REGIONAL SEMINAR ON COSTS AND TARIFFS FOR MEMBER COUNTRIES OF THE TARIFF GROUP FOR ASIA AND OCEANIA(TAS)
SEOUL,3-6 JULY 2007

TARIFF AND INVESTMENT TRENDS IN TELECOMMUNCATIONS IN THE ASIA PACIFIC REGION

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- TARIFF ,INVESTMENT AND COSTING TRENDS: EVIDENCES FROM ASIA PACIFIC

  - Evolution of tariffs - HOW HAS THE ASIA PACIFIC REGION FARED-
  - Investment and costing issues – WHAT ARE THE EMERGING PATTERNS

ITU

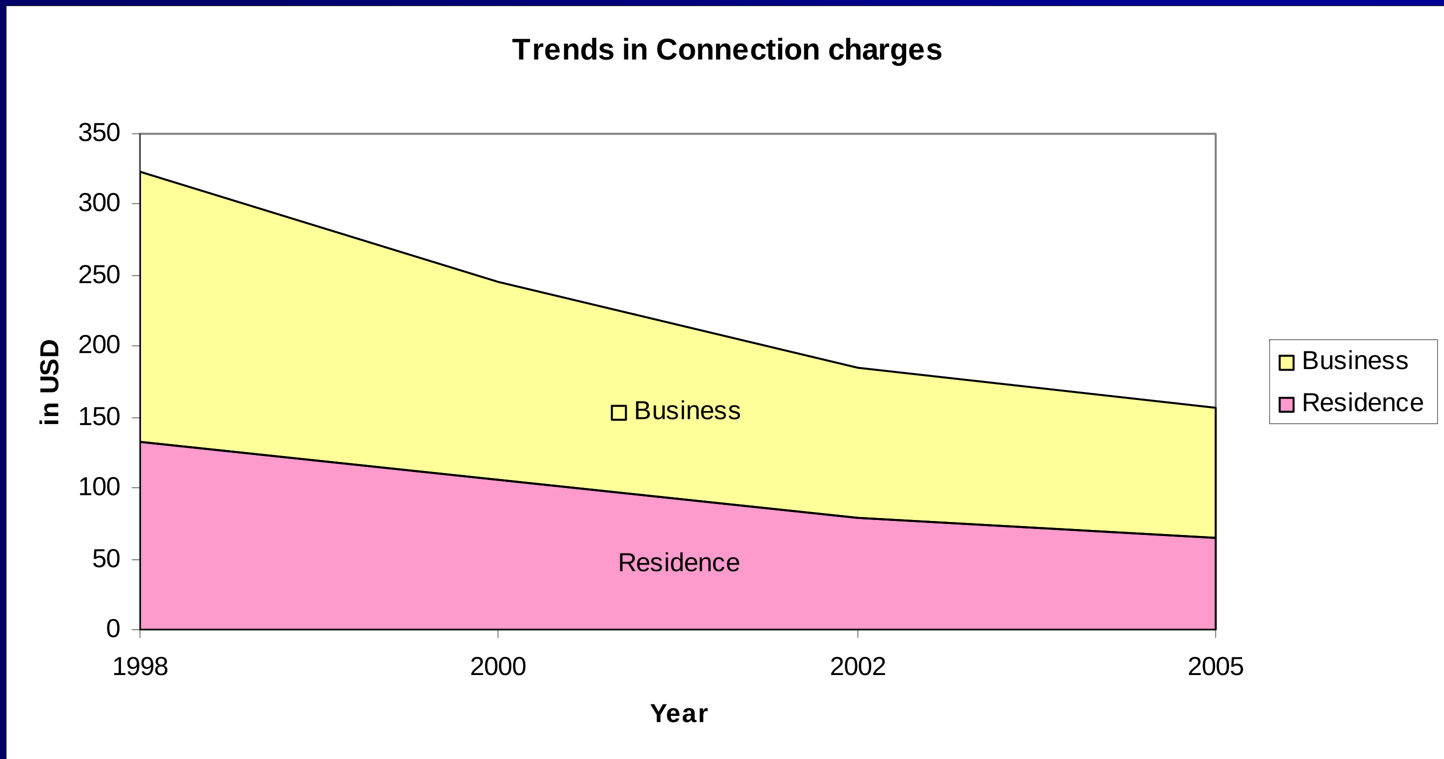
EVIDENCES FROM TARIFFS

(DATA SOURCE: ITU WORLD TELECOMMUNICATION/ICT INDICATORS)

Trends in Asian region fixed connection charges(in USD)

Year	Residence	Business
1998	132	191
2000	106	139
2002	79	106
2005	62	85

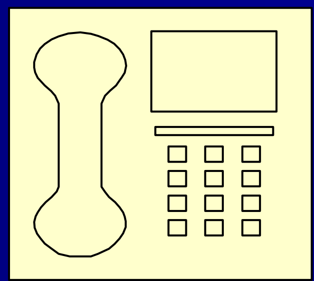
Trends in Asian region Fixed connection charges (in USD)



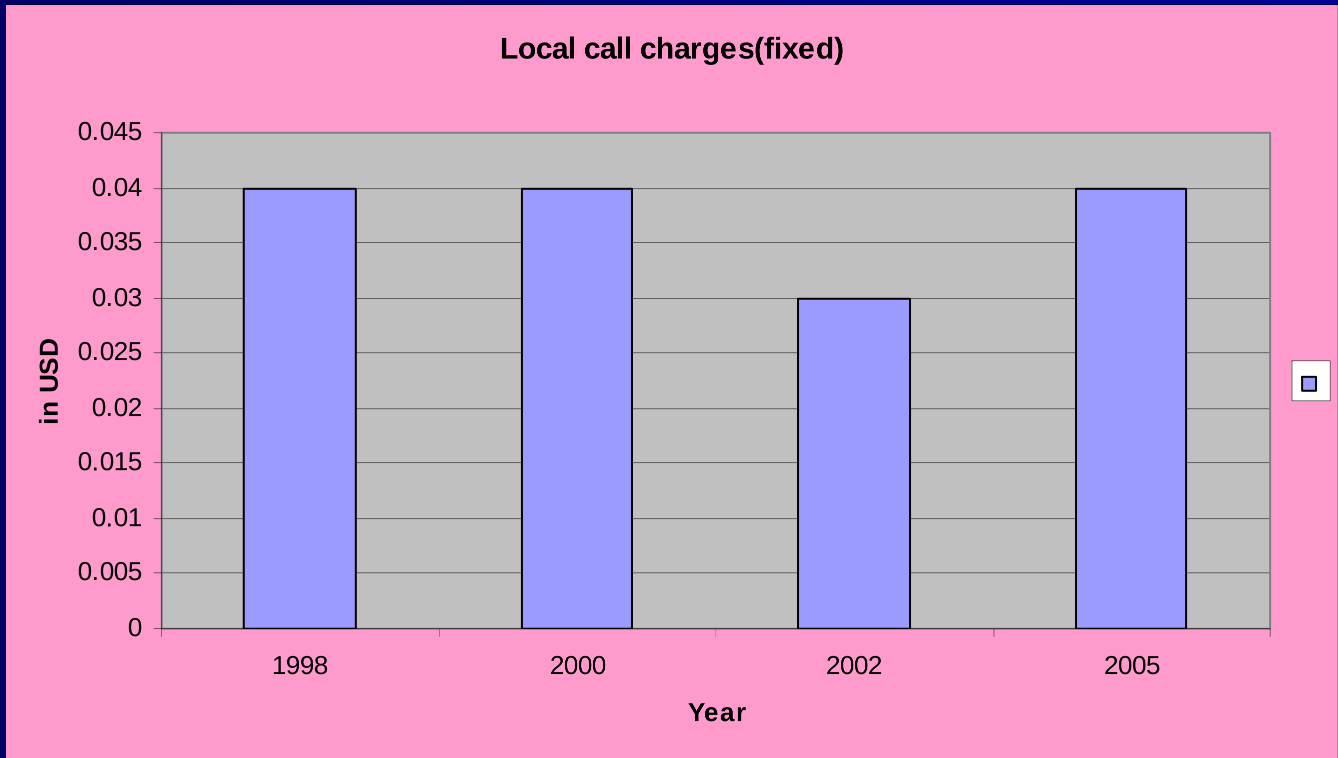
Trends in Asian region fixed line local call charges(in USD)

