

TELECOM REGULATORY AUTHORITY OF INDIA

## Responses received on

Consultation Paper No. 4/2003 dated 28.08.2003

on

WLL (M) Issues Pertaining To TRAI Based On  
Hon'ble TDSAT's Order

16<sup>th</sup> September, 2003

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**2(a) What should be the appropriate level of additional entry fee for Basic Service Operators in the context of being allowed to provide limited mobile? Please provide a substantiated reasoning for the suggestion made, clearly bringing out the basis for the suggestion.**

**ABTO/ Tata Teleservices Ltd.:**

According to ABTO, entry fee has already been paid / levied. It has been held that WLL(M) is part of Basic Licence. Therefore, no additional entry fee can be levied on Basic Operators for being allowed to provide limited mobility. This has been ratified by the TRAI, the DoT and the GOT-IT and accepted by the Hon'ble Prime Minister – way back in 2001. As such, there is nothing more that justifies an additional levy.

The Telecom Regulatory Authority of India, while allowing WLL (M) services had stated in its Recommendations of 8<sup>th</sup> January 2001:

*“...The Authority views WLL with mobility similar to a supplementary or value added service for basic service. In that sense, this service would be similar to the supplementary and roaming service that is presently allowed for cellular mobile. The Authority is of the opinion that there is no reason to re-consider the issue of entry fee of Basic service Providers particularly because the purpose of entry fee was mainly to deter non-serious entry of service providers.”*

*“...the Authority would like to recommend that WLL with limited mobility should be provided as part of the Basic Service License. The entry fee and percentage revenue share license fee should not be altered and be as applicable to Basic Services as at present”.*

ABTO agrees with this conclusion of TRAI in its recommendations and ABTO firmly believe that there is no case for any additional entry fee or change in percentage revenue share.

However, this consultation process has been necessitated as TDSAT has made the following observations in its judgement:

*“..... The cheaper alternative offered by the Limited Mobility Service, even though not exactly substituting all that fully mobile services can and do offer, has certainly introduced an unsettling element in the Cellular Mobile Industry, particularly in the Metro Cellular areas. Prices have crashed dramatically.....’*

*“..... since it is a value addition to WLL service which has a definite impact on the playing field conditions, we feel that there is enough justification for imposing additional entry fee....”(emphasis added).*

The judgement further states in para 96:

*“..... Government should have both on policy consideration as well as on economic grounds, levied an appropriate fee.....”*

We provide our views, reasons, analysis and relevant data on the TDSAT's observations in the following paragraphs.

The summary of these submissions are categorized as follows:

- I. We provide substantive reasons why additional entry fee should not be levied.
- II. We demonstrate that WLL (M) was not in fact mainly responsible for “an unsettling element in the Cellular Industry” or for the crash in prices, the credit for which goes to BSNL / MTNL (3<sup>rd</sup> Cellular Operator) and the 4<sup>th</sup> Private Cellular Operators.
- III. We establish that the various sops and most recently the CPP regime by TRAI to the CMSPs have more than compensated for any impact that WLL (M) may have had on the playing field conditions.
- IV. Any imposition of additional burden on BSOs by way of entry fee or revenue share would severely impact affordability of basic services – and also be a set back to achieving the tele-density targets.

I. Why additional Entry Fee is not justified:

There are two categories of Operators whose entry fee comparisons need to be made as entry conditions at the time of award of their license were different.

Category I: Those operators / service providers who applied for and obtained their licenses after 25.1.01 i.e. New BSOs and 4<sup>th</sup> Cellular Mobile Operators in the post-NTP '99 environment.

Category II: The CMSPs and BSOs that existed before 25.1.01, the date the licensor allowed BSOs to offer WLL(M) Service.

Category I Case:

We provide below a factual chronology of events.

25 Jan 01	The licensor released the guidelines for the issue of new basic service licenses.
29 Jan 01 to 19 Mar 01	147 applications received, including many from existing CMSPs like Airtel, Essar, Hutchison, Birla AT & T, BPL and Spice
9 Mar 01	Tenders for 4 <sup>th</sup> Operators for CMTS floated.
26 Mar 01	75 LOIs for Basic Service licenses issued to some of the applicants which included some CMSPs
July-August 2001	CMSPs pick up new CMTS licenses through a bidding process ignoring supposedly “cheaper” Basic Service license

It is evident from the above that:

- a) The entire telecom industry was aware of the terms and conditions under which WLL (M) was allowed for in the BSO licences.
- b) CMSPs had the choice of opting for a BSO license or a 4<sup>th</sup> cellular licence when the tenders were floated inviting bids for 4<sup>th</sup> license.

c) CMSPs even after applying in large number for new basic service licenses preferred to acquire the 4<sup>th</sup> cellular licenses despite having to pay a higher entry fee as a result of competitive bidding.

d) Basic Service Operator's license right from the beginning allowed them to use wireless as a preferred technology for rollout in specifically assigned frequency spectrum.

As such, it is clear, that the CMSPs took a conscious business decision with full knowledge of the prevailing market situation. The only logical reason why CMSPs opted for the 4<sup>th</sup> cellular license despite being fully aware of WLL (M) services was because WLL (M) was neither identical to nor a substitutable service for cellular mobile services.

After the 25.01.2001 guidelines no changes favourable to BSOs have been made (in fact rollout conditions were made far more onerous on BSOs as a result of the GOT-IT report). As such, the CMSPs cannot now demand that any changes be made in the terms of either of the licenses.

This fact has been duly acknowledged by TRAI in this Consultation Paper also.

Thus, there is no case whatsoever for imposing an additional entry fee.

