Indian Cellular Mobile Industry
Present & Future

1 September 2003
New Delhi

By
T V Ramachandran
Director General, COAI

The Importance of Telecommunications

- Information is the Key to the Social & Economic Development of a Nation.
- Axiomatic that efficient, widespread affordable telecommunication services critical for the spread of knowledge & information.
- Jipp's law shows that there is a strong correlation between telecommunication (as measured by tele density) and economic development (GDP per capita)

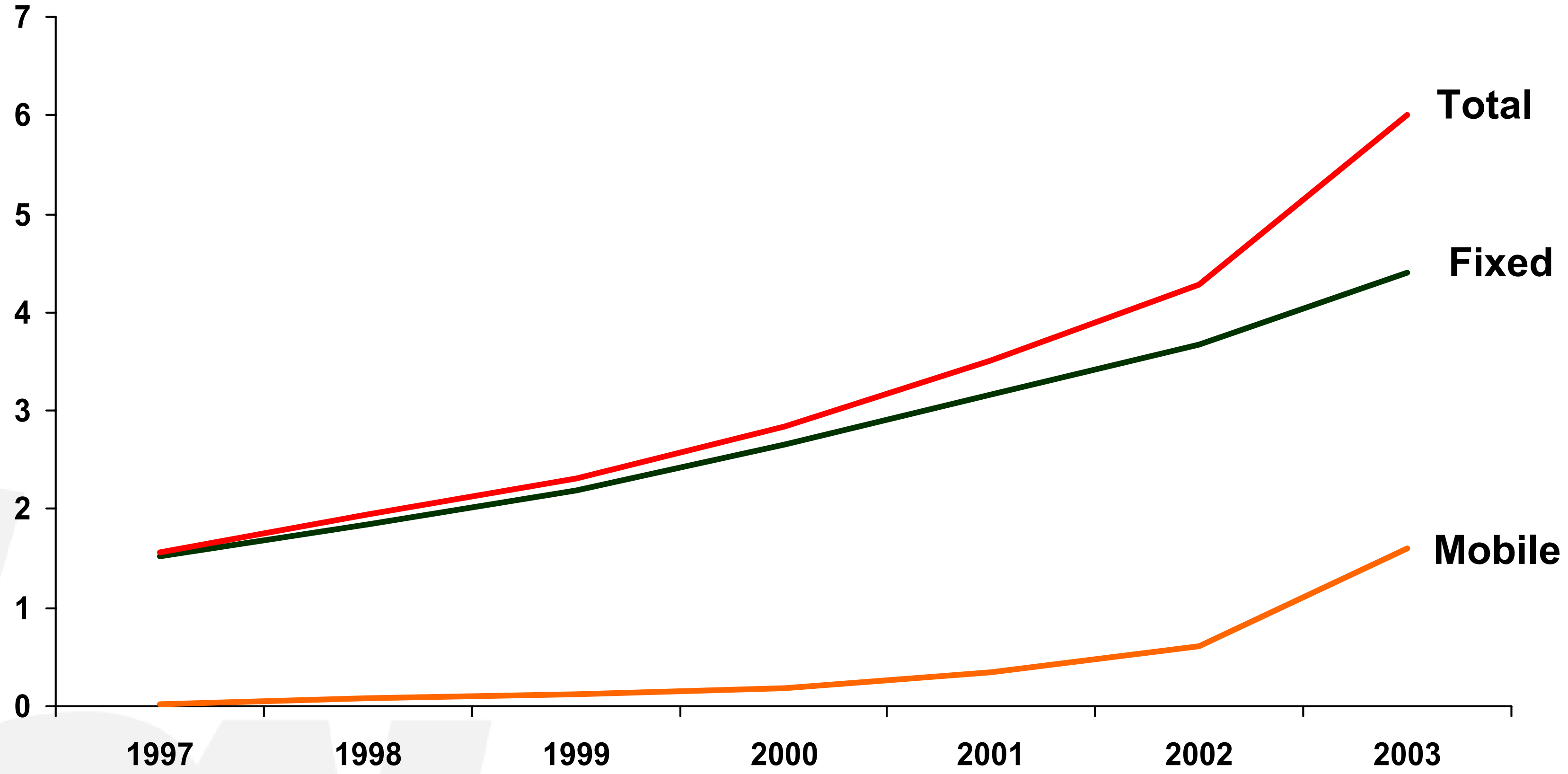
TO ACCELERATE ECONOMIC GROWTH, INDIA NEEDS TO URGENTLY INTENSIFY EFFORTS TO IMPROVE TELEDENSITY

