Telecom Regulatory Authority of India

Supplement to
'The Indian Telecom services Performance Indicator Report for the Quarter ending September 2005'

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Supplement to 'The Indian Telecom services Performance Indicator Report for the Quarter ending September, 2005'

TRAI had already released the main performance report for the quarter July – Sept'2005 on 27/12/2005 and same has already been placed on TRAI website www.trai.gov.in. The data pertaining to revenue and usage pattern of mobile services were not available at that time and TRAI has now compiled and analysed the same for the quarter ending September 2005. The information pertaining to revenue, usage and ARPU in respect of both GSM as well as CDMA mobile services has been included in this supplement. These reports have been prepared on the basis of the data received from the Service Providers and publication of these data does not tantamount to TRAI accepting / approving data in respect of these parameters which may have implication for any Regulation / Orders / Direction / Decisions of the Authority. The information pertaining to GSM has been furnished in Part I and CDMA in Part-II of Chapter 1.

TRAI has also carried out a analysis of growth of mobile services in India and China. Chapter- 2 of this supplement covers the growth pattern of mobile services, sale of handsets, tariffs etc in India and China.

Suggestions / modifications, if any, for further improvement in the report are welcome for which Sh.S.N.GUPTA, ADVISOR (CN), at Telephone No: +91-11-26167914, Fax: +91-11-26191998 E-mail: trai09@bol.net.in can be contacted.

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CHAPTER 1 : USAGE (MOU), ARPU, QUARTERLY GROWTH PATTERN OF MOBILE SERVICES

PART I – GSM

1.0 Introduction

1.1 At the end of Sept-05, 85 licensees are providing GSM services in 23 licensed areas. Out of these, Dishnet Wireless Limited (NE & Assam) commenced services only at the fag end of the quarter and hence the data in respect of these two licensees have been excluded. Main focus of this report is to cover trends observed in GSM service relating to revenue, usage and subscriber base for the period July-05 to September-05. The findings and conclusions in this report are purely based on the data submitted by the operators.

1.2 Summary findings

- Share of prepaid subscribers in total subscriber base is 76.33% at the end of Sept 2005, as compared to 74.35% at the end of June 2005. The launch of top-up coupons with full talktime starting from Rs. 10 and several promotional schemes could be some of the probable reasons for this increase.
- Growth rate of postpaid segment has declined from 6.72% to 4.50% during the quarter.
- Growth rate of prepaid segment increased from 10.27% to 16.28% during the quarter.
- All India ARPU for the quarter ending September 2005 is Rs. 374 showing a decline of 2.6% from Rs.381 for quarter ending Jun-05.
- Trend since September 2004 gives a decline of 7.4% in All-India ARPU.

- BSNL has been the only GSM service provider who has recorded increase in ARPU (8.6%) from Rs. 355 (June-05) to Rs. 385 (Sept-05).
- All India postpaid ARPU at Rs. 646 per month is about 2.3 times than that of all India prepaid ARPU of Rs. 284 per month.
- Average MOU per subscriber per month for the quarter is 367, showing an increase of 2.73% from 358 per month during the quarter ending June-05.
- On an average a GSM subscriber makes 142 minutes of outgoing calls, sends 38 SMSs and receives incoming calls for 225 minutes in a month. The highest outgoing MOU is recorded for BSNL at 172 minutes per subscriber per month and the lowest outgoing MOU is seen with BPL at 82 minutes per subscriber per month.
- The ratio of incoming – outgoing traffic has shown a slight shift towards outgoing, from 62:38 during the quarter ending June2005 to 61:39 in the quarter ending September 2005.
- Overall proportion of roaming revenue to the total revenue for GSM service providers for Sept-05 is 11.34% as against 12.54% in June-05.
- The all India blended RPM (Revenue per Minute) for the quarter has declined by 4% from Rs. 1.06 in June-05 to Rs. 1.02 in Sept-05.
- Proportion of the total outgoing GSM traffic (excl. ILD) terminating in Mobile network (CDMA + GSM) has increased from 75% in June-05 to 77% in Sept-05. As compared to Sept-04, there has been a shift of about 7% traffic from Fixed to Mobile networks.
- Mobile-to-Mobile Local (Intra-circle) traffic accounts for 79% of the Local (Intra-circle) traffic.

- On an average 45% of the total Intra-circle traffic terminates within on network (Mobile).
- On an average 81.76% of the total outgoing MOUs are local calls (terminating within the service area), 17.62% are NLD calls and the rest 0.62% are ILD calls.
- Trend indicates that the proportion of local calls (MOU) to total outgoing MOU is increasing and that of long distance is falling (See Table 9).

