

# Price and affordability indicators

## one simple illustration

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# Context

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- ❑ Complex tariff plans
- ❑ Difficult to compare meaningful tariffs across markets or across time
  - Useful for users, operators and regulators
- ❑ Price baskets
  - A technique to create comparable user baskets based on their actual profiles
  - Given a particular user; possible to compare “cheapest” or “most expensive” and any thing in between
- ❑ OECD price basket
  - T-Basket, since 1995



# OECD

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- Organization for Economic Co-operation and Development
  - Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, [Japan](#), [Korea](#), Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, USA



# OECD mobile user basket

	Number of minutes per month, since Feb 2006	Old basket, October 2001
Voice, level of user		
Low User	30	25
Medium User	65	75
High User	140	150
SMS		
Low User	33	30
Medium User	50	35
High User	55	42

Source: OECD/Teligen

## Working assumption

The OECD Medium = Reported average for IN, LK.  
OECD H:M:L ratio then applied to IN and LK

. SMS\*

	OECD	India	Sri Lanka
Voice, minutes of use per month			
Low User	30	86	92
Medium User	65	188*	200**
High User	140	404	430
SMS per month			
Low User	33	28	14
Medium User	50	42*	21**
High User	55	46	23

\*TRAI, September 2006, \*\* Operator

# Mobile voice 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, FL	0.07	0.07	0.07
On-net	0.48	0.48	0.47
Off-net	0.22	0.24	0.26
Voicemail	0.08	0.07	0.07
Total	1.00	1.00	1.00



# Mobile voice basket 2; weights

- OECD weights for time of day of call

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 voice basket 3; 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

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## □ Formula; for usage

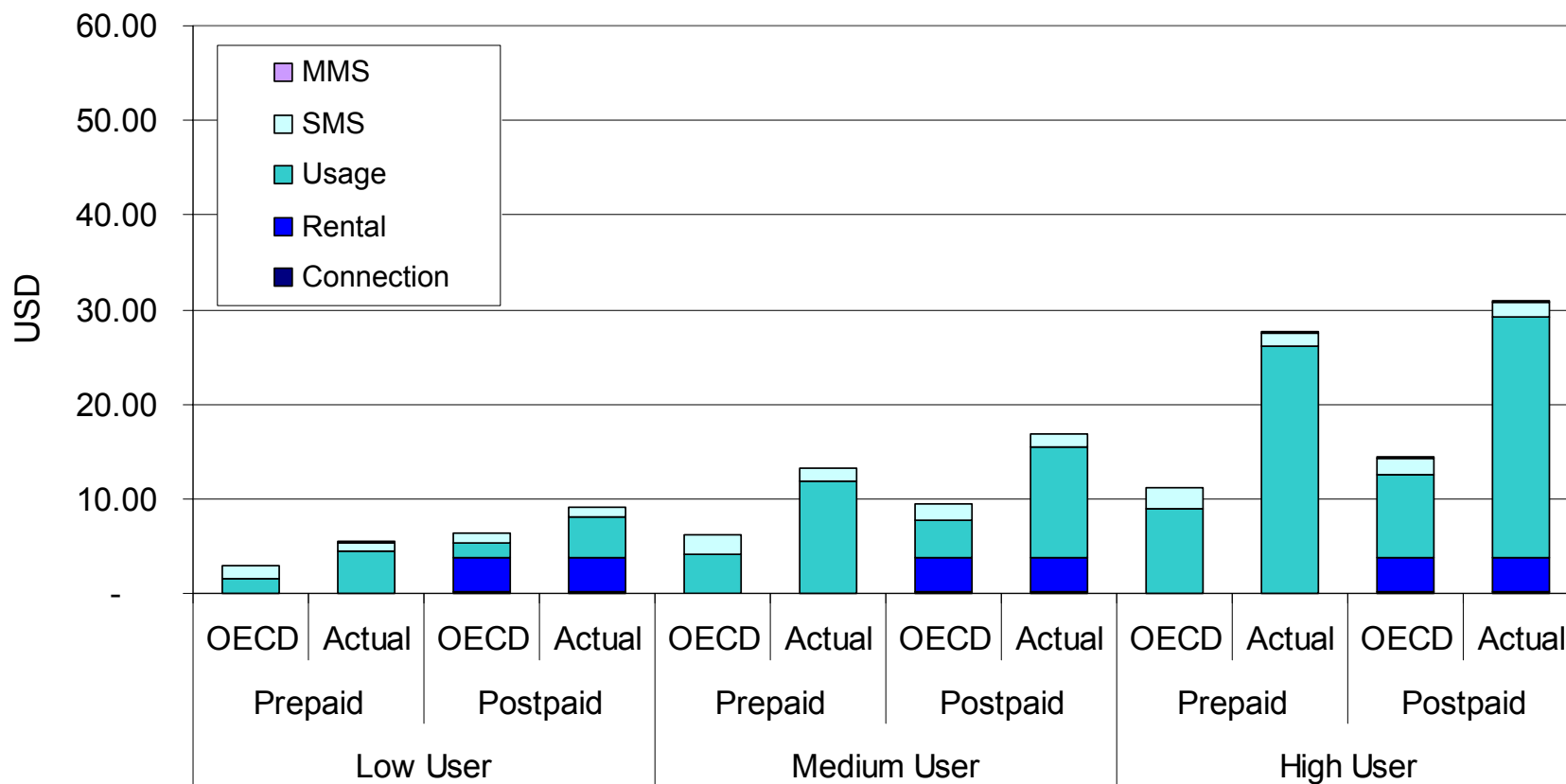
- User Level x Call made to x Called during x tariff x call duration

