



# **Process & Progress of Liberalization Indian Cellular Industry**

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# Telecom is a Critical Infrastructure



- **Growth & development of telecom impacts the efficiency, competitiveness & growth of every other sector in the economy.**
- **International studies have shown that a 1% increase in tele density results in a 3% growth of GDP.**
- **High costs of telecom had earlier rendered it a natural monopoly.**
- **However technological progress & innovation have driven down costs – thus making it possible for the private sector to play a significant role in the growth of telecom.**
- **This has completely changed the competitiveness of the sector & contributed to an acceleration of the liberalization process.**

# Process of Liberalization – Upside Down



- **Undertaken in a inverted manner :**
  - Private sector participation invited in 1992
  - NTP announced in 1994
  - TRAI set up in 1997
  - Tariff Rebalancing carried out in 1999.
  
- **International practices dictate / conventional wisdom demands that deregulation should be preceded by enunciation of policy, setting up of a strong & independent regulatory authority & tariff rebalancing.**

# Problems with both Policy & Regulation



## ➤ Policy Issues

- NTP 94 objective - ‘telecom for all & within the reach of all’
- However this objective was lost in actual implementation – auction method chosen to award licenses lead to enthusiastic & ill-considered bidding.
- Resulted in a high cost structure – exorbitant tariffs- not enough takers – low market growth – un-viability of the industry.

## ➤ Regulatory Issues

- TRAI set up in 1997.
  - No clarity on powers & functions of the Regulatory Authority.
  - Almost every order of TRAI challenged by the Government.
  - Industry could not move forward.
- This resulted in the industry being on the verge of bankruptcy by end 1998.

# Review of Policy & Regulation



- **Government reviews both policy & regulatory structures.**
  
- **Announcement of NTP 99 in March 1999 resulted in :**
  - **Open competition.**
  - **Move to revenue share regime.**
  - **Flexibility in choice of technologies.**
  
- **Amendment of TRAI Act in January 2000 resulted in :**
  - **Strengthening of TRAI.**
  - **Greater clarity on role & functions.**
  - **Setting up of TDSAT for exclusively dealing with telecom disputes.**
  
- **This changed the dynamics of the industry & gave it the vital encouragement to grow.**