Local call charges per 3 minutes

1998	**0.04**
2000	**0.04**
2002	**0.03**
2005	**0.04**



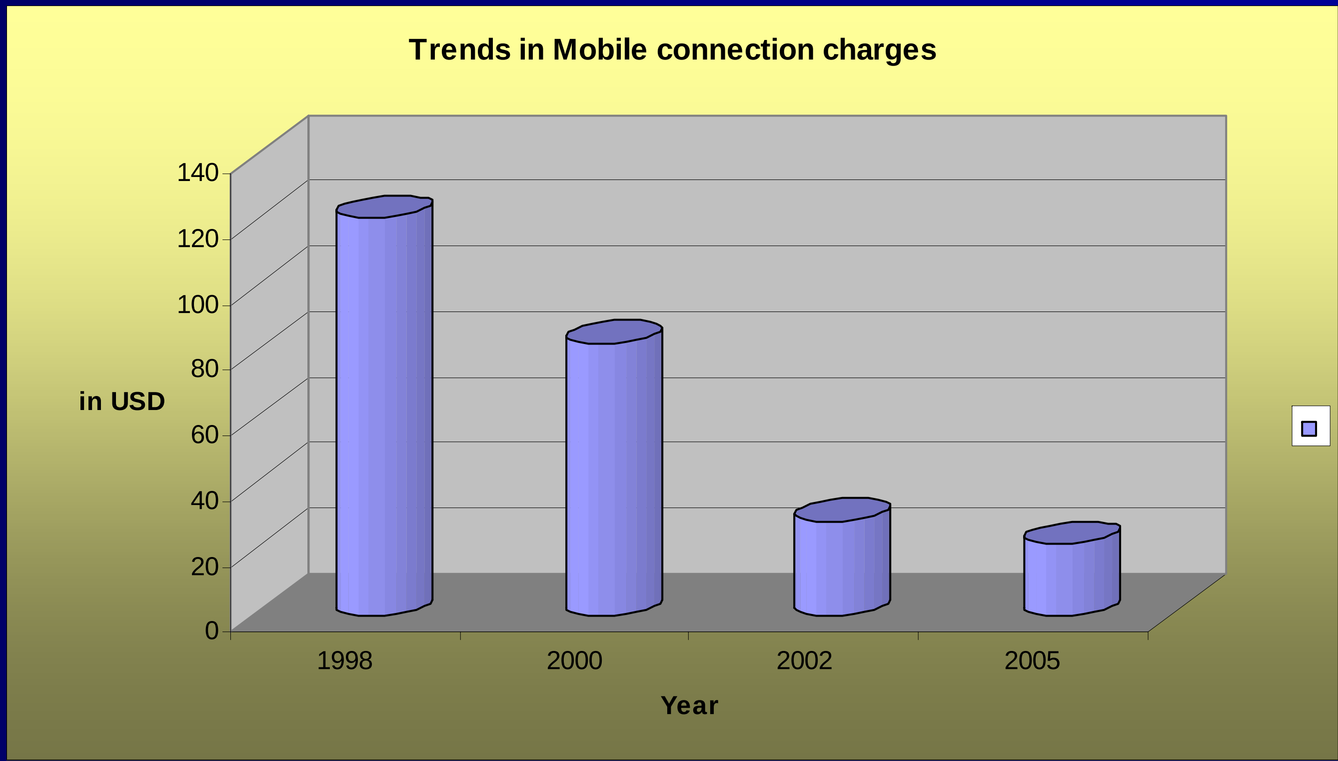
Trends in Asian region fixed local call charges



