

Global Regulators Symposium
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Internet Policy

in South East Asia

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The views expressed are those of the author and may not reflect the opinions of the ITU or its members



Topics

- Who is in charge?
- What can an ISP do?
- What about content?
- How much does it cost?
- To VoIP or not to VoIP
- Dot names
- Access for the masses
- Quality of service
- What is the market?
- Promoting the Internet



ITU Internet Studies

- Reasons
 - Improve market information
 - Examine factors influencing Internet diffusion
 - Compare & contrast
 - Recommendations
- Launched 2000
- Other case studies

www.itu.int/t/casestudies





Internet Case Study

Contents

- Country overview
- Telecom & Media sector
- Internet market
- Use in government, health, education and business
- Comparative framework
- Recommendations

2001 South East Asia Studies

Southeast Asia Map

- Countries studied

- Malaysia

- Indonesia

- Vietnam

- Cambodia

- Thailand

- Philippines

- Laos

- Collaboration with e-ASEAN

- Workshop in Bangkok, 21-23 November





Myth and Reality

Internet market is
unregulated

➤ Every country
regulates market in
one way or another

Competition is good

➤ No market is
completely
competitive &
incumbent
operators may be
able to provide
Internet access
more cheaply

Leave Internet to
private sector

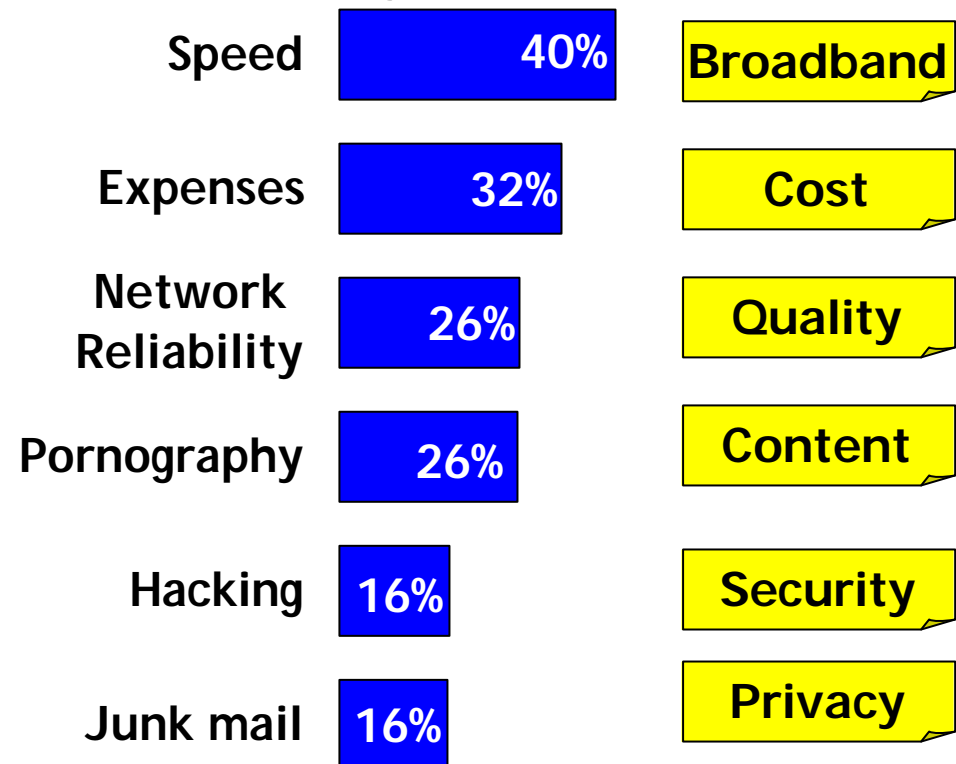
➤ Fine if you only want
the elite to use it



Who should [Why] be responsible for Internet regulation?

- Who:
 - Has generally fallen to telecom regulator to issue ISP licenses and resolve disputes
 - Broadcasting & other ministries are also sometimes involved in issues such as content, security & digital laws
- Why:
 - Public interest
 - ICT access (Digital Divide)

Perceived problems concerning the Internet



Source: NECTEC, Internet User Profile of Thailand 2000



Internet Service Provider (ISP) market

- *Entry?* In Cambodia, Laos and Vietnam, no new ISPs were licensed for several years. In Thailand, market entry has been frozen. In other countries, difference between licensed and operational ISPs.
- *License fees?* In Cambodia, share revenue with government. In Thailand, share income with international operator. In most other countries, pay license fee to regulator.
- *Infrastructure?* In Singapore, different class of license. In Philippines, must go through licensed telecom operators. In other countries, ISPs often constrained.