Category II Case:

Since the BSOs were allowed to offer WLL (M) services effective 25.1.01, we need to review whether action of the licensor, and the subsequent sops offered to the cellular licensees in existence before 25.1.01 seen in conjunction, created any disadvantage to the CMSPs at all, to merit an increase in entry fee for BSOs.

For the purpose of comparison, we have tabulated below some quantifiable aspects of the conditions pertaining to the six pre NTP '99 BSOs in Rajasthan, Gujarat, Maharashtra, Punjab, AP and MP and one CMSP each in the same circles. For the CMSPs, the average total entry fee has been taken i.e. average of two CMSPs in each circle. The relief in terms of license fee reduction for CMSPs has also been calculated on average subscriber figures.

TABLE

1.	Total Entry Fee paid	1115.32 AP : 161.47 Guj : 179.09 Mah : 532.55 MP : 35.33 Pb : 177.59 Raj : 29.29	1836.21
2.	Less: Estimated relief at NPV due to reduction in revenue share during 2002-15.	NIL	2315*
	TOTAL >>>	1115.32	(478)

*\* for detailed calculation, refer to Annex-7*

*The above data are based on conservative assumptions which are:*

*A conservative rate of growth of CMSPs i.e. 70% till 2005 declining to 10% by 2015 to estimate subscriber base.*

*NPV at the weighted average cost of capital of 12%.*

The above data clearly establishes that the differences on the entry fee are substantially tilted against BSOs.

Additionally, all CMSPs have derived benefits due to:

- 5% long distance revenue sharing and pass through revenue.
- Introduction of CPP / Termination charges to CMSPs, over the life of the license, consequent to the IUC regulation.
- PCOs, which account for approximately Rs 1,000 crores per annum revenue.

Further more, the following other factors also need to be taken into account which overwhelmingly establishes that no additional fee on BSOs for providing WLL(M) services is justified.

- BSOs have more onerous rollout obligations in terms of 100% SDCA coverage in the circle for post NTP-99 licensees and VPT/DEL obligation for Pre NTP-99 licensees as compared to CMSPs who have to cover only 50% DHQs / towns which is 1/10<sup>th</sup> of BSOs obligation. (please see Annex- 1). CMSPs were given flexibility to cover any town instead of DHQ which has additionally benefited CMSPs.
- The bank guarantees of BSOs are linked with the roll out obligations. BSOs have to provide BGs that are four times the entry fee for each circle (varies in the range of Rs 4 crores to Rs 460 crores). These are to be released only in phases after fulfillment of the rollout obligations. Even after completing 80% of the rollout obligations, only 50% of the PBGs are released, even though the balance 20% is a shared obligation between private licensees. Contrary to this, CMSPs provide PBG of only Rs 2 crores for Category - C circles, Rs 10 crores for Category B circles and Rs 20 crores for Metros / Category A circles to guarantee a service coverage of 50% DHQs / towns (In Metros there is not even this obligation). The Bank Guarantee terms for pre NTP'99 Basic Services' licensees are different from those of post NTP'99 licensees. Pre NTP '99 licensees are required to give a Rs 100 crore Performance Bank Guarantee, half of which is to be maintained for the entire license period, even after the roll-out obligations are fulfilled. (Please see Annex-2).

Both TDSAT and TRAI have maintained that WLL (M) is a value addition to the existing BSO services. TDSAT opines that the Government should have levied an additional entry fee on policy considerations. It may be noted that no additional entry fees were levied on the CMSPs when they were allowed to offer nation wide and international roaming and were Mobile PCOs, which severely impacted revenues of Basic Operators and this was recognized by TDSAT.

The BSOs were allowed mobility only within the SDCA, which by any stretch of imagination is a facility much smaller in scope than international roaming. Hence on

application of equitable policy considerations above, the case of additional entry fee falls through.

In light of all the above there is no case at all for imposing an additional entry fee on the BSOs.

II. WLL(M) was not in fact mainly responsible for “an unsettling element in the Cellular Industry”

1. Ever since WLL (M) services started, the rate of growth in the cellular industry has multiplied. The number of subscribers being added every month for the past six months is double the number added every month in the previous year 2002-2003. Almost 10 lakh subscribers are being added every month in the current financial year by CMSPs as against an average of 5 lakhs per month in the year 2002-03. As such, there has been no adverse effect due to WLL (M) deployment on this phenomenal growth of cellular subscribers.

2. Also, growth in cellular subscriber base during the first five months of FY 2003-04 between April – July has been phenomenal. This can be seen at Annex- 3. This is with the existence of WLL (M) services available across the country.

3. It is also a well-known fact that cellular operators have never taken any initiative to reduce tariffs on their own. They have only reacted to competitive pressures, within their own industry. This is witnessed from the entry of 3<sup>rd</sup> and 4<sup>th</sup> cellular operators in the market as shown in Annex- 4. This clearly shows that the falling tariff in the cellular industry is not due to the introduction of WLL (M) services.

It may be noted that wherever CMSPs get an opportunity to overcharge the subscribers because of lack of competitive pressures, they do not lose any opportunity to do so. For e.g. despite a free incoming regime having been introduced for normal subscribers the CMSPs charge as high as Rs. 6.44 per minute for incoming calls to roamers. Similarly, SMS charges for roamers are as high as Rs. 3.45 as against Rs. 1.50 or less non roamers.

4. It is also relevant to note TRAI's observation in its 8<sup>th</sup> January 2001 recommendations:

*Quote*

*“The main threat to the market of the existing CMSOs, is therefore, likely to come from the third and the fourth CMSOs rather than the WLL (M) operators i.e. BSOs.”*

*Unquote*

Taking TRAI's observation together with the fact that cellular services and WLL (M) services are neither identical nor substitutable the cellular operators' claims that a major part of revenues accrue to them from traffic within the SDCA is unsubstantiated and a bald assertion. In view of the differential (mainly twin advantage – global roaming and operation outside SDCA being available only to cellular subscribers) between the two services subscriber churn from cellular to WLL(M) service is negligible. This claim sounds even more hollow in view of the fact that cellular operators have the entire circle as their local area.



