

Unified Licensing Regime in India

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Brief Background and current Status of telecom services in India

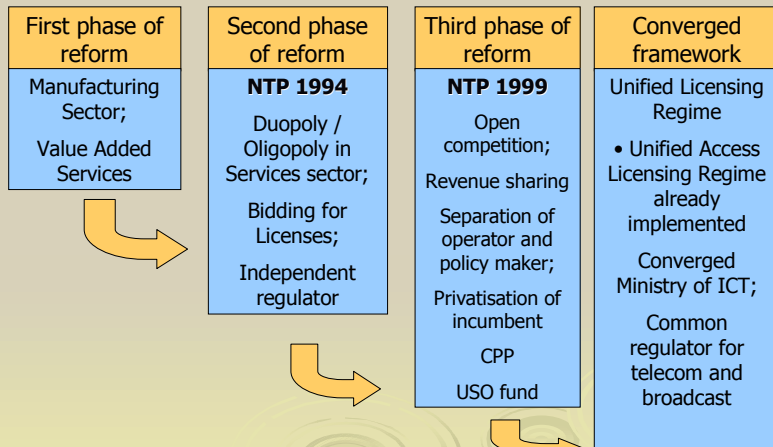


As on 31.03.2005

Size:	3287000 Sq. Kms.
Population:	1.027 Billion
Number of Fixed Lines:	46 Million
Number of Mobile:	52 Million
Teledensity: (Fixed & Mobile)	9.08
Number of Internet :	5 Million
Number of rural lines:	13 Million
Number of PCOs:	2.5 Million

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Phases of Policy reforms- The Indian Story at a Glance



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UNIFIED LICENSING

- Unified Licensing is part of an integrated approach for the growth of telecom services in India.
- Reforms in licensing process is a must considering the technological developments and market trends.

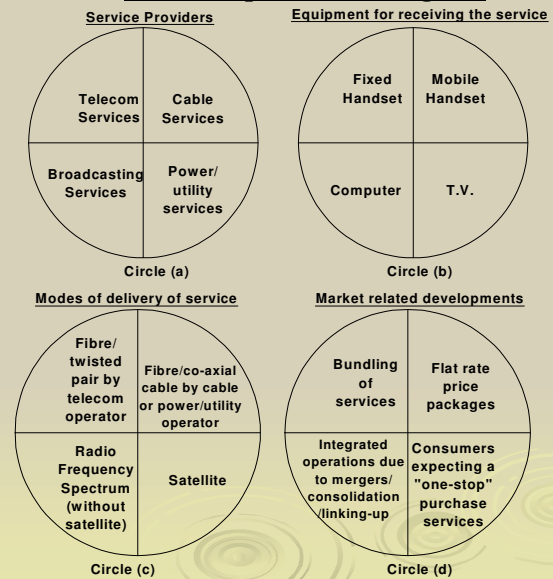
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Technological Developments

- **Fast Pace of Technological developments.**
- **Overlap in the scope of service specific license.**
- **Licensing restrictions should not come in the way of technological developments.**

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Different aspects of convergence



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Licensing (Cont'd)

Market Trends

➤ Tariff Convergence

- Convergence of Fixed and Cellular tariff gives rise to Product Substitution.
- Falling tariff for Cellular services