# Growth Of Cellular In New Environment

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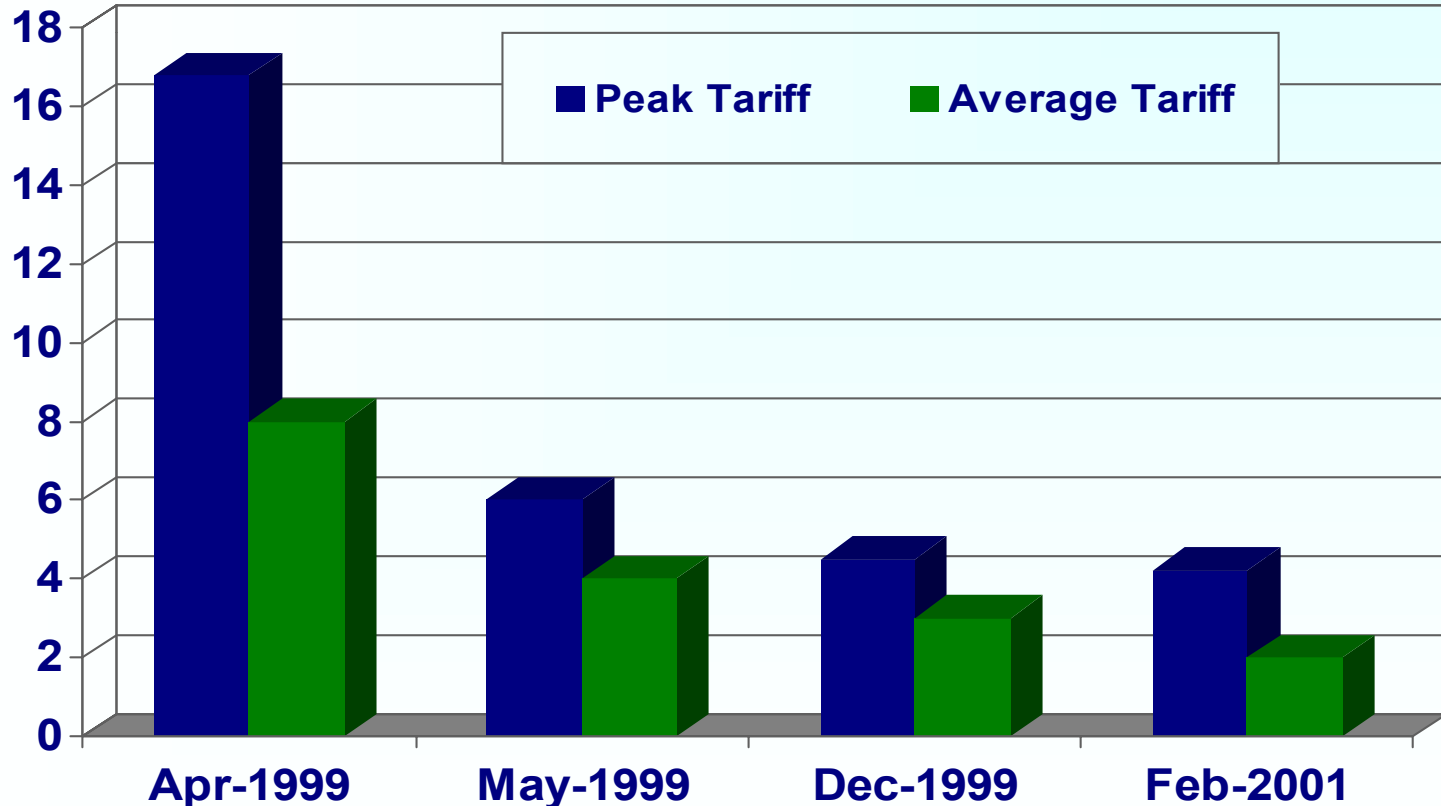


- **Lower Tariffs.**
- **Increased Coverage in more cities & towns.**
- **Growing Subscriber Base.**