5. High ARPU customers generally are those who require roaming and are demanding and choosy. They would never be the types of customers who would shift to WLL-M. CMSPs have already pocketed high ARPU subscribers in the last 7 years. These high ARPU subscribers are unlikely to churn.

III. Various sops to the CMSPs have more than compensated for any impact that WLL(M) is imputed to have had on the playing field conditions.

The benefits which have accrued to Cellular Mobile Operators from the sops amounting to thousands of crores of rupees which have direct impact on BSOs need to be taken into consideration while analysing any level playing field (LPF) issues.

The status of benefits granted to the cellular operators may be seen at Annex - 5. Briefly these include:

1) Changes in call termination charge for the benefit of the cellular operators compared to those specified earlier in the license. 'Calling party Pays' model was mandated by TRAI despite opposition from most of the stakeholders. In line with international experience, because of these benefits granted to CMSPs, there has been an exponential growth of cellular subscribers. From this, it can be seen that phenomenal growth in subscribers has been due to IUC regulation and also due to consumer awareness created by WLL-M operators.

2) No compensation was paid to BSOs when CMSPs were allowed to provide PCOs. TRAI noticed in its recommendations on Mobile PCOs that it is not a function of the Government or the TRAI to ensure any guaranteed returns to any operator, private or public. Public interest must outweigh purely, selfish commercial interests. The same principle was followed by TRAI in its recommendations of 8<sup>th</sup> Jan, 2001 when it recommended no additional fee for allowing WLL-M. Therefore, there is no ground for levying additional entry fee etc on Basic Service Operators.

3) *Though TDSAT has held that WLL-M is a value added service allowed to BSOs it has also observed that when CMSPs were allowed to offer roaming or SMS as value added service, they were not required to pay any additional fee. Further it has noted that allowing SMS to CMSPs has literally obliterated paging services. No compensation or LPF has been provided to paging industry.*

4) Reduction in revenue share as license fee from the level of 17% to 12%, 10% and 8% for Metro and A, B & C circle respectively has resulted in license fee savings for CMSPs of about Rs. 1000 crore till March 04. This total saving in license fee at NPV till 2015 is to the tune of Rs. 13,000 crores. (Please refer Annex-6).

5) Allowed to utilize GSM infrastructure utilized for providing WLL (M) services and the entire basic services.

6) Cellular Mobile Operators were allowed to retain 5% of pass through revenue in comparison to zero allowed earlier under the license terms and conditions. They obtained much higher share for them by mutual agreement obtained by using strength of their association / cartel.

7) Mobile PCO / Mobile community phones permitted which according to DoT gave benefit worth Rs. 1,000 crores annually.

8) Cellular operators were allowed through license amendment to interconnect directly with each other and to carry traffic on each others network within their own Service Area. This has also resulted in direct savings in revenue share which they would have otherwise to give to BSOs.

9) The present numbering plan of cellular mobile coupled with TRAI's determination on interconnection dated 8<sup>th</sup> January, 2001 and subsequent letter dated 29<sup>th</sup> January, 2001 has enabled CMSPs to by-pass legitimate intra circle long distance traffic of BSOs over last few years resulting in revenue loss of several thousands crores of rupees to basic service operators.

#### IV. Affordability:

1) Access to telecommunications is of utmost importance for achievement of the country's social and economic goals. NTP 99 has provided one of the important objectives as availability of affordable and effective communication for the citizens.

2) Substantially higher volumes in Indian telecom market on the backdrop of depressed world telecom market, is realizing unprecedented low equipment prices for Indian operators which would lead to lower network costs and thus exponential growth of telecom market in India. Some handset manufacturers are planning to set-up manufacturing facilities in India.

3) Importance of affordability for growth of markets is explained by following example of China.

- Experience shows that low prices can fuel dramatic growth. Colour TV prices in China are lower by 30% than prices in India. Domestic market for colour TV in China is 6 times Indian Market. Most of the difference in domestic market size is explained by lower prices. ARPUs have fallen from \$ 45 p.m in '98 to \$ 8 p.m in 2002 resulting in high growth of subscribers from 13 mn to 208 mn. Affordability is the main factor in Asian markets determining growth rate.

Consumer interest is served when fair and open competition which brings about affordable and on-demand services. WLL (M) phone connection provides affordable services to the end-consumer.

In view of the affordability factor also, there is no case for imposing additional entry fee on BSOs. TRAI, in its consultation paper, has also stated very clearly that "... The ordinary consumers will find WLL(M) a highly acceptable and cheaper option ...."

In the light of the above reasonings, there is no case at all for imposing additional entry fee on the BSOs.

Further, we would like to highlight that the case of six pre-NTP'99 BSOs needs to be looked into additionally:

The Level Playing Field Issue for these six licencees is a long pending unresolved issue. These six licencees operate under a different set of operating conditions as compared to the licences issued post NTP'99, notable among them being Entry Fee, differential and dual Roll-Out Obligations, differential Performance Bank Guarantees.

The promise of "Level Playing Field" made in NTP'99 and other Government pronouncements and supported by expert opinion, was not fulfilled when the Government announced guidelines for issue of new Basic Services Licences on January 25, 2001. As a result, the pre-NTP'99 Basic Services licencees continue to operate under differential terms and conditions. Brief Summary of the developments starting from the NTP'99 is as follows:

(1) Among other things, NTP'99 included the subject of "equal opportunities and level playing fields for all players" as part of the General Objectives.

