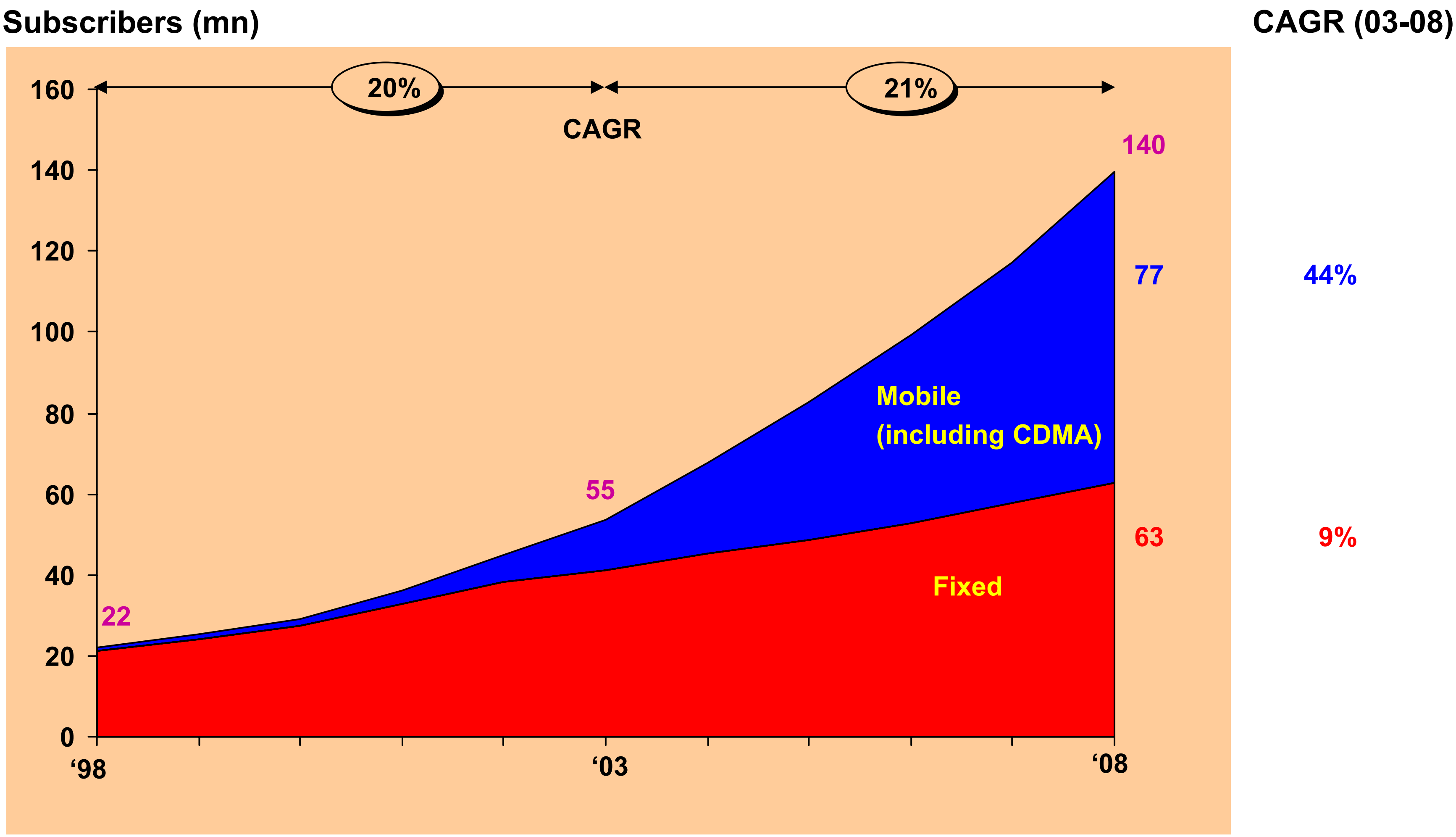
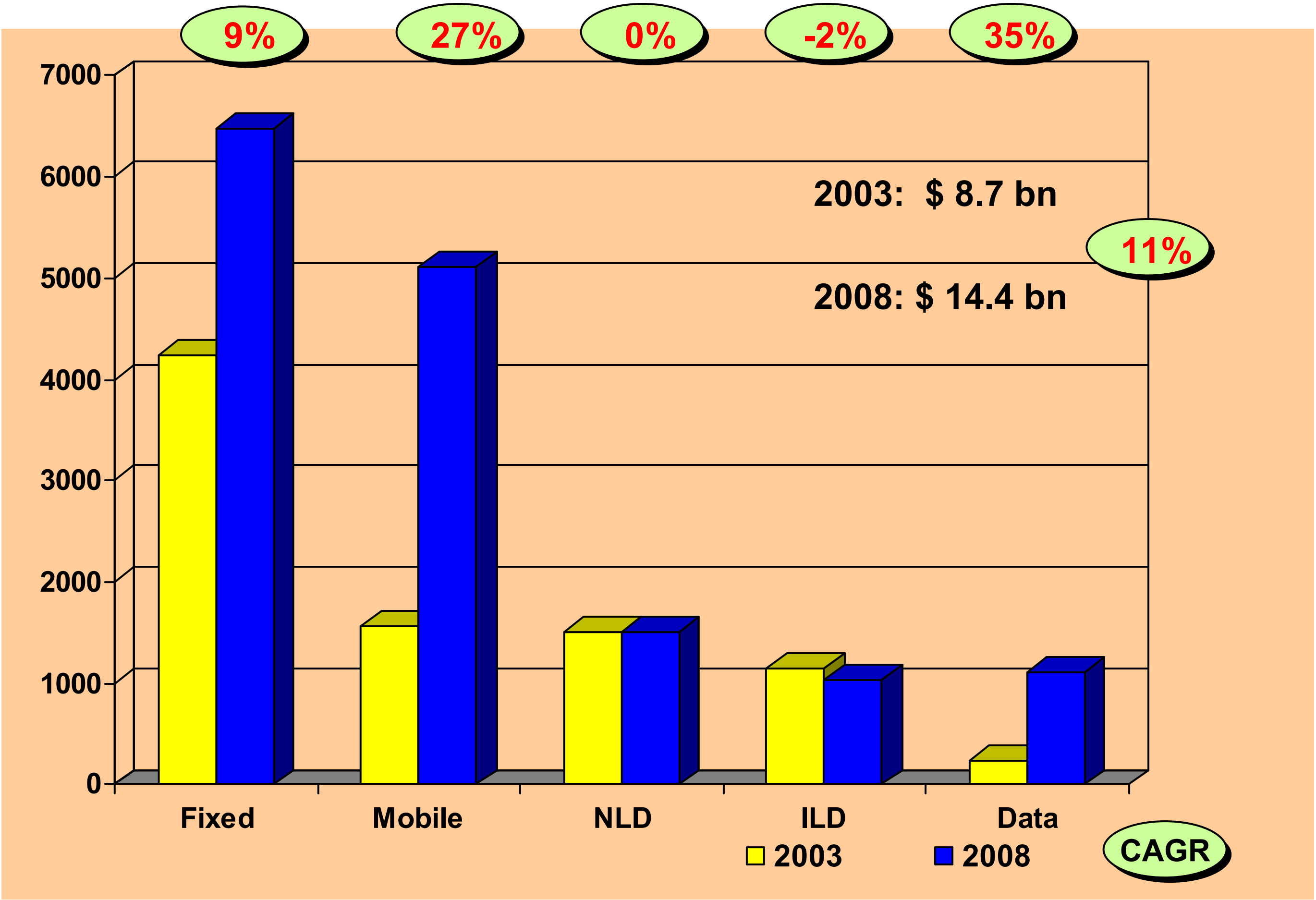
India Subscribers - Voice: Promises substantial growth