# Increasingly Affordable Tariffs

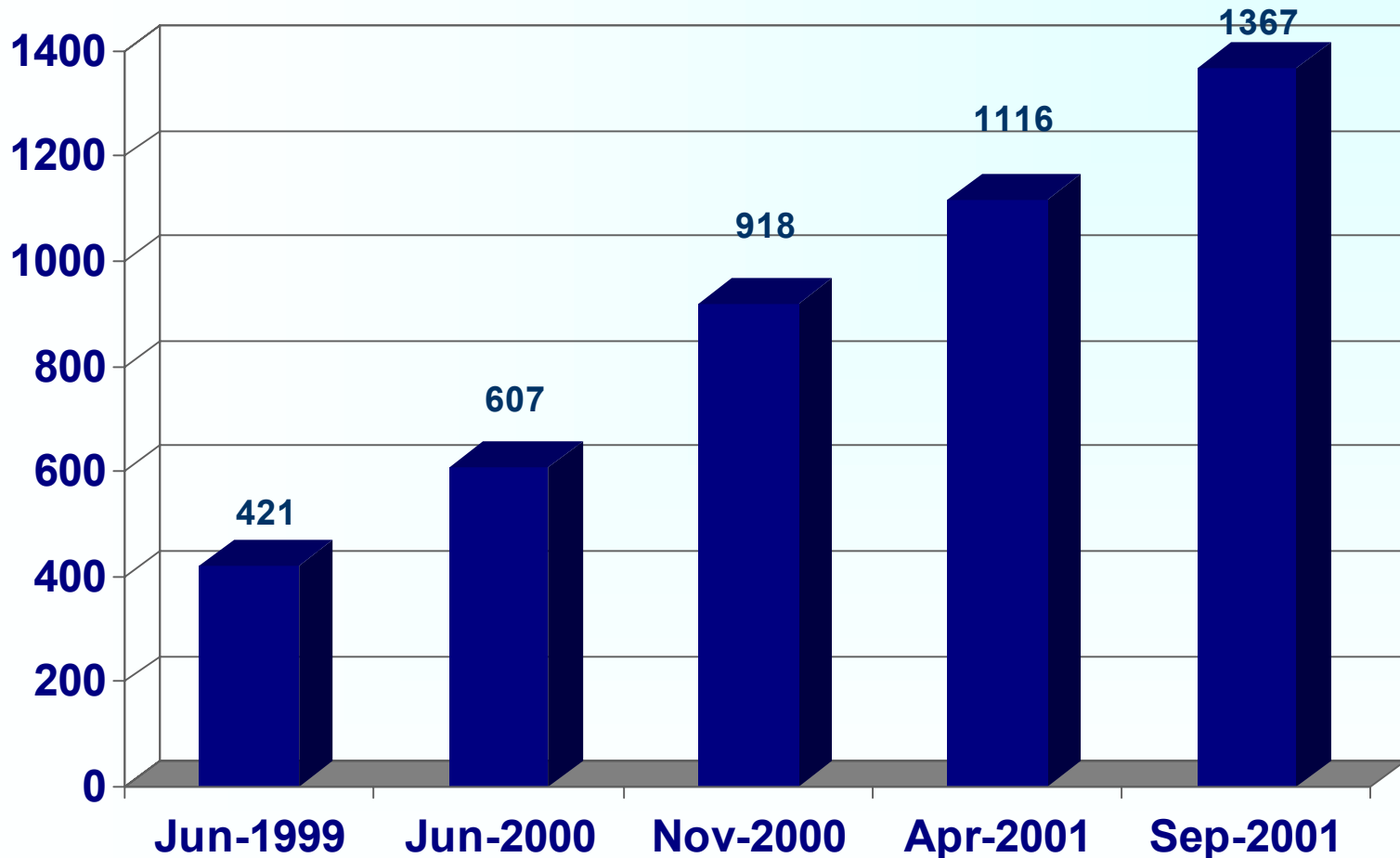


Tariffs have fallen by more than 90% in the last two and a half years...



Operators have always been offering services at tariffs lower than the ceiling prescribed by the Regulator.