- General Objectives: *"Transform in a time bound manner the Telecommunications Sector to a greater competitive environment in both urban and rural areas providing equal opportunities and level playing fields for all players"*
- New Policy Framework: *"...the option of entry of multiple operators for a period of five years for the service areas where no licences have been issued is adopted. The number of players and their mode of selection will be recommended by TRAI in a time bound manner..."*

(2) The Migration Package offered on July 22, 1999 to the BSOs, clearly stated in the Title and opening paragraphs, that the package was for migrating to the NTP'99 regime. It was not a migration to merely a revenue sharing licencing arrangement. The Migration Package also stated that the amendments to the licence would be signed.

(3) Hence, these BSOs had a "legitimate expectation" that whenever the norms for new licences are announced there would be a "level playing field" between them and the new operators. In other words, there was a legitimate expectation that:

- *either* the new licences would have similar benefits and obligations as the earlier licence
- *or* the earlier licence would be amended to give us similar terms as the new licencees.

(4) The opinion given by the Attorney General on the Migration Offering recommended the need for "Level Playing Field" unambiguously:

*"If the two regimes, namely the 1994 policy & NTP' 99 are allowed to co exist, the cost structures will be different and is likely to lead to distortion in tariff settings. This would be impracticable in a market economy structure in a multipoly competitive license regime"*

5) TRAI, in its recommendations dated 31 August 2000 extensively covered the aspect of "Level Playing Field" and recommended ways of mitigating the gap.

- *"...the new entrants by paying a substantially lower entry fee will acquire an undue competitive advantage... enabling them to resort to anti-competitive"*

*practices such as predatory pricing. Such a market scenario may not be in the consumers' interest in the long run. In all fairness, the existing operators should be provided a level playing field and opportunities for fair competition..."*

- *"...where the disparity ...is more than 100 crores, the licence fee payable by the existing operator may be waived....for a period of four years..."*

6) TRAI reiterated its opinion in its recommendations dt. 31 October 2000.

- *"...While it is true that the Operators who have been allowed to migrate to the new regime paid the high Entry Fee in fulfillment of their commitments, it has also to be kept in view that once they have been allowed to migrate, the conditions under which they compete with the new entrants are not so adverse that leave no room for equal competition. Precisely speaking an anti-competitive situation should not be allowed to arise..."*
- *"...two groups of service providers in the same service area should not have basically different roll out obligations, as it will be violative of the principle of level playing field"*
- *"In regard to provision of VPTs and rural DELs, TRAI is of the view that such obligations will be better fulfilled by the service providers voluntarily rather than through a conditionality of the license...VPT and rural DELs will get real support and can progress mainly through U.S.O...."*

(7) The Government issued a press release in September 2000 where it referred to "Level Playing Field" again.

- *"The Government has already decided to allow unrestricted entry for the Basic Services in all the Telecom Circles. Detailed guidelines in this regard prescribing the conditions relating to matters like entry fee, revenue sharing, eligibility criteria will be announced before the end of the next month. While framing the guidelines, the need to have a level playing field among all the service providers as envisaged in National Telecom Policy 1999 (NTP-99) will be kept in view"*

(8) In January 2001, about 18 months after the migration of old BSOs to NTP'99, the Government based on TRAI recommendations of 8<sup>th</sup> Jan, 2001, announced norms for new licences. Government however, ignored the TRAI recommendations relating to the pre NTP'99 licencees. In addition, the spectrum policy announced in March 2001 altered the position of the Pre-NTP'99 BSOs further. The salient differences are summarized below:

- Entry Fee: Comparison of the entry fee paid by pre-NTP'99 and post NTP'99 BSOs is shown in the table below:

Circle	Entry Fee paid by BSOs (Rs cr)	
	Pre-NTP'99	Post-NTP'99*
Andhra Pradesh	161	35
Gujarat	228	40
Madhya Pradesh	35	20
Maharashtra	533	115
Punjab	178	20

Rajasthan	29	20
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\* plus PBG equivalent to 4 times the entry fee.

- **Roll-Out Obligations:** Pre-NTP'99 BSOs have dual roll-out obligations. Under the Licence, they are required to provide a certain number of DELs. Further, under the Spectrum Policy, they are required to undertake phased SDCA coverage to get the spectrum allocations. Post NTP'99 licencees are required to undertake a phase wise roll-out obligation for all the SDCAs.
- **Social Obligations:** Pre-NTP'99 BSOs are required to provide VPTs even though the NTP'99 refers to VPT coverage through USO. Post NTP'99 BSOs do not have any VPT obligations.
- **Bank Guarantees:** Pre-NTP'99 BSOs are required to provide PBG of Rs 100 crore. Out of this, Rs 50 crore is to be maintained for the entire licence period, i.e. it is not to be released even after meeting Roll-out & Social Obligations. The balance Rs 50 crore is to be released after meeting these obligations. Post NTP'99 BSOs are required to give PBG of 4 times the entry fee. This PBG is released in phases linked to the phased SDCA coverage.

#### ABTO's Suggestion

*Any recommendations that TRAI makes now, must incorporate the recommendations TRAI made on Level Playing Field for pre NTP'99 BSOs in August 2000 and October 2000.*

Hence, besides strongly opposing any additional entry fee on Basic Operators for the right to provide limited mobility services, ABTO suggests that TRAI should revisit the case of the pre-NTP'99 Basic Operators and recommend suitable relief, particularly in terms of entry fee, roll-out obligations and Performance Bank Guarantees.