Section-I – Subscriber base [Closing figures]

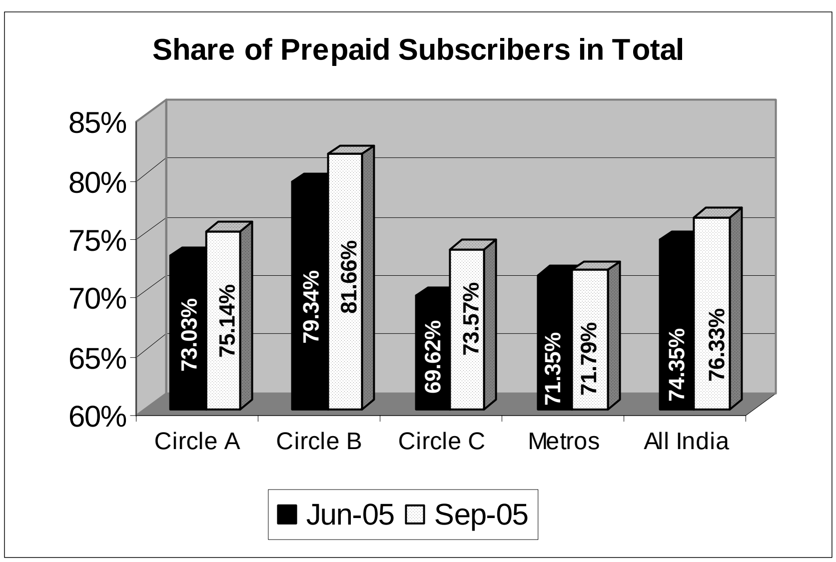
Table 1: Number of Prepaid subscribers

Circle	June-05	Sept-05	Net additions	% increase
Circle A	11543035	13154591	1611556	13.96%
Circle B	11109592	13520204	2410613	21.70%
Circle C	2025299	2656235	630936	31.15%
Metro	8353190	9078108	724918	8.68%
All India	33031116	38409138	5378023	16.28%

Table 2: Number of Postpaid subscribers

Circle	June-05	Sept-05	Net additions	% increase
Circle A	4263734	4351028	87294	2.05%
Circle B	2893675	3035661	141986	4.91%
Circle C	883692	954431	70739	8.00%
Metro	3353552	3566666	213114	6.35%
All India	11394653	11907786	513133	4.50%

Chart 1: Proportion of prepaid subscribers in total subscribers (quarter ending)



- Highest growth in prepaid segment (31.15%) is in Circle C. In terms of absolute numbers, the highest number of net additions has been in Circle B (about 24 lakhs), which accounts for 45% of the total net additions.
- Highest growth in postpaid segment has been in Circle C (8%). Highest net additions have been in Metros (about 2 lakhs), which accounts for 42% of the total net additions.

Section-II – Revenue Analysis

According to the revenue reports submitted by the service providers, revenue, net of "pass through" and service tax, from GSM services is about Rs. 5308 Crores in the quarter ending Sept-05 as against Rs. 4842 Crores in the June-05 quarter, translating into a growth rate of 9.63%. Growth in average subscriber base in the corresponding period has been 11.77%.

Table 3: ARPU (Rs. per month during the quarter)

Circle	Postpaid		Prepaid		Blended ARPU	
	Jun'05	Sept'05	Jun'05	Sept'05	Jun'05	Sept'05
Circle A	605	599	286	283	375	364
Circle B	561	554	265	276	327	330
Circle C	605	576	321	310	410	386
Metro	836	803	290	292	446	438
All India	**662**	**646**	**282**	**284**	**381**	**374**

- The all India blended ARPU per month has gone down by about 1.9% from Rs. 381 in the quarter ending June-05 to Rs. 374 in the quarter ending Sept-05.
- The lowest blended ARPU per month is in Circle B (Rs. 330), which is higher than the previous quarter's corresponding

figure (Rs. 327). The highest blended ARPU is in Metro (Rs. 438).

- Monthly ARPU in postpaid segment has declined from Rs. 662 in June-05 to Rs. 646 in Sept-05. On the other hand, prepaid segment has shown a marginal increase in ARPU per month from Rs. 282 in June-05 to Rs. 284 in Sept-05.
- Gap between postpaid and prepaid ARPU is getting smaller. Postpaid ARPU has been 2.27 times that of prepaid ARPU in the quarter ending Sept-05, as against 2.35 as existed in the previous quarter. Such gap is lowest in Circle C (1.86%) and highest in Metros (2.75%).