## □ Example

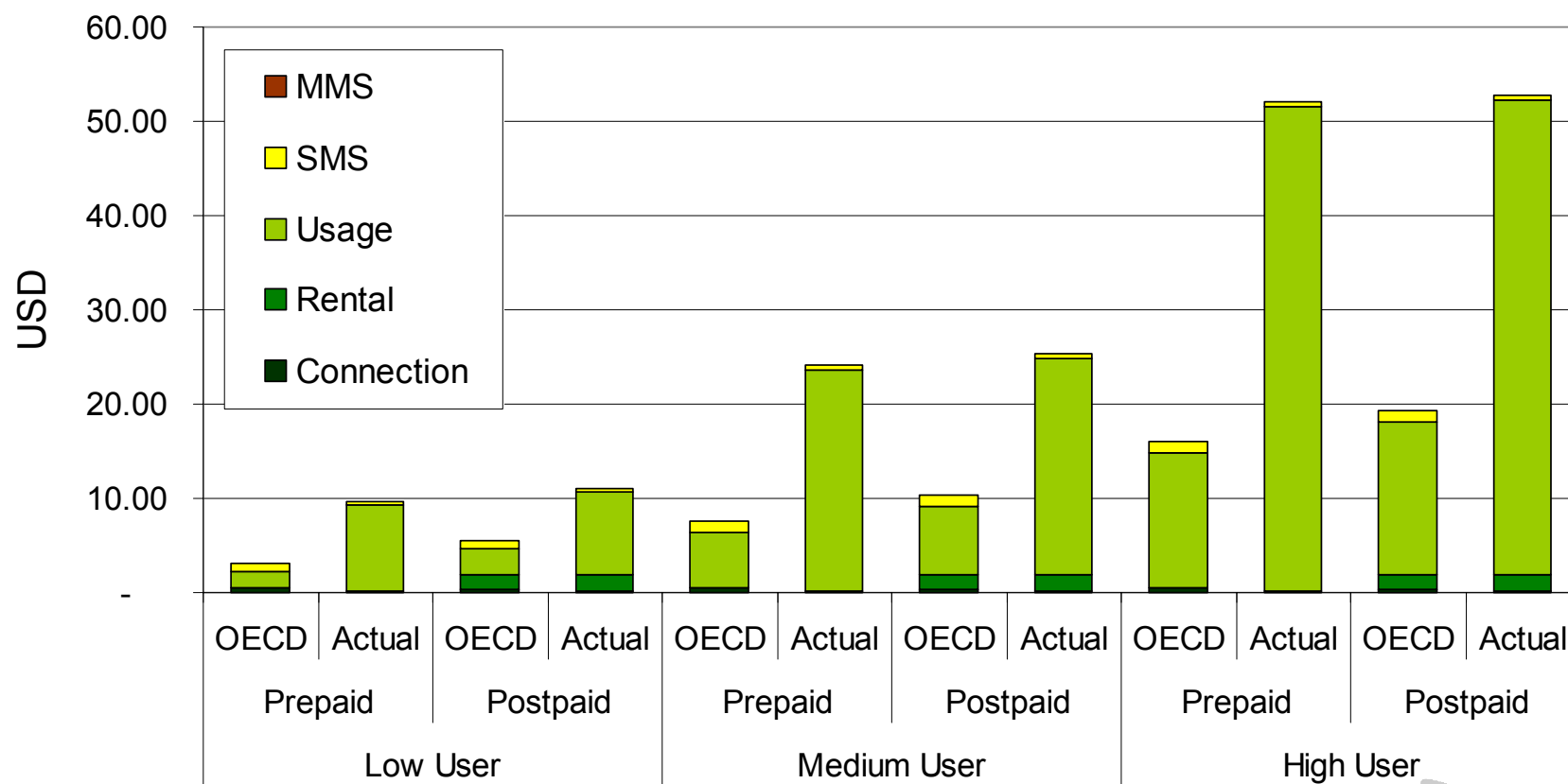
- If, Low User x [On-Net x (price/min) x call duration] x [Off peak x (price/min) x call duration]
- Then, 25 minutes x [0.48 x (price/min) x minutes] x [0.52 x (price/min) x minutes]



