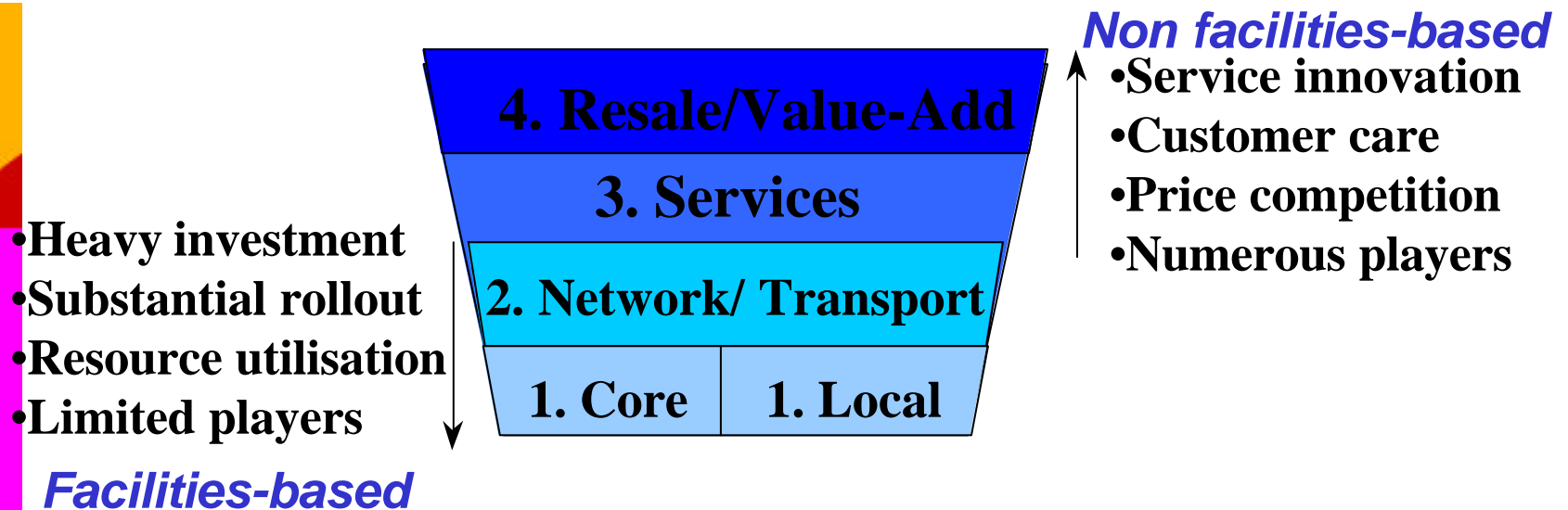- **Number of Internet Dial-Up subscribers**   **1,919,500**

Infocomm industry grew by 30% last year to $26 billion, approx 7% of Singapore's GDP in 2000

INFOCOMM DEVELOPMENT AUTHORITY OF SINGAPORE

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SINGAPORE'S REGULATORY PHILOSOPHY

After full market liberalisation......

➪ Regulation is still necessary in this transitional phase to full market competition