India : Current Status

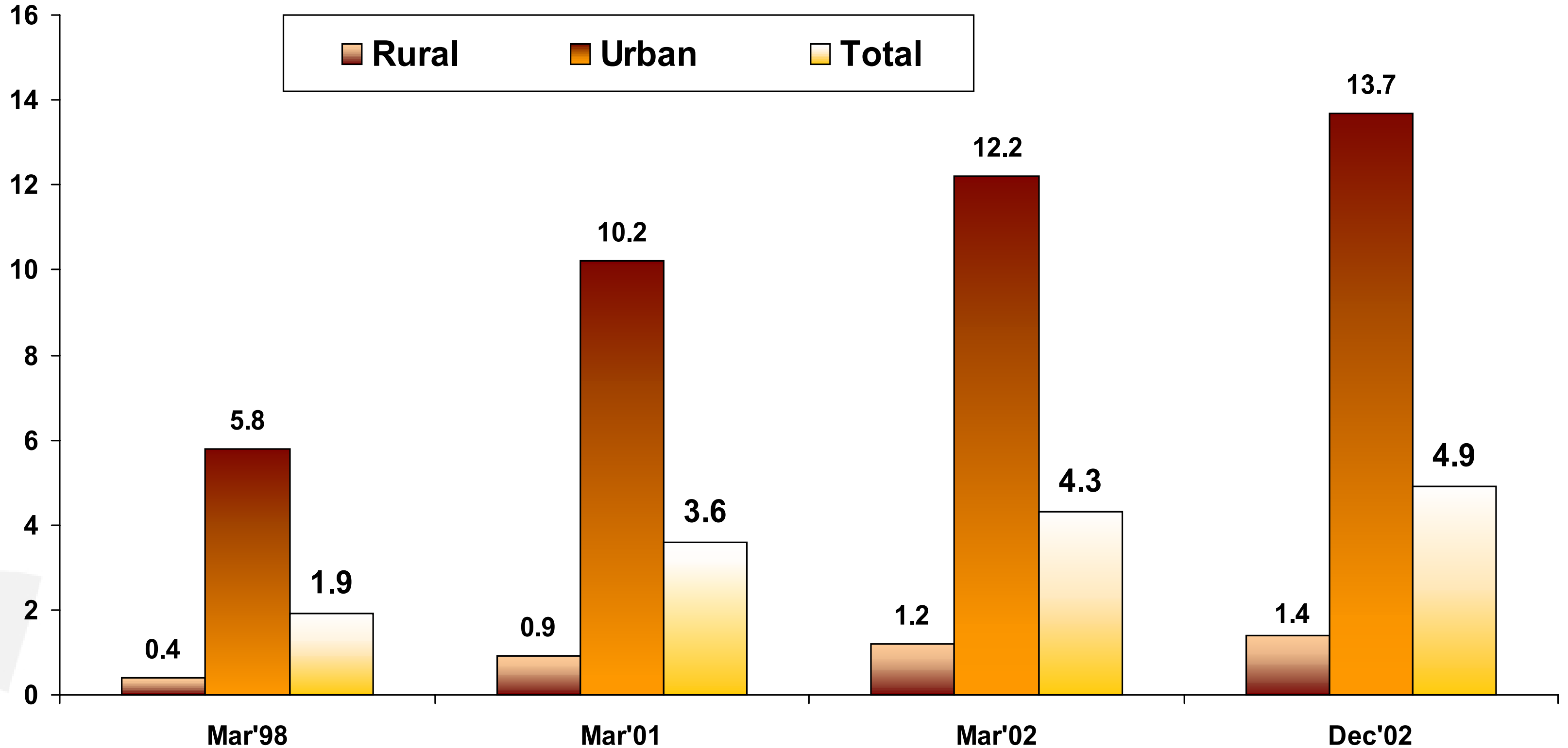
- Total tele density (mobile + fixed) of about 6%, which is far below the global average. Connecting India presents formidable challenges, with the population exceeding one billion,
- 24 languages spoken by more than one billion people,
- 70% of population living in rural areas,
- more than 600000 villages
- of which nearly 91309 villages are without even a single telephone,

WHILE INDIA HAS DONE CREDITABLY IN THE FACE OF DAUNTING CHALLENGES IT IS OBVIOUS THAT WE HAVE A LONG WAY TO GO TO CATCH UP WITH THE WORLD AVERAGE