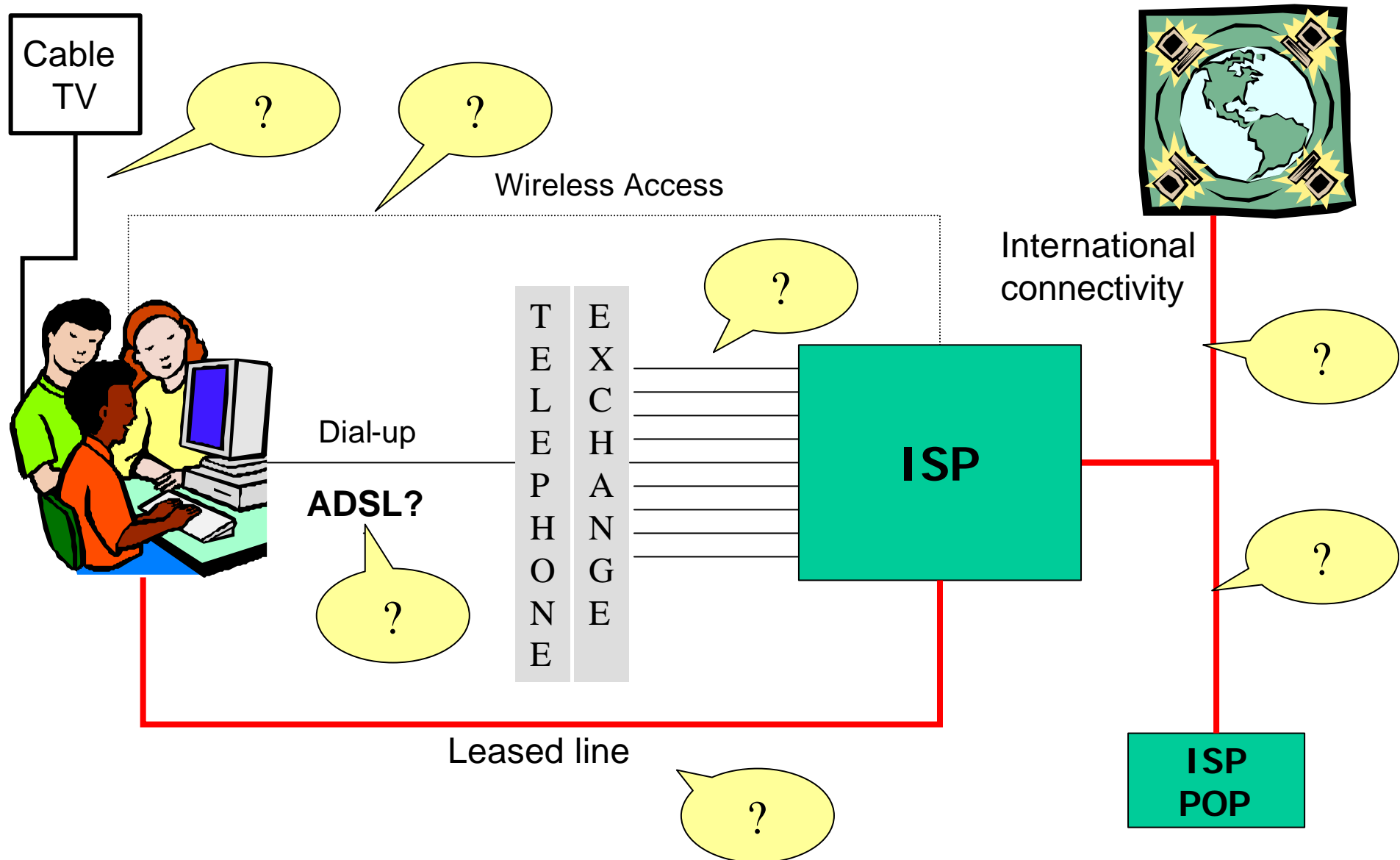
Who are the ISPs?