Table 4: Trends in All India Monthly ARPU

Circle	ARPU (Rs. per month)
Sept-04	404
Dec-04	398
Mar-05	394
June-05	381
Sept-05	374

- There has been a decline of about 7.4% in ARPU since last year i.e. between Sep-04 to Sept-05.

Table 5: Composition of Revenue (%)

Item	Jun-05	Sep-05
Rental Revenue/ Processing fee	31.67%	31.66%
Revenue from Call charges (usage)	42.78%	42.02%
Revenue from Roaming	12.54%	11.34%
Revenue from SMS	5.25%	5.40%
Other Revenues *	7.76%	9.58%
Total	**100%**	**100%**

* Includes revenue from other value added services, installation etc.

- The data furnished by the service providers shows that 78% of the total call revenue is contributed by local call usage, 18% by NLD calls and 4% by ILD call usage.

Table 6: Revenue Realization Per Minute (RPM) for total usage [Incoming + Outgoing MOU]

[in Rs.]

Circle	Postpaid	Prepaid	Blended
Circle A	0.91	1.03	0.97
Circle B	0.94	1.06	1.01
Circle C	1.09	0.80	0.90
Metro	1.15	1.07	1.11
All India	**1.01**	**1.02**	**1.02**

- The all India blended RPM for the quarter has declined by 4% from Rs. 1.06 in Jun-05 to Rs. 1.02 in Sept-05.
- Decline in RPM during the quarter has been much higher in case of postpaid service (7.4%) than that of prepaid service (2.2%), bringing postpaid and prepaid RPMs almost at the same level.

Section-III – Usage Pattern

Table 7: MOU & SMS (per subscriber per month)

	Postpaid				Prepaid			
Circle	Outgoing MOU	Incoming MOU	Total MOU	Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU	Outgoing SMS
Circle A	291	366	657	37	92	183	275	53
Circle B	285	306	591	44	97	165	261	19
Circle C	284	245	528	34	143	247	390	13
Metro	300	398	698	44	77	197	273	44
All India	292	351	643	40	93	184	277	37

BLENDED [Postpaid + Prepaid]

Circle	Outgoing MOU	Incoming MOU	Total MOU	Outgoing SMS
Circle A	143	231	374	49
Circle B	133	192	325	24
Circle C	183	247	429	19
Metro	140	254	395	44
All India	142	225	367	38

- MOU per subscriber increased from 358 in quarter ending June-05 to 367 in quarter ending Sept-05, thereby showing an increase of about 2.73%. Outgoing MOUs alone increased by 4.10% (from 136 to 142) and incoming MOUs by 1.88% (from 221 to 225).
- In Postpaid, total MOUs increased by 5.45% from 609 in June-05 to 643 in Sept-05. Increase in prepaid service has been 3.07% during the quarter from 269 to 277.
- The incoming-outgoing minutes ratio is 61:39. For postpaid, ratio of incoming-outgoing minutes is 55:45 and for prepaid segment, it is 66:34.
- The outgoing MOU per subscriber has been highest in Circle C at 183 per month and highest incoming MOU per subscriber has been in Metros at 254 per month. Lowest per subscriber usage for both outgoing and incoming has been in Circle B, for outgoing (133 per month) and incoming (192 per month).

- The number of SMS has been highest in Circle A (49 per subscriber month), and lowest in Circle C (19). SMS usage has shown a remarkable increase of 14.75% from 33 to 38. This increase is mainly due to increase in SMS usage by prepaid subscribers (from 31 in June-05 to 37 in Sept-05).

Table 8: Composition of outgoing minutes of use

Circle	Local (Intra-circle)	NLD (Inter-circle)	ILD
Circle A	85.16%	14.37%	0.47%
Circle B	84.04%	15.34%	0.62%
Circle C	77.59%	22.20%	0.21%
Metro	75.69%	23.33%	0.98%
All India	81.76%	17.62%	0.62%

Table 9: Trend in composition of outgoing MOUs

Circle	Local (Intra-circle)	NLD (Inter-circle)	ILD
Sep-04	78.73%	20.22%	1.05%
Dec-04	79.01%	20.03%	0.96%
Mar-05	81.05%	18.07%	0.88%
June-05	80.85%	18.44%	0.71%
Sept-05	81.76%	17.62%	0.62%

Table 10: Trends in outgoing MOUs per subscriber per month

Circle	Local (Intra-circle)	NLD (Inter-circle)	ILD
Sep-04	84	21	1
Dec-04	96	24	1
Mar-05	108	24	1
Jun-05	110	25	1
Sep-05	116	25	1

- Trend of increasing local usage per subscriber is maintained during this quarter also. NLD & ILD usage remained unchanged.