# Greater coverage in cities & towns

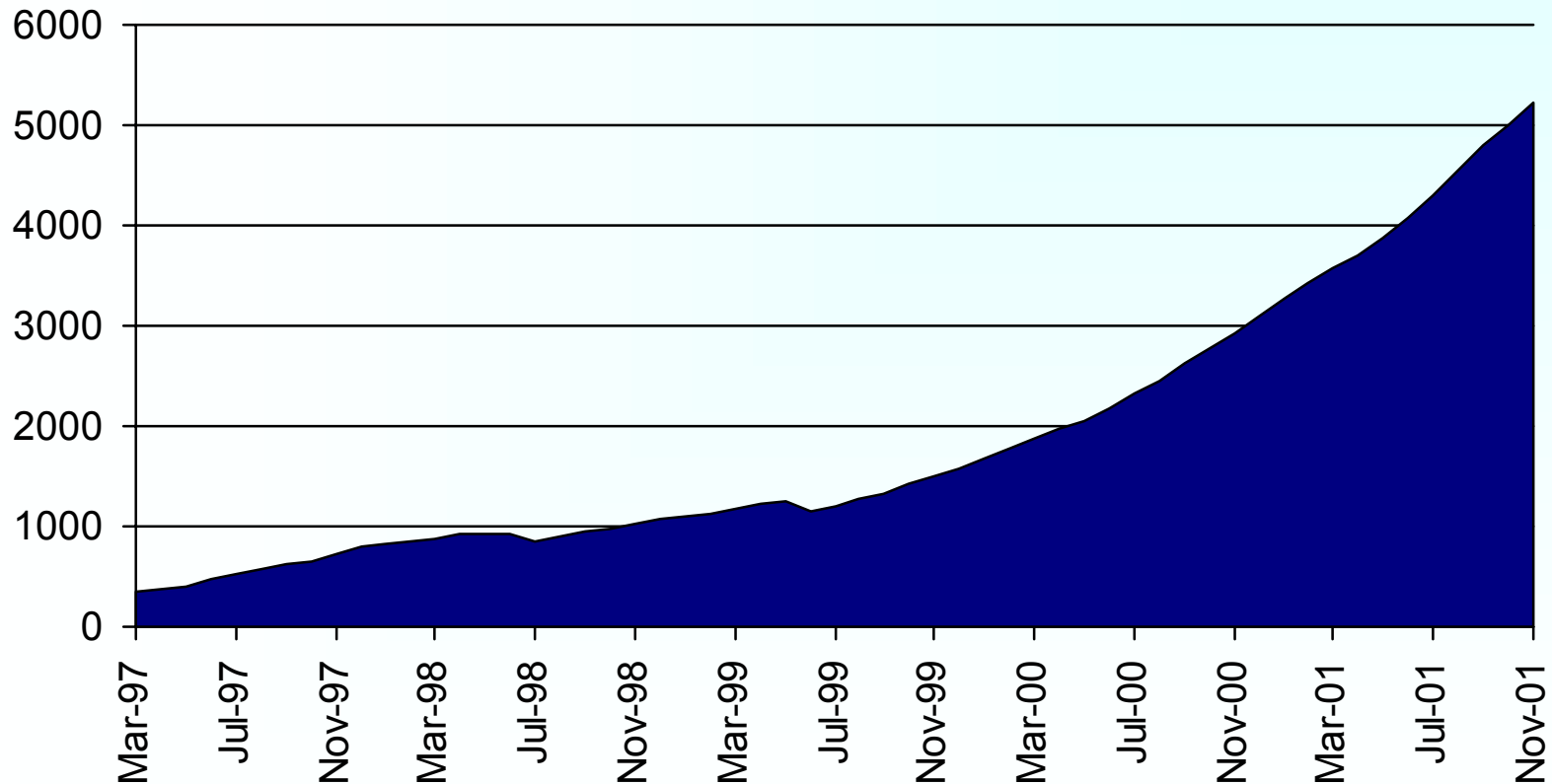


Renewed viability of industry made it possible to extend the services to more towns & reach out to marginal consumers.

# Growth in Subscribers



The number of cellular subscribers all over India crossed 5.2 million by end- November 2001.