➪ Challenge for IDA has been to put in place a regulatory regime that

➪ allows market forces to prevail

➪ fosters timely, effective and sustainable competition

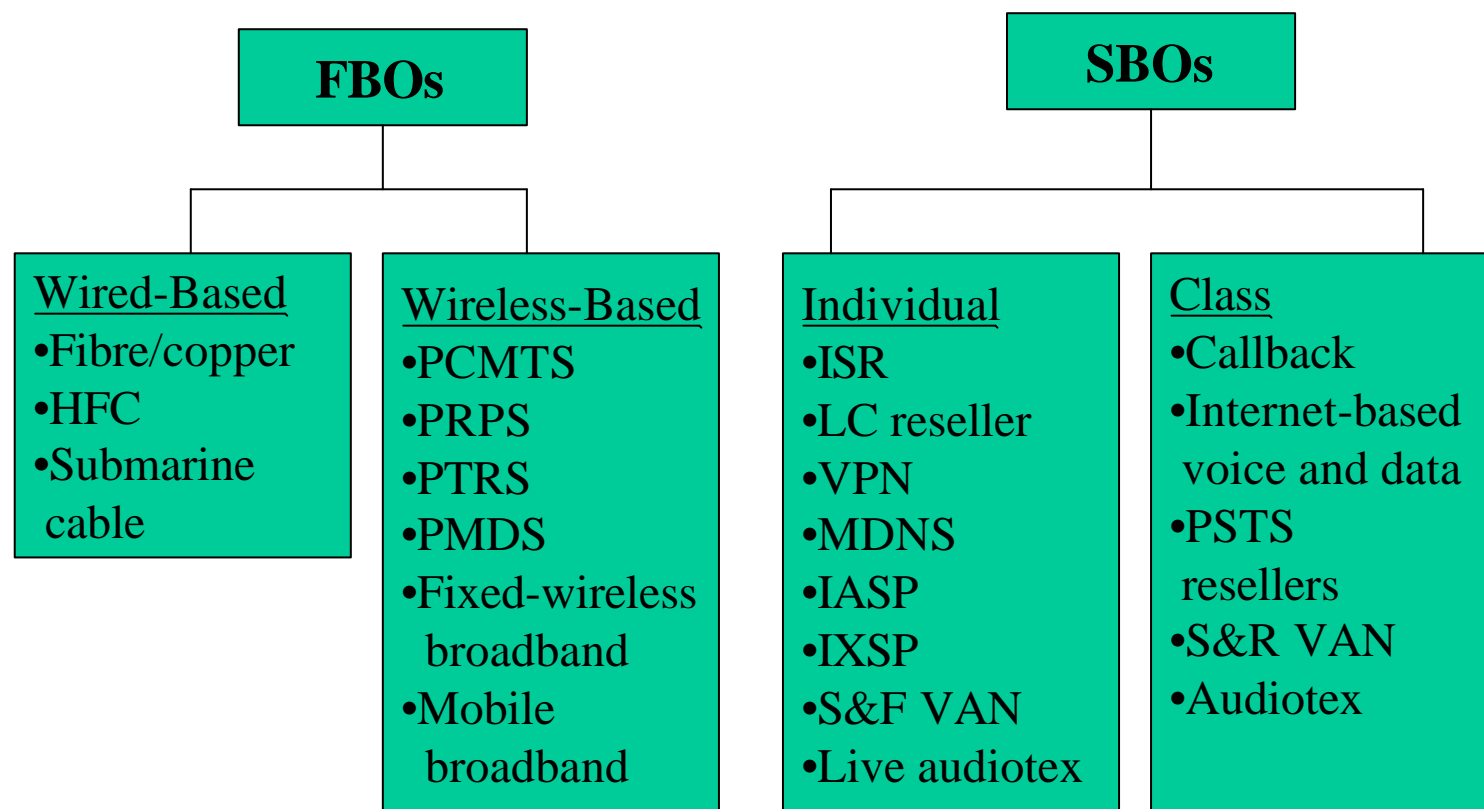➪ introduces a clear, coherent and robust competition framework for a multi-player environment

REGULATORY PHILOSOPHY
TELECOM INDUSTRY FRAMEWORK

iDA SINGAPORE

Non facilities-based

4. Resale/Value-Add
3. Services
2. Network/ Transport
1. Core	1. Local

•Heavy investment
•Substantial rollout
•Resource utilisation
•Limited players

Facilities-based

•Service innovation
•Customer care
•Price competition
•Numerous players

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• Degree of regulation depends whether operator is facilities-based (FBO) or services-based (SBO).

• Aim is to provide for network diversity and resiliency as well as avoid unnecessary duplication of scarce resources at the facilities level

•Aim is to spur competition and choice at the service level

LICENSING FRAMEWORK

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FBOs

SBOs

<u>Wired-Based</u>
- Fibre/copper
- HFC
- Submarine cable

<u>Wireless-Based</u>
- PCMTS
- PRPS
- PTRS
- PMDS
- Fixed-wireless broadband
- Mobile broadband

<u>Individual</u>
- ISR
- LC reseller
- VPN
- MDNS
- IASP
- IXSP
- S&F VAN
- Live audiotex

<u>Class</u>
- Callback
- Internet-based voice and data
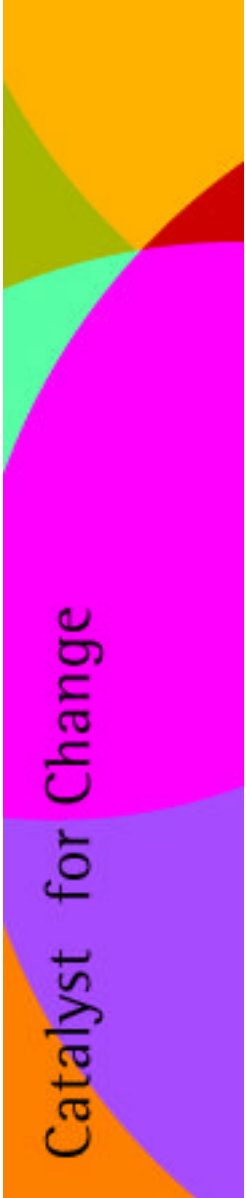- PSTS resellers
- S&R VAN
- Audiotex

*FBO – Facilities-Based Operator; SBO – Service-Based Operator.