Source: DoT; Morgan Stanley Estimates

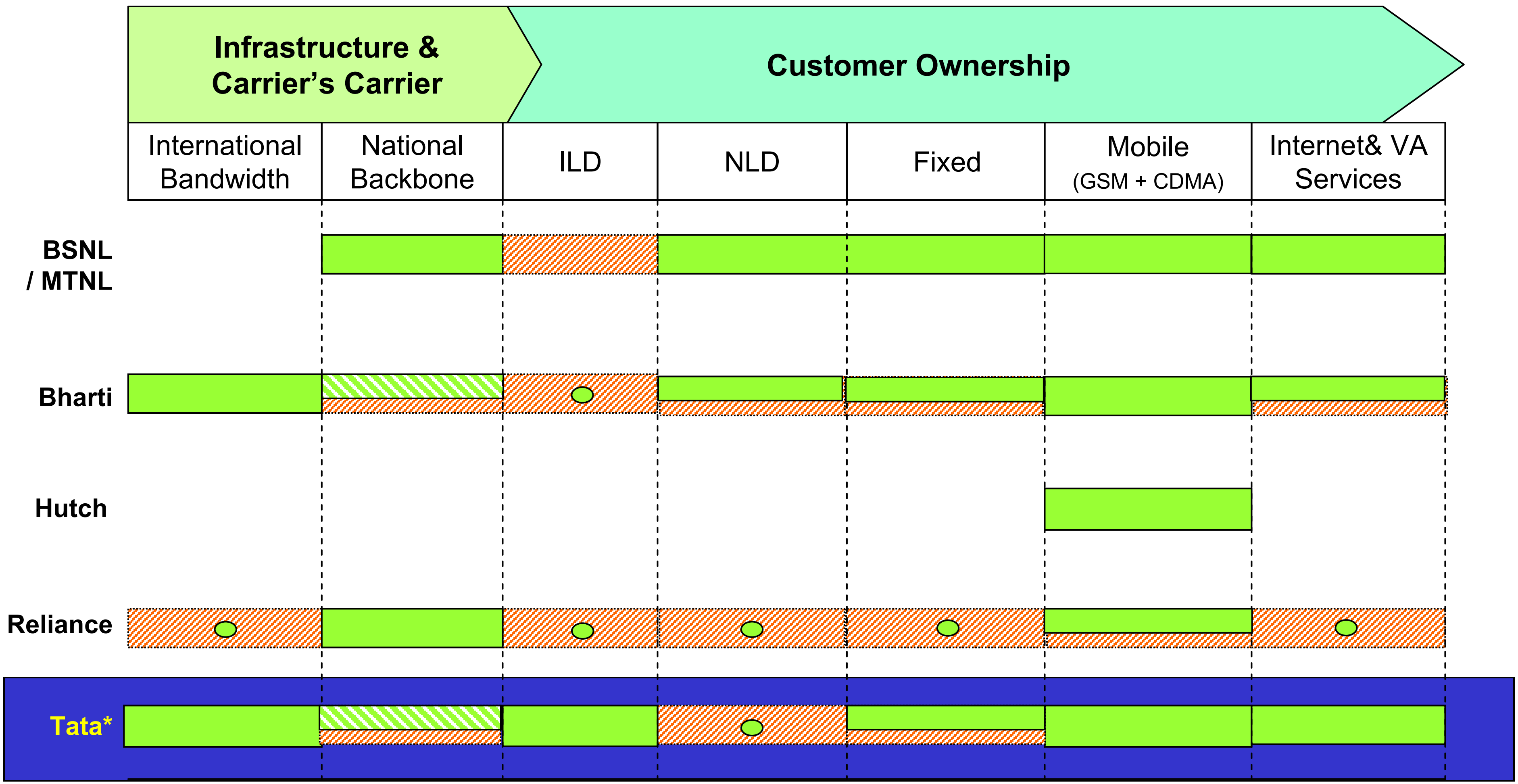
India Revenues: Voice will continue to dominate

Revenues (Rs crores)