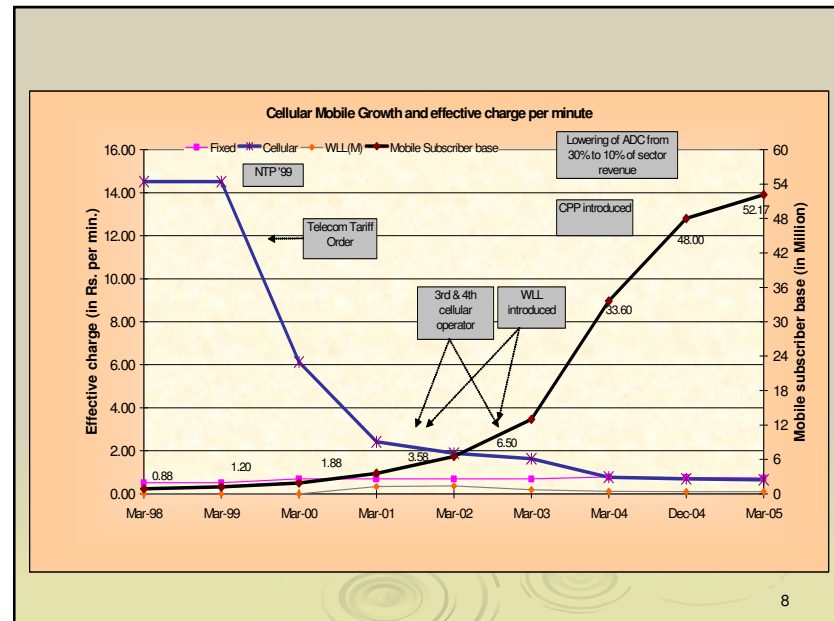
➤ Same Charging Regime

- CPP for both fixed and Cellular services

➤ Very high growth of wireless subscribers

- Wireless roll-out costs significantly lower than wireline

(1:3 approx.)



Key Challenges

Present Coverage of Mobile Networks (Population Coverage ~ 20-25%)

	<i>By area</i>	<i>Population Coverage</i>
Towns	~2000 out of 5100	~250 Million
Rural areas	Negligible	Negligible

Proposed Network Coverage by 2006 ; operators plan (Population Coverage 75%)

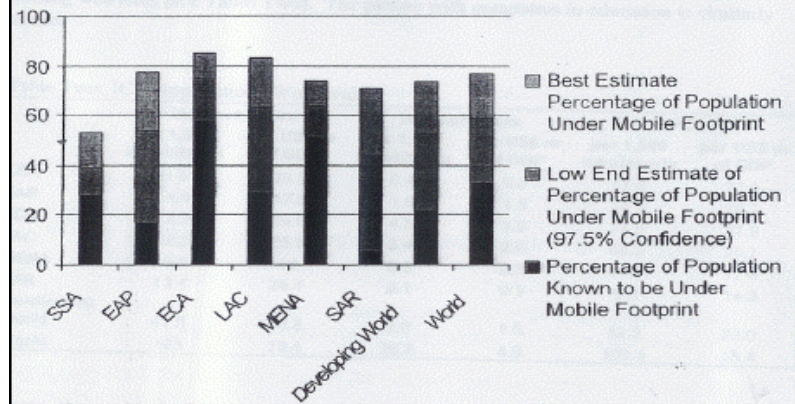
	<i>By area</i>	<i>Population Coverage</i>
Towns	~4900 out of 5200	~300 Million
Rural areas	~350,000 out of 607,000 villages	~450 Million

Efforts required to facilitate / encourage implementation of operator's plans

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Key Challenges (Contd.)

Figure 1: Estimated Global Mobile Footprint Coverage



Source: ITU

77% of the world's population is under mobile footprint.

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Mobile coverage beyond the urban population in selected countries, by region, 2002.

Region	Country	Pop. Covered by mobile signal	% of urban pop. in country
Africa	Cape Verde	90%	53%
	South Africa	93%	53%
	Togo	90%	38%
	Zambia	50.5%	44%
Americas	El Salvador	85%	45.6%
	Ecuador	86%	63.6%
	Gautemala	68%	40%
	Mexico	89.9%	74.7%
Arab States	Jordan	99.5%	78.7%
	Morocco	95%	55.9%
Asia-Pacific	Korea-Rep.	99%	84%
	Malaysia	95%	62%
	Philippines	70%	58.6%
Europe	Azerbaijan	94%	50.8%
	Belarus	72%	70.7%
	Czech Republic	99%	71%
	Slovak Rep.	98%	56.1%

Source:- ITU World Telecommunication Indicators Database

International comparison: India's per capita holds higher Teledensity potential

Country	GNI Per Capita PPP 2002, USD**	Teledensity*	
		2002	2003
India	2570	4.8	6.7
Bolivia	2300	17.22	23.81
Georgia	2210	23.35	23.98
Moldova	1560	19.69	23.76
Ecuador	3130	23.08	30.32

Source: * ITU database

** World Development Indicators data, World Bank July 2003

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Key demographics and wireless market data

