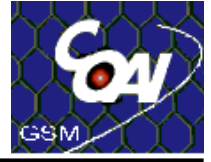




PRESENTATION TO SHRI ARUN SHOURIE
The Hon'ble Minister of
Communications, IT & Disinvestment

Cellular Operators Association of India
February 14, 2003
New Delhi

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- I. Indian Telecom: 1992 till today

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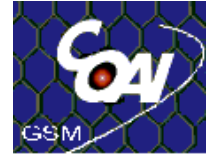
Opening of Telecom : Metro Cellular



1991	Gol invited private companies to bid for 8 metro licenses Open bidding for all. GSM was the DoT specified technology
1992	Interim licenses awarded
1992- 1994	Litigation and legal review of licenses cleared by Supreme Court
1994	Final licenses awarded and licenses signed

- 31 companies bid, 14 shortlisted and 8 awarded licenses
- Licenses awarded through bidding process in which all companies participated. Winners made pioneering investments into hitherto unknown territory and have paid Rs. 409 crores (then actual value without interest) as license fees

Opening of Telecom : Circle Licenses



1994	Gol announced NTP 94
1995	Gol invited private companies to bid for Basic and Cellular licenses separately for each circle and fixed licenses for metros. DoT specified GSM for cellular. Need for foreign partners also mandated
1995	Licenses were bid for by a large number of companies, including several that bid for Basic and Cellular in the same circles

- 32 companies bid for Cellular and 16 for Basic
- Fixed and Cellular always separate licenses even in 1995. WLL was permitted for last mile connectivity for BSOs
- CDMA mobile networks were already commercially deployed in various parts of the world

Opening of Telecom : Circle Licenses



1997	Fixed line licenses awarded after 2 year delay
1997	TRAI act promulgated. Independent Regulator TRAI appointed
1998	ISP policy announced
1998	Cellular Industry files case against DoT seeking damages for delays in permissions and clearances that have caused significant overruns in project cost
1999	NTP 99 announced - Reclassifies BSOs as FIXED SERVICE PROVIDERS

NTP 99 : Salient Features



- Perhaps the most extensive consultation process ever to formulate government policy
- Three types of Service Providers
 - Cellular Mobile Service Providers (CMSPs) : “Right to provide all types of mobile services”
 - Fixed Service Providers : “Right to provide all types of Fixed services”
 - Cable Service Providers
- Recognizes convergence, makes licenses technology neutral but service specific
- Talks about strengthening TRAI’s competition management functions
- Assured level playing field as a promise of the policy

Migration to NTP 99



- Given that existing Basic and Cellular licenses were issued under the previous policy of NTP'94, the government decided to migrate these to NTP'99
- Both Cellular and Basic licensees under NTP'94 migrated to Cellular and Fixed licenses under NTP'99
- Cellular licensees migrated as part of a settlement with the government and both parties withdrew its cases as part of its settlement
- Basic (Fixed) also migrated to NTP 99, one of their pleas on record being their Basic (Fixed) licenses were infringed upon by the new ISP policy that permitted ISPs to build and operate last mile access

Migration to NTP 99



- Settlement of Cellular resulted in giving up its duopoly
- Its important to note that at time of migration, the Cellular operators had already invested significant amounts of capital and infrastructure and paid 30% of their fixed fees to Gol
- Basic operators were barely operational and had only paid 6% of their fixed commitments to Gol
- It is wrong to characterize migration as being favorable to Cellular when Basic (Fixed) operators equally benefited from the same



Migration: A Settlement

The industry got :

- Migration to revenue share
- Six months waiver of license fee
- Extension of license term
- Promise of strengthened regulatory framework

The Industry accepted :

- No duopoly status. Review every 2 years
- Introduction of competition under NTP '99 / TRAI Act
- Sharp reductions in tariffs and rentals
- Withdrawal of court cases (claims of Rs.10,000 crores)