Source: Morgan Stanley Estimates

Tata Group: Largest Private Telecom Player in India



ILD: International Long Distance

NLD: National Long Distance

Fixed: Land Line

VA: Value Added services

Significant Presence

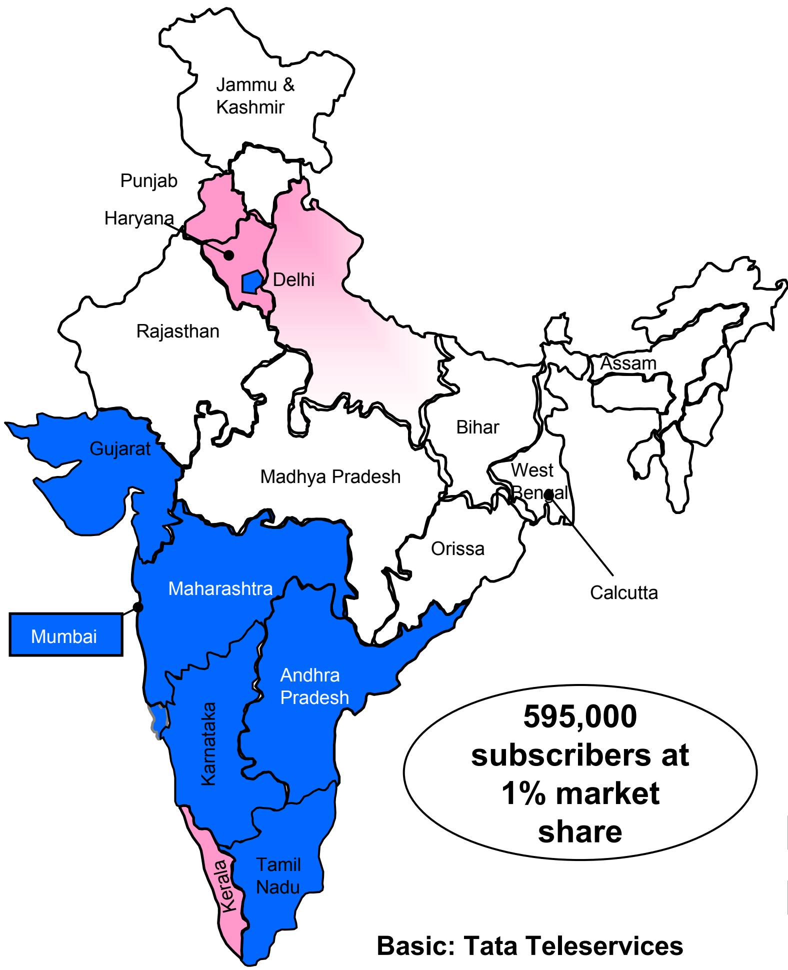
Limited Geog. Presence

Recent / Small Presence

Under Evaluation / WIP

Tata Group Access Plans: Cover all high potential circles in India

BASIC



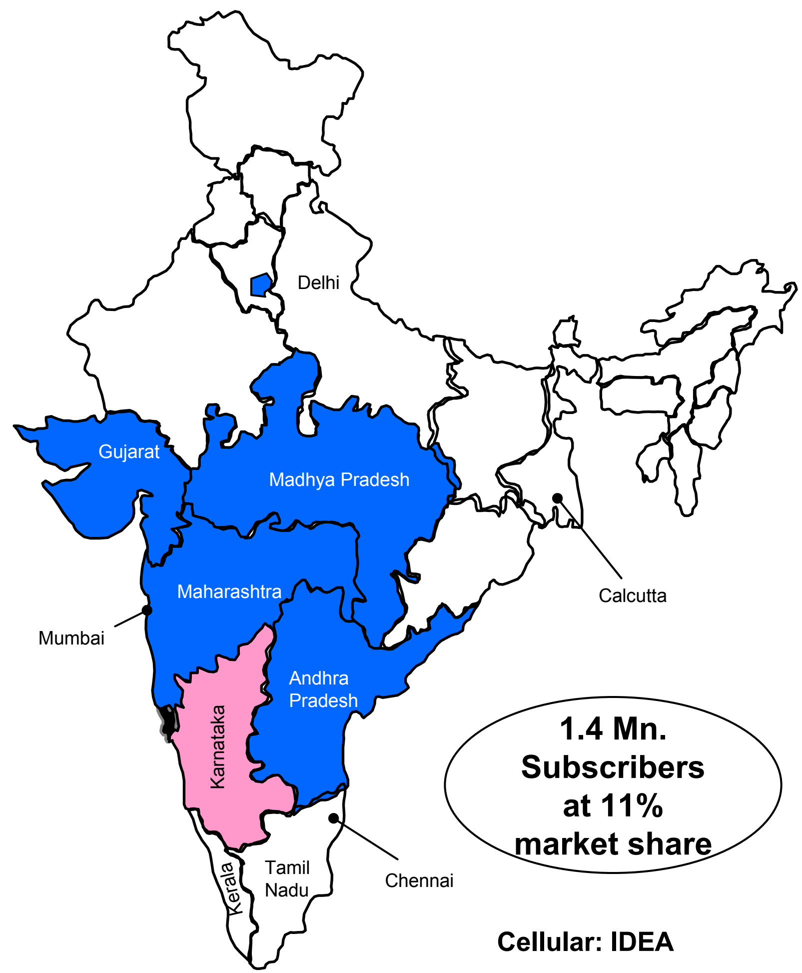
595,000 subscribers at 1% market share

Basic: Tata Teleservices

Existing

Plans

CELLULAR



1.4 Mn. Subscribers at 11% market share

Cellular: IDEA

As of Mar, 2003

Indian Subscriber Base – Voice (Fixed, Cellular and Limited Mobility)

As of Mar, 2003

Operator	Circle: For FSP	Circle: For CMSP (circles)	Subscribers (000s): Fixed	Subscribers (000s): LiMo (with FWT)	Subscribers (000s): Mobile	Subscribers (000s): Total	Mkt Share (%)
BSNLwith MTNL	All India - Mum & Del	19	40100	429	2547	43076	77.8%
Bharti	MP, Har, KK, TN, Delhi	15	30	289	3071	3390	6.1%
Tata Tele with TTML	AP		328	268		596	1.1%
Rel Info with Rel Telecom	Guj	7	3	861	541	1405	2.5%
Shyam	Raj		37	36	132	205	0.4%
HFCL	Pun		62	54		116	0.2%
Idea		5			1280	1280	2.3%
Hutch/ Orange		7			2163	2163	3.9%
BPL		4			1131	1131	2.0%
Spice		2			640	640	1.2%
Escotel		3			586	586	1.1%
Sterling		4			229	229	0.4%
RPG		1			179	179	0.3%
Essar		4			183	183	0.3%
Total			**40751**	**1937**	**12682**	**55370**	100%

