

Basket methodology to benchmark telecom prices in South Asia

The cases of Pakistan, India and Sri Lanka

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Context

- ❑ Complex tariff plans after liberalization
- ❑ Difficult to meaningfully compare tariffs across markets or across time
 - Useful for users, operators and regulators
- ❑ Price baskets
 - A technique to create comparable user baskets based on actual user profiles
 - Possible to compare high, medium and low user baskets



Price baskets

- T-Baskets, OECD
- The Core ICT Indicators document, Partnership on Measuring ICT for Development
- ITU basket of call charges



OECD mobile user baskets

☐ Take into account:

- Most popular plans of the largest operator (based on subscribers) in each country
- Connection charges and monthly subscription
- Call and SMS use
- Taxes
- Free minutes/SMS, etc



Why OECD?

- ❑ Provides a comprehensive tariff indicator as opposed to other methodologies
- ❑ In use since 1995 with periodic recalibrations and improvements



OECD mobile user baskets

	No. of calls, per month per user	SMS, per month per user
Low user	30	33
Medium user	65	50
High user	140	55



Mobile user basket; weights

□ OECD weights for call destinations

Call made to	Low User	Medium User	High User
Local, Fixed Line	0.15	0.14	0.13
National, Fixed Line	0.07	0.07	0.07
Mobile On-net	0.48	0.48	0.47
Mobile Off-net	0.22	0.24	0.26
Voicemail	0.08	0.07	0.07
Total	1.00	1.00	1.00



Mobile user basket; weights

□ OECD weights for peak/off-peak

Called during	Low User	Medium User	High User
Peak	0.48	0.50	0.60
Off-peak (OP)	0.25	0.24	0.19
Weekend (WE)	0.27	0.26	0.21
OP+WE	0.52	0.50	0.40
Total	1.00	1.00	1.00



Mobile user basket; weights

□ OECD call durations (in minutes)

	Peak			Off-peak		
	L	M	H	L	M	H
Local/National	1.5	1.8	1.7	1.5	1.8	1.7
On-net	1.6	1.9	1.9	1.6	1.9	1.9
Off-net	1.4	1.7	1.8	1.4	1.7	1.8
Voicemail	0.8	0.8	0.8	0.8	0.8	0.8



Price calculation

□ Formula; for usage

- User Level x Call made to x Called during x tariff x call duration

□ Example

- If, Low User x [On-Net x (price/min) x call duration] x [Off peak x (price/min) x call duration]
- Then, 30 minutes x [0.48 x (price/min) x minutes] x [0.52 x (price/min) x minutes]



PK, IN, LK comparison

	OECD	PK	LK*	IN**	Weighted average basket (PK, LK, IN)
No. of minutes used per month per user					
Low user	44	96	98	87	75
Medium user	114	208	212	188	194
High user	246	448	457	405	419
No. of SMS per month per user					
Low user	33	18	16	28	25
Medium user	50	28	24	42	38
High user	55	31	26	46	42