Growth in Tele density per 100 population



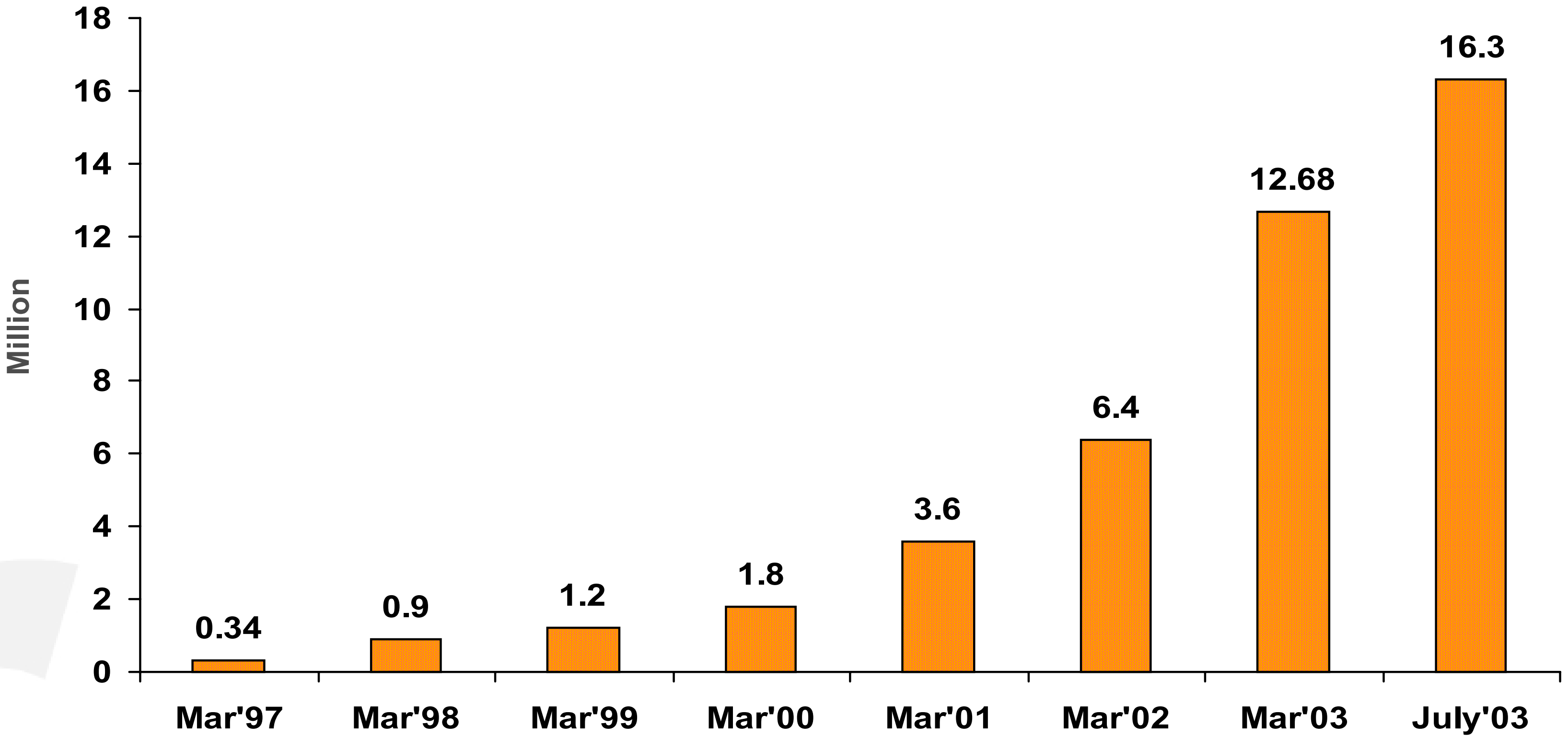
Digital Divide in India



EVEN AS OVERALL TELEDENSITY HAS RISEN, THE GAP BETWEEN RURAL & URBAN TELEDENSITY HAS DISTURBINGLY WIDENED

Growth in Cellular Communications

Growth in subscribers

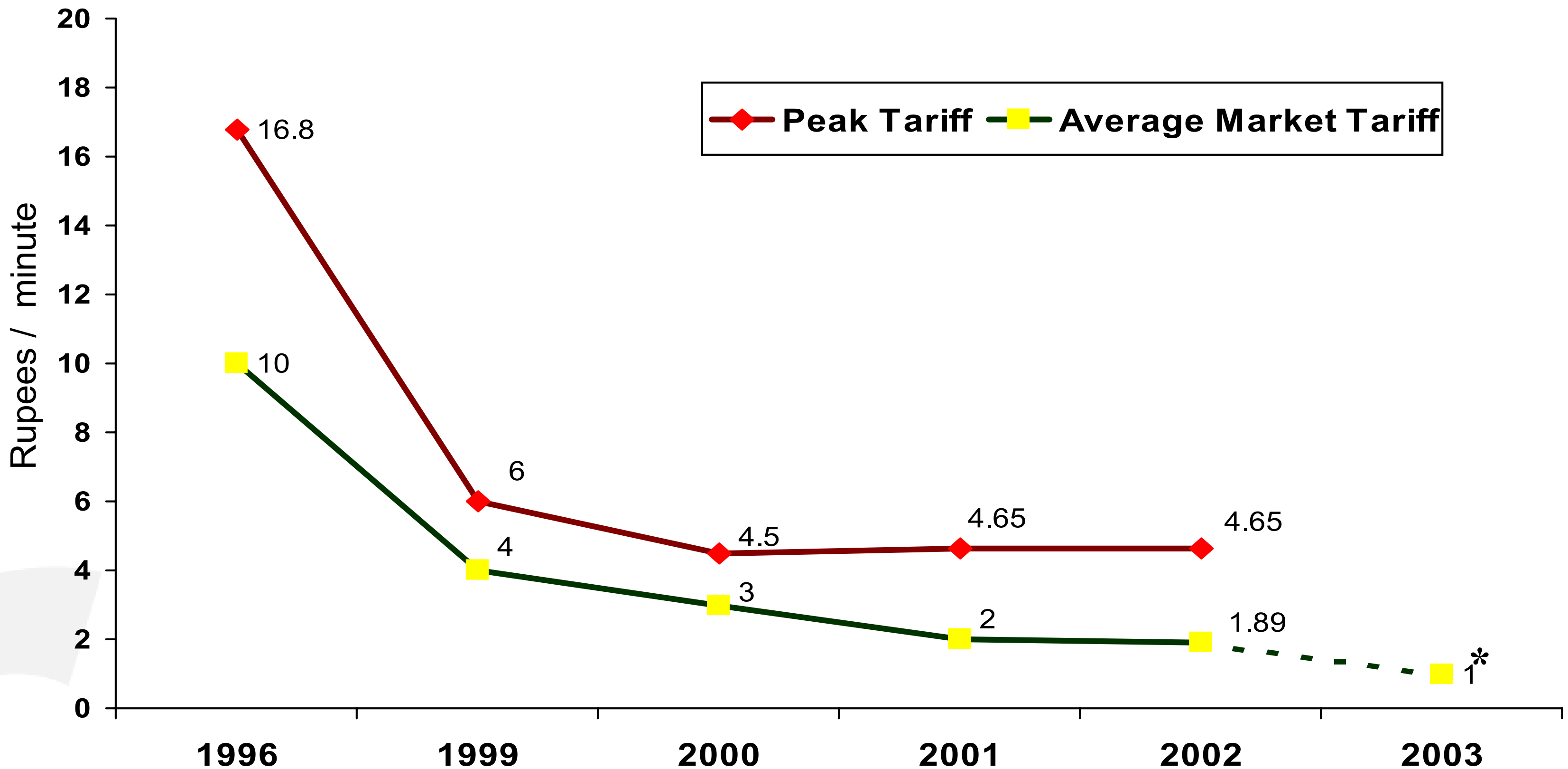


GSM CELLULAR SUBSCRIBER HAVE BEEN GROWING AT A HEALTHY RATE – A CAGR OF AROUND 80% FROM 1997-2002.

Indian Cellular – Current Status

- Networks
  - 69 Networks on Air
- Subscribers
  - Over 16 million subscribers by July end 2003
  - Subscriber adds at around 7-8 lakh subscribers per month.
  - Subscribers have grown at a CAGR of 109% since 1995
  - Constitute around 20% of current national Tele Density
- Tariffs
  - Dropped by over 75% since 1996.
  - Presently amongst lowest in the world
- Coverage
  - Services in over 1640 cities & towns & thousands of villages– March 2003
- Infrastructure
  - > 15,000 Kms Backbone, 69 MSCs, 214 BSCs, 6215 BTSs – August 2002
- Investments
  - Around Rs. 25,000 crores by March 2003