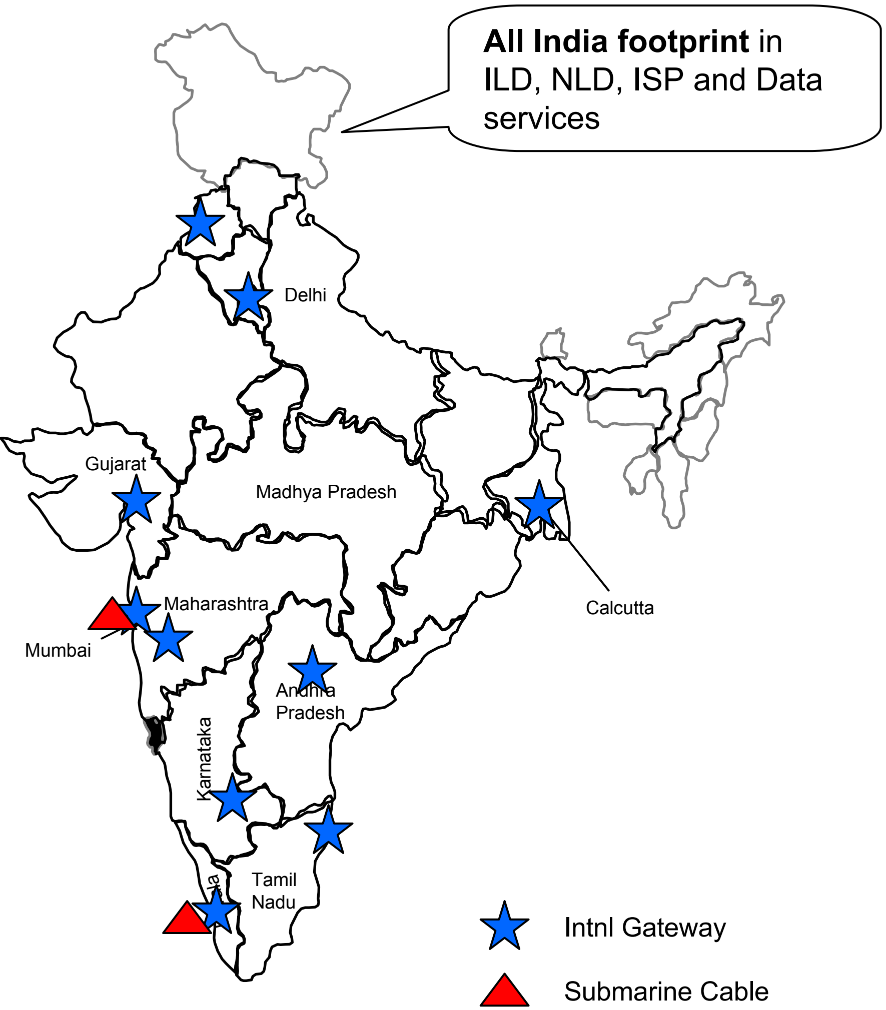
FSP: Fixed Service Provider

CMSP: Cellular Mobile Service Provider

LiMo: Limited Mobility (CDMA)

FWT: Fixed Wireless Terminal

Tata Group Long Distance & Data Plans: All India Presence (VSNL)



Existing Assets

- **10 Gateways; 14 Switches**
- **47 Earth Stations**
- **7 Gbps international bandwidth**
- **701,000 ISP subscribers**

Existing Services

- **ILD Voice and Data Services**
- **Domestic VPN & ISP Services**
- **VoIP**
- **TV Up linking**

Plans

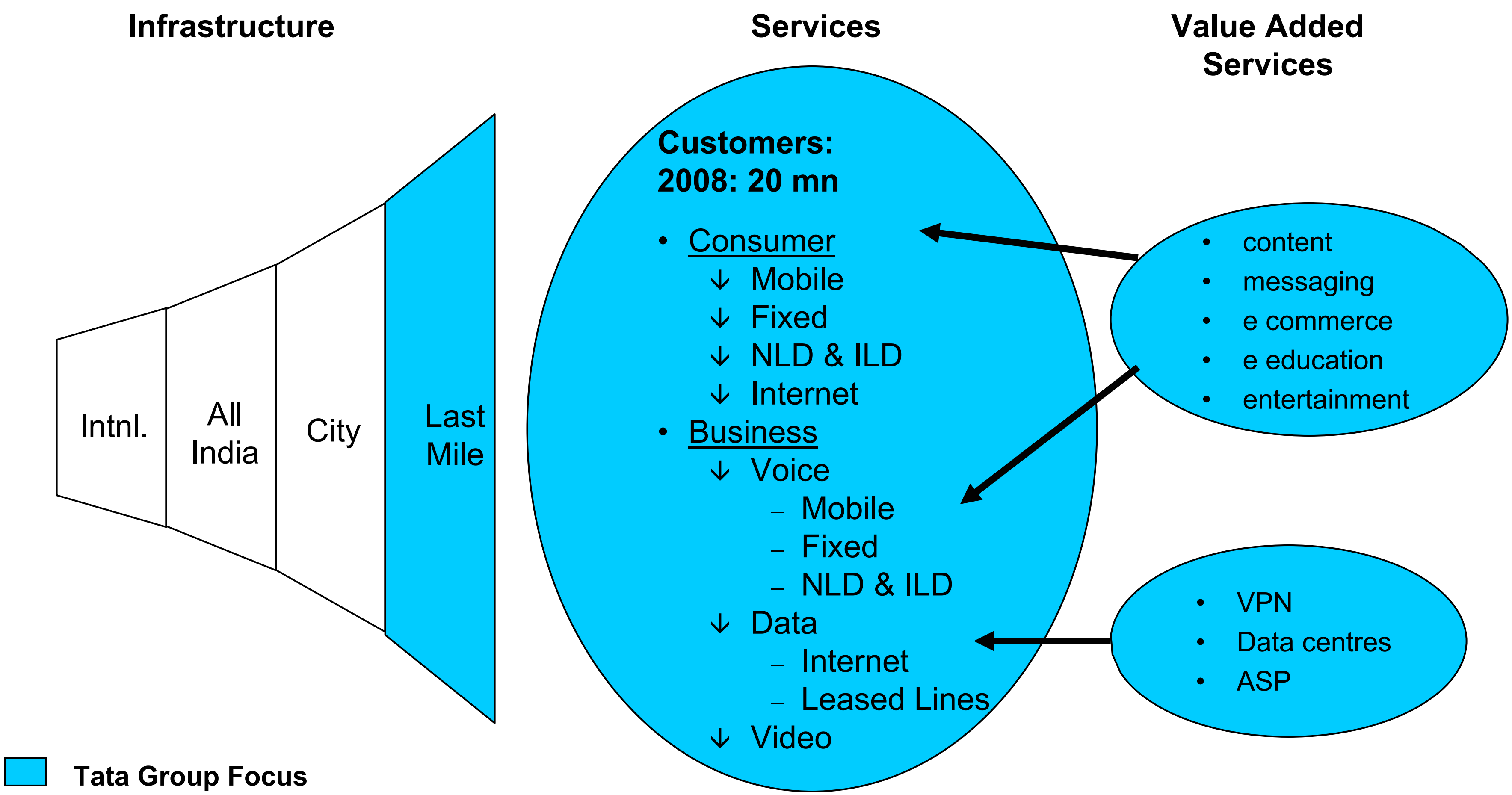
- **13,000 km domestic optical fiber backbone in 2 years**
- **321 PoPs for NLD services in 7 years**
- **Internet Telephony**