Migration package protected principle of service specific licenses



INDIAN CELLULAR INDUSTRY

PERFORMANCE & CONTRIBUTIONS
PICTURE BEHIND THE PERFORMANCE
INVESTOR SENTIMENT & CONFIDENCE

Indian Cellular – A Performing Sector

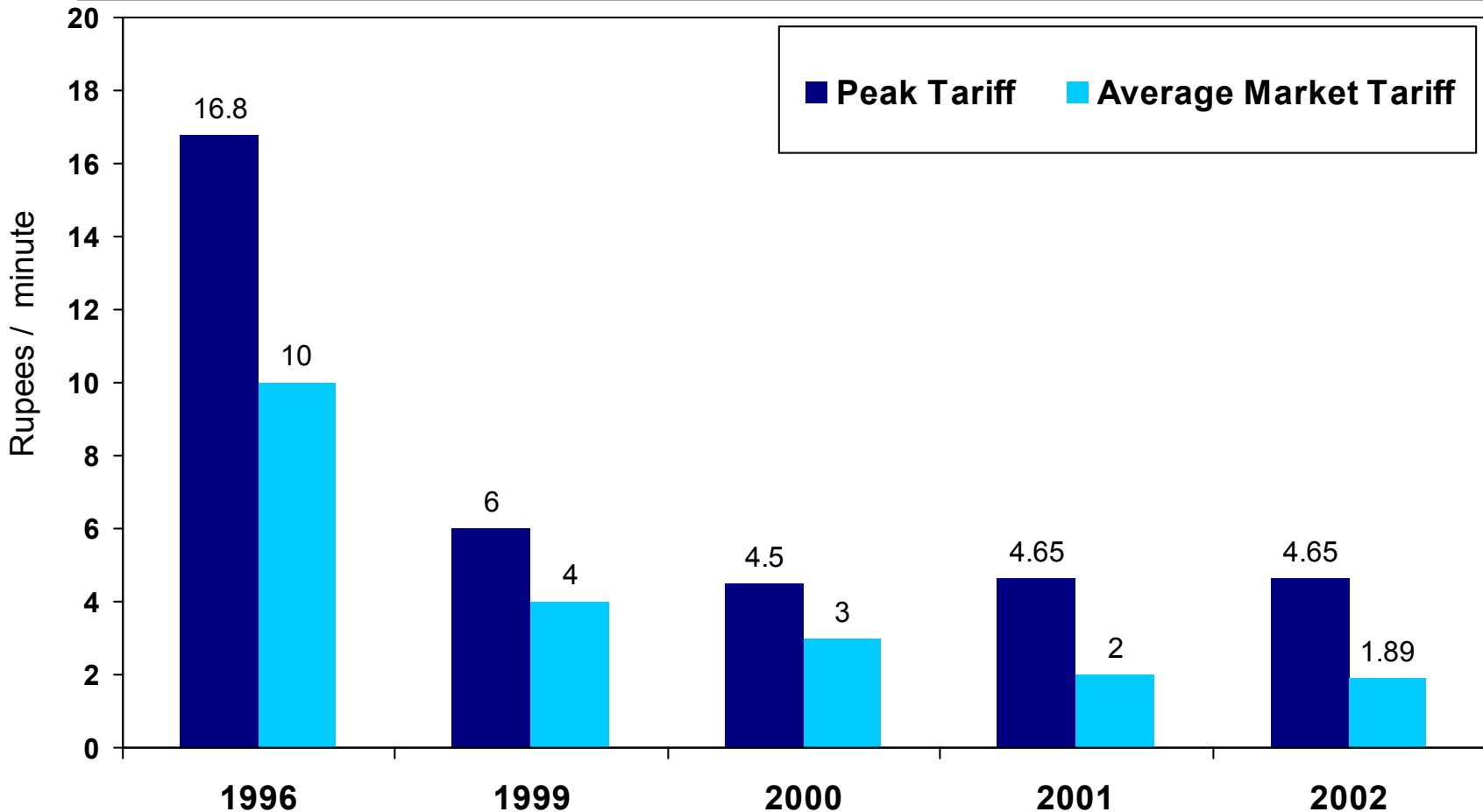


- Networks
 - 68 Networks on Air
- Subscribers
 - Over 10 million subscribers by end-December 2002
 - Subscriber adds now, at around 7 lakh subscribers per month.
 - Subscribers have grown at a CAGR of 109% since 1995
 - Contribute over 1% to national Tele Density
- Tariffs
 - Have dropped by 80% since 96
 - Presently amongst the lowest tariffs in the world
- Coverage
 - Services in over 1500 cities & towns – September 2002
 - Cellular coverage over thousands of villages
 - Have fulfilled all roll-out obligations
- Investments
 - Expected to be around Rs. 25,000 crores by March 2003