Country	How many *	Registry	ISP association
Thailand	18/18	www.thnic.net	ISP Club
Indonesia	150/60	www.iix.net.id/iix.html	APJII
Singapore	44/?	www.ida.gov.sg/license/Licensees.nsf/SBO-IND-PIAS?OpenView	No
Philippines	150/50	http://www.piso.org.ph/membersframe.htm	PISO
Malaysia	18/7	http://www.cmc.gov.my/licensing-new/class_license/class_esp2.htm	No
Vietnam	5/4	VDC, FPT, SPT, NetNam	No
Cambodia	3/3	Camnet, BigPond, Mobitel	No
Laos	2	LaoTel, GlobeNet	No

* Licensed / In operation.



What can an ISP do?





International gateway

- Should ISPs operate own international gateway?
 - Pros:
 - Heart of their business
 - Redundancy
 - Quality of service
 - Cons:
 - Content
 - Incentive to exchange traffic
 - Higher costs
- Price of international Internet connectivity

Price per 64 kbps of international bandwidth, US\$

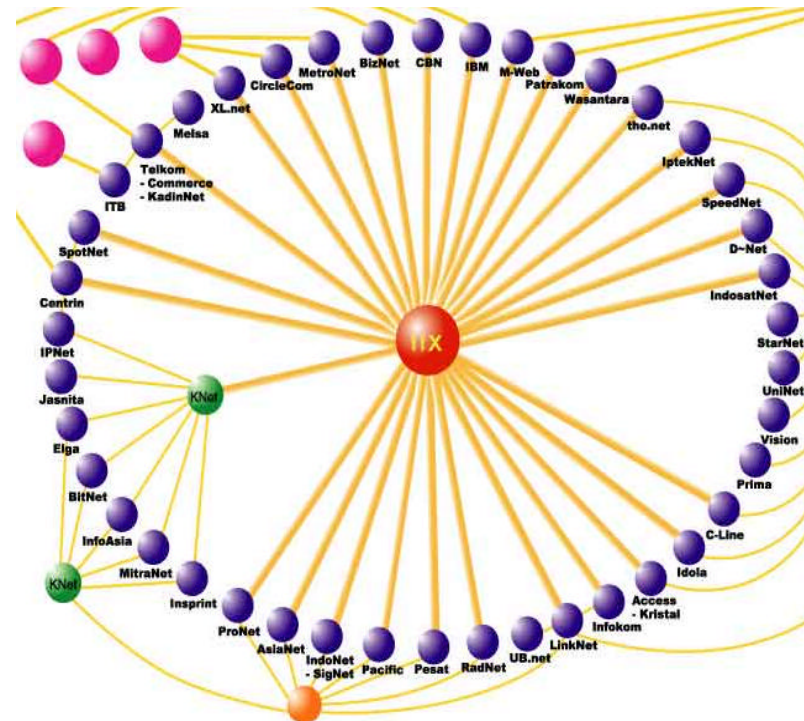


Source: ITU Case Studies



Internet traffic exchange

- Keep local Internet traffic within country to reduce international bandwidth costs
- Public vs. Private peering
- Support local content and national “Intranet”





Content

- No content control: Cambodia, Indonesia, Malaysia, Philippines, Thailand,
- Content control: Singapore (firewall to pornographic sites, registration of content providers), Vietnam (firewall, registration of content providers), Laos