Tata Group Telecom Objective : Capture ~ 20 million fixed & mobile customers by 2008

Nos. in Millions

	2003		2008
Total Subscribers	55	+ 75	**130**
Public Sector Units	42	+36	**78**
Private players	13	+39	**52**
Tata Group	2	+18	**~20**
Market share	4%		**~40%**

Tata Group's Strategic Intent: Capture Sizable Share of Customers to Anchor Other Telecom Offerings

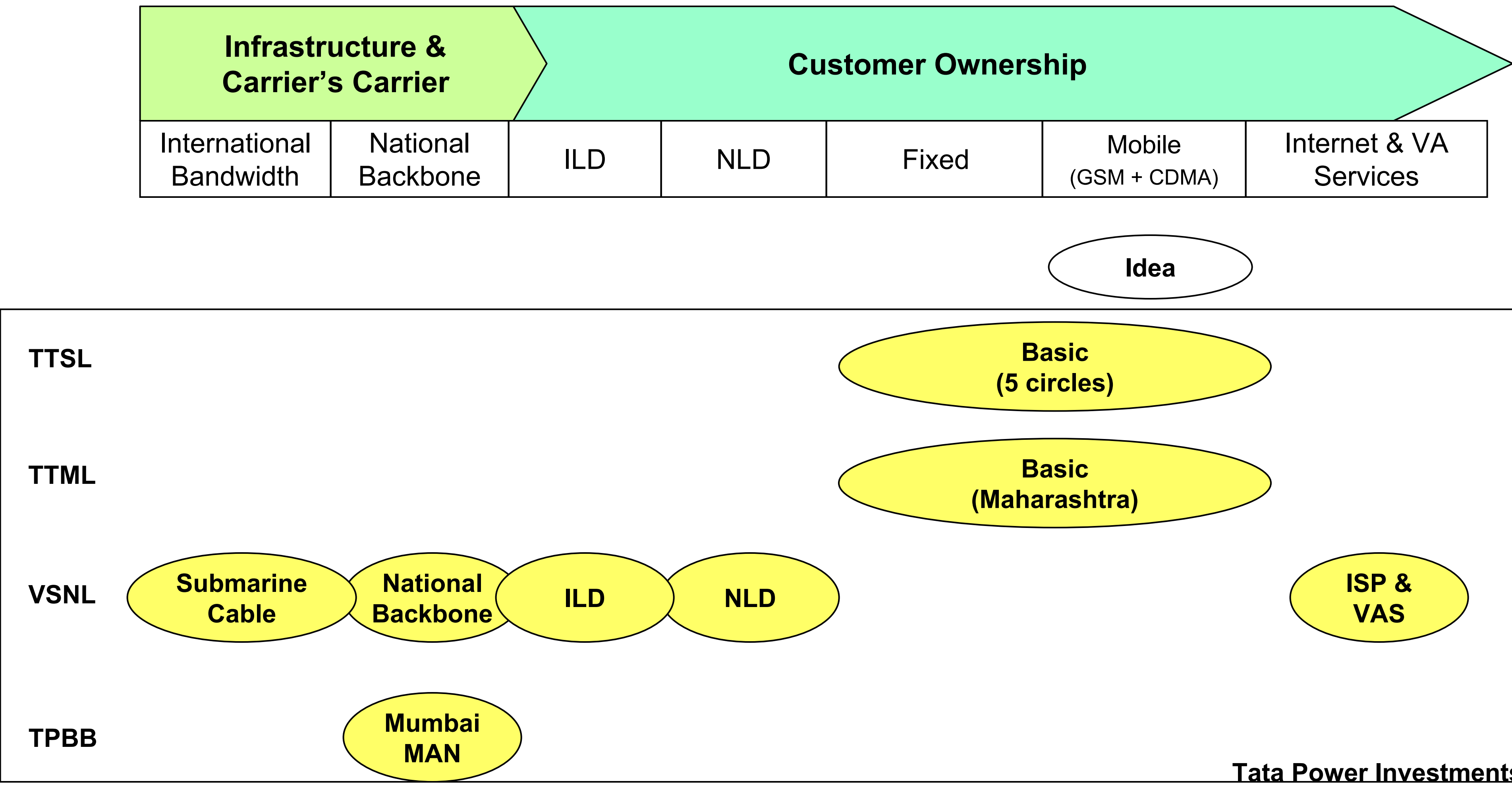


Compete on
- **Superior customer care**
- **Innovative service/ product bundling**