Trends in Asian region- Mobile connection charges in USD

	Mobile connection charges
1998	121
2000	83
2002	28.32
2006	18.41

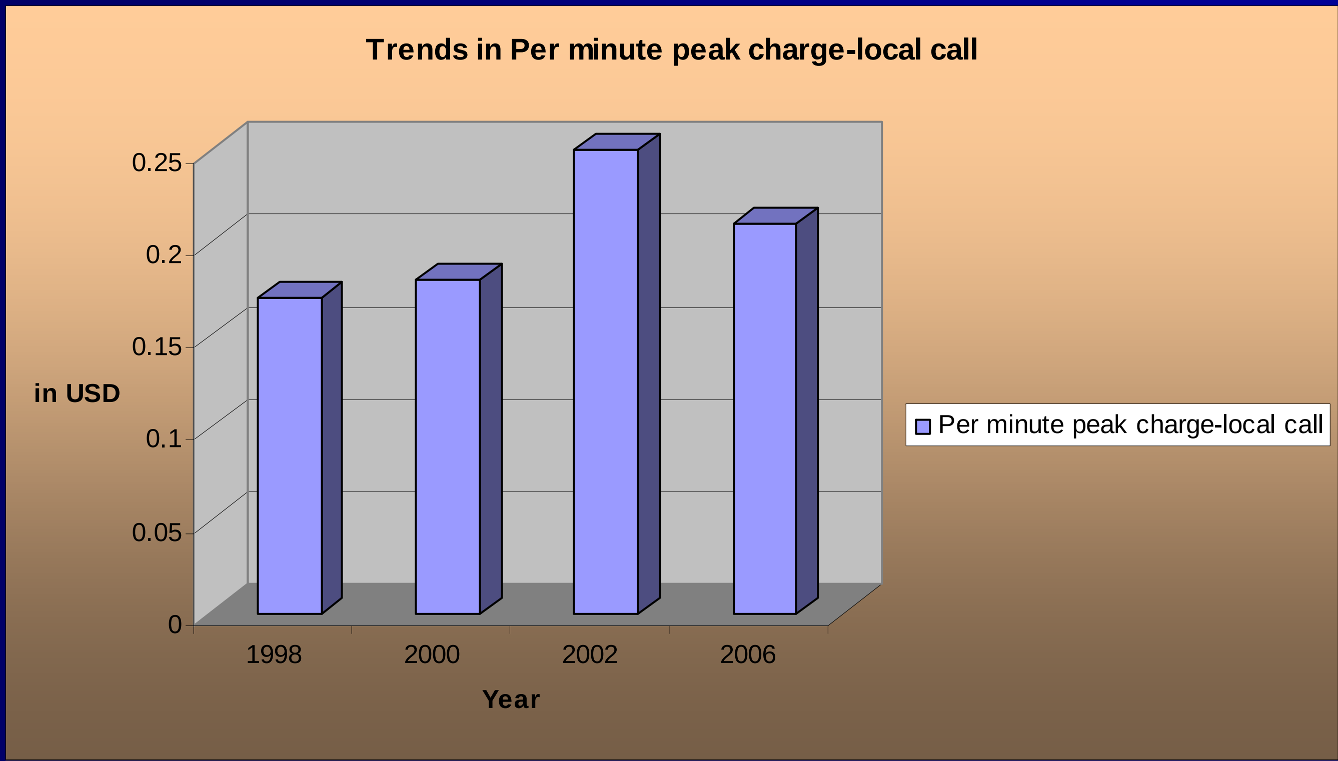
Trends in Asian Mobile connection charges



Mobile peak tariffs in Asia

	Per minute peak charge-local call
1998	0.17
2000	0.18
2002	0.25
2006	0.21

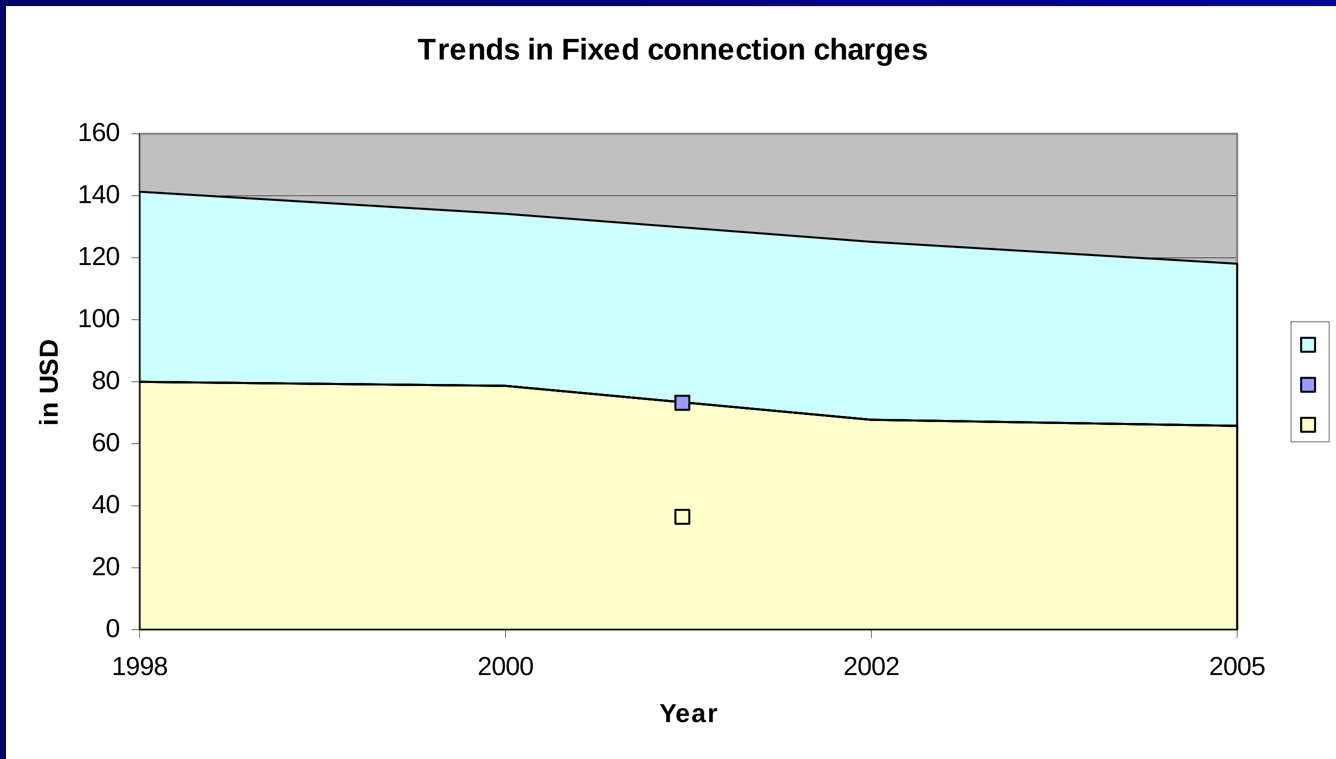
Trends in Asian region – mobile peak tariffs



Trends in Oceania region- Connection charges.

Year	Residence	Business
1998	61	80
2000	55	79
2002	57	68
2005	51	64

Trends in Oceania –fixed connection charges(in USD)