# India Basket: OECD vs. Actual; USD



# Sri Lanka: OECD vs. Actual; USD



# Data availability: mobile baskets as at September 2006

	ID	IN	PH	PK	LK	TH
MoUs						
Prepaid	?	337	?	?	120	?
Postpaid	?	883	?	?	520	?
Average	269.90	423	?	?	200	?
SMS						
Prepaid	?	Available	?	?	19	?
Postpaid	?	Available	?	?	31	?
Average	?	42	?	?	21	?
MMS						
Prepaid	?	?	?	?	?	?
Postpaid	?	?	?	?	?	?
Average	?	?	?	?	?	?



# Data availability 2: mobile baskets as at September 2006

	ID	IN	PH	PK	SL	TH
Distribution of calls						
On-net	?	Possible	?	?	53	?
Off-net	?	Possible	?	?	47	?
Local	?	Available	?	?	-	?
National	?	Available	?	?	-	?
Distribution of calls						
Peak	?	N/A	?	?	?	?
Off-Peak	?	N/A	?	?	?	?
Call durations						
Peak	?	?	?	?	?	?
Off-Peak	?	?	?	?	?	?
Source	Operator	TRAI	?	?	Operator	?



# Data availability: fixed baskets as at September 2006

	ID	IN	PH	PK	SL	TH
MoUs (including calls to mobile phones)						
Business	-	-	-	-	-	-
Residential	-	-	-	-	-	-
Distribution of calls (by destination)						
Local	-	-	-	-	-	-
National	-	-	-	-	-	-
On-net	-	-	-	-	-	-
Off-net	-	-	-	-	-	-
Distribution of calls (time of day)						
Peak	-	-	-	-	-	-
Off-Peak	-	-	-	-	-	-
Distribution of calls (distance in Kms)					-	
Call durations (by time of day and distance)					-	

# Data availability

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- Where will the tariff data come from?
  - OECD: Teligen, commercial operation
    - Obtains from own master tariff database
  - Our region?
- What about
  - International calls and roaming
  - Business vs. residential
  - Packaged services



# Basket calculation

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- ☐ Regional
- ☐ country specific
  - Responsibility?
- ☐ A combined effort
  - Who will lead?
  - Cooperation of operators crucial
- ☐ Validity period?
- ☐ Many other issues...





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□ Thank you  
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