Indian Cellular is the flag bearer of India's infrastructure reforms process 11



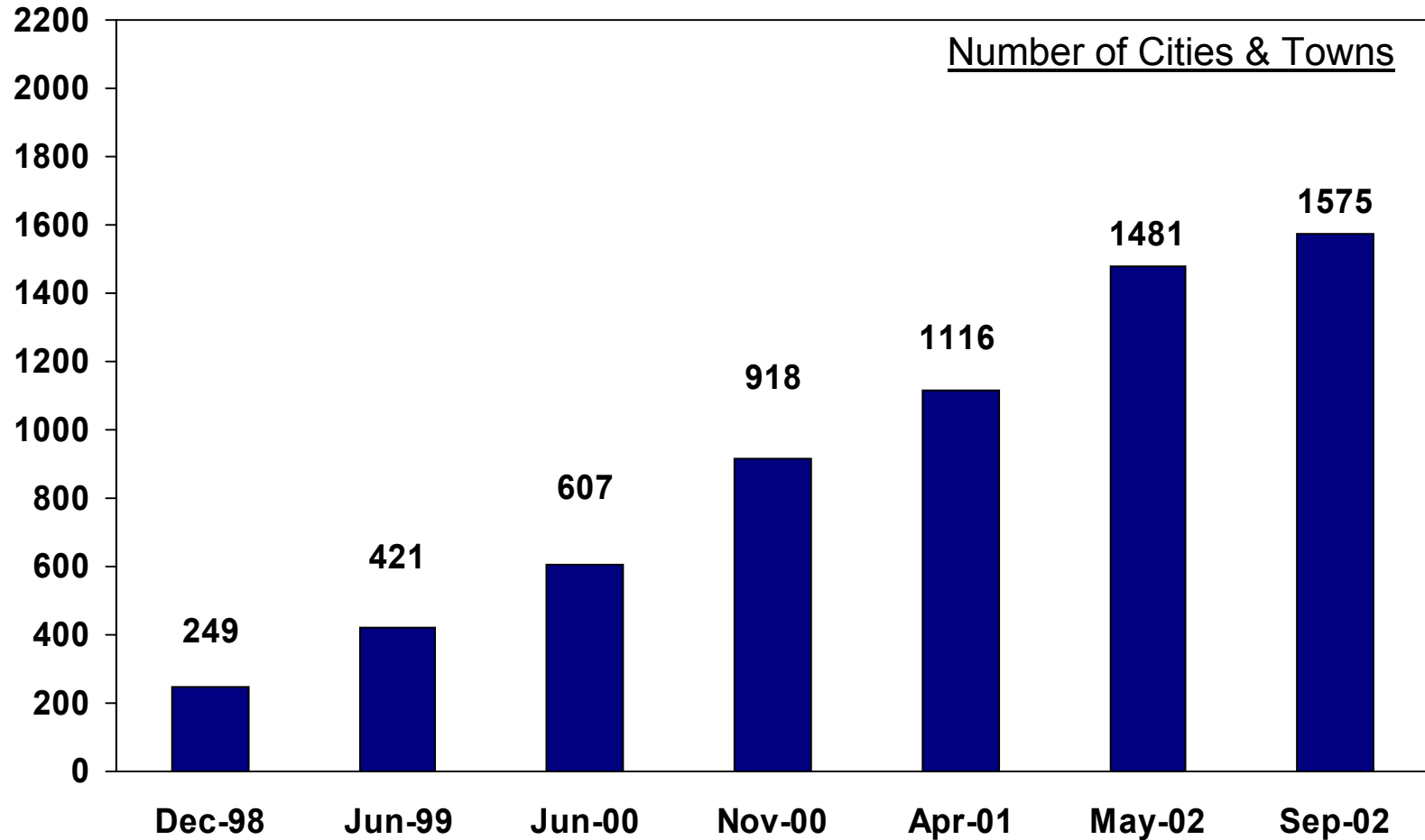
Enhanced Affordability – Airtime Rates



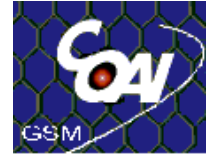
- Air time rates plunge by over 75% from 1996 to date
- Market tariffs have always been below TRAI standard tariff
- Below cost tariffs reflect intensity of market competition