Table 11: Composition of outgoing Local (Intra-circle) minutes of use

Circle	To Fixed	To Mobile	To On network (Mobile)
Circle A	20%	80%	46%
Circle B	21%	79%	48%
Circle C	34%	66%	45%
Metro	17%	83%	40%
All India	21%	79%	45%

- Local (intra-circle) traffic to Mobile has marginally increased from 78% in Jun-05 to 79% in Sep-05. Traffic to on-network has also experienced a marginal increase from 44% in June-05 to 45% in Sept-05.

Table 12: Composition of outgoing NLD (Inter-Circle) minutes of use

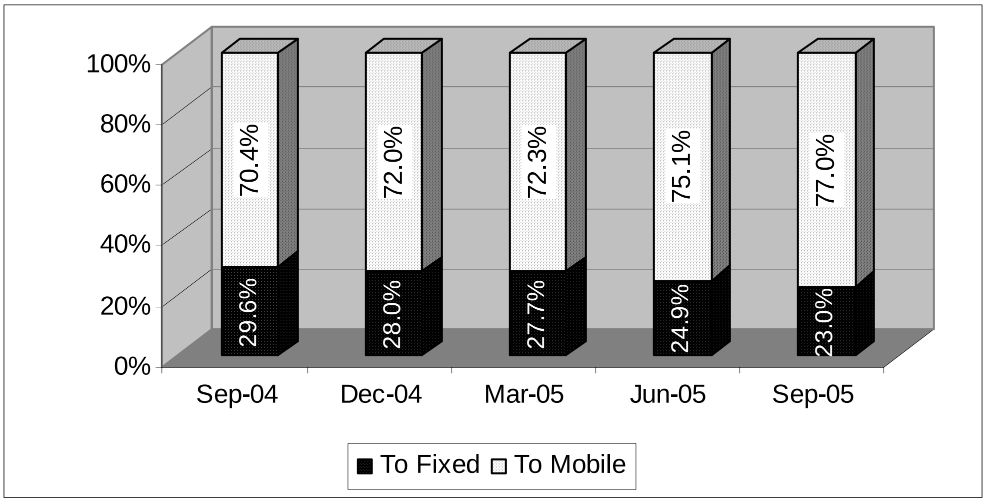
Circle	To Fixed	To Mobile
Circle A	30%	70%
Circle B	30%	70%
Circle C	34%	66%
Metro	29%	71%
All India	30%	70%

- It has been observed that NLD (Inter-circle) traffic has shifted in favour of Mobile network from 67% in the quarter ending Jun-05 to 70% in the quarter ending Sept-05.

Table 13: Composition of Total outgoing minutes of use (excl. ILD)

Circle	To Fixed	To Mobile
Circle A	22%	78%
Circle B	23%	77%
Circle C	34%	66%
Metro	20%	80%
All India	23%	77%

Chart 2: Trend in composition of total outgoing MOUs (excl. ILD)



- Traffic pattern shows that GSM originated traffic is steadily shifting towards Mobile (from 70.4% in Sept-04 to 77% in Sept-05).

Part II - CDMA

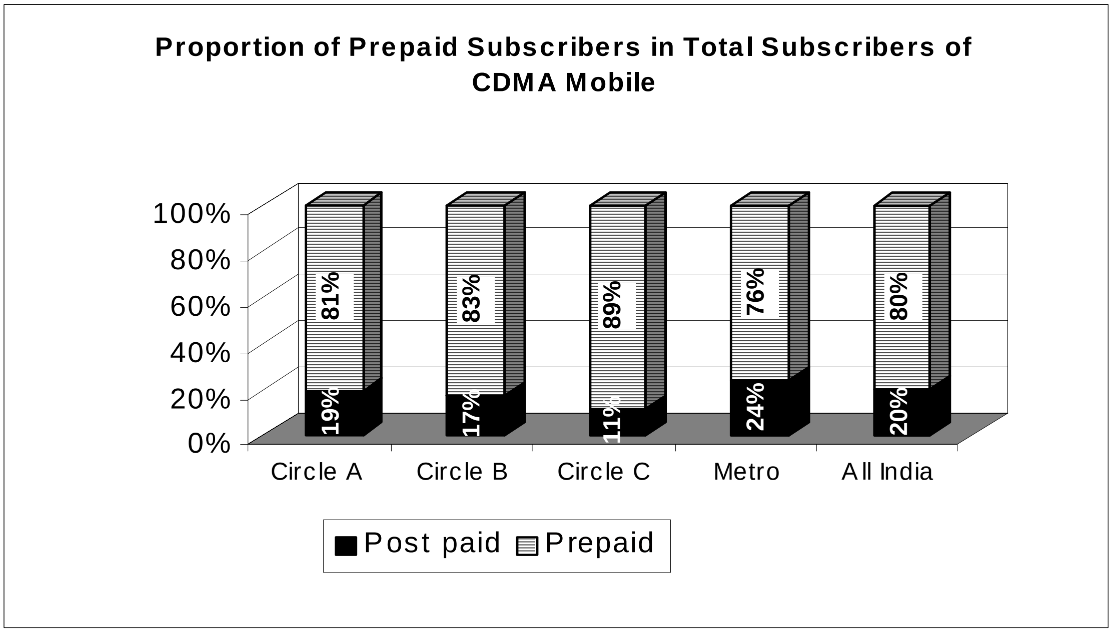
2.0 At the end September 2005, 65 licensees were providing CDMA Mobile services in 23 license areas. Main focus of this report is to bring out the key parameters, observed in CDMA Mobile service relating to Revenue, Usage and Subscriber Base for the period July to September 2005.