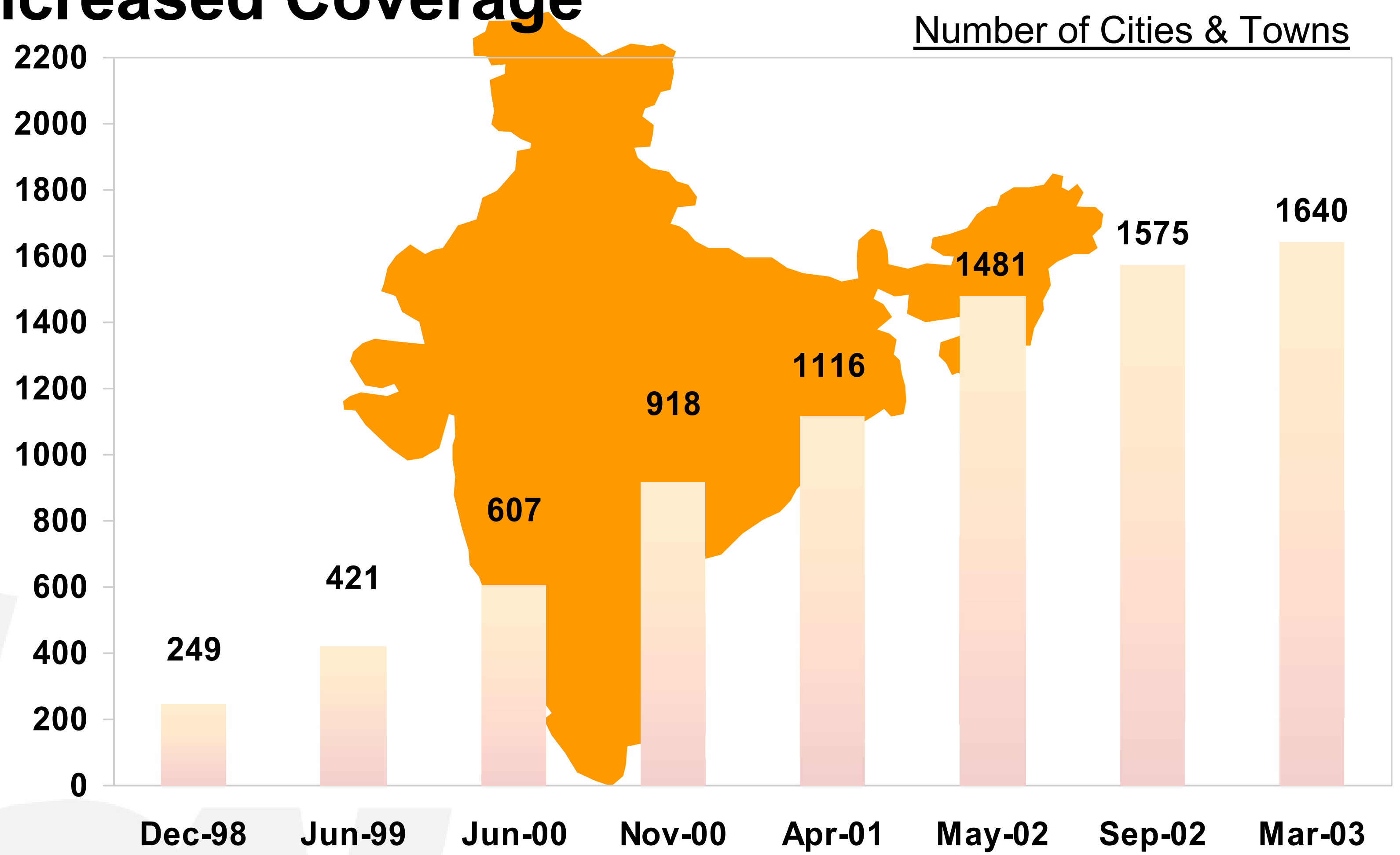
Enhanced Affordability – Airtime Rates



- Air time rates have plunged by over 75% from 1996 to date
- Market tariffs have always been below Regulator prescribed standard tariff
- Low Tariffs reflect intensity of market competition