Tata Power: Evolution of Telecom Plans

	Late 2000	Early 2001	Mid 2001	Mid 2002
Market	• Dot-com Boom • B/W Shortage	• B/W Shortage • High growth projections	• Dot-com Bust • Telecom Consolidation	• Global telecom slowdown • Failure of stand-alone backbone players • Shake-out and consolidation
Tata Power	• Existing Fibre (400km in Mumbai)	• Extend network to all India	• No change in plans	• Investments in TTSL, TTML & VSNL • Explore Mumbai MAN sale
Tata Group	• Basic & Cellular in Andhra • No expansion plans	• BTAL merger • New basic licenses evaluation	• TTSL signs 4 new licenses	• VSNL Acquisition • HughesTele.com (now TTML) Acquisition • BTAL (Idea) - BPL merger MoU
	Mumbai MAN	**Broadband / Carriers' Carrier: National & Metro**		**Strategic Investments**

Tata Power's Telecom Investments: Strategic; Across the Value Chain



TTSL: Tata Teleservices Ltd.
TTML: Tata Teleservices Maharashtra Ltd.
VSNL: Videsh Sanchar Nigam Ltd.
TPBB: Tata Power Broadband (division of TPC)

Tata Power Telecom Investments

Tata Power

		Equity Stake: As of Mar 31, 2003 — Rs Cr	Equity Stake: As of Mar 31, 2003 — % of shareholding
TTSL	*Basic services (Wireline & Wireless) in 5 circles*	500	35%
TTML	*Basic services in Maharashtra*	115	11.5%
Panatone	*45% stake in VSNL: ILD, NLD & ISP services*	500	40%
TPBB	*Mumbai MAN Division of TPC*	110	100%
Total		1225	

BACKUPS

Financial Performance – TTSL, TTML

					In Rs. Cr.
	FY 03 (Act.)	**FY 04E**	**FY 05E**	**FY 06E**	**FY 07E**
TTSL					
Cumulative Subscribers ('000)	366	1358	1870	2620	3300
Gross Revenue	298	674	1405	2011	2604
EBITDA	-68	-51	327	709	1089
Project IRR	20%				
TTML					
Cumulative Subscribers ('000)	232	226	641	819	972
Gross Revenue	370	525	665	826	976
EBITDA	73	37	227	328	403
Project IRR	23.6%				

Projected peak funding requirements :

- **For TTSL – Rs. 7529 crs. up to financial year ended March 31, 2009**
- **For TTML - Rs. 3381 crs. up to financial year ended March 31, 2005**

Financial Performance – VSNL, Idea

	FY 03 (Act.)	FY 04E	FY 05E	FY 06E	FY 07E
VSNL					
Gross Revenue	4813	3581	2697	2987	3580
EBITDA	1401	420	580	725	929
Idea					
Cumulative Subscribers ('000)	1280	2066	3289	4906	
Net Revenue	784	1026	1730	2582	
EBITDA	240	321	699	1183	

Projected peak funding requirements :

- **For Idea - Up to financial year ended March 31, 2006**

Balance sheet as on March 31, - Idea

Rs Million	2002-03*	2003-04	2004-05	2005-06
Sources of Funds				
Funded Capital	27,411	28,451	28,451	28,451
Funding Shortfall	0	3,226	5,610	5,974
Accum Losses / Misc Exp	(17,959)	(21,490)	(21,771)	(17,763)
Networth	9,452	10,187	12,290	16,662
Debt	21,611	23,240	24,750	22,556
Total Sources	**31,063**	**33,427**	**37,040**	**39,218**
Application of Funds				
Net Fixed Assets	17,769	20,887	23,043	26,629
Unamortised LF / Goodwill	14,673	13,547	12,457	11,366
DSRA	62	-	2,649	2,494
Net Current Assets	(1,441)	(1,007)	(1,109)	(1,271)
Total Application	**31,063**	**33,427**	**37,040**	**39,218**

*Estimated figures

Balance sheet as on March 31, – TTSL

Rs. Million	2002-03	2003-04	2004-05	2005-06	2006-07
Liabilities					
Equity	14254	23453	29065	31735	33261
Other reserves	-9696	-16730	-22210	-25254	-25739
Netw orth	4558	6723	6855	6480	7523
Term debt	14870	24551	30724	33661	35026
Bank borrow ings for WC	0	663	1301	1057	1337
Creditors for capital goods	2463	2470	1977	1887	1792
Deposits	487	399	500	554	645
Other Current Liabilities	1463	534	710	835	950
RPS	8354	8360	8360	7140	7140
Total Liabilities	**32196**	**43700**	**50427**	**51615**	**54411**
Assets					
Gross block	19366	33963	42515	49656	56932
Less: Accum Depreciation	3162	6978	10990	15745	21269
Net Block	16204	26985	31525	33911	35663
Investments	4621	7890	7890	7890	7890
Net License fees	3290	2660	2483	2306	2128
Net Preoperative expenses	0	1420	1159	897	718
Miscelleneous Expenditure	3501	770	977	1215	1416
Debt service reserve	0	825	2216	2513	2784
Current Assets	4188	2970	3997	2703	3190
Cash Balance	392	180	180	180	621
Total Assets	**32196**	**43701**	**50427**	**51615**	**54412**

Balance sheet as on March 31, – TTML

Rs. Milliion	2002 -03	2003-04	2004-05	2005-06	2006-07
Liabilities					
Equity share capital	14,053	14,053	14,053	14,053	14,053
Reserves & surplus (incl. premium)	(7,801)	(8,045)	(9,161)	(9,375)	(8,898)
Asset revaluation reserve		2,057	2,057	2,057	2,057
Long term debt	7,111	15,144	15,850	15,924	15,998
Deferred liabilities	-	86	75	58	75
Bank borrow ing for w orking capital	-	740	930	1,096	1,254
Current liabilities	8,133	253	259	279	319
Deposits	124	81	81	81	81
Total liabilities	**21,620**	**24,369**	**24,144**	**24,173**	**24,939**
Assets					
Gross fixed assets	18,665	21,981	22,933	23,725	24,541
Less:Depreciation	3,468	3,805	5,005	6,252	7,545
Net fixed assets	15,198	18,176	17,929	17,473	16,997
Entry fee		5,325	5,325	5,325	5,325
Less:Amortisation of entry fee		(1,731)	(1,997)	(2,264)	(2,530)
Entry fee after amortisation	3,861	3,594	3,328	3,062	2,796
Pre-operative expenses after amortisation	-	-	-	-	-
Investments againse DSRA	-	868	894	894	1,383
Investments againse DEL reserve		300	300	300	300
Current assets	1,337	1,220	1,472	1,696	1,923
Cash & bank Balance	1,225	211	221	748	1,541
Total assets	**21,620**	**24,369**	**24,144**	**24,173**	**24,939**