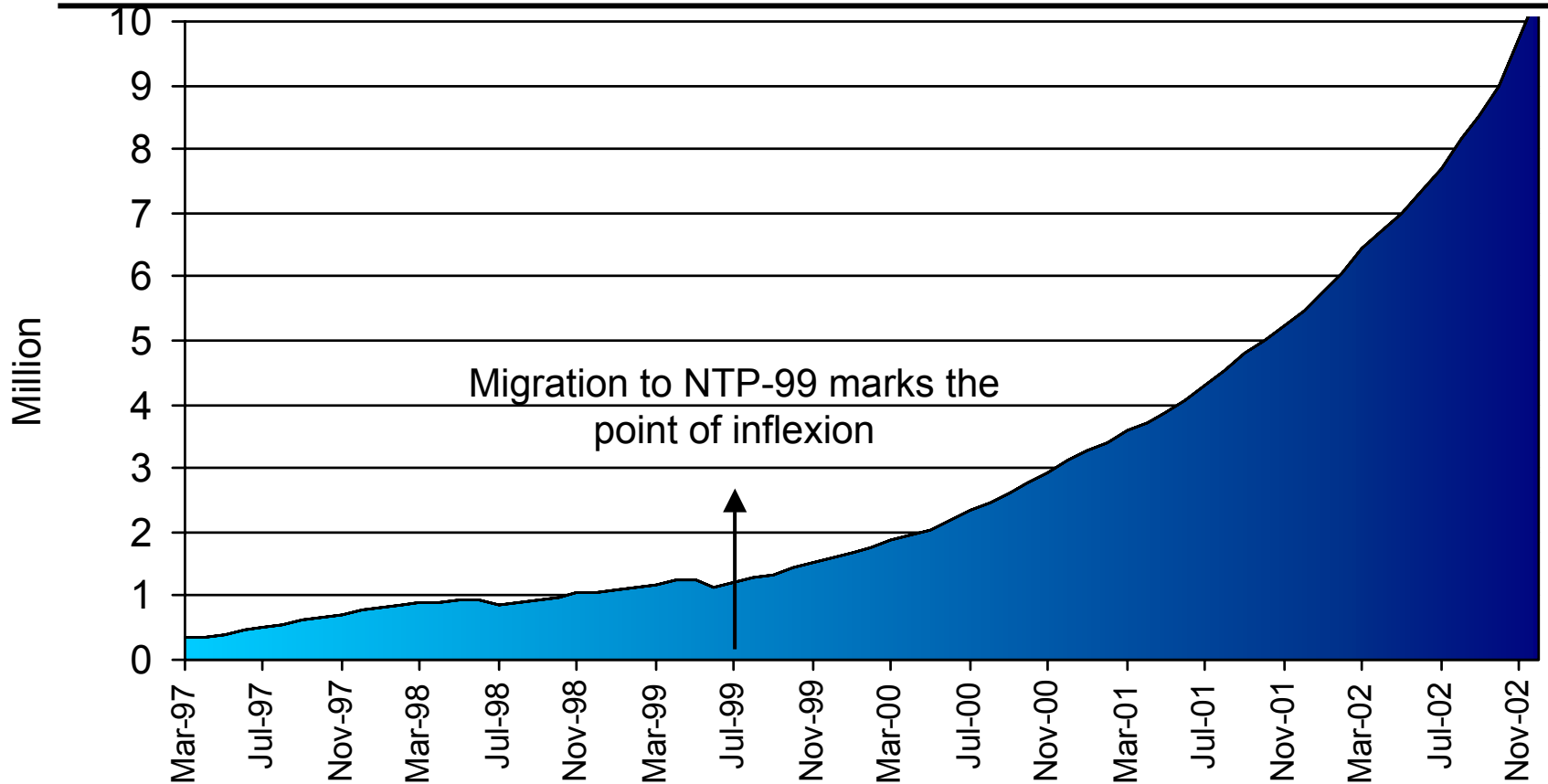
Increased Coverage



- Cellular Operators increasingly venturing into smaller cities & towns



Increased Subscriber Growth



- Cellular Subscribers to 10 million+ by end-December 2002
- Migration to NTP-99 allowed operators to :
 - regain viability
 - pass on benefits to consumers in form of more affordable services
 - Increase coverage &
 - Serve more subscribers

Indian Cellular : Promise gone sour



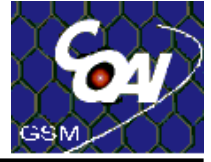
- This Performance of the Industry has been achieved at a Steep Cost. Industry Is struggling against various policy & Regulatory Issues
- Anti-competitive behavior by Incumbent and other integrated operators
- Industry has amongst the lowest tariffs in the world, but the highest cost structure – an unsustainable combination - effect already reflected in industry bottom lines - **Accumulated losses - > Rs. 7,700 crs. Rs. 800 crs in FY02 alone**
- Aggressive Performance masks incipient sickness
- Capital flows into the sector completely stopped because of total crisis of confidence amongst Investors

Indian Cellular : Promise gone sour



- Received a fillip with NTP'99, international and domestic investors welcome policy and set Indian Telecom sector firmly in radar screen of global and domestic investors
- Burst of investment activity in 1999 and 2000
- However 2 years hence picture in sector is dismal
- Sector is beset with litigation
- Total ambiguity about applicable policy, law and regulation
- Key issues driving negative investor sentiment are those of high Government (Policy) and Regulatory risk far outweighing the high growth potential

Myths about cellular Industry



- Migration – all rights given up
- CMSPs are against competition
- Cellular charged Exorbitant tariffs. Tariffs dropped only with WLL(M) entry
- Cellular Industry is opposing march of technology