* Estimated

Increased Coverage



Coverage

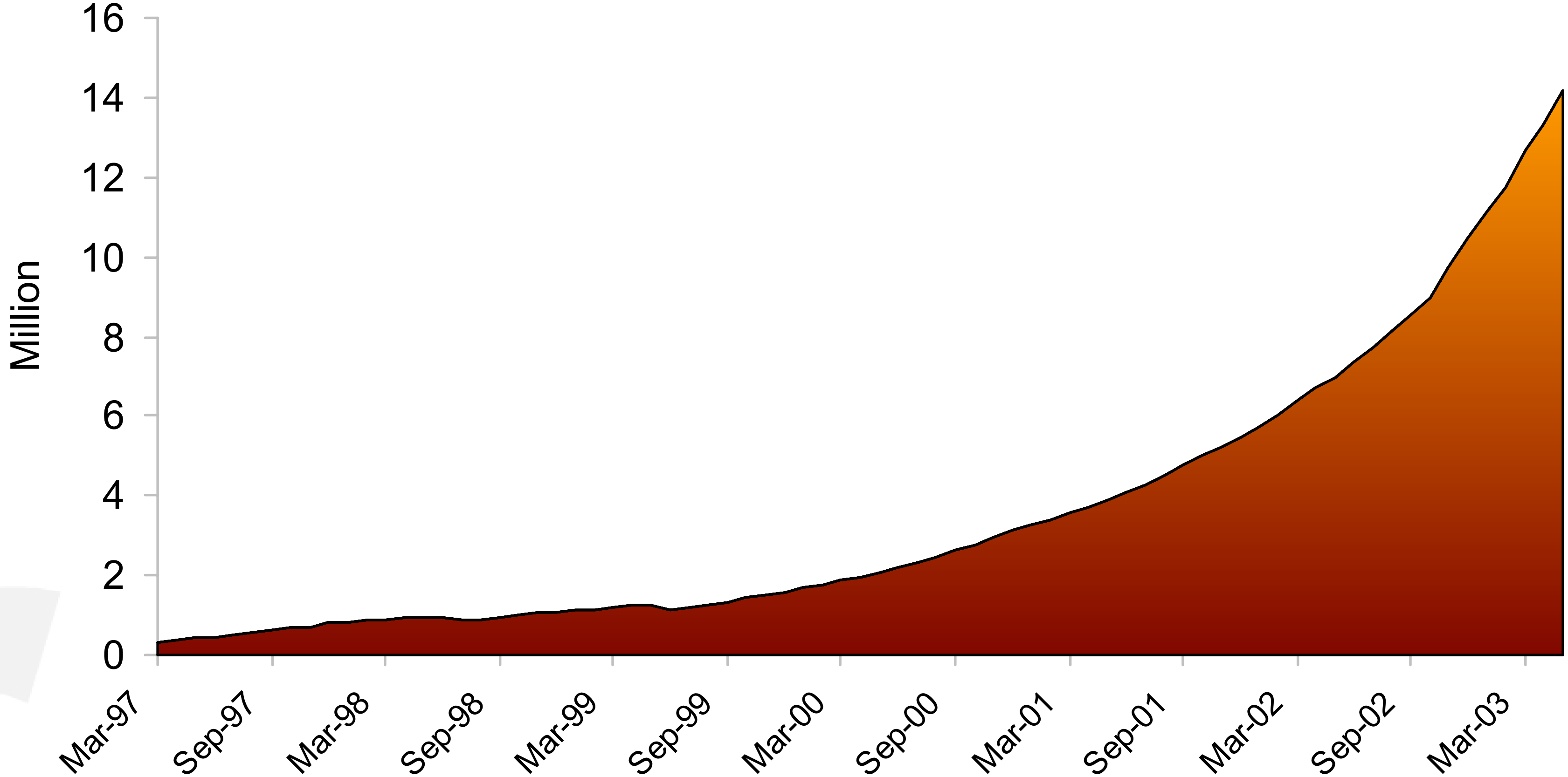
Network coverage as a % of geographical area	
Metros	100%
A Category Service Area	15 %
B Category Service Areas	9%

Cellular Density	
Metros	10%
A Category Service Area	0.8%
B Category Service Area	0.4%

Population covered	
Metros	100%
A Category Service Area	30%
B Category Service Areas	20%

INDIA MARKET STILL HOLDS HUGE UNTAPPED POTENTIAL

Increased Subscriber Growth



Migration to NTP-99 allowed operators to :

- Offer more affordable services
- Increase coverage &
- Serve more subscribers

Growth Drivers

- Prepaid Cards
  - Account for 63% of total base & around 80% of new adds.
  - Prepaid available for as little as USD 6 per month.

- Free Incoming Calls
  - - introduction of IUC & free incoming calls will give huge fillip to cellular growth.

- More Affordable Handsets
  - Available from USD 40+, flourishing 2nd hand market - significantly lowered entry barrier.

Growth Drivers

- Value added services
  - SMS - small, but growing share of revenue enhance overall category attractiveness.
  - Roaming
- Cheaper Intra-circle long distance calls
  - Cell operators have discarded monopolist distance-based pricing model
  - Generally, the Service Area is a local call.
- Lowering of DLD & ILD tariffs
  - Mobile to mobile long distance anywhere to anywhere in India – less than USD 0.10 per minute.