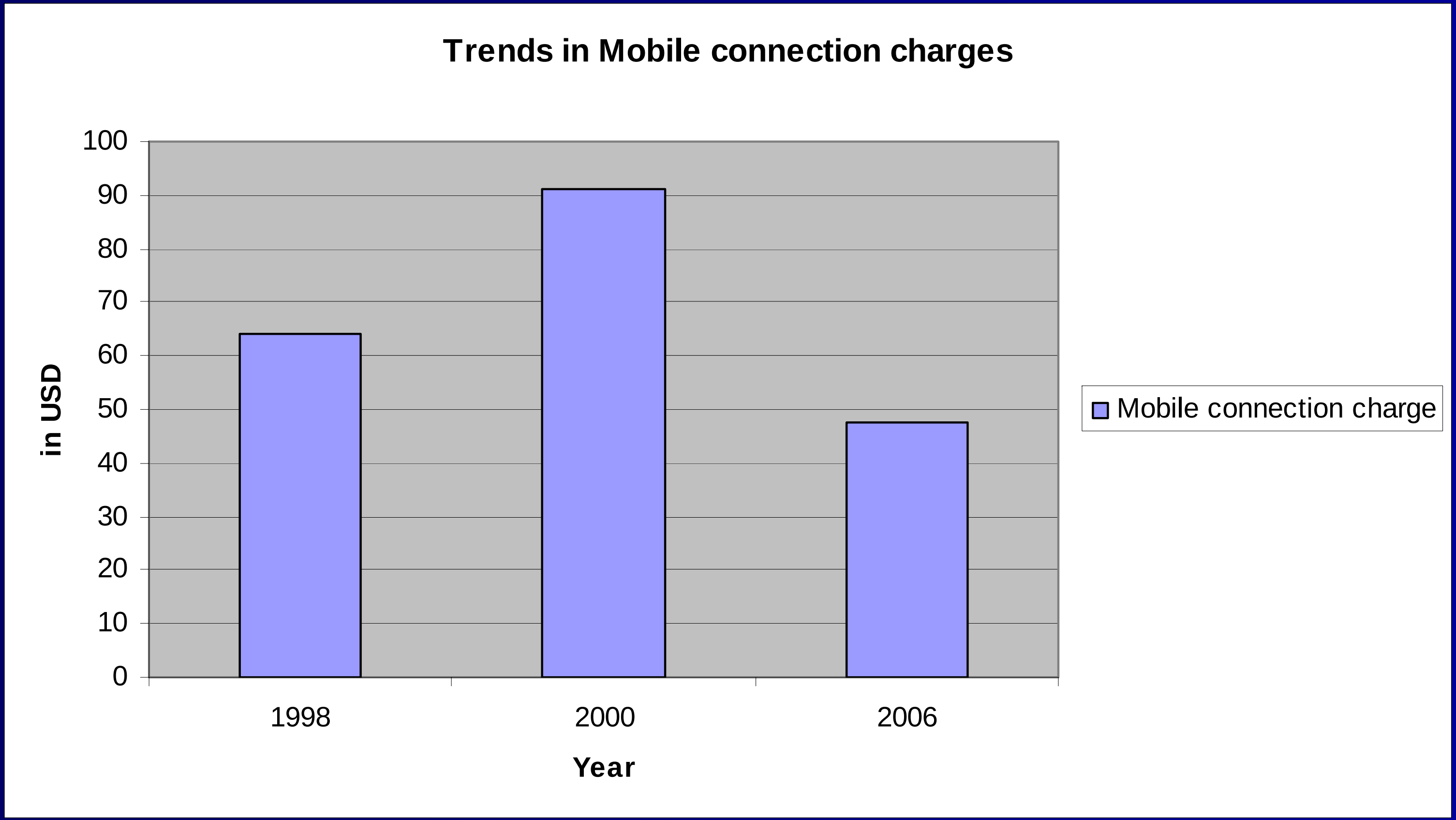


Trends in Oceania region-Mobile connection charges(in USD)

- More accessibility

	Mobile connection charge
1998	64
2000	91
2006	47.42

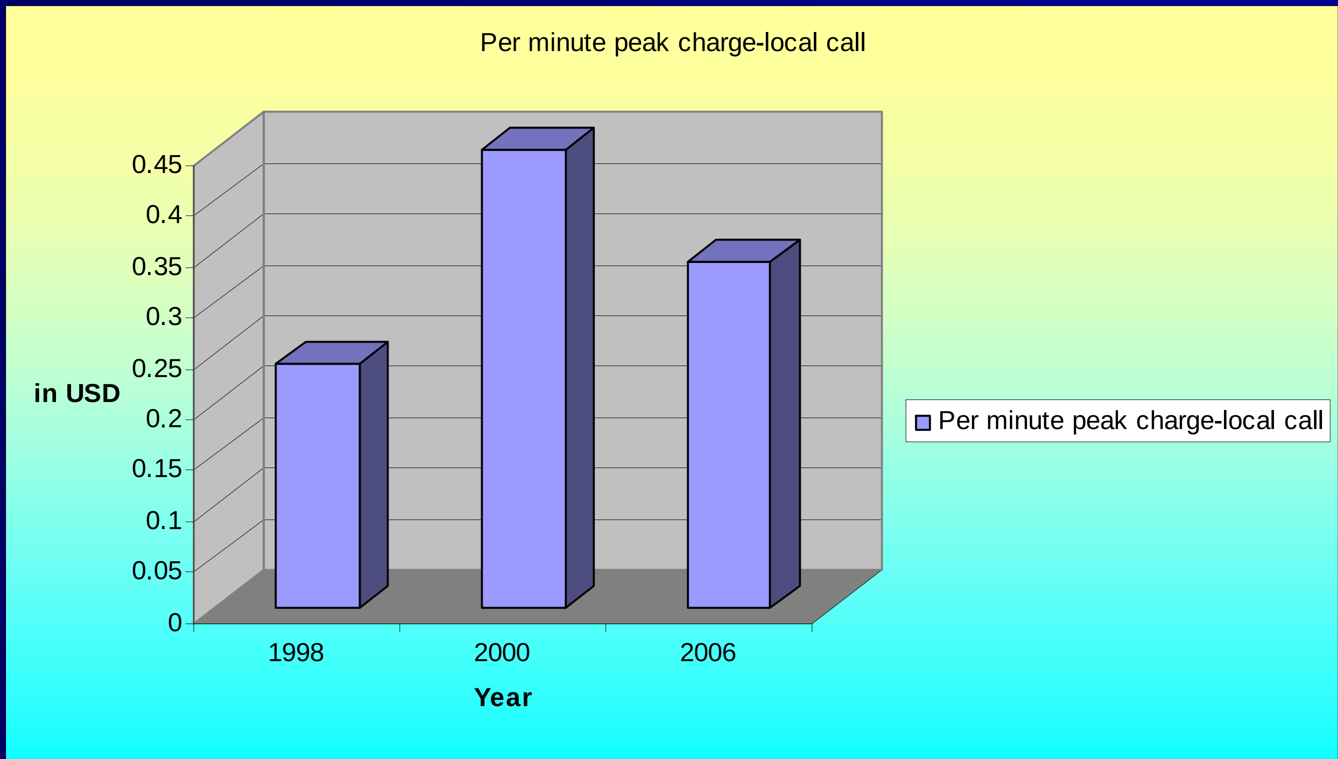
Trends in Oceania-Mobile connection charges (in USD)