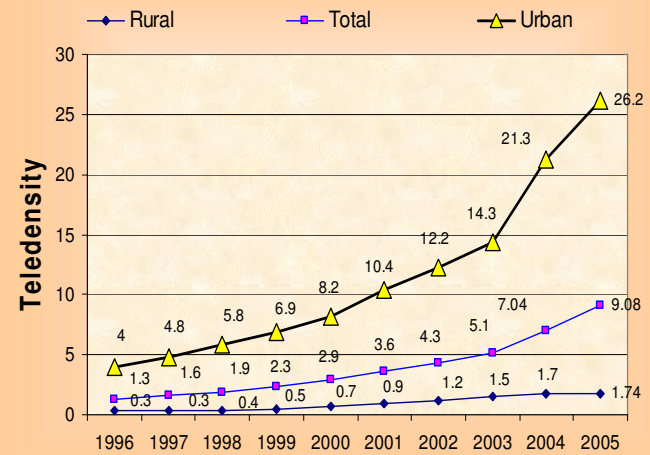
	Brazil	China	India	Indonesia	Philippines	Russia	Thailand
Country data							
Surface Area (mn sq kms)	8.5	9.6	3.3	1.9	0.3	17.1	0.5
Population end-2004 (mn)	179	1301	1094	222	87	147	65
Estimated 2004 GDP / capita (US\$)	2788	1269	638	1164	1050	3023	2540
Urban Population (%)	83	40	28	42	59	73	30
Urban Population (mn)	148	521	310	93	51	107	19
Estimated Urban GDP / capita (US\$)	NA	2025	1360	NA	NA	NA	NA
Estimated Rural GDP / capita (US\$)	NA	765	352	NA	NA	NA	NA
Urban to Rural GDP/capita (X)	NA	2.6	3.9	NA	NA	NA	NA
Wireless Market Data							
Wireless Subs, end - 2004 (mn)	66	339	48	31	32	66	27
Current penetration (%)	36.7	26	4.3	13.8	36.4	44.7	41.9
Number of operators (#)	8	2	6	4	4	6	5
Market Share of Top 2 (%)	60	100	42	79	85	70	84
ARPU of leading operator (US\$)	11.8	10.7	11.1	10.4	7.2	10.8	10.8
EBITDA margin, average of Top 2 (%)	33(a)	53	33(b)	64	61	50	46

- a) Only the top operator is included
- b) Only Bharti is included

Source:- UNDP, Asian Development Bank, Kotak Institutional Equities, Goldman Sachs Research estimates

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Rural and Urban teledensity gap is widening

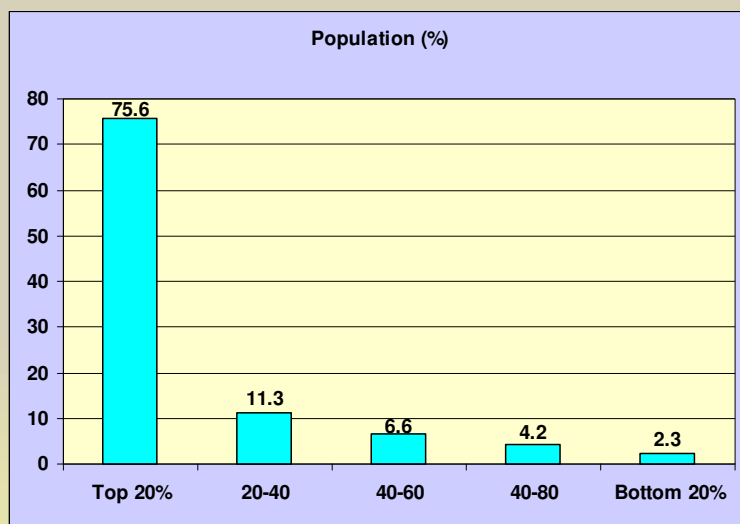


This shows that gap between Urban and Rural Teledensity is increasing

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Top 2000 towns (40% of total) account for 87% of urban population

Distribution of population across India's 5100 towns (%)



Important factors that need consideration

- **Weaker demographics**
- **Unfavorable urban-rural population mix and income distribution.**
 - India's rural GDP per capita is low, at an estimated US \$ 352 (considerably lower than China – US)
- **Distribution of population**
 - Top 2000 most populated towns (out of 5100) with wireless service account for 87% of urban population. Wireless penetration in these 2000 towns is 19%.
- **Average Revenue Per User (ARPU)**
 - Around \$10
 - As per Morgan Stanley's report – Operator can make profits at ARPU as low as \$5

Important factors that need consideration (Contd)

For maintaining and further increasing the growth rate of the telecom services

- increase the teledensity in the already covered urban areas
- increased exposure of rural areas.