- WLL (M) & Cellular addressing different market segments
- Sops has been given to CMSPs
- Cellular industry is hugely profitable
- Cellular bid with open eyes & should not complain



Key Investor Issues

Reviving Investor Confidence : Issues



I. Critical Issues

1. Mobile Services by FSPs - Enforcement of Limited Mobility
2. Prevention of anti competitive practices by Integrated Operators
3. Spectrum and Interconnection

II. Other Issues

WLL(M) - Biggest threat to Investor Confidence



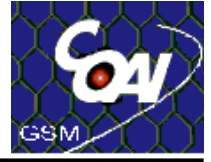
- Attempt of Fixed Service Providers to offer Cellular Mobile services without getting a cellular mobile license is the biggest threat to investor confidence
 - In violation of policy, law and promissory estoppel
- They have been permitted to offer limited mobility (legally disputed) services and this should be enforced, while the judicial review is underway

Indian telecom: The tiger has been uncaged

- A concerted effort is required to ensure profitable growth of the sector
- Strong and steady regulator required 'set the ground rules'

.....McKinsey

Wireless in the Local loop



Audio-visual Presentation



Chronology of WLL(M)

1996	Licensor (DoT) clarifies to FSPs that Mobile Handsets not permissible
1998	DoT-COAI Co-ordination committee - “No provision for Limited Mobility through WLL”
01-04-1999	NTP-99 announced
17-09-1999	DoT states on record in communication to TRAI, that FSPs cannot offer mobile services under NTP-99
12-06-2000	TRAI’s Consultation Paper for New FSP Licenses, records: NTP-99 has treated ‘WLL’ as a technique to provide connectivity for fixed services
31-08-2000	TRAI recommendations for FSP Licenses. No mention of any form of Mobility for FSPs
09-10-2000	As a means of faster roll-out, DoT decides that FSPs can offer WLL mobility – asks TRAI to make recommendations on scope of service, entry fee, etc