Data furnished by some of the operators in respect of prepaid for Bihar and Orissa and in respect of postpaid service in MP and Haryana and also for both for Chennai, Karnataka, Delhi, J&K, Jharkhand, North East and Tamil Nadu was found to be inconsistent and thus, has not been included in this report. Further, one PSU operator did not furnish data on incoming traffic for all the service areas and therefore, its data has been excluded for arriving at the value for relevant parameters in this report. However, these exclusions are not likely to impact the overall picture in any substantial manner.

Section-IV – Subscriber base

Table 1: Number of CDMA Mobile Subscribers

Circle	Postpaid	Prepaid	Total
Circle A	951429	3942874	4894303
Circle B	779315	3683458	4462773
Circle C	64320	499756	564076
Metro	1047319	3241299	4288617
All India	**2842382**	**11367387**	**14209769**



- Share of prepaid subscribers in total subscriber base is 80% at the end of Sept 2005. Highest share of prepaid subscribers is seen in Circle C at 89% and lowest in Metros at 76%.
- Prepaid service by CDMA operators started only recently, somewhere around end of 2004.

Section-V – Revenue Analysis

Table 2: ARPU (Rs. per month during the quarter)

Circle	Postpaid	Prepaid	Blended
Circle A	406	183	225
Circle B	373	183	212
Circle C	346	186	271
Metro	521	220	298
All India	**444**	**194**	**244**

- All India Blended ARPU per month for the quarter ending Sept-05 is Rs. 244. Highest ARPU is seen in Metros (Rs. 298) and lowest in Circle B (Rs. 212)

- For postpaid service alone, all India monthly ARPU is Rs. 444 and for prepaid service it is Rs. 194.

- Postpaid ARPU has been 2.29 times that of prepaid ARPU in the quarter ending Sept-05. Such gap is lowest in Circle C (1.86) and highest in Metros (2.37).

- The trend of ARPU with respect to previous quarters is not available because of unavailability of consistent data.

Table 3: Composition of Revenue (%)

Item	**Postpaid**	**Prepaid**	**Blended**
Rental Revenue/ Processing Fee	37%	41%	36%
Revenue from Call Charges (Usage)	51%	57%	59%
Revenue from SMS	11%	1%	4%
Other Revenues *	1%	1%	1%

Note: *Includes Revenue from VAS, Installation charges etc.

- Blended Revenue from Usage (Call Revenue adjusted for interconnect Payments) accounts for 59% of the Total Revenue.

Table 4: Revenue realization per minute for total usage [Incoming+ Outgoing]

[in Re.]