In either situation, a reduction in entry cost and tariff is necessary.

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The real Digital Divide

“ Encouraging the spread of mobile phones is the most sensible and effective response to the digital divide The digital divide that really matters, then, is between those with access to a mobile network and those without.”

(The Economist, March 12- 18, 2005)

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Number of households with key consumer durable assets

	All India	Urban + semi-urban	Rural
Total Households	192	54	138
Bicycle (Penetration)	44%	46%	43%
Radios (penetration)	35%	44%	32%
Television (penetration)	32%	64%	19%
2 wheelers (penetration)	12%	25%	7%

Rural India provides a substantial market

Even a lower rate of penetration in rural areas will be a substantial addition (2.5 times than urban) in market size.

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What we did in the recent past

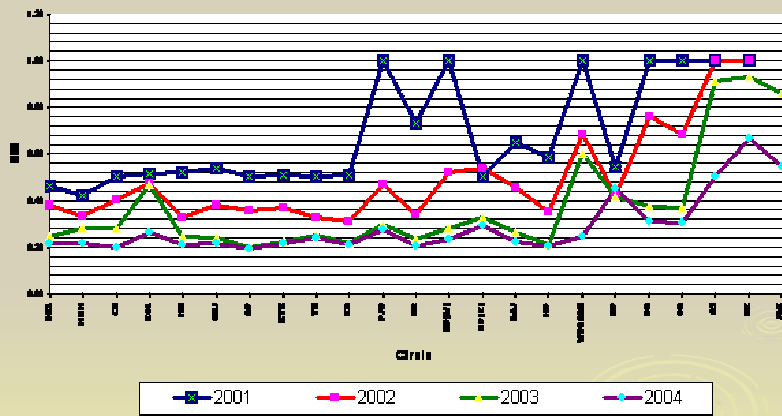
Regulatory initiatives

- Encouraged aggressive competition.
 - Herfindahl-Hirschman Index (HHI),
 - ↳ We can measure the level of competition by looking at the HHI
 - ↳ Sum of square of the market share of all the operators in the market.
 - ↳ 1 = monopoly and 0 = pure competition.

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Level of Competition

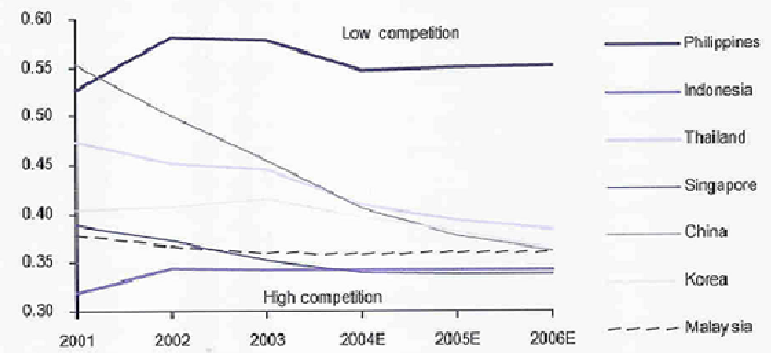
Circle-wise HHI for Mobile Services



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HHI Index for eight Asian markets

Chart : Measuring the level of competition with the HHI



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Why Unified Licensing (Cont'd)

NTP '99

“Convergence of both markets and technologies is a reality that is forcing realignment of the industry.”

“Internet telephony shall not be permitted at this stage. However, Government will continue to monitor the technological innovations and their impact on national development and review this issue at an appropriate time.”

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(Cont'd)

International Practices

➤ A number of countries are migrating towards the concept of authorisation or converged licensing.

➤ From the various international practices, it was observed that Unified Licensing regime enhances the scope of applications/ services that can be provided under a given Single license / Authorisation, thereby removing the policy imposed artificial barriers on application of technology.