Chronology of WLL(M)

<p>08-01-2001</p>	<p>TRAI makes qualified Recommendations</p> <ul style="list-style-type: none"> • Requires the services to be <u>non-substitutable</u> & for <u>level playing field to be assured</u> through necessary policy changes. • Recommendations categorically state that MSCs are not used in WLL systems.
<p>22-01-2001</p>	<p>Cellular operators approach TDSAT challenging even limited mobility.</p>
<p>24-04-2001</p>	<ul style="list-style-type: none"> • Cellular industry offers to provide services at local call rates provided they are extended identical terms
<p>27-04-2001</p>	<p>GoT-IT assumes TRAI's "purposive constructive" of NTP-99.</p> <ul style="list-style-type: none"> • Does not answer the question of whether NTP allows WLL(M) for FSPs • Lays down requirements for roll-out coverage and spectrum
<p>15-03-2002</p>	<p>TDSAT judgment that does not go into any issues of merit</p>
	<p>Cellular Operators appeal to Supreme Court</p>
<p>17-12-2002</p>	<p>Supreme Court remits the matter back to the TDSAT with detailed comments on issues of permissibility, legality and level playing field²³</p>

DOT confirms that FSPs cannot offer mobility under NTP-99



- In mid-99 TRAI explicitly sought DoT's opinion on whether NTP 99 allows FSPs to provide limited mobility
- As the author of NTP 99 and as a licensor, the DoT responded to TRAI on 17 September 99:
 - “Scope of basic and cellular mobile services has been described categorically in NTP 99,provision of mobile services by private Basic Service Operators is, therefore, not permitted
 - The Basic Service Operators are not permitted to provide Mobile Services as per the license granted to them. NTP-99 also does not envisage the provision of Mobile Services by fixed Service Providers.
 - There is no relevance of any further public consultation on the subject.”



WLL(M) - Not Permitted under NTP-99

- BSOs of NTP 94 reclassified as FIXED service providers
- NTP-99 recognizes convergence clearly & distinctly classifies access providers into :
 - Cellular Mobile Service Providers (CMSPs)
 - Fixed Service Providers (FSPs)
 - Cable Service Providers. (CSPs)
- Under NTP-99, CMSPs can provide all types of mobile services while FSPs can provide all types of fixed services
- FSPs are entitled to use WLL, but only to offer fixed services.
- Further, the award of spectrum for WLL, even for offering fixed services, required the FSPs to pay both an additional entry fee as well as an additional revenue share.
- By way of precedent, NTP-99 also provided that CSPs wanting to offer two-way communication services would have to obtain an FSP License so as to ensure level playing field

WLL(M) - Not Permitted under FSP License



- Scope and area of service fundamental to license superstructure
- FSP license expressly prohibited mobile services
 - **Clause 3.0** - The scope of service of Fixed Operators does not cover mobile voice and non-voice services
 - **Clause 1.7.9.2** The LICENSEE may provide Value Added Services, other than mobile telecommunication and paging services, after obtaining a separate license from the LICENSOR."
 - **Under Definitions** - 10.0 'Value Added Service' : Value Added Service are enhanced services which add value to the basic tele services and bearer services for which separate licenses are issued. At present, Government is issuing licenses for following value added services :
 - (i) Cellular Mobile Telephone Service....."
- TRAI in its Consultation Paper on WLL(M) records that "There is no provision in the License Agreement for the Basic Service Operator to provide Mobility using WLL technology."

Provision of WLL(M) Violates TRAI Act



- TRAI Act amended in 2000 making it mandatory for the government to seek recommendations for need & timing and terms & conditions [Sec. 11 (1) (a)(b)]
 - DoT's reference already assumes need & timing, as well as terms & conditions (SDCA)
- TRAI Act requires the DoT to refer recommendations back to the TRAI (5th proviso) in case they require change
 - DoT has made changes but never once sent the recommendations back for reconsideration
- This is in direct contrast with the references made by DoT on account of all other services - ILD, NLDO, CMSP, FSP, ISP, etc.
- TRAI willfully surrendered its powers to act sumo moto, inspite of multiple requests by CMSPs