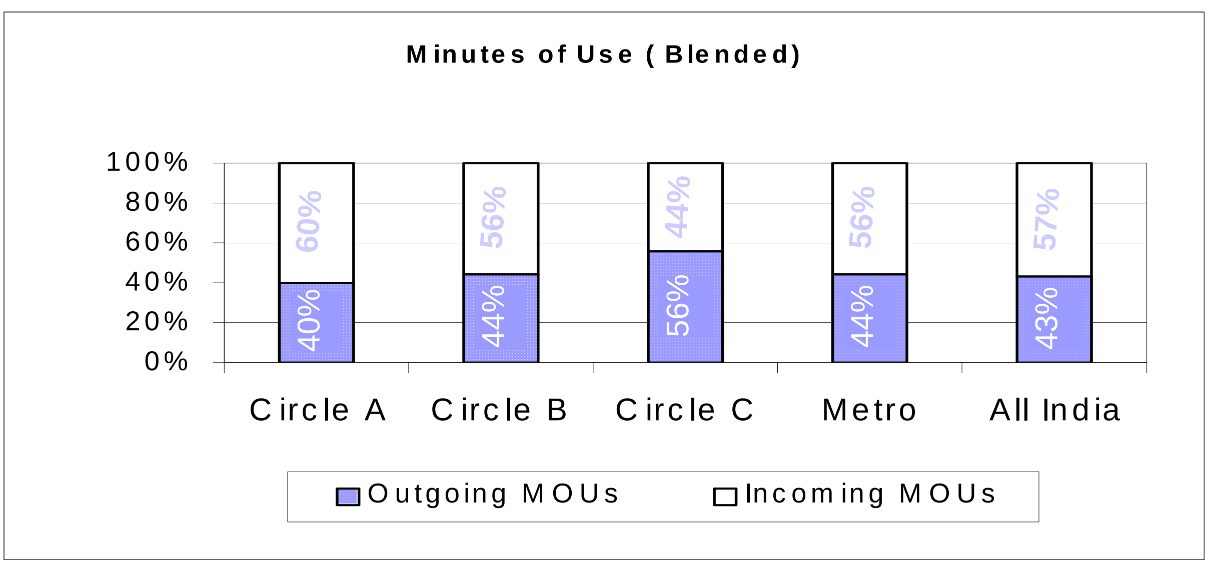
Circle	Postpaid	Prepaid	Blended
Circle A	0.66	0.47	0.52
Circle B	0.67	0.40	0.44
Circle C	0.44	0.74	0.53
Metro	0.93	0.46	0.58
All India	**0.77**	**0.44**	**0.52**

- The all India blended RPM for the quarter is Re. 0.52. For postpaid alone, RPM is Re. 0.77 as against Re. 0.44 for prepaid service

Section-VI – Usage Pattern

Table 5: Blended Minutes of Use (per subscriber per month)

Circle	Outgoing SMS	Outgoing MOUs	Incoming MOUs	Total MOUs
Circle A	11	173	258	431
Circle B	12	210	264	474
Circle C	12	214	277	491
Metro	14	216	293	509
All India	**12**	**198**	**271**	**470**



- On an average a CDMA subscriber makes 198 minutes of outgoing calls, sends 12 SMS and receives incoming calls for 271 minutes in a month.
- The incoming-outgoing minutes ratio is 57:43.
- All India blended MOU (outgoing + Incoming) per subscriber has been 470. Highest MOU per subscriber has been seen in Metros (509) and lowest in Circle A (431).

Table 6: Composition of outgoing minutes of use per subscriber per month

Circle	Local (Intra Circle)	% to Total O/G MOUs	NLD (Inter Circle)	% to Total O/G MOUs	ILD	% to Total O/G MOUs
Circle A	154	**89.4%**	18	**10.5%**	0.22	**0.1%**
Circle B	194	**92.3%**	16	**7.6%**	0.20	**0.1%**
Circle C	142	**66.4%**	71	**33.4%**	0.36	**0.2%**
Metro	184	**85.2%**	32	**14.6%**	0.30	**0.1%**
All India	176	**89.0%**	22	**10.9%**	0.24	**0.1%**

- 89% of the total outgoing minutes of usage are local calls, 10.9% are NLD calls and 0.1% are ILD calls.

- Circle C stands apart from the all India weighted average, with proportion of local calls at 66.4%, NLD calls at 33.4% and ILD calls at 0.2%

CHAPTER 2 : UNPRECEDENTED MOBILE GROWTH IN INDIA

MOBILE GROWTH IN INDIA CATCHES UP WITH CHINA

2.1 India has become one of the fastest growing mobile markets in the world. The mobile services were commercially launched in August 1995 in India. In the initial 5-6 years the average monthly subscribers additions were around 0.05 to 0.1 million only and the total mobile subscribers base in December 2002 stood at 10.5 millions. However, after the number of proactive initiatives taken by regulator and licensor, the monthly mobile subscriber additions increased to around 2 million per month in the year 2003-04 and 2004-05. For the year 2005-06, the first 9 months have seen an addition of 26 million mobile subscribers, which translates into average addition of 3 million subscribers monthly. The additions in the month of December 2005 alone have touched around 4.5 million.

2.2 In China the mobile service were commercially launched in the year 1988 as compared to 1995 in India. Thus China is ahead of India by about 7 years in starting mobile services. China has been recognised as one of the fastest developing country in deployment of mobile telephony service since it has been adding about 4 to 5 million mobile subscribers per month in the last 5 years. India has also achieved this landmark in December 2005 when the mobile subscribers addition reached around 4.5 million in a single month for the first time since the launch of mobile service in the year 1995. Thus India has really caught up with China in mobile growth. Rather the performance of Indian mobile sector is better than China if we compare first 11 years of India

Vs. China. The subscriber base at the end of 11 years after start of mobile services for India and China is highlighted in Table 1.

