

Expert Forum on ICT Sector Indicators and Benchmark Regulation for
SAARC NRAs

Benchmarking broadband/data prices

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- ▶ Some new benchmarking tools that may help you do your job better/easier

Access to the high-speed data services is important

- ▶ For the economy
 - Enables Asian countries to provide off-shore data process/BPO services
 - Contributes to economic growth [revenue, jobs, taxes....direct, indirect]
 - Availability and accessibility of broadband a stated objective of many governments

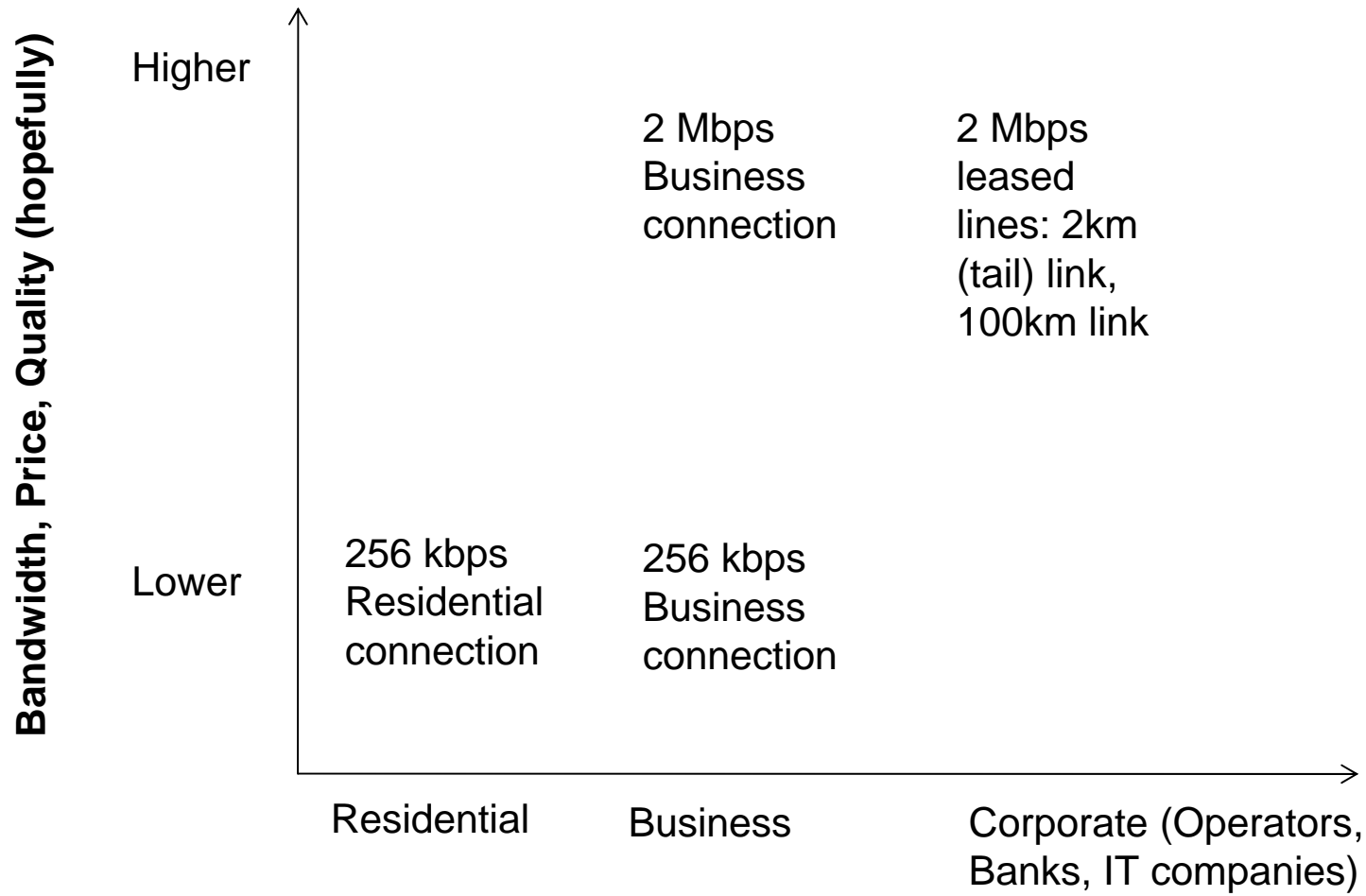
- ▶ For the consumer
 - To access a world of knowledge on the WWW

- ▶ For operators
 - To be able to provide basic services
 - To offer new services (IP TV, VOIP etc)

No pre-defined methodology

- ▶ Mobile has baskets
 - Put various usage components into basket
 - Calculate price based on assumptions
- ▶ For broadband/data, no such “basket”
 - How many hours of use per month?
 - At what speed?

Start by tracking multiple, commonly used packages/services. Based on speed and user



For each package...

- ▶ Available in capital city
- ▶ For Leased lines: Price of incumbent (~ largest operator)
- ▶ BB for residential/business: cheapest price
- ▶ Not inclusive of
 - Installation, modem/router charges
 - Any discounts
 - VAT or other taxes
- ▶ Prices in local currency, converted to USD
- ▶ Annual (leased lines often for a year. So others also for a year, though monthly easier to fathom)
- ▶ Technology neutral (cable = xDSL=WiMax...as long as speed is same)
- ▶ “all you can eat” (i.e. unlimited download/time) offers only
- ▶ Done every 6 months

OECD collects and reports more extensively....

- ▶ Publish Multiple packages (as many as 6) for each country + country average
 - We don't. Limited resources
- ▶ Separates residential vs. business use
- ▶ Residential lines many different packages
 - With various bandwidth, separated by up/down speeds
- ▶ For leased lines the same measures as ours
 - 2 Mbps 2km
 - 2 Mbps 100km
- ▶ Reports as USD and USD PPP
 - We can do this.