Facilities-based Operators

➢Operators decide on types of networks, systems, facilities to deploy & their preferred technology platforms

➢In general, no restriction to number of licences awarded, except where spectrum/physical constraints arise

➢Wireless networks are licensed via a market-based approach due to spectrum constraints

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Service-based Operators

➢ Operators lease network elements from FBOs to provide their own services or resell the services to 3rd parties.

➢ 2 sub-categories:

  ❑ Operators with **SBO (Individual) Licences** lease international transmission capacity to provide services

  ❑ Operators with **SBO (Class) Licences** provide their services over the PSTN or the Internet.

➢ No limit on class licence. IDA will also not predetermine the number of individual licences.

➢ No foreign equity limit imposed for licensees.

INFOCOMM DEVELOPMENT AUTHORITY OF SINGAPORE

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TOOLS OF EFFECTIVE REGULATION

TELECOM COMPETITION CODE

➤Launched in 2000 to assist IDA to facilitate the move to full market competition

Goals of the Code

➤Promote international competitiveness of our infocomm industry

➤Promote and maintain fair and efficient market conduct

➤Encourage and facilitate industry self-regulation

➤Encourage investment in telecom infrastructure to enhance Singapore's position as hub of choice

➤Minimise duplication of scarce resources

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TELECOM COMPETITION CODE

Regulatory Principles enshrined in the Code

- ➤ Maximum reliance on voluntary industry negotiations and market forces where competition exists
- ➤ Clear and effective regulation where full competition does not yet exist
- ➤ "Light touch" regulation that is not more burdensome than necessary
- ➤ Proportionate (asymmetric) regulation
- ➤ Open decision-making
- ➤ Technological neutrality

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TELECOM COMPETITION CODE

Category of Licensee	Duty to End-User	Interconnection & Sharing	Competition	Enforcement
Dominant FBO	✓	✓	✓	✓
Non-Dominant FBO	✓ selected provisions	✓ selected provisions	✓ selected provisions	✓
SBO with switching/ routing equip	✓ selected provisions	✓ selected provisions	✓ selected provisions	✓
SBO without switching/ routing equip	✓ selected provisions	✗	✓ selected provisions	✓
Dealer Licensees	✓ selected provisions	✗	✓ selected provisions	✓

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INTERCONNECTION

- **Interconnection with Non-dominant Licensees**
  - Reliance on market forces and commercial negotiations to foster agreements
  - Limited role for IDA: ensuring agreements meet minimum requirements and mediation upon request
  - Private enforcement

- **Interconnection with Dominant Licensees**
  - Higher level of IDA scrutiny
  - The Reference Interconnection Offer (RIO)
  - Individualised agreements
  - Operators may also opt into existing Interconnection Agreements between Dominant Licensee and any other similarly situated licensee

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THE REFERENCE INTERCONNECTION OFFER (RIO)

➢ Dominant Licensees lack the economic and commercial incentives to enter voluntarily into Interconnection Agreements (IAs) with competing Licensees

➢ RIO stipulates the prices, terms and conditions on which Dominant Licensees must offer interconnection within a specified period of time to other Licensees.

➢ Comprehensive technical descriptions of Interconnection-Related Services (IRS) offered, the prices, terms and conditions, the procedures used to order and provide such services and timeframes that will apply.

➢ Sufficiently detailed to enable a Licensee that is willing to accept its prices, terms and conditions to obtain Interconnection Related Services without the need for further negotiation

WHAT'S NEXT FOR SINGAPORE?

LOOKING AHEAD…

Managing a multi-operator converged market

IDA will need to build capabilities in the following areas:

➢ Managing convergence in the Telecom, IT, Media and Entertainment (TIME) sector

- interactive TV (iTV) services, video-on-demand (VOD)
- paid content services accessible via PCs, TV sets and other information appliances such wireless PDAs

➢ dispute settlement, mediation, facilitating competition, industry promotion and technology development

➢ greater cooperation with other regulators as jurisdictional boundaries increasingly blur

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LOOKING AHEAD…

Managing a multi-operator converged market

IDA will need to build capabilities in the following areas:

➢ introduce greater industry consultation in our decision-making processes

➢ encourage greater industry self-regulation e.g. via codes of practice

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Resources

The Code, Reference Interconnection Offer, Related Legislation and other papers are available at IDA's website:

http://www.ida.gov.sg

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Thank You