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International Practices (Contd.)

- **EU Model –** Simple Authorisation Regime
- **Singapore Model –** Facility Based and Service based Licensing:
- **Malaysian Model –** Converged Licensing framework
- **Argentina Model -** Single License Regime
- **Japan Model-** Simple Registration/Notification
- **Australian Model -** Carrier license and carriage service providers

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Key Objectives of Unified Licensing

- **To encourage free growth of new applications and services**
- **Simplify licensing procedure and easy entry**
- **Reduce legal disputes on scope of license**
- **Ensure flexibility and efficient utilisation of resources**
- **Ensure level playing field and fair transition to the new regime.**
- **Encourage efficient small operators to cover rural, remote and telecommunication facilities wise less developed areas.**

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UNIFIED LICENSING

• Based on TRAI recommendations Government decided to implement Unified Licensing on 11.11.2003

• Unified Licensing to be implemented in two steps:

- First Unified Access Services License which has already been implemented.
- Unified Licensing for all Telecom Services including Broadcasting services, to be implemented through a consultative process
 - Three consultation papers and several consultation meetings.

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Unified Licensing Regime- Salient features of TRAI's recommendations

Framework of Unified Licence : Four categories of licenses:

➤ **Unified License**

- All inclusive license.
- Key new aspects in line with NTP'99 :
 - a) Internet telephony
 - b) Telecom services by broadcasting and cable operators.

➤ **Licensing through Authorisation**

- No entry fee or revenue share license fee.
- Includes provision of passive infrastructure and bandwidth services, Radio Paging, PMRTS and Internet Services but not general internet telephony.

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Unified Licensing Regime- Salient features of TRAI's recommendations

Framework of Unified Licence (Cont'd) :

➤ **Class License**

- No entry fee; Revenue share license fee same as Unified license.
- Includes:
 - a) Niche operators
 - b) All services other than under 'Licensing through Authorisation', which do not have both way connectivity with Public network e.g. VSAT.

➤ **All Stand Alone Broadcasting and Cable licenses (as at present).**

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Salient features of TRAI's recommendations

Licensing Category	Entry Fee	Revenue share license fee
Unified License	First year: ➤ Rs. 107 crores for providing NLD/ILD plus ➤ a function of BSO's (entered in/after 2001) entry fee to offer access services.	6% of AGR Comprising ➤ 5% for USO ➤ 1% for Administrative charge
Licensing through Authorisation	Nil	Nil
Class License	Nil	Same as for Unified License
Standalone Broadcasting and Cable Licenses	As at present	As at present

Salient features of TRAI's recommendations

· Licensing framework - hierarchical in nature (except stand-alone Broadcasting & cable TV services) with Unified Licence being at the highest hierarchical level.

· No restriction on usage of Internet Telephony

· To offer Broadcasting service Unified Licensee will have to apply to the I&B Ministry in case such clearance is required and fulfill other requirements as prescribed. The content in any case, would be regulated by I&B Ministry.

Niche Operators:

•To increase penetration of telecom services in rural / remote / backward areas from telecom point of view

•Service area: SDCAs where fixed rural tele density is below 1%

•Permitted to offer fixed telecom services including multimedia, Internet telephony and other IP enabled services only in these SDCAs.

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A quote from recently published book "The fortunes at the bottom of the Pyramid: Eradicating Poverty through Profits" By Prof. C.K. Prahalad is appropriate here

"What is needed is a better approach to help the poor, an approach that involves partnering with them to innovate and achieve sustainable win-win scenarios where the poor are actively engaged and at the same time, companies providing products and services to them are profitable"

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Salient features of TRAI's recommendations

- Rs. 107 crore to decline over time to become Rs. 30 lakhs after five years.
- Rs. 107 crore entry fee to ensure to 'no worse – off'.
- Spectrum charges, wherever applicable, would be extra.
- Migration optional at this stage. Mandatory after a period of 5 years.
- Service specific regime permitted to continue till two years of implementation of Unified Licensing Regime.
- As the sector revenues grow, the percentages revenue share may be reviewed for downward revision.
- Reselling: Not permitted at this stage.

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THANK YOU

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