Feb 2008 data, based on this methodology

Country ²	2Mbps, 2km DPLC ³ (p.a ⁴)	2Mbps, 100km DPLC ⁵ (p.a)	2Mbps broadband business connection (p.a) ⁶	256kbps broadband business connection (p.a) ⁶	256kbps broadband residential connection (p.a) ⁶
Afghanistan	12,000 ⁷	N/O ⁸	N/O	N/O	N/O
Nepal	55,393 ⁹	2,760,290 ⁹	57,385 ¹⁰	8,608 ¹⁰	6,695 ¹⁰
Bangladesh	23,393 ¹¹	N/O	N/O	8,016 ¹²	2,680 ¹³
Pakistan	49 ¹⁴	2,437 ¹⁴	N/O	964 ¹⁵	964 ¹⁵
India	432 ¹⁶	4.447 ¹⁶	3,779 ¹⁷	241 ¹⁸	379 ¹⁷
Bhutan	2,438 ¹⁹	18,283 ¹⁹	4,540 ²⁰	303 ²¹	303 ²¹
Sri Lanka	3,249 ²²	6,350 ²³	556 ²⁴	250 ²⁵	250 ²⁵
Maldives	18,803 ²⁶	40,756 ²⁷	16,619 ²⁸	2,091 ²⁹	379 ³⁰
EU average	358 ³¹	-	164 ³¹	119 ³¹	119 ³¹

But look at how many footnotes are required....mainly due to lack of standard

1. Prices quoted in local currencies converted to US dollars based on rates found at: http://www.oanda.com/convert/classic_at_10/02/2008. Annual prices for a Domestic Private Leased Circuit not inclusive of installation charges, modem/ router charges, any discounts, VAT or other taxes
2. Countries are ranked according to GDP per capita obtained from the World Economic Outlook database, Oct 2007
3. Also known as a tail cost
4. p.a = per annum
5. Cost of tail charges + 96km link charge
6. The package chosen are those that have an unlimited download capacity, in the event this package was not found the closest available offering was used.
7. Rates obtained from ATRA, 2007 data as reported in the earlier document, to be found at <http://www.lirneasia.net/wp-content/uploads/2007/09/bbenchmarks-page1-v4.pdf>
8. N/O- No offering was available at time of publication
9. Nepal Telecom, http://www.net.np/tariff/int_tariff_new.php
10. Radius Communications Pvt Ltd, <http://www.radiusnp.com/index.php>
11. BTTB, for a 5km link, <http://www.bttb.net.bd/rates.php#broadband>
12. Grameen Cybernet Ltd, Fibre-Optic Broadband connection, http://www.citechco.net/pro_int.php
13. Agni Systems Ltd, Premium package, guaranteed minimum speed is 256kbps, <http://www.agni.com/products/fiber.php>
14. PTCL, <http://www.ptcl.com.pk/contentb.php?NID=43>
15. PTCL, DSL 1MB unlimited package, <http://www.ptcl.com.pk/contentp?NID=47>
16. BSNL, http://www.bsnl.co.in/service/leased_tariff.htm
17. BSNL, http://www.bsnl.co.in/service/dataone_tariff.htm
18. MTNL, TriB Unlimited, http://www.mtnldelhi.in/broadband/triband_tariff.htm
19. Bhutan Telecom, http://www.druknet.bt/btelecom/index.php?option=com_content&task=view&id=35&Itemid=62
20. Bhutan Telecom, DSL 15000, Data limit of 12GB, http://www.druknet.bt/btelecom/index.php?option=com_content&task=view&id=64&Itemid=112
21. Bhutan Telecom, DSL 1000, Data limit of 500MB, Does not discriminate between corporate and home users, http://www.druknet.bt/btelecom/index.php?option=com_content&task=view&id=64&Itemid=112
22. SLT, for a 0-33km link
23. SLT, for a 33- 99km link
24. Dialog, WiMax, 2MB Corporate package, <http://www.dialog.lk/en/broadband/product/wimax.html>
25. SLT, ADSL Office, Home Express, <http://www.slt.lk/data/forbusiness/115adsl.htm>
26. Dhiraagu, <http://www.dhiraagu.com.mv/tariffs/dhivehinet.php#dedicatedaccess>
27. As per data obtained from the earlier document, to be found at <http://www.lirneasia.net/wp-content/uploads/2007/09/bbenchmarks-page1-v4.pdf>, Data not available for this quarter.
28. Focus Infocomm, ROL corporate access 2MB, <http://www.rol.net.mv/downloads/ROLTariffSheet.pdf>, Dhiraagu does not have a 2MB package with an unlimited offering.
29. Dhiraagu, Biz Unlimited package, <http://www.dhiraagu.com.mv/tariffs/dhiveinet.php#broadband>
30. Focus Infocomm, ROL broadband 256 value for homes, <http://www.rol.net.mv/downloads/ROLTariffSheet.pdf>

Clearly modifications are needed...

- ▶ Mobile internet is not included
 - But its important
 - Huge BOP growth coming from mobile internet (e.g. India)
- ▶ Over time, the minimum speed can increase
 - OECD no longer has 256 kbps minimum : goes up to nearly 64 Mbps
- ▶ “all you can eat” (i.e. unlimited download) packages is increasingly not the norm in Asia
 - Need way to compare limited download packages
 - But how limited? 1Gb per month? 2 GB per month? 20 hours per month? Other? Why?
- ▶ Should we forget all these packages?
 - Just do price / Mbps?
 - Why not? (OECD reports this, along with other measures)

Can we agree on methodology
Can you track and report this data?