

## Mobile Benchmark Studies in South Asia and Latin America compared

The findings from LIRNEasia's recent comparative study of price and affordability in eight South Asian countries – [Mobile Benchmarks South Asia, March 2008](#) – indicates that Bangladesh has the lowest average monthly cost of using a mobile at all levels of use (low, medium and high) for prepaid and postpaid tariff plans, followed closely by Pakistan, India and Sri Lanka; Bhutan, Maldives and Afghanistan have considerably higher average monthly mobile costs among the South Asian countries considered.

The study, which is based on an adaptation of the basket methodology used by the [Organization for Economic Co-operation and Development \(OECD\)](#)<sup>1</sup>, applies usage charges (voice and SMS), line rental, connection charges (depreciated over a three year period), and applicable taxes to different use levels, low, medium and high.

In South Asia, the baskets are calculated separately for prepaid and postpaid users, unlike in the OECD methodology which does not differentiate between the two. Each basket has different Minutes of Use (MoUs)<sup>2</sup> and SMS volumes. The MoUs are apportioned by call destination (fixed – local and national, and mobile – on-net and off-net), and time of day (peak, off-peak and/or weekend), using OECD ratios.

Since mobile phone usage patterns in South Asia are quite different from those in OECD countries, MoU and SMS volumes that were used to calculate the price baskets were based on actual data reported by the regulatory agencies and operators in India, Bangladesh and Sri Lanka.<sup>3</sup> The call distributions by destination, time of day and duration, however, were taken from the OECD methodology because call distribution data for the South Asian countries are not publicly available.<sup>4</sup>

OECD price basket methodology also considers voicemail and MMS (Multimedia Messaging Service) volumes as part of the basket, but since these services are not yet popular and, in some cases, are not even offered,<sup>5</sup> they were excluded.

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<sup>1</sup> Of February 2006.

<sup>2</sup> OECD methodology provides call volumes per year. Since data from the South Asian countries considered here are available in the form of MoUs per month and not in call volumes, the OECD call volumes were converted into MoUs per month based on average call duration data.

<sup>3</sup> For instance, an OECD medium-user basket is equal to 119 MoUs/month and 50 SMS/month, while the South Asian prepaid medium-user basket is made up of 175 MoUs/month and 23 SMS/month and a postpaid medium-user basket is 535 MoUs/month and 39 SMS/month.

<sup>4</sup> Where available, the call distributions by destination were not presented in the form required for calculating the baskets, and available only for average users (i.e. applicable to medium-user baskets).

<sup>5</sup> MMS and/or voicemail were not provided in the tariff plans selected for the largest operator in Afghanistan and Bhutan.

The South Asian methodology also accommodated Receiving Party Pays (RPP). Based on the assumption that outgoing MoUs equaled incoming MoUs, relevant tariffs were applied to determine the incoming call costs. Even though minimal, it was included in the calculations.

[DIRSI's study on mobile price and affordability](#) also adapts the OECD price baskets to compare the monthly costs of using mobiles in six Latin American countries. The Latin American baskets take into consideration call and SMS volumes and usage data as specified in the OECD methodology,<sup>6</sup> but exclude initial connection charges. DIRSI also does not report data on postpaid or indicate whether different MoUs have been applied to prepaid and postpaid.

Despite differences in methodology, it is interesting to note the rather large differences in the monthly costs between users in South Asia and Latin America; even though the former takes into account a broader set of costs. Table 1 shows that a low user in Afghanistan (who pays the most in South Asia) is still paying approximately half that paid by a low user in the cheapest of the Latin American countries studied (Argentina) when comparing the findings in straight USD. In Purchasing Power Parity terms (which reflect affordability), the differences are still dramatic.

**Table 1: Comparison of monthly costs of a prepaid low user in South Asia and Latin America**

South Asia			Latin America		
Country	US\$	US\$ PPP	Country	US\$	US\$ PPP
Bangladesh	2.46	11.66	Argentina	15.28	45.53
Pakistan	3.34	10.57	Chile	16.42	23.98
India	3.72	15.04	Mexico	20.02	27.97
Sri Lanka	3.83	13.39	Colombia	20.12	56.82
Nepal	5.25	21.55	Peru	29.07	58.02
Bhutan	5.46	17.25	Brazil	29.99	47.60
Maldives	5.48	17.05			
Afghanistan	8.33	32.93			

These findings are also corroborated by [Nokia's study on Total Cost of Ownership \(TCO\)](#), which concluded that only Sri Lanka, India, Bangladesh and Pakistan achieved a TCO of less than US\$ 5 per month<sup>7</sup>, while Argentina, Colombia, Mexico and Chile, on the other hand, were on the higher end with TCOs between USD 10 and 20.

The Nokia study looked at the lowest cost entry-level Nokia handset (depreciated over a three-year period), service prices based on an OECD low-user service basket of prepaid mobile use, and applicable taxes, in order to determine the TCO in 80 emerging markets.

<sup>6</sup> Of April 2003.

<sup>7</sup> According to the study, TCO of less than five US dollars per month would enable the majority of the people in emerging markets to use mobile services, and thus help lower the digital divide.

The key point now is what can be done to lower the Latin American prices? The service is pretty much the same; the equipment is bought from the same vendors: why can't Telefonica and America Mobiles bring down the prices they charge in Latin America?

The South Asian and Latin American Mobile Benchmarks are the result of productive discussions that took place at the [Workshop on ICT Indicators and Benchmarking Performance in Network and Service Development](#) in New Delhi, India in March 2006.