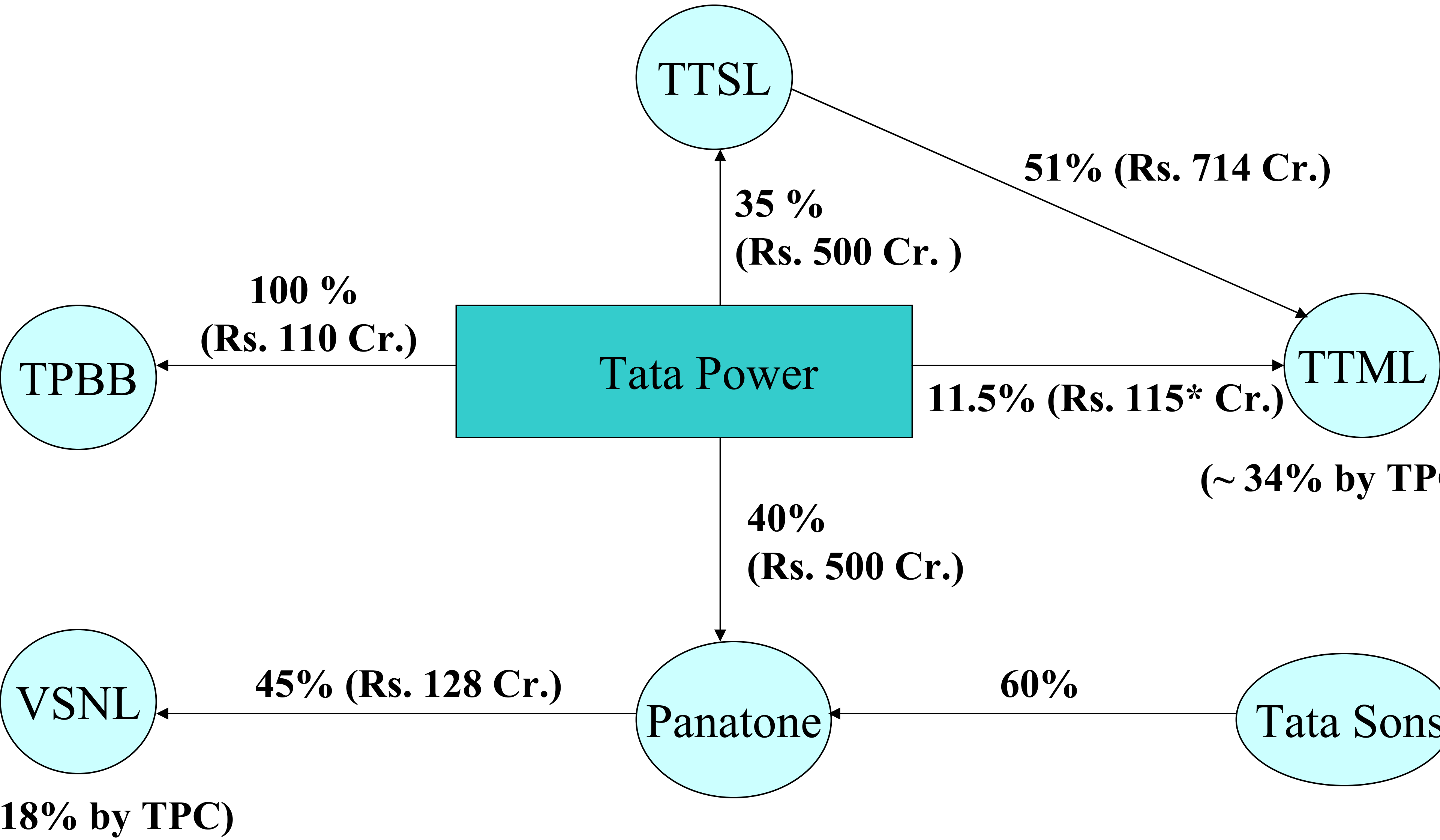
Equity Structure -TTSL and TTML (as on 31st March 2003)

	Rs. Crs.	% of Shareholding
TTSL		
Tata Industries	250	18%
Tata Power	500	35%
Tata Sons	343	24%
TISCO	48	3%
TELCO	2	0.1%
Tata Chemicals	2	0.1%
VSNL	280	20%
TOTAL	**1425**	**100%**
TTML		
A) Promoters Holding	995	70.8%
TTSL	714	51%
Tata Power	162	11%
Tata Sons	119	8%
B) Non Promoters Holding	410	29.2%
Institutional Investors	313	22%
Others	97	7%
TOTAL	**1405**	**100%**

Equity Structure - VSNL, Idea (as on 31st March 2003)