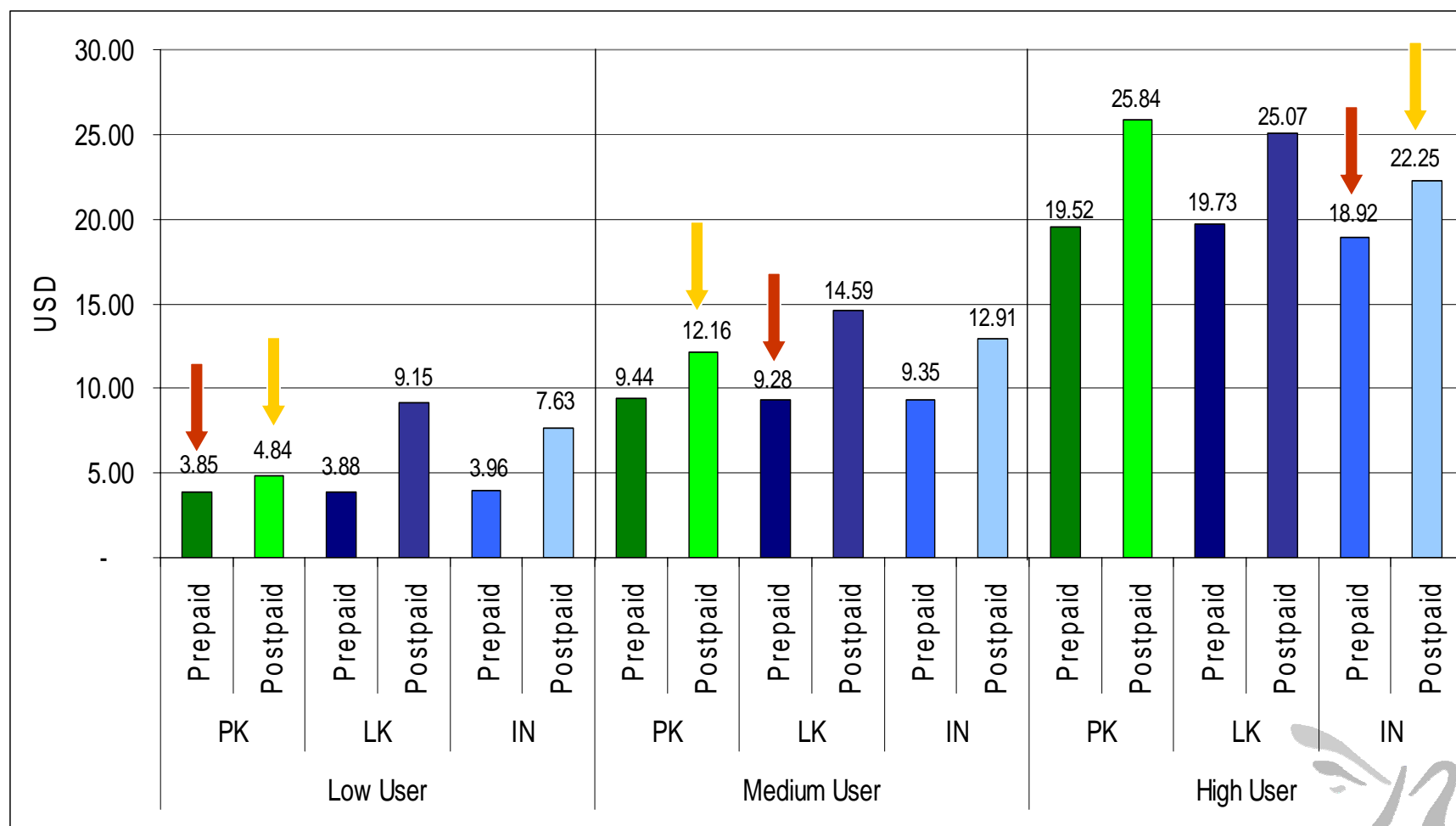
- Sources:
- PK – PTA
 - IN – TRAI
 - LK – Operator