**Point of inflexion appears to have been reached soon after NTP 99 was announced.**

# Are we Performing to our Full Potential?



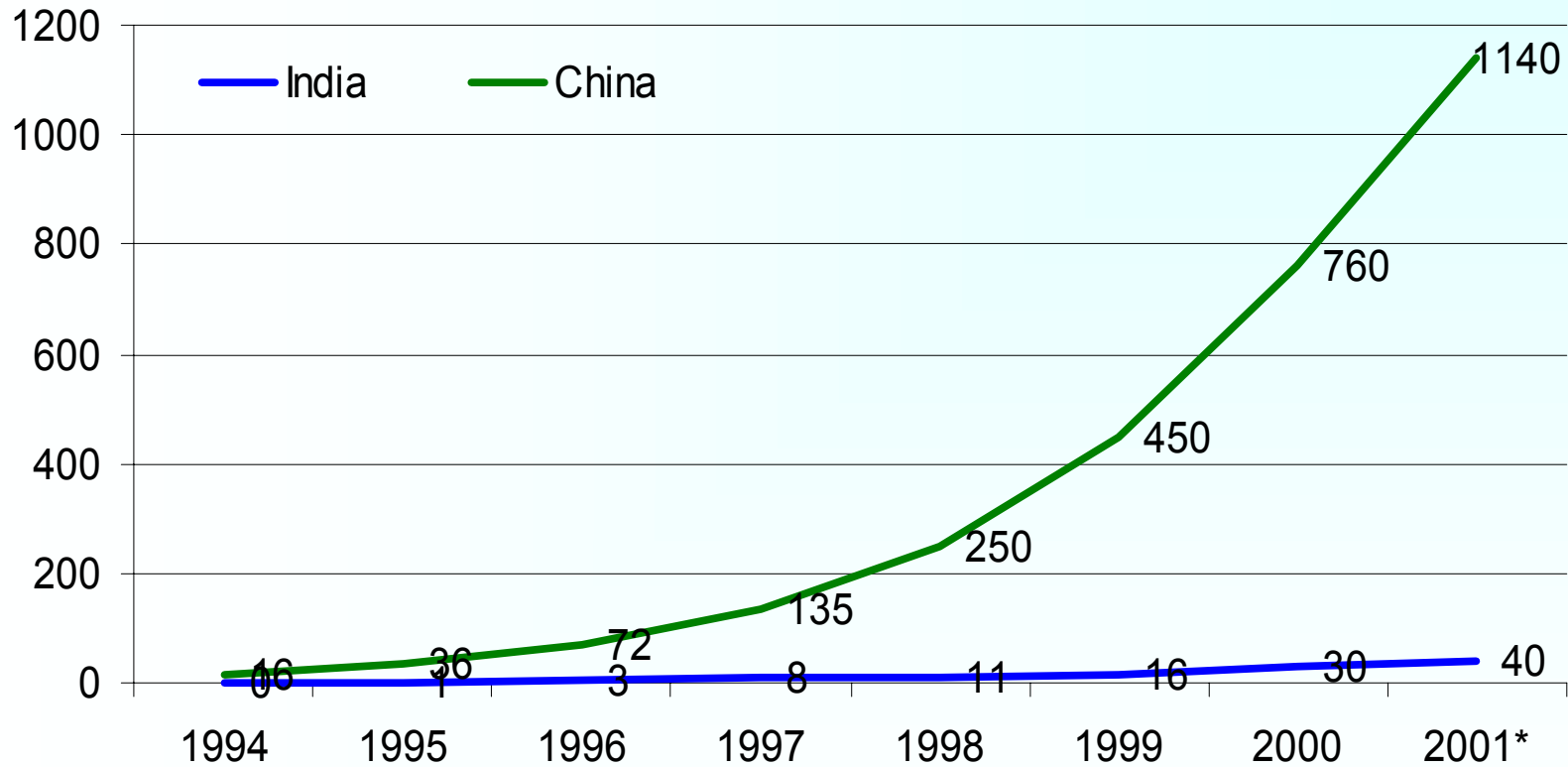
## ➤ India versus China

- Growth of Subscribers
- Basic Indicators
- Consumer Market Indicators
- Cost of Mobile Services

## ➤ Probable Reasons for China's Success

- Nil License Fee Levies
- Ample Spectrum Availability
- Minimal Spectrum Usage Charges
- Nation-wide Footprint

# India vs. China – Growth of Subscribers



**China is adding on 5 million subscribers every month – the total number that the Indian industry has achieved in six years of service.**

# India vs. China : Basic Indicators



		<u>China</u>	<u>India</u>
GDP growth rate (last decade)	%	8.8	5.1
Population growth rate (last decade)	%	1.1	2.2
Per capita GDP growth rate	%	7.7	2.9
Population (current)	Million	1404	1012
GDP per capita (present)	USD	887	424
Mobile Users (June 2001)	Million	117	4

**Per capita GDP in China is double that of India due to higher growth of GDP & lower growth of population in the last decade.**

# India vs. China : Consumer Market Indicators



		<u>China</u>	<u>India</u>	<u>China/India</u>
TV penetration	Million	177	82	2.2
Cable Connections	Million	90	31	2.9
Computers	Million	16.3	5.5	2.9
Internet users	Million	26.5	6	4.4
Telephones-Fixed	Million	164	34	4.8
Telephones-Mobile	Million	117	4	29.3

Ownership multiple for mobile phones in India is way out of line with other consumer market indicators.