#### **BPL Mobbile (D B Sehgal)**

The additional entry fee payable by Basic Service Operators for WLL (M) should be determined based on the entry fee paid by the 4<sup>th</sup> cellular operators for the corresponding circle keeping in view the business potential and relative infrastructure cost of setting-up GSM (1800 MHz.) network and CDMA (800 MHz.) network for catering to the same number of subscribers in a service area. The FSPs should also pay interest @ PLR+5% from the date of issue of WLL (M) licence till the amount is actually paid.

The above entry fee should be over and above the entry fee already paid by BSOs for providing Fixed Services. TRAI had earlier recommended entry fee for new basic service licenses for fixed services only as no mobility was envisaged at that time. Subsequently, TRAI did not recommend any additional entry fee for providing limited mobility by the BSOs.

In fact as per NTP'99, FSPs are required to pay an additional one time entry fee over and above the FSP entry fee for use of spectrum for WLL (Fixed). All FSP operators using WLL (F) shall pay a licence fee in the form of revenue share for spectrum

utilization over and above the %age payable for the FSP licence. It is strange that while NTP'99 clearly provided for additional entry fee and revenue sharing for use of spectrum even for WLL (Fixed), TRAI did not consider it appropriate to recommend any additional entry fee or revenue share for WLL spectrum with the additional dispensation of mobility.

### **BSNL**

As long as the mobility under basic service licence is strictly limited to within the SDCA and additionalities like free inter SDCA call transfer, multiple SDCA registration, over the air authentication etc are not allowed, there is no justification for extra entry fee to be levied on the Basic Service Operators.

With strictly limited mobility there is no comparison between a cellular licence and a basic licence. The competition in cellular market is limited to four operators while in case of basic services, the competition is open for any number of operators. Therefore, there is no justification for any additional entry fee to be levied on the Basic Service Operators.

### **Chandra Shekhar,A.K.** **A/31 Asiad Village, New Delhi:**

With effect from the date of NTP 1999 i.e. 1.8.1999, the entry fee to be made effective circle-wise for both CMSPs and WLL (M)-based BSOs will be identical and equal to the lowest of the entry fees charged circle-wise for any CMSP or WLL (M)-based BSO irrespective of the timing of their entry with the excess entry fee if any paid by the operators over the aforesaid uniform fee being refundable to the respective operators with a pre-determined rate of interest.

### **COAI**

a. At first we would like to submit that the entry fees paid by CMSPs for the right to offer mobile services, which was essentially the right to spectrum, was arrived at after a transparent and fair bidding process. A post facto determination of an entry fee for WLL (M) cannot ever deliver the true value for this resource / right.

b. Assuming without accepting that the 4<sup>th</sup> cellular license fee will be used as the basis for determining the entry fee for WLL(M), the same must be adjusted to take into account the following factors :

i. FSPs have been given spectrum in the 800 MHz band while the 4<sup>th</sup> CMSP has been housed in the 1800 MHz band. It is a fact that the higher band requires the operator to use smaller cells which increases the capex by about 1.5-2 times. This aspect has also been noted by the Authority in its recommendations on WLL (M) which have also been reproduced in the present consultation paper in Para 3.2 (i) on Page 18 that "infrastructure costs for a macro cellular system is less than that of a micro cellular system"

ii. The fixed operators have themselves stated in TDSAT that CDMA requires 80% fewer base stations than GSM.

iii. CDMA spectrum has about 5 times higher capacity than GSM spectrum i.e. with the same spectrum, it can cater to about 5 times more subscribers than GSM. This effectively means that 5MHz of CDMA spectrum is at least equivalent to about 25 MHz of GSM spectrum.

iv. The above too, has been confirmed by the FSPs in TDSAT where they have placed evidence that a single 10 MHz license with CDMA yield 177% the erlang capacity of a 30 MHz license with GSM

v. The WLL (M) operators have been offering services since 2001 – any entry fee recommended by the Authority must be applicable with retrospective effect with the operators required to pay the same at current PLR rates.

vi. CMSPs have tabled exhaustive data to demonstrate that WLL(M) services within the SDCA target 80-85% of the revenue base of CMSPs. For the dispensation of SDCA based WLL (M), a factor of 0.8 may be applied to the entry fee after all the above factors have been considered

c. The introduction of WLL (M) besides causing disturbances and imbalances in the playing field, has also had an adverse impact on CMSPs businesses. It is estimated that the introduction of WLL (M) would cause the cellular industry losses of several thousands of crores. It is therefore submitted that in addition to imposing an entry fee on WLL (M), the Authority should also consider compensation to CMSPs for loss of 80% of their business within the SDCA for the tenure of their license post January 25, 2001 when WLL (M) was allowed.

d. It is further proposed that the Authority may consider appointment of an independent expert agency to advise on the quantum of entry fee as also the appropriate compensation to CMSPs on account of introduction of WLL (M)

### **HFCL Punjab**

HFCL Infotel is a stand-alone Basic Services Operator in the Punjab Circle only. Our licence was issued pursuant to the National Telecom Policy - 1994 in November 1997. Our views on this subject are based on situation applicable to our licence only.

In our case, the subject of Level Playing Field between pre-NTP'99 BSOs like us and post-NTP'99 BSOs is a major relevant issue. Substantial part of our response to this question details this subject. In addition, we cover (i) the non-existent impact of our WLL(M) services on Cellular Services in Punjab and (ii) the overall benefits already bestowed upon the Cellular Operators.

In our case, it is well known and acknowledged that the entry fee paid by us is far in excess of that paid by new licences issued post NTP'99. In addition, there are other differences in the licence/ operating conditions that put us at a disadvantageous position as compared to new BSOs. TRAI has already acknowledged this situation of non-level playing field and had made detailed recommendations on providing level playing field to operators like us on 31<sup>st</sup> August 2000. These were subsequently reiterated in TRAI's reconsidered opinion dated 31<sup>st</sup> October 2000.