Trends in Oceania- per minute peak mobile tariff

	Per minute peak charge-local call
1998	0.24
2000	0.45
2006	0.34

Mobile peak tariffs in Oceania region -trends



MOBILE CELLULAR TARIFFS as of Aug 2006

Source : ITU WORLD TELECOMMUNICATIONS INDICATORS DATABASE

	Connection charge 2006	Per minute local call: Peak 2006	Per minute local call: Off-peak 2006	Cost of local SMS 2006	100 minutes of use: US$	100 minutes of use: As % of GNI per capita
World	18.39	0.25	0.23	0.11	23.98	30.02
Africa	14.78	0.26	0.22	0.08	24.40	77.21
Americas	22.69	0.26	0.25	0.06	25.42	12.46
Asia	18.41	0.21	0.20	0.06	20.08	14.05
Europe	11.04	0.30	0.29	0.23	29.10	6.29
Oceania	47.42	0.34	0.28	0.13	30.64	22.79

FIXED TARIFFS (US$)

Source :ITU WORLD TELECOMMUNICATIONS INDICATORS DATABASE

	Residential		Business		Local
	Connection (US$) 2005	Monthly subs. (US$) 2005	Connection (US$) 2005	Monthly subs. (US$) 2005	call (US$) 2005
WORLD	64	8.2	79	11.6	0.15
Africa	53	5.2	65	6.3	0.13
Americas	60	9.5	70	16.0	0.08
Asia	62	4.4	85	7.7	0.22
Europe	86	13.4	99	16.4	0.14
Oceania	51	10.4	64	17.5	0.11

INTERNET TARIFFS -2005
Source : ITU

	ISP charge			Local
	Connection fee US$	Monthly fee US$	20 hours charge US$	call charge US$
World	9.34	15.81	5.24	9.15
Africa	11.35	18.16	8.76	20.17
Americas	5.48	15.20	2.45	8.39
Asia	9.25	8.15	5.91	3.57
Europe	0.99	15.18	0.95	2.94
Oceania	47.65	55.70	13.27	0.24

TELECOMMUNICATION INVESTMENT 2005(TOTAL IN USD MILLION AND INVESTMENT PER INHABITANT) Source :ITU WORLD TELECOMMUNICATIONS INDICATORS DATABASE

WORLD	201547.3	42.8
AFRICA	8096.5	12.9
AMERICAS	43982.0	59.7
ASIA	80831.8	31.9
EUROPE	63852.7	81.2
OCEANIA	4784.3	190.8

ANALYSIS OF TRENDS

- CONNECTION CHARGE OF MOBILE DRIVES POSITIVE GROWTH TRENDS FOR ACCESSIBILITY
- INTERNET PRICES TO COMPETE WITH VOICE TARIFFS FOR CUTTING EDGE COMPETITIVE TRENDS IN FUTURE
- INVESTMENT FIGURES ONE OF THE HIGHEST IN TERMS OF LEVELS

ITU study group: Q12/1 SURVEY ON TARIFF

- Investment and costing issues – WHAT ARE THE EMERGING PATTERNS-POLICY PERSPECTIVES

TARIFF DETERMINATION

A. How do you determine the price of the domestic telecommunication services you provide (local and long-distance calls and interconnection)?			
Multiple answers possible	**Graph**		
1. Set by the State	2004	30.77 %	4/13
	2005	23.53 %	4/17
	2006	50.00 %	4/8
2. On the basis of revenue requirements, having regard to company overheads	2004	46.15 %	6/13
	2005	52.94 %	9/17
	2006	50.00 %	4/8
3. On the basis of the individual production costs of each service	2004	69.23 %	9/13
	2005	47.06 %	8/17
	2006	75.00 %	6/8
4. Benchmarking of Tariffs	2004	46.15 %	6/13
	2005	41.18 %	7/17
	2006	12.50 %	1/8

TARIFF CALCULATION

E. Which concept do you use as the basis for calculating telecommunication service tariffs?			
Only one answer possible	**Graph**		
1. Fully distributed costs (FDC)	2004	53.85 %	7/13
	2005	68.75 %	11/16
	2006	50.00 %	4/8
2. Incremental costs (IC)	2004	23.08 %	3/13
	2005	18.75 %	3/16
	2006	25.00 %	2/8
3. Unspecified	2004	23.08 %	3/13
	2005	12.50 %	2/16
	2006	25.00 %	2/8

UNIVERSAL SERVICE AND TARIFFS

G. How is universal service policy implemented in your domestic market?

Multiple answers possible	Graph		
1. State-imposed limits on the price of domestic calls	2004	36.36 %	4/11
	2005	42.86 %	6/14
	2006	25.00 %	2/8
2. State-imposed limits on installation charges	2004	0.00 %	0/11
	2005	28.57 %	4/14
	2006	12.50 %	1/8
3. State-imposed limit on the monthly subscription fee	2004	18.18 %	2/11
	2005	35.71 %	5/14
	2006	25.00 %	2/8
4. Discriminatory tariffs in favour of specific eligible groups	2004	9.09 %	1/11
	2005	7.14 %	1/14
	2006	25.00 %	2/8
5. Obligatory investment in unprofitable areas	2004	54.55 %	6/11
	2005	42.86 %	6/14
	2006	37.50 %	3/8
6. Mandatory contribution to a universal service fund	2004	63.64 %	7/11
	2005	64.29 %	9/14
	2006	75.00 %	6/8
7. Any other (e.g. tax, royalty, etc.)	2004	0.00 %	0/11
	2005	0.00 %	0/14
	2006	12.50 %	1/8

INTERCONNECTION ISSUES

O How are your interconnection charges calculated?

Only one answer possible	Graph		
1. Common tariff model for all services	2004	0.00 %	0/10
	2005	0.00 %	0/15
	2006	12.50 %	1/8
2. Separate costing methodology	2004	30.00 %	3/10
	2005	13.33 %	2/15
	2006	25.00 %	2/8
3. National tariff benchmarks	2004	0.00 %	0/10
	2005	6.67 %	1/15
	2006	0.00 %	0/8
4. International tariff benchmarks	2004	0.00 %	0/10
	2005	6.67 %	1/15
	2006	0.00 %	0/8
5. Imposed by the regulatory authority	2004	50.00 %	5/10
	2005	53.33 %	8/15
	2006	37.50 %	3/8
6. Other	2004	20.00 %	2/10
	2005	20.00 %	3/15
	2006	25.00 %	2/8

VoIP- TRENDS FROM REPLIES

Q. Please indicate which regulatory arrangements are respected with the use of networks based on IP. (Voice services)

Multiple answers possible	Graph		
1. Regulatory arrangements subject to universal service obligations	2004	18.18 %	2/11
	2005	13.33 %	2/15
	2006	0.00 %	0/7
2. Regulatory interconnection arrangements with networks using switching circuits	2004	45.45 %	5/11
	2005	33.33 %	5/15
	2006	57.14 %	4/7
3. Banning of services based on IP	2004	9.09 %	1/11
	2005	0.00 %	0/15
	2006	0.00 %	0/7
4. No regulatory arrangements defined at present	2004	27.27 %	3/11
	2005	60.00 %	9/15
	2006	42.86 %	3/7
5. Other	2004	18.18 %	2/11
	2005	13.33 %	2/15
	2006	0.00 %	0/7