* RPP, therefore includes incoming & outgoing

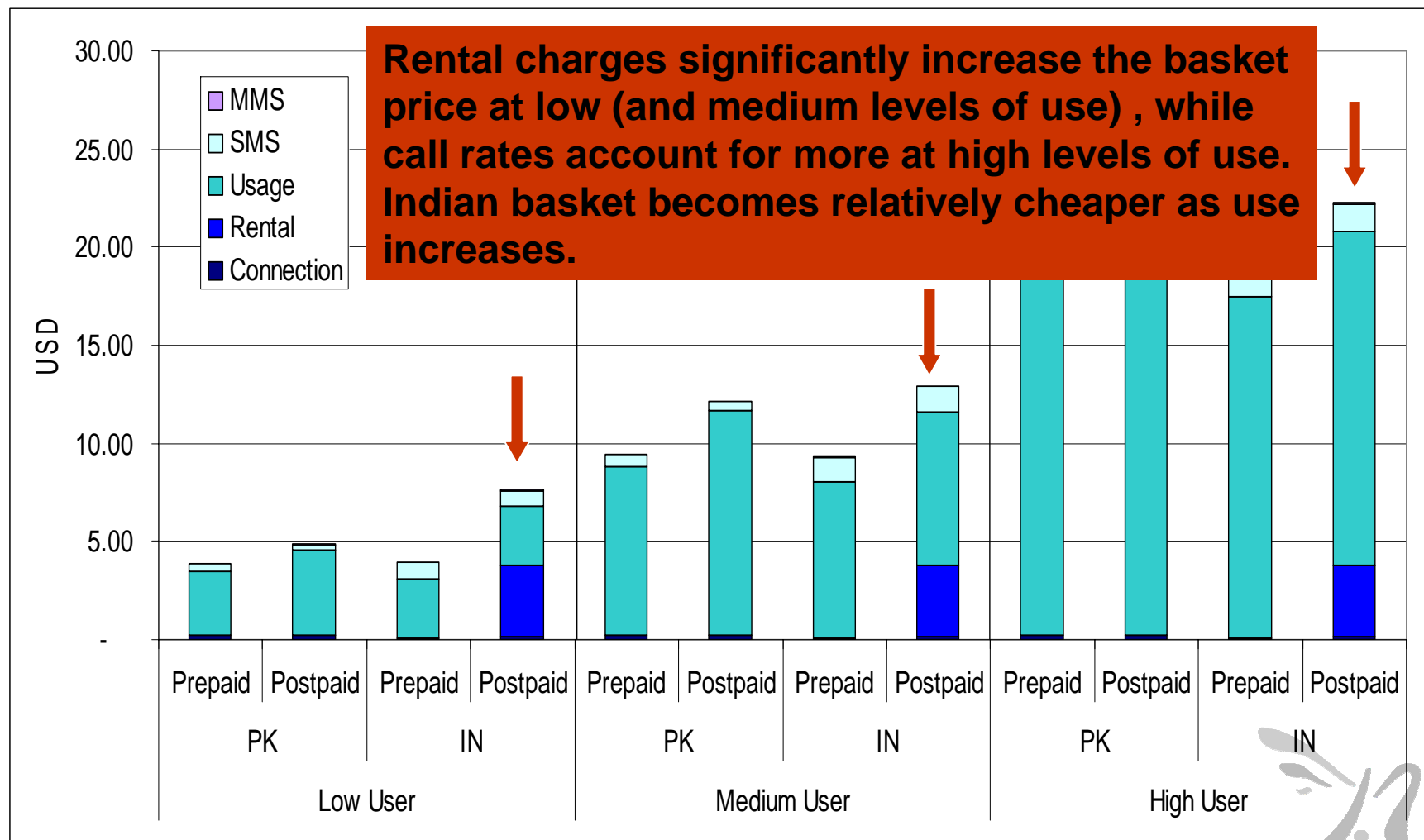
** Sept 2006 data, others January 2007 data



Aggregate basket, PK+LK+IN



Results explained...



Per minute mobile comparisons

In USD	PK		IN		LK	
	Postpaid	Prepaid	Postpaid	Prepaid	Postpaid	Prepaid
Incoming	0	0	0	0	0	0.054
Outgoing (fixed)	0.047	0.041	0.047	0.049	0.054	0.063
Outgoing (m, on-net)	0.039	0.030	0.030	0.030	0.036	0.063
Outgoing (m, off-net)	0.065	0.041	0.047	0.049	0.054	0.063
SMS	0.014	0.014	0.030	0.030	0.018	0.018

India has lowest postpaid call charges, but suffers in basket approach because of rental; World does not know that Pakistan has lowest pre-paid charges and that its SMS charges are lower than even the Philippines!



Considerations for the future

- Where will the tariff data come from?
 - OECD: Teligen, commercial operation
 - Obtains from own master tariff database
 - Our region?
 - Should SATRC or APT get involved?
- What about
 - International calls and roaming
 - Business vs. residential



Considerations (contd)

- ☐ Regional or country specific
 - Whose responsibility?
- ☐ A combined effort
 - Who will lead?
 - Cooperation of operators crucial
- ☐ Validity period?
 - With rapidly changing prices and use
- ☐ Many other issues...



□ Thank you

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