2.3 The mobile subscriber base in India (since 1995) and China (since 1988) is shown in the table 1 below:-

Table 1:

S.No.	Year Ending	INDIA (In Million)	China (In Million)
1.	1988	--	0.003
2.	1989	--	0.01
3.	1990	--	0.02
4.	1991	--	0.1
5.	1992	--	0.2
6.	1993	--	0.6
7.	1994	--	1.6
8.	1995	0.03	3.6
9.	1996	0.22	6.8
10.	1997	0.8	13.2
11.	1998	1.1	24.0
12.	1999	1.6	43.0
13.	2000	3.1	85.0
14.	2001	5.5	145.0
15.	2002	10.5	207.0
16.	2003	28	279.0
17.	2004	48	335.0
18.	2005	76	388.0

2.4 At the time of launch of GSM cellular service in the country there were a number of impediments in the form of high handset costs, exorbitant tariffs, high initial entry/activation charges, Mobile Party Pays (MPP) regime etc. With the passage of time these initial barriers have almost disappeared as on date.

2.5 The mobile tariffs in India have also become lowest in the world. A new mobile connection can be activated with a monthly commitment of

US$ 5-6 only. The average mobile tariffs prevalent in different countries in the neighbourhood are shown in Table 2 below:

Table 2:

S.No.	Countries	Per Minute Cellular Tariffs (in US Cents)
1.	India	2.5
2.	China	3.5
3.	Bangladesh	6.5
4.	Nepal	6.5
5.	Pakistan	8.4
6.	Sri Lanka	11.0
7.	Bhutan	11.4
8.	Maldives	14.4

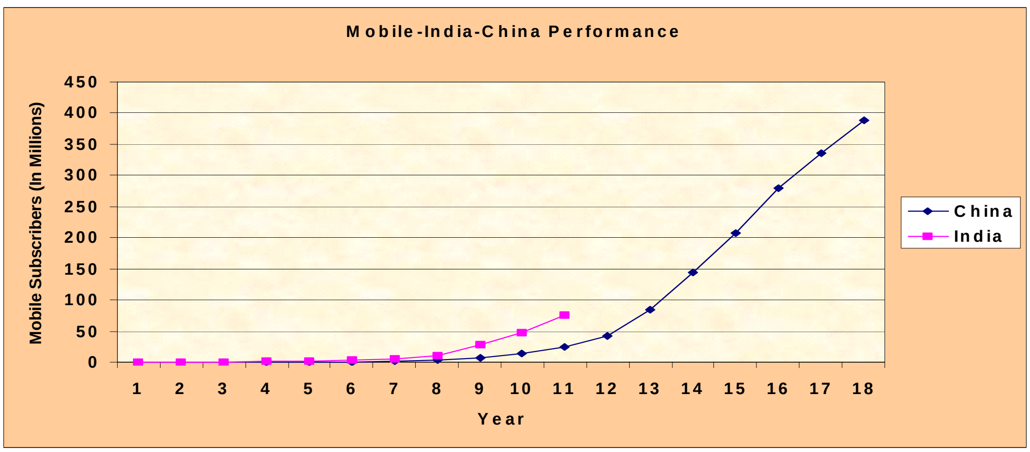
2.6 **Handset Sales** : The data pertaining to sale of handsets in India provided by Indian Cellular Association (ICA) for the last three years is as under:-

* 2003 : 19 Million
* 2004 : 24 Million
* 2005 : 32 Million

The above data also is in synchronization, which supports the high growth of mobile subscribers in last 3 years. With the monthly additions of about 5 million subscribers, the sale of handsets is likely to pick up substantially in 2006 and may reach somewhere in the range of 60-65 millions per annum. The replacement markets in India is mentioned to be about 10% of the total subscriber base. The sale of handsets in China is around 100 million sets including replacement, which implies about 60 million are purchased by new subscribers and remaining 40 million as a replacement of old handsets.