KEY RESULTS ON DOMINANCE QUESTION

- MAJORITY OF COUNTRIES HAVE RECOGNISED THE CONCEPT OF DOMINANCE AS A REGULATORY POLICY PLATFORM
- MARKET SHARE APPROACH WITH SMP BEING DEFINED WITH RANGES OF 25% TO 40% SEEN

SURVEY LESSONS

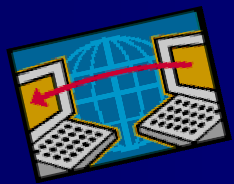
- Asia Pacific region : dynamics of the mobile and internet market to become more pronounced and keen from a competitive standpoint
- VoIP policy will become a major regulatory issue for many countries in the region
- Competitive tariffs and cost of provision with technologically different solutions, will ultimately and redefine the notion of universal accessibility to telecommunications and in turn USO/Access deficit issues which still play a lead role in the region

MARKET ISSUES IN THE FUTURE

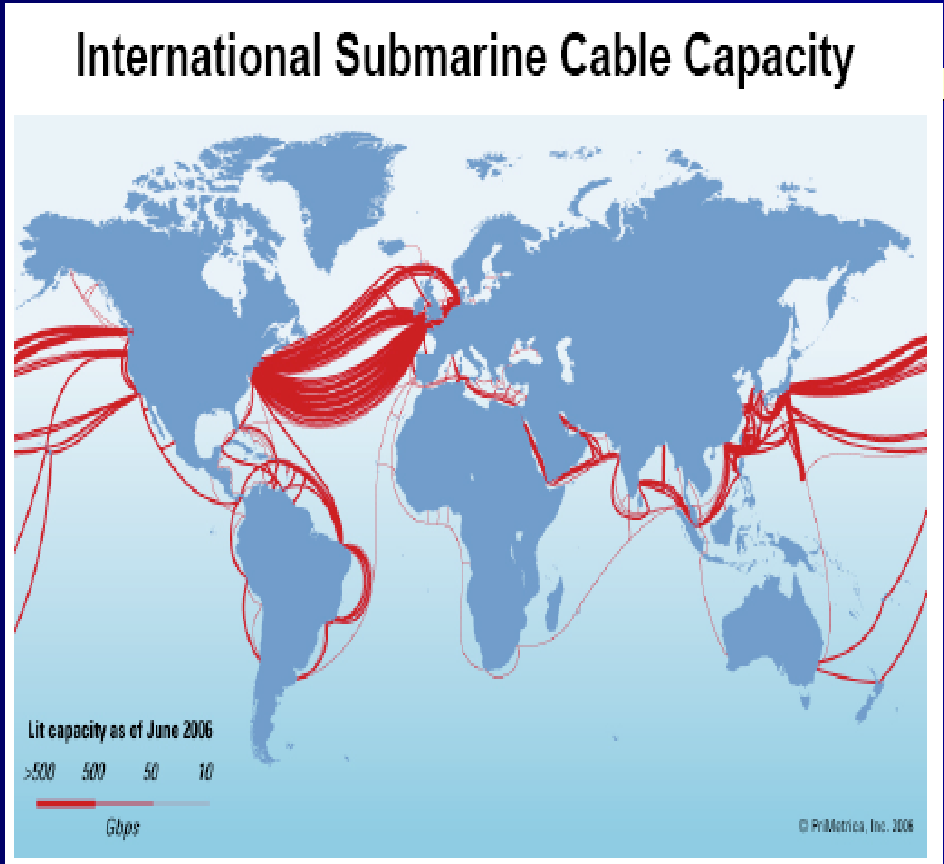
- Growth in wireless penetration has lead to a decrease in growth of fixed lines
- VoIP will increasingly be the option for deployment in many countries
- Stimulating broadband growth through access to PC's or mass marketed handsets is the key to driving internet usage

INTERNATIONAL INTERNET BANDWIDTH

- DRIVER TO THE FUTURE MARKET EXPANSION POTENTIAL IN THE ASIA PACIFIC REGION ?



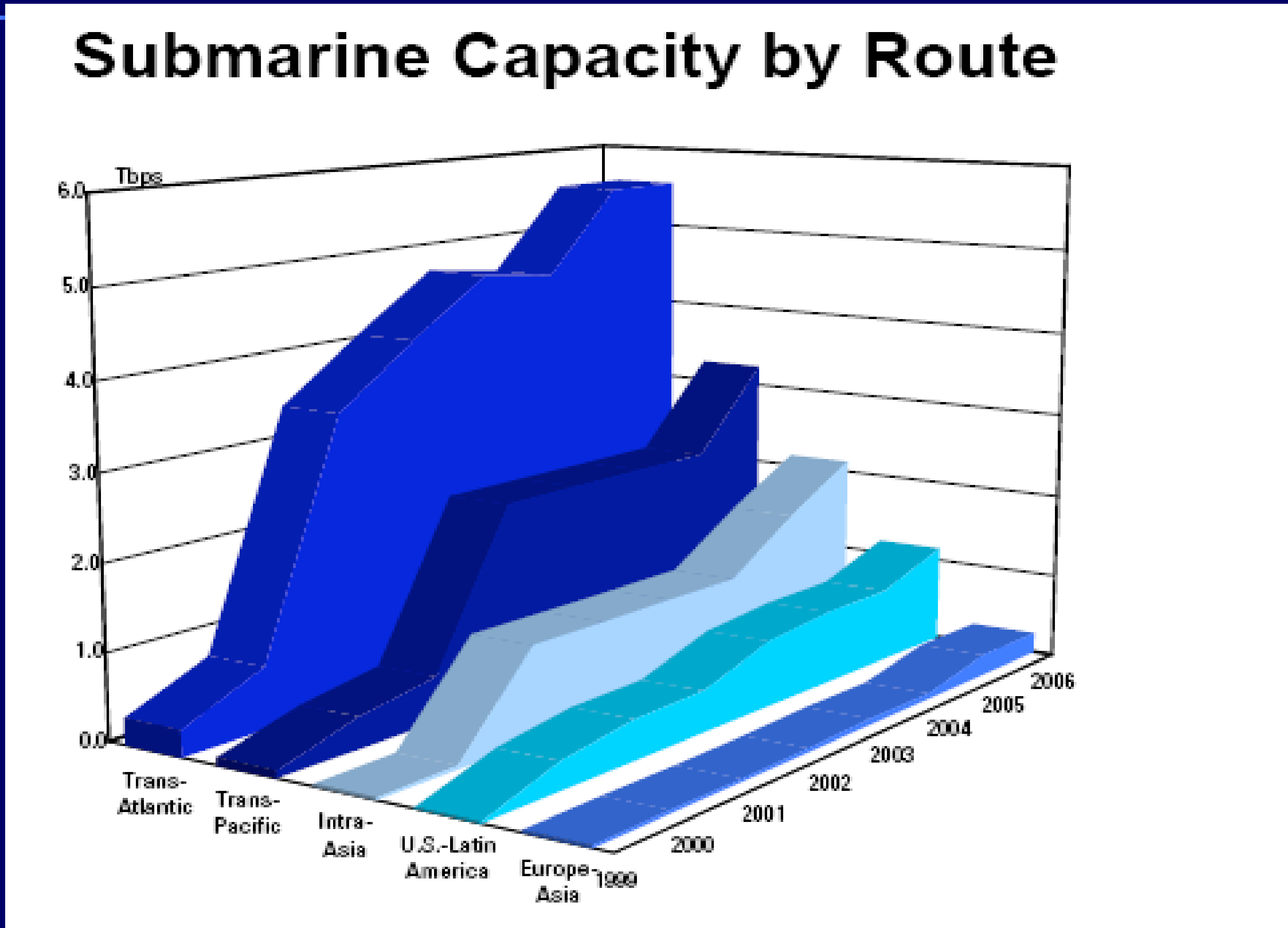
INTERNATIONAL INTERNET BANDWIDTH – ASIA PACIFIC SCENARIO Source:Telegeography