Pricing

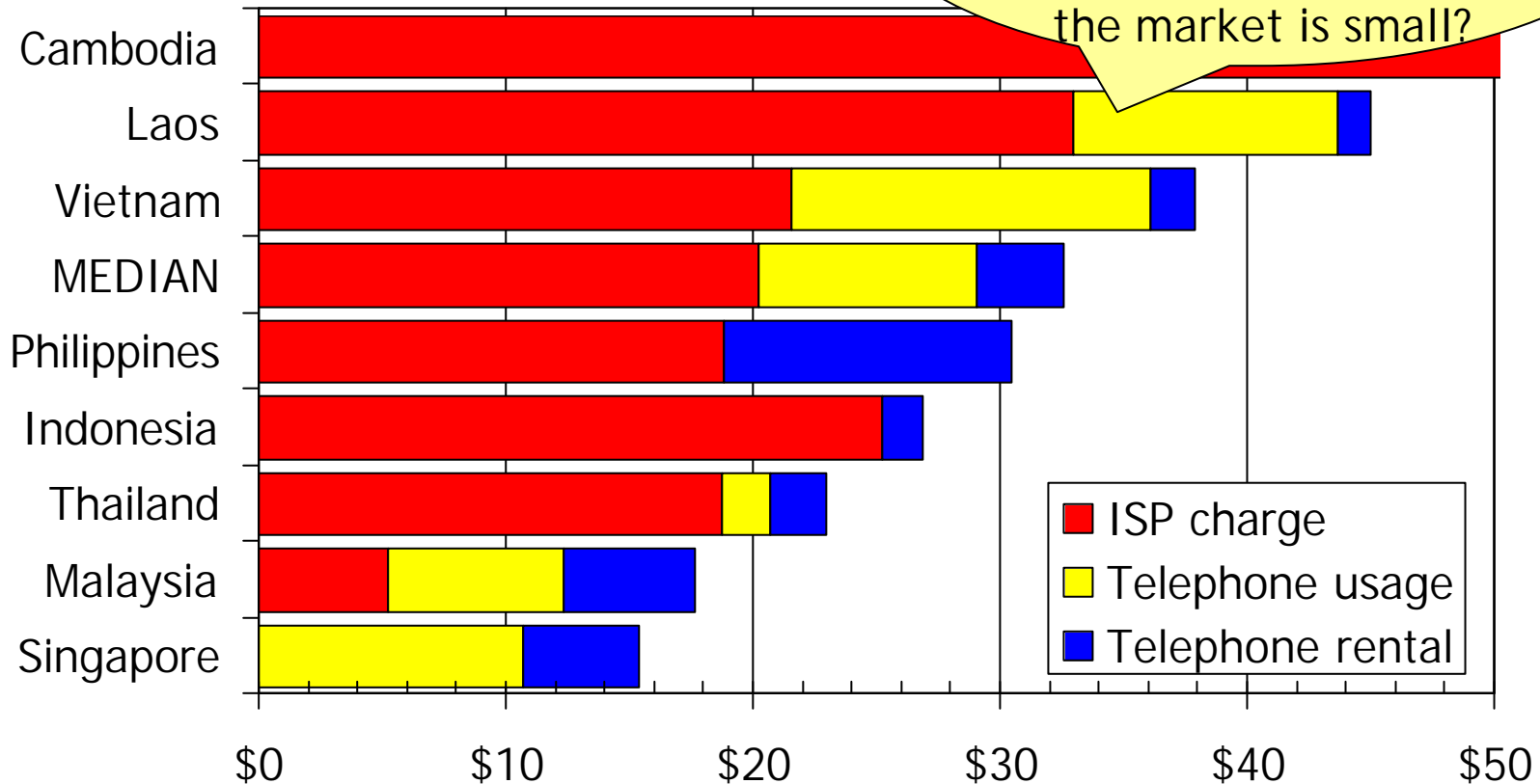
- Nationwide at local call
- Internet on demand
- Prepaid cards
- Telephone charges
 - Usage: Cambodia, Laos, Singapore, Vietnam
 - Lower rate: Indonesia, Malaysia
 - Flat rate: Thailand
 - No charge: Philippines





Internet pricing South East Asia

Million \$ question:
Is the market small
because prices are high or
are prices high because
the market is small?



30 hours of Internet access, US\$, October 2001

Source: ITU adapted from ISPs / PTOs.



Internet telephony

- Policies on Voice over Internet Protocol (VoIP) vary across region
 - Malaysia & Singapore provide for VoIP licenses
 - Vietnam long distance trial
 - In Thailand, telecom operators provide
 - In Cambodia and Laos, technically illegal but widely available in urban areas






Quality of Service (QOS)

- Only Singapore publishes clear QOS results
- Philippines ask for QOS but does not enforce
- Thailand has informal user surveys



Domain name

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Domain Name Search

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[Bulk registration click here](#)


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:: Get the name you want with the dot that's hot

If you want to be on the cutting edge of the Web, .LA is the domain for you. And right now it's wide open. Chances are the name you want is available now!