Strategies for Growth

- Consolidation
  - 4 large groups account for nearly 70% of the subscriber base.
  - M&A activity is the market response to the policy which induced proliferation of operators.
  - Strategic alliances between players
  - In most European & Asia Pacific countries, the average number of cellular operators is between 3-4.

- Cost Efficiencies
  - Opex per subscriber has reduced by 75% in the last 4 years - primarily due to increased subscriber base, economies of scale & cost efficiency measures.

Key Policy & Regulatory Issues

1. WLL Mobility
2. Unified Licensing
3. Interconnection;
4. Spectrum Issues;
5. Competition Issues
6. High Cost Structure of Industry

1. WLL Mobility

- WLL (M) is contra to both NTP-99 & FSP License

- Further, even the conditions on which WLL(M) was allowed are not being enforced by the Licensor / Regulator
  - WLL(M) operators are using Mobile Switching Centres (MSCs)
  - They are not using V5.2 interface to connect the WLL system directly to the Local Telephone Exchange
  - They are offering roaming under the garb of call forwarding & multiple subscriptions
  - They are offering all offer several tele & supplementary service like SMS, etc. which can only be offered by CMSPs

- Issue of legal permissibility of WLL(M) under review by TDSAT – judgment to be pronounced shortly

2. Unified Licensing

- Consultation is mistimed – pre-empts TDSAT judgment on WLL(M)
- Does not discuss policy –issues – Unified licenses not possible under NTP-99
- Narrow definition of “unified” license – only fixed & mobile
- Does not discuss impact on CMSPs – issues of migration, compensation, etc
- Recognized spectrum for existing CMSPs is sub-optimal – still recommends more players
- Does not discuss competitive scenario – impact on pure-play / smaller operators, safeguards against anti-competitive practices
- Initiative appears to be aimed only at legitimizing WLL(M) & giving FSPs right to offer full mobility while circumventing due process established by TRAI

3. Interconnection

- Cost-based & non-discriminatory interconnection are the two fundamental tenets of Interconnect pricing.
- TRAI has adopted these tenets in principle, but is not implementing them in practice.
- IUC charges for cellular are not cost based (determined by TRAI at 10% of total costs)
- CMSPs are given inadequate POIs – leading to inefficient call routing & loading of unnecessary STD costs on consumers
- A fair & cost based IUC regime must be put in place

4. Spectrum

- Adequate spectrum key to high quality, cost-efficient mobile services
- International Practices in GSM Spectrum
  - International average = 2x17.1 MHz / operator (COAI study of 114 operators in 31 countries in Europe & Asia-Pacific)
  - China : average spectrum = 2x22.5 MHz / operator
  - Important cities in the US & Europe = 2X30.5 MHZ / operator (29 operators in US, Italy & France)
- Indian CMSPs allocated fraction of world average – leading to difficulty in meeting TRAI's QOS parameters

❖ Spectrum entitlement be brought in line with international average

❖ Higher allocation may be considered for metros & important cities.

❖ Extended GSM band be vacated for the GSM operators – Fixed wireless spectrum be relocated in the 1800 / 1900 MHZ bands

❖ Usage charges be sufficient only to cover costs of administration & regulation.