- HIGH INVESTMENT LEVELS WITNESSED IN TRANS ATLANTIC ROUTES AND TRANS PACIFIC ROUTES

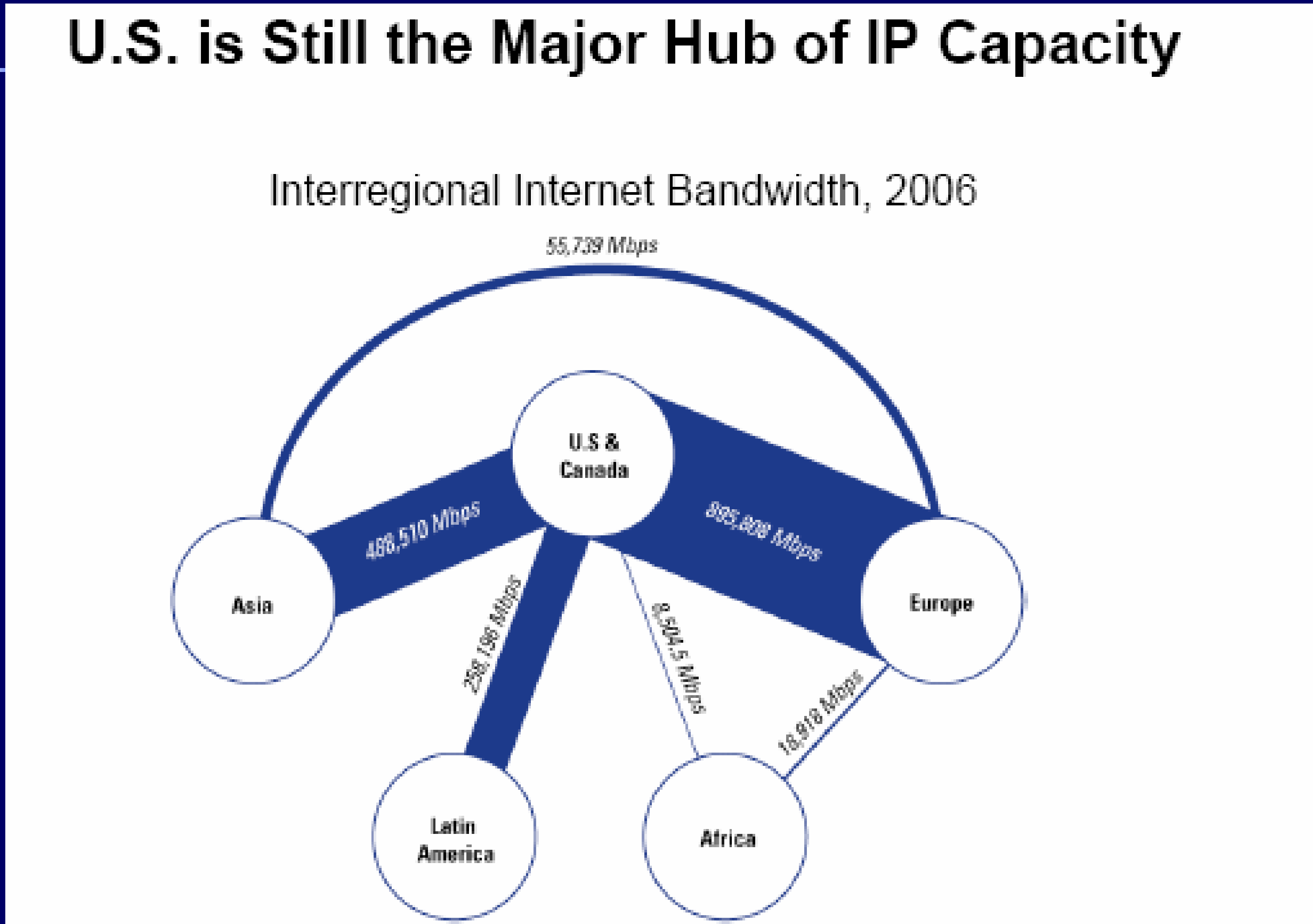
INTRA ASIA CAPACITY FIGURES

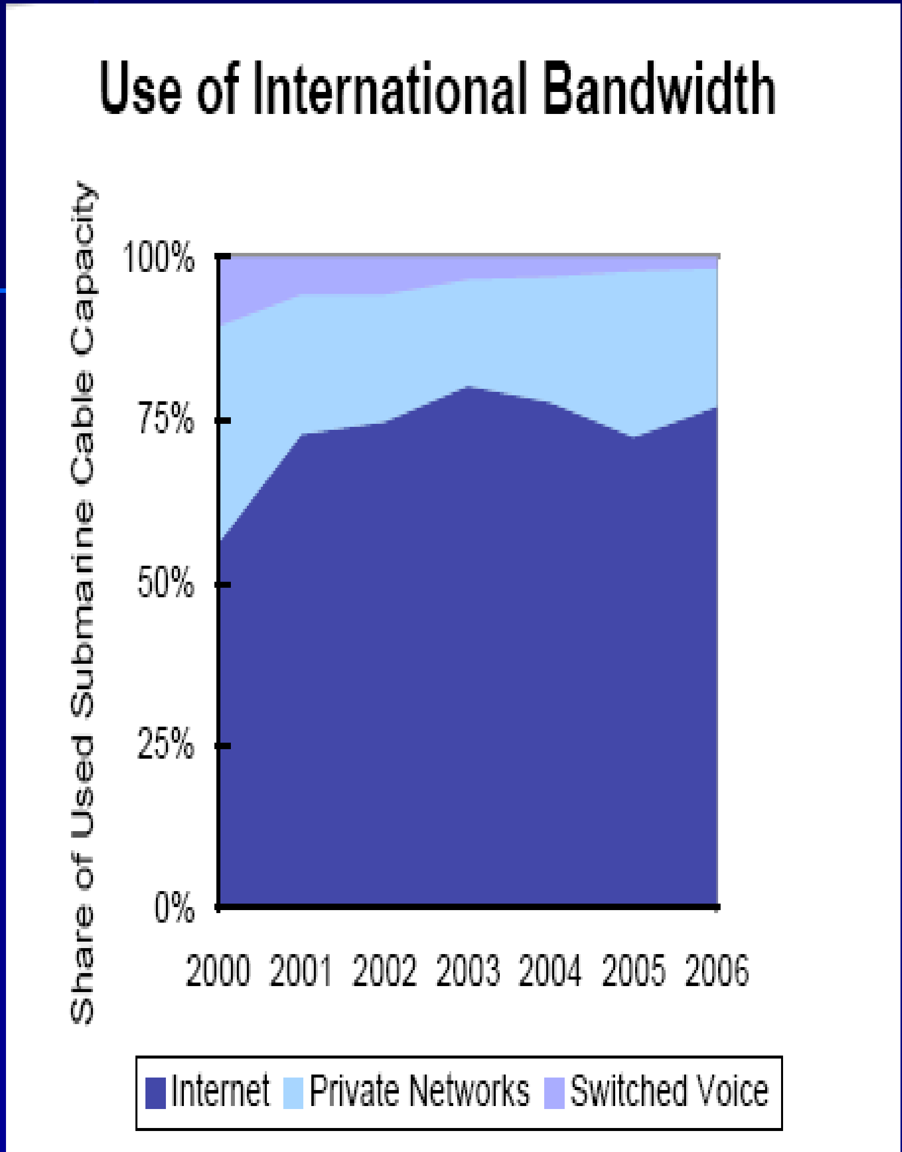
Source:Telegeography



CONSOLIDATION OF IP CAPACITY IN THE ASIAN REGION HAS IMMENSE POTENTIAL – WITH IP LED

GROWTH IN THE FUTURE Source:Telegeography





- ON A GLOBAL SCALE, NEARLY 75% OF USAGE OF INTERNATIONAL BANDWIDTH IS CONCENTRATED IN INTERNAET TRAFFIC .
- Source:Telegeography

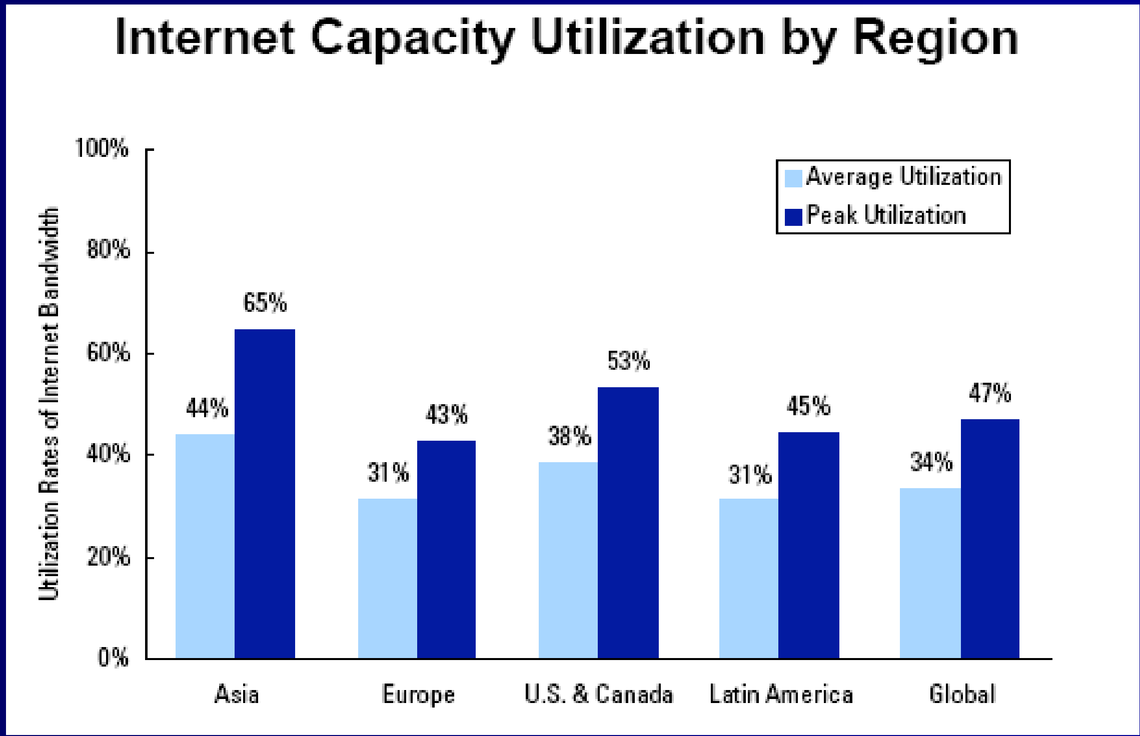
Fixed Broadband subscribers:- by region

SOURCE: ITU WORLD TELECOMMUNICATION/ICT INDICATORS

- As of end 2005, out of a world total of 181.25 million subscribers, the Asia region constituted about 74.8 million accounting for 41.26% of the total while the Oceania region constituted about 0.013%
- Broadband subscribers as a % of total internet subscribers ranks highest in Europe at 53.8, the Asian region figure ranked next at 48.3 with America following at a level of 43.1. The Oceania figure was 34.0

ASIA PACIFIC SHOWS PROMISE

Source: Telegeography



INVESTMENT IMPLICATIONS FOR THE SECTOR

- Weighing options between fixed and mobile broad band usage
- Investment options to focus on capital and entry fee barriers
- Last mile and local loop unbundling as policy issues will become increasingly required

FINANCING AND INVESTMENT TRENDS

- Fixed mobile convergence and internet usage will lead to new patterns of investment and financing
- Consolidation of ISPs ,mobile and CATV could become an option
- Asset sharing issues will become a key to future drivers in the synergy between service and application providers

- Thank you

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