# India vs. China : Cost Of Mobile Services



In Rupees

	<u>China</u>	<u>India</u>
<b>Connection Fee</b>	<b>Nil</b>	<b>1260</b>
<b>Monthly Subscription</b>	<b>Part of new bucket plan</b>	<b>395</b>
<b>Peak tariff</b>	<b>1.44-2.88</b>	<b>4.00</b>
<b>Off-peak tariff</b>	<b>0.70 – 1.44</b>	<b>1.80</b>

**Significant difference in the tariff offerings between the two countries. China's advantage is further enhanced if we take into account its superior purchasing power.**

# Probable Reasons for China's Success



## 1. Nil License Fee Levies

- **China** - the Chinese cellular operator has to pay nil license fees.
- **India** – in contrast, the Indian operators despite moving to a more rational telecom regime, still have to pay a hefty entry fee and an annual license fee of between 8-12% of their revenues.
- The recent auction for the 4<sup>th</sup> cellular license slot fetched the Government over Rs. 1,633 crores.
- High cost structure leads to higher tariffs....lower growth...

# Probable Reasons for China's Success



## 2. Ample Spectrum Availability

- **China** - The two Chinese mobile operators have perpetual right of usage of 2x16 and 2x29 MHz of spectrum respectively.
- **India** - the Indian cellular operators are given a minimal 2x4.4-6.2 MHz of spectrum.
- Indian operators have on an average less than a fourth of the spectrum available to their Chinese counterparts.
- Paucity of this resource adversely impacts both cost & quality of service,
- There is an urgent requirement to increase the quantum of spectrum available to cellular operators to lead to better quality and more affordable services.

# Probable Reasons for China's Success



## 3. Minimal Spectrum Usage Charges

- **China** – mobile operators in China pay a negligible amount as spectrum usage charges. China mobile paid a flat 15 million RMB as spectrum usage charges, which on its operating revenues of 64 Billion RMB, works out to a negligible 0.02% of revenues.
- **India** - Indian cellular operators on the other hand have to pay 2% + 1% of their revenues plus other charges for spectrum usage.
- As a percentage of revenues, spectrum charges paid by Indian operators are 100 times that paid by their Chinese counterparts.

# Probable Reasons for China's Success



## 4. Nation-wide Footprint

- **China** has duopoly with each operator having a national footprint.
- **India** - 81 cellular licensees in 18 circle & 4 metropolitan cities in India – resulting in a highly fragmented cellular market & no economies of scale.
- Further, even if a cellular operator may offer services in contiguous circles, he is still compelled to go through the national long distance operator for inter-circle calls.
- Long distance tariffs in India being amongst the highest in the world – CMSPs are unable to offer their customers affordable inter-circle calls.

# Way Forward for India – 5 point Program



**Affordable Tariffs will drive growth. This however will require :**

**1. Policy & Regulatory Stability.**

- Full implementation of mandates of NTP 99.
- Considered Move to Convergence

**2. Availability of Strong Competition Laws**

**3. Seamless, Cost based & Equitable Interconnection**

**4. Adequate & Affordable Spectrum**

**5. Early Introduction of CPP**

# Affordable Tariffs



- **Affordability is the key factor that will determine the growth of the service.**
- **Future growth has to come from the marginal subscribers, in the smaller cities & towns & even the rural areas – this requires lower tariffs.**
- **Although the tariffs have dropped drastically, in the mind of the consumer, there is still scope for further reduction.**
- **But tariffs are driven by costs. Cellular till date has been a high cost industry. Plus the industry still has huge accumulated losses that need to be wiped out.**

## **ACTION :**

- **Dispense with high levies & impose only a service tax. The Government will become a partner in industry growth & benefit from increased revenues through service tax.**

# 1. Policy Stability - Implement NTP 99



- Policy flip-flops & regulatory ambiguity are viewed with concern by foreign investors who either :
  - Await clarity on policy direction – putting the sector in a limbo.
  - Or divert their funds to competing destinations – sector loses out on valuable FDI.
  
- NTP 99 is an excellent policy, but has suffered considerably, both in implementation & interpretation.
  - Mandates explicitly provided in NTP 99 are disregarded - e.g. direct inter-circle connectivity
  - New interpretations are sought to be given to the policy e.g. WLL based mobility to fixed operators.
  
- Such policy deviations will not only have a disastrous impact on the viability of cellular businesses, but also endanger the huge investments that have been made in the sector.