Any imposition of additional entry fee on us for permitting WLL(M) services can be considered only after bringing us at par with the new BSOs in terms of entry fee and other licencing/ operating conditions. In other words, we need to be exempted from any additional levy of entry fee to the extent the entry fee paid by us is more than that paid by the new BSOs. The estimated economic value of other disparities in the licencing/ operating conditions needs to be additionally considered.

To put the current situation of ours in the right perspective, the events/ developments starting from the NTP'99 are summarized below:

(1) Among other things, NTP'99 included the subject of “equal opportunities and level playing fields for all players” as part of the General Objectives.

- *General Objectives: “Transform in a time bound manner the Telecommunications Sector to a greater competitive environment in both urban and rural areas providing equal opportunities and level playing fields for all players*
- *New Policy Framework: “...the option of entry of multiple operators for a period of five years for the service areas where no licences have been issued is adopted. The number of players and their mode of selection will be recommended by TRAI in a time bound manner...”*

(2) The Migration Package offered on July 22, 1999, clearly stated in the Title and opening paragraphs that the package was for migrating to the NTP'99 regime. It was not a migration to merely a revenue sharing licencing arrangement. The Migration Package also stated that the amendments to the licence would be signed.

(3) Hence, we had a “legitimate expectation” that whenever the norms for new licences are announced there would be a “level playing field” between us and the new operators. In other words, we had a legitimate expectation that:

- *either* the new licences would have similar benefits and obligations as the our earlier issued licence
- *or* our earlier issued licence would be amended to give us similar terms as the new licencees.

(4) The opinion given by the Attorney General on the Migration Offering recommended the need for “Level Playing Field” unambiguously:

*“If the two regimes, namely the 1994 policy & NTP' 99 are allowed to co exist, the cost structures will be different and is likely to lead to distortion in tariff settings. This would be impracticable in a market economy structure in a multipoly competitive license regime”*

(5) TRAI, in its recommendations dated 31 August 2000 extensively covered the aspect of “Level Playing Field” and recommended ways of mitigating the gap:

- *“...the new entrants by paying a substantially lower entry fee will acquire an undue competitive advantage... enabling them to resort to anti-competitive practices such as predatory pricing. Such a market scenario may not be in the consumers' interest in the long run. In all fairness, the existing operators should be provided a level playing field and opportunities for fair competition...”*



- “...where the disparity ...is more than 100 crores, the licence fee payable by the existing operator may be waived....for a period of four years...”

(6) In response to the Government’s request for reconsideration, TRAI reiterated its opinion in its recommendations dated 31 October 2000.

- -“...While it is true that the Operators who have been allowed to migrate to the new regime paid the high Entry Fee in fulfillment of their commitments, it has also to be kept in view that once they have been allowed to migrate, the conditions under which they compete with the new entrants are not so adverse that leave no room for equal competition. Precisely speaking an anti-competitive situation should not be allowed to arise...”
- -“...two groups of service providers in the same service area should not have basically different roll out obligations, as it will be violative of the principle of level playing field”
- -“In regard to provision of VPTs and rural DELs, TRAI is of the view that such obligations will be better fulfilled by the service providers voluntarily rather than through a conditionality of the license...VPT and rural DELs will get real support and can progress mainly through U.S.O....”

(7) In the meanwhile, the Government issued a press release in September 2000 where it referred to “Level Playing Field” again.

- “The Government has already decided to allow unrestricted entry for the Basic Services in all the Telecom Circles. Detailed guidelines in this regard prescribing the conditions relating to matters like entry fee, revenue sharing, eligibility criteria will be announced before the end of the next month. While framing the guidelines, the need to have a level playing field among all the service providers as envisaged in National Telecom Policy 1999 (NTP-99) will be kept in view”

(8) In January 2001, about 18 months after our migration to NTP’99 regime, the Government announced norms for new licences that were significantly tilted in favour of the new licences. In addition, the spectrum policy announced in March 2001 further altered the position against BSOs like us. The salient persisting differences are summarized in the Table below:

	Pre NTP’99 Operators (6 circles)	Post NTP ’99 Operators (All Circles)
Entry Fee	Fixed Amount Licence Fee upto migration date considered as Entry Fee Rs 177.59 crore paid by us in Punjab Circle	Fresh Amounts prescribed; a fraction of the amounts paid by pre-NTP’99 BSOs Rs 20 cr in our Circle (Punjab)
Roll-Out Obligations	As per licence, commissioned DELs (customers) over 3 years; <u>as well as</u> As per the Spectrum policy, phased SDCA coverage (same as new licencees) to obtain the spectrum allocations	SDCA Coverage phased over 7 years

Social Obligations	VPTs in uncovered villages	Nil
Bank Guarantees	Rs 100 crore Rs 50 cr as per licence with no provision of release even after meeting Roll-out/ Social obligations Additional Rs 50 cr demanded after awarding new licences post NTP'99, following GOT-IT report; release on completion of Roll-out & Social Obligations	4 times the entry fee Phased release over 7 years linked to network coverage of SDCAs
Spectrum	As per licence, 8 MHz for WLL Services As per Spectrum policy, unilaterally reduced to 5 MHz as for new licencees	5 MHz for WLL services

(The Annexure IV of the Consultation Paper does not capture the above differences in Roll-out/ Social Obligations and Bank Guarantees)

(9) Permission to offer WLL(M) services was granted to us on 25<sup>th</sup> January 2001 without any concomitant conditionalities.

(10) A few months later, purporting to act on some advice of the GOT-IT, the Government tilted the field further against us, when it asked us and other pre-NTP'99 licencees to double the Performance Bank Guarantees (PBGs) given to Rs 100 crore (as indicated in the table above). No corresponding PBG demand was placed on new BSOs in their LOIs or Licences.