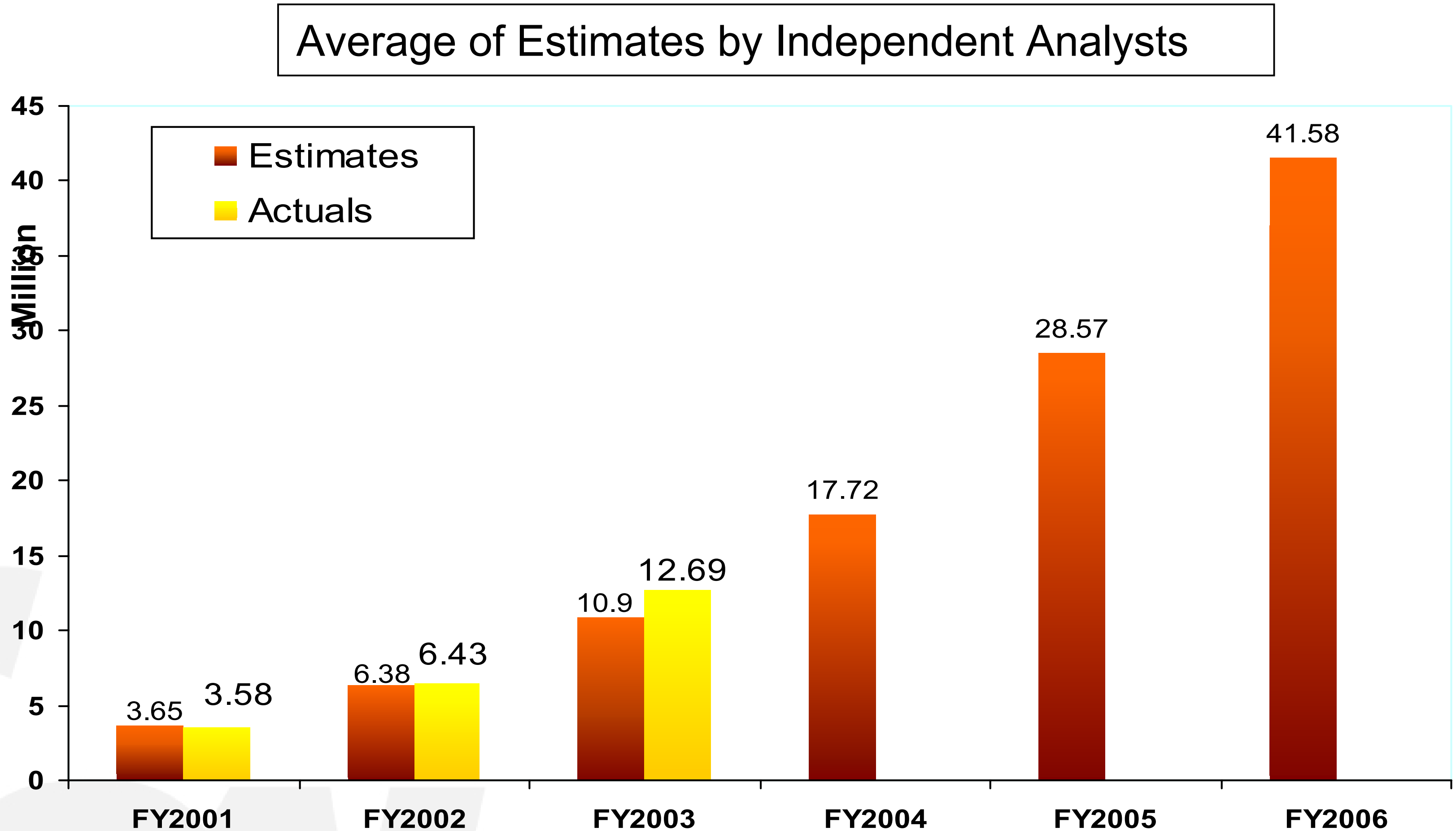
5. Competition Issues

- Predatory & anti-competitive behaviour of Vertically Integrated Units (VIUs), especially BSNL of serious concern
- TRAI Consultation Paper on unified licensing, which promotes integrated operators, further enhances industry concerns
- Introduction of unified licensing in absence of adequate regulatory safeguards makes 'pure play' CMSPs vulnerable to unfair competition affecting their viability & survival
- Unified Licensing must be preceded by strong competition laws
- Speedy intervention of Regulator crucial to protect pure-play and smaller operators.
- Regulator must introduce & implement asymmetric regulation
- Competition Regulation of VIUs must cover all aspects - commercial transfer pricing for common facilities, accounting separation, safeguards concerning bundling, predatory pricing tactics, etc.

6. High Cost Structure of Industry

- Indian Cellular has lowest tariffs, but highest costs.
  - Rs. 9,000 crores - All India Entry Fees for 3 CMSPs
  - 19% of service revenues - license fee, spectrum charges, physical IC.
  - 15% of revenues - Interconnect access charges
  - Customs' duties of as much as 25%
  - Sub-optimal spectrum - adds to costs & impacts quality of service.
- Low Tariffs + High Costs cannot be sustained Industry losses already Rs. 8,000 crores as on 31-3-2003.
- For sustainable affordability, imperative to review cost structure of industry :
  - Annual License Fee & Spectrum Usage Charge covers only costs of administration & regulation.
  - Adequate Spectrum (at least 2X17 Mhz / operator) is available for superior service at lower costs.
  - Equitable, non-discriminatory & cost based access & interconnect is ensure for all service providers.

Growth Potential



- Most analyst estimates project 40 million by 2006.
- Cellular growth has always exceeded estimates

THANK YOU

tvram@coai.com