TRAI recommendations on WLL (M)



- TRAI did not charge entry fees despite DoT's specific request over and above license fees for FSP licenses
- Ignored fact that CDMA was not a new or cheaper technology
- Prove low tariffs direct result of preferential regulation, not technology
- Admits no economic data or cost analysis available to justify conclusions
- Free entry for FSPs into WLL(M) citing affordability and consumer interest, while concurrently directing bidding for 4th cellular licenses
- Assumes SDCA/roaming restriction will ensure service distinction without any market analysis till date

The Issue of WLL(M) Tariffs



- 08-01-2001 – TRAI recommendations made without rentals
- 25-05-2001 – Prescription of floor of Rs. 450 in mid-2001, citing anti-competitive safeguards - no consultation
- 04-07-2002 - U-turns eight months later to prescribe rental of Rs. 200 - surrendering competition principles. Again, no consultation
- 24-01-2002 - Resorts to forbearance, citing sufficient competition as the key reason - departing from the recommendations, floor tariff and affordability plank

The Key Issue of WLL(M) Interconnection



- January 2001 – TRAI accepts non-discriminatory, cost-based equitable interconnection as premise for level playing field
- Does not act for over two years on requests for implementing its own recommendations. Keeps cellular in CPP regime
- Cell operators / subscribers forced to pay for over two years a unidirectional charge, funding competition. Cellular consumers interests ignored
- January 2003 - TRAI directs CMSPs to interconnect with WLL(M) without complying with own recommendations or its statutory responsibility of prescribing commercial terms
- TRAI clears WLL(M) tariff plans as late as January 2003, without the incidence of interconnection
- After the crisis, within two weeks, announces interconnection, which again violate its own laid down regulations, as also its recommendations
- The new IUC regime has in fact made cellular cheaper for the consumer

Contradictions of WLL(M) : Fixed or Mobile?



- Entry fee - fixed line
- Architecture – BSNL / Bharti (LE/V5.2), other Private FSPs (MSC)
- Original interconnection - fixed line (changed by GoT-IT)
- Tariff - fixed line (now changed to forbearance)
- Rental - neither - first Rs.450, then Rs.200, now forbearance
- Service offering - mobile
- New tariff - mobile (incoming free & forbearance)
- WLL(M) interconnection pulse with mobile - mobile
- WLL(M) interconnection pulse with fixed line - fixed line

**WLL(M) seems like an attempt to bypass Policy and Statute
(TRAI Act - need and timing clause)**

Limited mobility: Must be enforced in the interim



- DOT decisions based on TRAI recommendations
- TRAI Recommendations were qualified. Required that
 - WLL(M) be a non-substitutable service
 - Level playing field must be ensured
- These include :
 - FSPs would not use Mobile Switching Centres (MSCs)
 - They would not offer several tele & supplementary service which can only be offered by CMSPs
 - FSPs would use a V5.2 interface to connect the WLL system directly to the Local Telephone Exchange
 - FSPs would only offer the service within an SDCA.
 - Roaming not permitted
- The above are core features of the TRAI recommendations which were accepted by the DoT and are also incorporated into the FSP License
- Union of India's sworn affidavits needs to be enforced
- ABTOs affidavits also needs to be enforced

Non-Compliance of WLL(M) Conditions



- Despite clear definition of service by both Regulator and Licensor, private FSP are contravening most conditions
- Using MSCs, not Local Exchange/V5.2 interface
- Advertising Roaming, SMS, WAP, etc - derived from MSC - not permissible under WLL(M)
- Offering services in multiple SDCAs

In contravention of DoT's submission, post licensing, in Supreme Court ... "the consumer handset becomes useless outside the SDCAroaming facilities are not permitted," and FSP's submissions in TDSAT

Non-enforcement will make judicial review infructuous



Fixed line service companies, however, are banking on the fact that they're presenting a fait accompli. "By the time the legal wrangle over the issues get resolved, companies like Tata Teleservices and Reliance Infocomm would have invested crores of rupees and would have at least two million subscribers. It would be difficult for any court to order a roll back," crowes a source at the Association of Basic Telecom Operators