(11) New Licences were issued sometime in July/ August 2001 containing differential terms and conditions. This has the effect of perpetuating an Unlevel Playing Field, despite clear earlier recommendations of the TRAI.

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We had earlier requested for inclusion of this case of ours in this consultation paper through a letter dated August 21, 2003 (copy enclosed as Annexure A).

**Reliance Infocomm Ltd.**

Background

1. Before giving the response to these questions, it is essential to understand the whole genesis of the issue in proper perspective.

Value added service and additional entry fee:

2. The TRAI in its original recommendations dated 08.01.2001 had specifically considered the issue of levying additional entry fee on the BSOs due to the permission of WLL(M) and after a careful analysis decided against it. It was held that WLL with mobility is similar to the supplementary or value-added services for the basic service. In that sense, this service has to be similar to the supplementary services and roaming service presently allowed to the cellular mobile operators.

3. The majority judgment of the TDSAT dated 08.08.03 has also held that we have not only to see the various provisions of the license, but also to keep in view the fast changing developments in the telecom sector. These changes give value addition to the existing services, irrespective of the fact, whether they are basic service or cellular service. After considering the various arguments, the Hon'ble TDSAT concluded that, *"It can appropriately be concluded, that WLL is the part of the basic service. Hence, WLL(M) has to be seen as value addition to WLL service....."*. (Page 19).

4. The judgement further quotes, *"As observed by TRAI, the cellular mobile service providers were already permitted to provide supplementary/or value-added services as a part of their licensed activity, even though these were not originally a part of their license."*(Page 20)

5. Thus, both TRAI and TDSAT have considered that limited mobility permitted to the bsos is a supplementary or value added service.

6. As regard to the exclusivity of any activity in a particular license, the TDSAT judgement further quotes,

*"If this is indeed so, we do not understand as to how the Radio Paging industry, which is also ultimately a wireless based mobility service, is still licensed separately, and how the CMSPs have been permitted to provide SMS without following the regulatory procedure of licensing as laid down under the TRAI Act. It is common knowledge that the single act have effectively wiped-out the Radio Paging industry. This was however, a technology dictated decision, which was welcomed by the consumers and the question of contractual obligation or statutory limitations were not allowed to stand in the way of the overall interest of the public."*

7. This indicates that technological developments take place regularly and these can lead to any value addition to the service being provided. Also, whenever there is a value-added service given by a service provider, it is based on only technology development and need not necessarily mean additional license or additional entry fee for the same.

8. The cellular licenses issued in 1994 and 1995 clearly indicate that the cellular service means conveyance of message through wireless telegraphy, where every message is conveyed by means of a telecom system which is designed or adopted to be capable of being used while in motion. Message here certainly means voice message. Since the message has been defined in the license in terms of Sub-clause 3 of Section 3 of the Indian Telegraph Act. This clause states that message means any communication sent by telegraph or given to a telegraph officer to be sent by telegraph or to be delivered.

9. This shows that e-mail, SMS, MMS or other enhanced data services through GPRS, WAP etc. were not a part of the cellular license issued in 1995. There was also no reference to roaming services in this license. The provision of such services is treated as the supplementary or value-added service, both by the TRAI as well in the TDSAT judgement order.

10. There had never been a consideration, either by the Government or the Regulator, to ever consider imposition of any additional fee – entry fee or license fee, for permitting such value-added services.

11. The TDSAT judgement has further indicated that the introduction of SMS has completely wiped-out the Radio Paging industry, which was basically a non-voice carriage of message on wireless telegraphy. Despite this single act having wiped-out the Radio Paging industry, neither the Government nor the TRAI has ever considered imposition of additional entry/license fee on the cellular operators for providing value-added data services like SMS or roaming services.

12. TRAI has rightly mentioned in its consultation paper in Para 2.7, that mobile PCOs were permitted to the cellular operators, though this facility was reserved for the basic operators.

13. There were two issues in this;

(i) one is that the STD PCO to the mobile service operators was permitted on the ground that it was mentioned in the NTP '99. It must be clearly stated here, that clause 3.11 of the NTP '99 explicitly states that the new telecom policy is applicable to the new licensees only. For the existing licensees, the policy envisaged resolution of their problems, which ultimately resulted in migration from fixed license fee to revenue share.

In case the STD PCOs were permitted only to the new licenses, it would have been in accordance with the provisions of NTP '99. However, extending the same benefit to the then existing cellular operators was against the explicit provision of the NTP '99 as stated above.

If the intention was to bring both the licensees (pre-1999 & post-1999) at par, without taking into account the provisions or obligations of each license, the same should have been done in the case of basic service also, where the obligation of the existing licensees were not changed, despite migration and provisions of the new license.

(ii) Secondly, it is important to point out here, that the TRAI, while making various recommendations, either suo-moto or on reference from the Government or on request from the service providers, has always followed the following basic principles:

a. Benefits of technology cannot be denied to the subscribers.

b. If alternative service is available to the subscribers at lower rates, whether it is substitutable with the existing service or not, cannot be denied on the grounds of protecting the monetary/commercial interests of any service provider or a class of service provider since it would be against the public interest.

- c. In a dynamic economy level of revenue or profitability of any enterprise cannot be guaranteed to remain at a certain fixed level in perpetuity by keeping alternate services out of the reach of the public.
- d. Interests of public at large are to be given priority over the interest of limited section of service providers.
- e. Consumer interest would be best served by encouraging competition rather than shutting out competition.

14. The principles enumerated above are clear in all the TRAI recommendations, including the recommendations to provide STD PCO services by the cellular operators.