## ACTION :

- It is imperative that the policy provisions of NTP 99 be upheld & implemented by the Government in both letter and spirit.

# 1. Policy Stability : Move to Convergence



- **Convergence Bill is being considered within 2 years of formulation of NTP 99 - frequent changes in policy & regulatory framework are not desirable.**
- **Bill does not achieve anything that is not possible under NTP 99 – in fact leads to over-licensing & over regulation which may stifle growth, constrict innovation & deter foreign investment.**
- **Bill suffers from certain crucial flaws:**
  - **Gives overriding powers to the Government**
  - **Is silent on the treatment of existing licensees**
  - **Authority overlaps in matters of**
    - **spectrum (assignment & payment)**
    - **as well as anti-competitive practices**
  - **Allows CCI to sit in judgment on itself.**

## **ACTION :**

- **Move towards convergent should only be considered after all underlying regulatory, licensing and competitive issues have been satisfactorily addressed**

## 2. Strong Anti-Competition Laws



- Regulation of the incumbent operator is a matter of overwhelming concern for private operators.
- The incumbent operator (BSNL / MTNL) with monopoly profits & monopolistic control over bottleneck facilities, can indulge in predatory pricing and other anti-competitive practices to the detriment of the private operators.
- There is a need for Regulator to intervene and if necessary, over-regulate the incumbent state-owned monopoly to safeguard the interest of the fledgling private sector.
- Simultaneously, ensure early introduction of a strong competition regulation and clear separation of accounts especially for SMP operators offering vertically integrated telecom services.

### ACTION :

- Ensure specific regulation of activities of SMP operators.
- Ensure early introduction of Competition Bill.

# 3. Seamless & Equitable Interconnection



- Interconnection between networks - a critical element of any telecom service.
- Costs & availability of interconnection will affect cost and availability of the service.
- Thus principles of interconnection mandate that interconnection between operators must be equitable, cost-based & non-discriminatory.
- These principles have been affirmed by TRAI, but till date, they have not been adopted or implemented. Gross inequities still prevail in this aspect, which result in higher cost of services.

## ACTION :

- Seamless, cost-based, equitable & non-discriminatory interconnection is a crucial pre-requisite to be able to offer affordable services.

## 4. Adequate & Affordable Spectrum



- Frequency spectrum is an extremely scarce and precious national resource.
- It is imperative that this resource is optimally priced, equitably allocated and efficiently utilized.
- A study done by COAI for 31 countries covering 114 GSM operators, the average spectrum allocation per operator was approximately 2 x 17 MHz & 2x13.4 MHz was operators in Asia Pacific countries.

### ACTION :

- India must try & achieve parity at least with Asia-Pacific norms as regards availability of spectrum.
- Charges for spectrum should also be brought in line with the Chinese model.

## 5. Introduction of CPP



- Having to pay for incoming calls is one of the most serious roadblocks to the growth of cellular services
- Over 95% of the world telecom regimes are on a calling party pays system.
- China is an exception, but this has not affected the growth of the Chinese mobile market because :
  - Mobile tariffs in China are already very low - in Indian purchasing power terms, mobile tariffs in china are currently 50% of the prevalent Indian tariffs.
  - Differential between fixed and mobile tariffs is not very significant. - the ratio of fixed to mobile tariffs in China has historically been 1:5 whereas in India this ratio has been brought down from 1:42 to 1:10.
- Efforts to introduce CPP have been initiated for the third time. If this is achieved, the cellular market will explode, as one of the biggest barriers to subscribing to a mobile service will be removed.

### ACTION :

- Strive for early introduction of a CPP Regime.

# Conclusion

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- **In telecommunications, India is way behind other comparable economies.**
- **This is a very serious handicap for the achievement of adequate economic growth and global competitiveness.**
- **Good policies are not enough. The process, detailed structure and on-going implementation are the key to success.**
- **We have to most urgently create an environment that is conducive for the play of viable and effective competition.**

# Conclusion

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**“Creating effective competition in telecommunications is the single most important step that Governments around the world need to take to bring the benefits of the death of distance to their people”.**

**- Frances Cairncross**