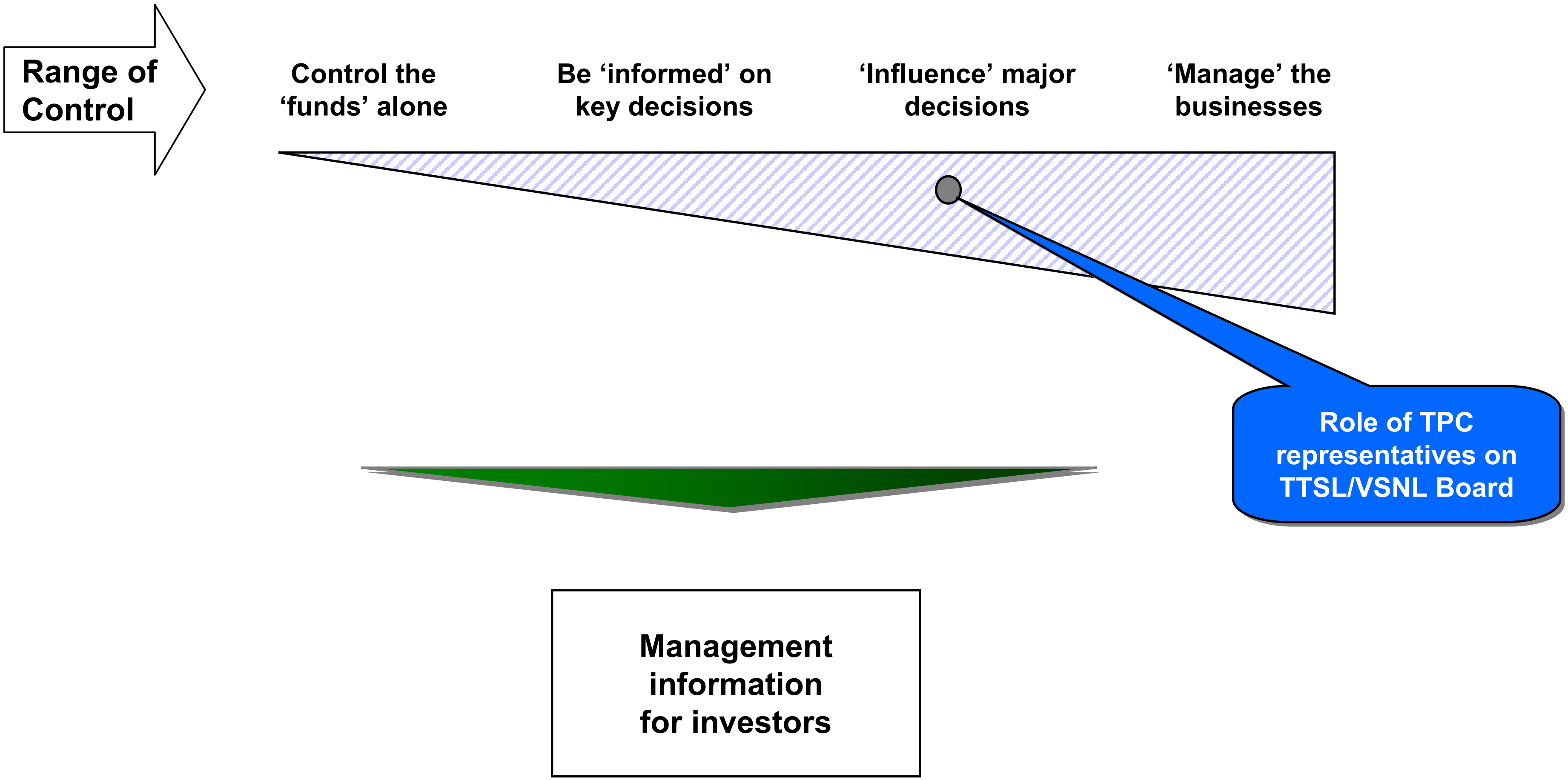
	Rs. Crs.	% of Shareholding
VSNL		
Panatone	128	45%
Govt. of India	74	26%
Others	83	29%
TOTAL	**285**	**100%**
Idea		
1) Tata	850	31%
2) Birla	905	33%
3) AT & T	905	33%
4) Others	82	3%
TOTAL	**2741**	**100%**

Tata Power Telecom Investments – as on March 31, 2003



*As per TPC books. As per TTML books it is Rs. 161 Cr.)

Tata Power Role: Board level participation; Investment protection



Telecom: Integrated Play not feasible for TPC Independently

Integrated Telecom Play

Access

Basic Services (6 circles)

- 100% Ownership
- 3 - 4 mn subscribers in 5 years
- @ Rs 20,000 per sub

Investments: Rs 7500 cr

Long Distance

Build Case

- 15,000 km all India backbone
- ILD, NLD, ISP & Data Services

Investments: Rs 2000 cr

VSNL Buy Case

- ILD, NLD, ISP
- 45% Stake @ Rs 202

Investments: Rs 2600 cr

TPC Impact

Equity Investment

Rs 4500- 5000 cr

Telecom play in partnership with other strategic investors, e.g. Tata Sons

Telecom Future Options: Consolidate, Divest or Exit

Option	Description	Timeframe	TPC Value Creation
Consolidate	• Increase stake over 50% • Telecom business as TPC subsidiary	• 4 - 5 years	• Entry into telecom as promoters • Capture greater share of future value / upside
Divest in parts	• Selectively sell stake to strategic investors / public	• 5 - 7 years	• Extract value appreciation • Retain part stake for future value growth
Exit	• Sell entire stake at appropriate time to other partners / investors	• 5 - 7 years	• Cash out at attractive valuations

Critical Success Factors

Success Factors	Business Imperatives
Winning Market Share	• Target attractive segments e.g. Corporates, PCOs, etc. - Innovating product bundling • Manage profitability by optimizing - Service offerings - Acquisition approach • Align network roll-out and customer acquisition strategies
Minimizing Costs	• Share infrastructure & operations across businesses - Backbone, switching, manpower, space, branding, etc. • Lease and swap wherever possible • Use scale to negotiate better prices with vendors
Managing regulation	• Customer choice mechanisms • Fair interconnect mechanisms • Sharing of infrastructure & networks • No technology restrictions on services • No artificial ceilings / floors on tariffs

Risks to be managed

Risks	Business Imperatives
Competition	• Obtain first mover advantage and lock-in key customers • Differentiate on services & branding • Consolidate
Regulation	• Anticipate regulatory unfolds, proactively participate in its making and speedily accomplish /adapt • Vertical integration to balance /hedge value migration
Long Gestation	• Prepare for large investments • Prepare for a long term play • Returns only after 5 -7 years

Risks to be managed

Risks	Business Imperatives
Technology	• Keep options open till critical mass is achieved • Choose long-term mainstream options • Minimize tech. investments; lease/swap where possible
Economy	• Build resource cushions