Universal access

NGO



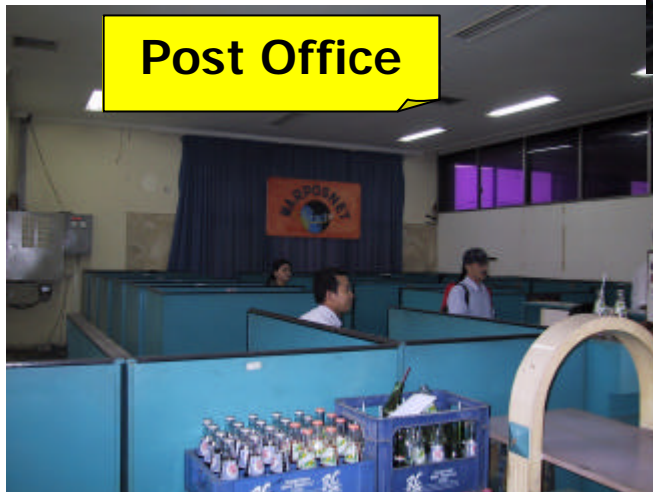
School



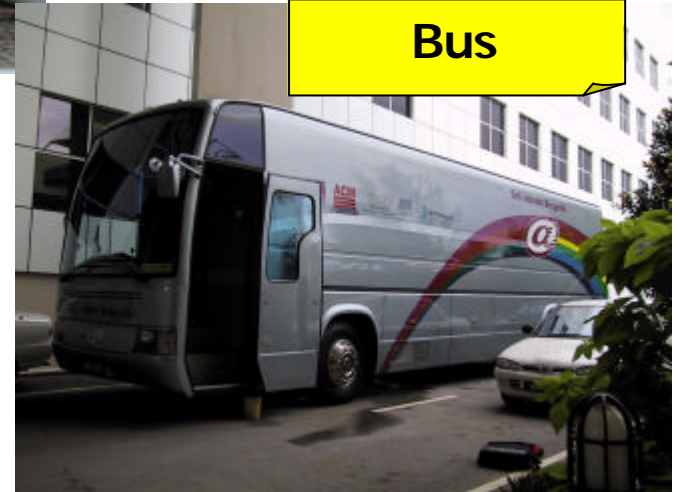
SME



Post Office

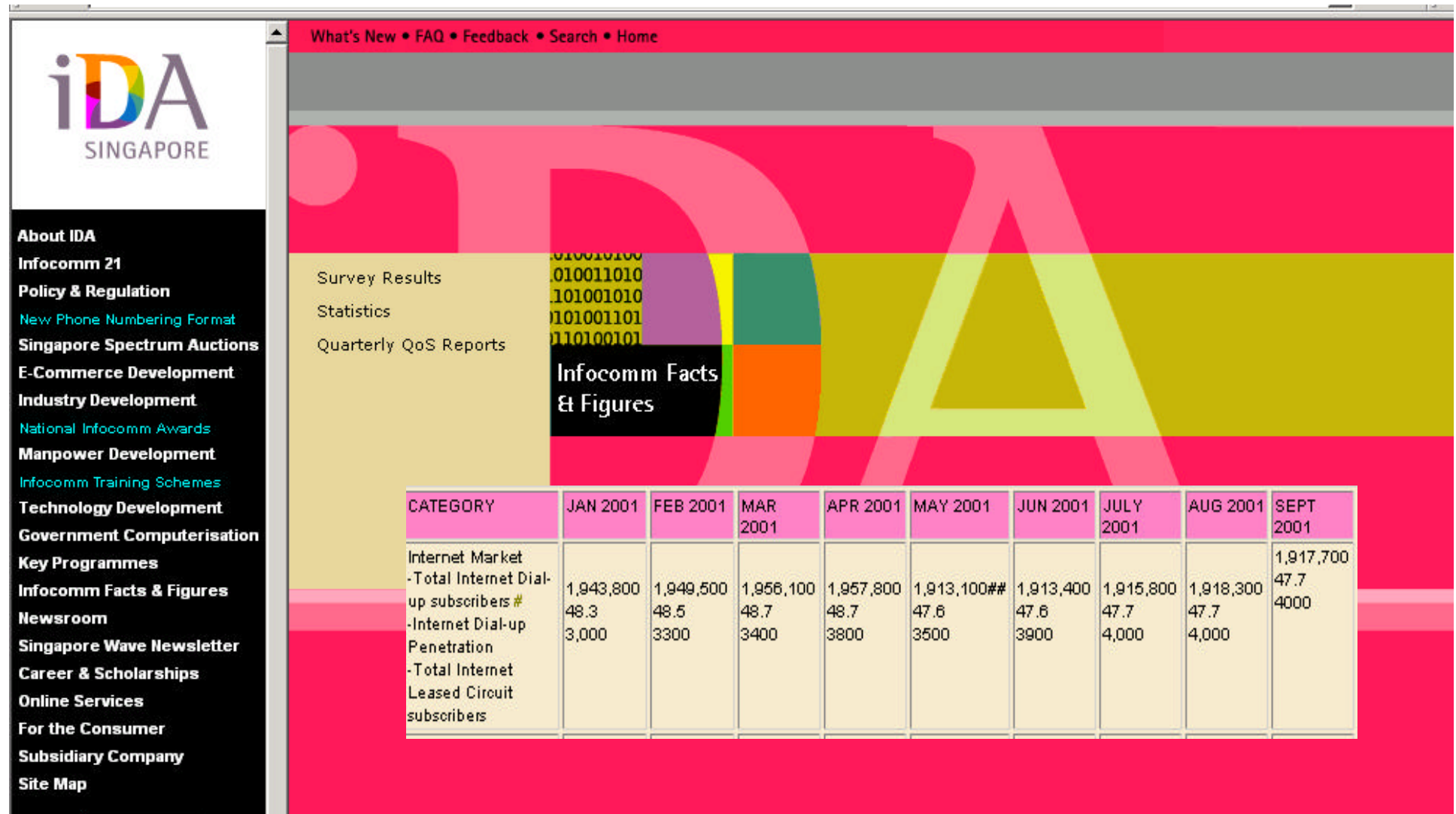


Bus





Market information





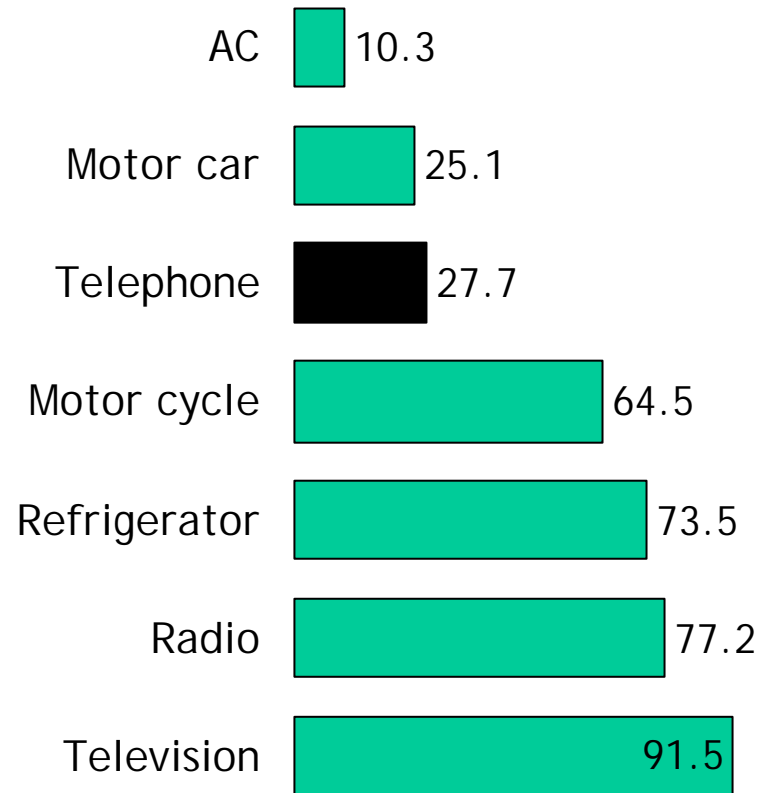
Malaysia & Thai 2000 Census

Are the following items
available for use by
members of this Household:

- ☐ Radio / Hi-fi
- ☐ Television
- ☐ Video / VCD / DVD
- ☐ Fixed Telephone Line
- ☐ Mobile phone
- ☐ Personal Computer (PC)
- ☐ Internet Subscription

*Source: Question B7.
Population and Housing
Census Malaysia 2000*

% of households with appliance



Source: Thailand 2000 Census

www.nso.go.th/pop2000/pop2000.htm



Promotion

- Awareness
- Broadband
- Content development
- Industry collaboration



Conclusions

- Internet requires some degree of regulation & policy to function efficiently
- Telecom regulators are best placed to monitor market
- Consumer concerns need to be acted on
- Internet requires promotion in developing nations

Thank you!