- *Business Standard, January 1, 2003*

Strategy to create third party rights

WLL (M) : Immediate Enforcement



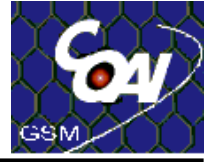
- Legality, permissibility, due process, legitimate expectation, etc., under review by TDSAT under direction of Supreme Court
- While TDSAT review underway, must be ensured that WLL (M) is consistent with Government / TRAI's position i.e.:
 - No Mobile Switching Centre
 - Use of V5.2 interface
 - Strictly non-cellular mobility - i.e. no hand-off is permitted. This is in full consonance with applicable TEC specifications and ITU understanding of limited mobility
 - In SDCA use only. No roaming
- Full disclosure in advertising including impact of IUC from 1 April
- All Interconnection provision subject to compliance with above conditions

Competitive Safeguards Missing



- Level Playing Field & fair competition fundamental tenets of NTP 99
- Predatory & anti-competitive behaviour of BSNL of serious concern
- Must be noted:
 - BSNL as incumbent fixed line operator controls 38 million fixed line customers, dominant control of almost 99% of bottleneck fixed-mobile interconnect facilities
 - Vertically integrated – no legal, structural or accounting separation for its different businesses
- Consequently, ideally placed to exploit its dominant position & indulge in anti-competitive practices including misuse of significant market power

Competitive Safeguards Missing (contd)



Few instances of anti-competitive actions

- Its Cellular Mobile Services
 - providing incoming free from BSNL fixed wireless (98% of the total market)
 - routing its cellular traffic through its fixed line business – free interconnection to network of CMSPs
- Interconnection
 - Not paying access charge for use of CMSP network
 - Levying exorbitant charges for POIs –misuse of market power
 - Not signing separate IC agreement for different services
- The above anti-competitive practices can also be adopted by other vertically integrated operators

Ensuring Competitive Safeguards



- Integrated operators should not be allowed to indulge in anti-competitive bundling across services
- Implement principle of asymmetric regulation
- Accounting separation guidelines issued by TRAI - must be immediately notified & rigorously enforced

Allocation of Adequate Spectrum



- No nation has comparative advantage in spectrum availability
- Spectrum - pre-requisite to offer cellular mobile services
 - Adequate availability of spectrum key to high quality, cost-efficiency
 - Piecemeal allocation leads to inefficient network planning, sub-optimal utilization
- Cellular services presently offered with GSM technology in the 900 & 1800 MHz band. ITU specs:
 - 2x25 MHz in 900 MHz - 3 CMSPs
 - 2x10 MHz in E-GSM 900 MHz – in India uniquely given to FSPs / WLL(M)
 - 2x75 MHz in 1800 MHz – 1 CMSP
- Of 2x110 MHz total in ITU specs, only 2x28.4 MHz released for CMSPs
 - CMSPs now entitled to 2x10 MHz per operator
 - actual allotment only 2x8 MHz in only Delhi/ Mumbai

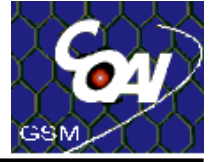
Allocation of Adequate Spectrum(..contd)



- Spectrum allocation in GSM bands covering 114 GSM operators in 31 countries across Europe & Asia-Pacific (excluding India):
 - Average GSM spectrum per operator is 2x17.1 MHz per operator
 - In China, average GSM spectrum per operator 2x22.5 MHz
- Indian Cellular Operators allocated only 1/3 of world average
- Several creative solutions possible to address legitimate defence/security requirements

Globally, spectrum policy always precedes competition reform

Spectrum : Follow International Best Practices



- Spectrum entitlement for Indian CMSPs be immediately enhanced to at least international average of 2x17.1 MHz per operator
- Allocation must be made in one go, upon signing of license
- Will facilitate lower cost, higher quality and more efficient mobile services

Leads to affordable mobile services



OTHER CELLULAR ISSUES

- RETENTION OF 5% PASS THROUGH REVENUES
- SPECTRUM CHARGES FOR M/W & BACKBONE
- INTRODUCTION OF NEW COMPETITION IN CELLULAR