2.7 **Comparison with Chinese Numbers**: The growth pattern of Indian mobiles in comparison to China is represented in the Charts I to IV as follows:

Chart I



Mobile subscribers (in Millions)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
China	0.003	0.01	0.02	0.1	0.2	0.6	1.6	3.6	6.8	13.2	24	43	85	145	207	279	335	388
India	0.03	0.22	0.8	1.1	1.6	3.1	5.5	10.5	28	48	76							

Introduction of Mobiles:

China year 1 : 1988 Year 18 : 2005

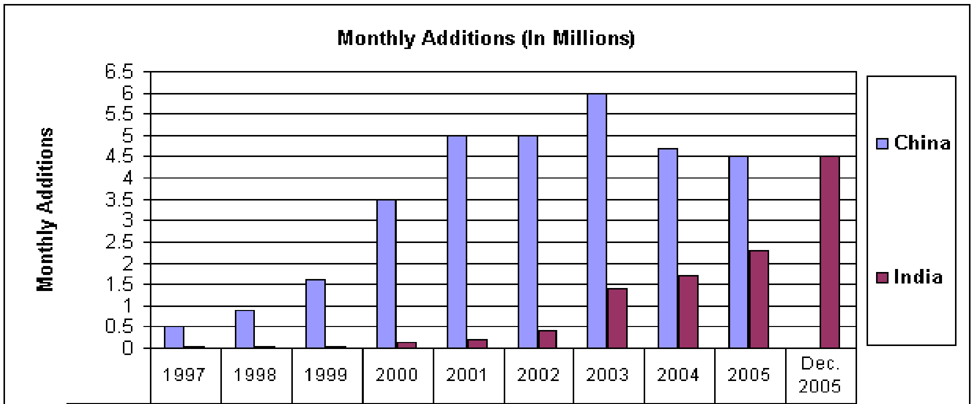
India year 1 : 1995 Year 11 : 2005

Note: Values are for end of year (December)

- **So far, on any year to year basis, after late start of mobiles in India, it has done better than China**

Chart II

Monthly Growth (Mobiles)
China : India



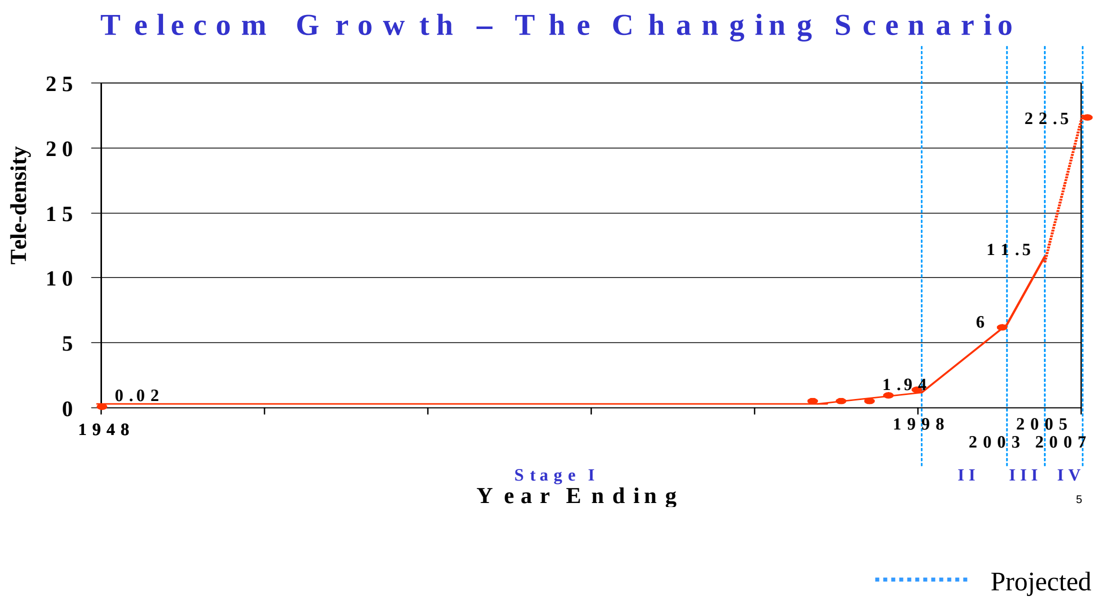
	1997	1998	1999	2000	2001	2002	2003	2004	2005	Dec. 2005
China	0.5	0.9	1.6	3.5	5	5	6	4.7	4.5	NA
India	0.05	0.03	0.04	0.13	0.2	0.4	1.4	1.7	2.3	4.5

Chart III

Sales of handsets : Increase in the number of subscribers

Year	2003	2004	2005	Dec. 2005
Handsets sales (Nos. in millions)	18	23	32	4.0
Mobile Additions (Nos. in millions)	17.5	19.5	28	4.5

Chart IV



Telecom Growth – The Changing Scenario
25
20
15
10
5
0
Tele-density
0.02
1.94
6
11.5
22.5
1948
1998
2003
2005
2007
Stage I
II
III
IV
Year Ending
Projected

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