15. The MOST IMPORTANT ISSUE FOR CONSIDERATION THEREFORE IS :Despite clear objections from the then Department of Telecom services, that provision of this service by the cellular operators is against their service license, and infringement on the rights of FSPs and will tantamount to giving CMSPs a back door entry into about 30% of the long distance business, amounting to Rs. 2000 crores allotted for FSPs, without any additional entry fee, license fee, VPT/USO obligation etc., the TRAI still permitted the cellular operators to provide STD PCOs but did not impose any additional entry fee or any license fee. This was also treated as a value addition and alternative means of communication, which cannot be denied to the consumers.

16.

The last para of the TRAI letterNo.4-29/CP/410-2/2000-TRAI(Com) recommending STD PCOs for cellular operators is worth reproducing here, since it has major impact on the issue under consideration.

*"TRAI is aware that to the extent the provision of Community Mobile Service by cellular mobile service providers leads to a reduction in the revenues of fixed service providers, certain repercussions on the tariff structure will have to be examined. This, however, is only one of the several factors, which are going to have a bearing on the various revenue streams. Factors like the major structural changes which are taking place, and the opening up of various service sectors by the government, are all likely to cause a major change in the relative revenue streams of various services and various service providers. At an appropriate time these will be taken into account while reviewing the tariff structure. This consideration is not regarded as an adequate consideration to prevent the extension of a service to public which is otherwise available."*

17. TRAI, thus, admitted that such an action will have a bearing on the fixed service providers' revenue and they will have to examine the repercussions on tariff. This has not been done so far. Therefore, consideration of additional entry fee at this stage for providing a value-added service is not justified.

18. The Hon'ble TDSAT, in its majority judgement, at para 68 stated, *"In this context, we have found the reasons given by the TRAI for not recommending any additional entry fee for this service as convincing enough as this is an enormous value-added service over the fixed service which the basic service operators have been providing. . . . Since it is a value addition to WLL service which has a definite impact on the playing field conditions, we feel that there is enough justification for imposing additional entry fee over and above what they are paying as required under the basic service license agreement"*.

19. In addition, in para 96 of the judgement, it has been observed that, “. . . the Government should have, both on policy considerations as well as on economic grounds, levied an appropriate fee for permitting the basic service operators to provide limited mobility within the SDCA.”

20. At the same time, in the same judgement, in para 38, the majority judgement states that, “. . . If this is indeed so, we do not understand as to how the Radio Paging industry which is also admittedly a wireless based mobile service is still licensed separately and how the cellular mobile service providers have been permitted to provide SMS without following the regulatory procedures of licensing as laid down under the TRAI Act. It is common knowledge that this single act has effectively wiped out the Radio Paging industry. This was however a technology dictated decision, which was welcomed by the consumers and the questions of contractual obligations or statutory limitations were not allowed to stand in the way of the overall interest of the people.”

21. If the single act of permitting SMS wiping out the entire paging industry has not lead to consideration of levying additional entry fee or license fee on the cellular operators, a simple value addition to the basic service in the form of WLL(M) can have no justification for levying additional entry fee.

Value addition/permitting changes without additional entry fee:

22. The permission to provide Internet telephony service is an important example whereby the Internet Service Providers (ISPs) have been given permission to offer Internet telephony without any additional entry fee or license fee. This affects the revenue of both, national and international long distance service providers as well as access service providers. This has been done in the name of advanced technology available for the same and this would reduce the cost of providing long distance services-the same ground and basis on which BSOs have been permitted to provide hand-held terminals.

23. Another such example is that of International Long Distance service. In the case of International Long Distance service a provision has been introduced which directly and adversely affects the National Long Distance Operators because the access providers have been permitted to handover calls directly to the international carrier, bypassing the national long distance carrier. In spite of a specific provision in the NLD service providers license that the access provider will hand over the traffic to international carrier only through the National Long Distance Operator.

24. In these cases, the issues of additional entry fee or license fee as well as level playing field have neither been considered nor been addressed either by TRAI or by the Licensor. It is not that these changes have not adversely affected the existing operators. These changes are aimed at providing better service at affordable rates to the subscribers. These changes have worked to the detriment of several operators but still no additional entry fee has ever been proposed or levied.

Consumers' Interest

25. Further, the TRAI in its original recommendation, while considering the issue of additional entry fee on the FSPs for allowing them to provide WLL(M) service, had clearly stated that there is no reason to reconsider the issue of entry fee for BSOs, because such an increase will most certainly be passed on to the consumer, which, as long as possible, must be avoided. The situation in this regard has not changed in any way even today and the argument that it would be passed on to the consumer still holds valid.

26. It should be considered that the fundamental point to permit WLL(M) was the availability of cheaper alternative for the consumer and if any additional entry fee is imposed now, it will defeat the very basis, on which WLL(M) was permitted to the basic service operators.

#### Achieving the objectives

27. It should also be noted that the permission to provide WLL(M) services was given on the basis that this would lead to faster rollout of services and increase in the teledensity as per the objectives of the NTP '99. It is stated that both the objectives have in fact been achieved in very clear terms as is indicated below:

*As against the requirement of coverage of 15% of SDCAs till July, 2003 in phase one of the license, the basic service operators have achieved coverage of more than 60% in this period and in some cases even 100%.*

*The provision of more than 3 million lines in less than a year is a clear indication of achieving the teledensity target.*

28. When this service has achieved its laid down objectives, any additional imposition of entry fee or license fee, will not only increase its cost for the subscribers but will also mean additional expenditure by the service providers, which will slow down their progress on providing the service.

#### Level Playing Field

29. The issue of additional entry fee has arisen due to bringing in level playing field. It would be interesting to see that the basic service operators have paid more license fee in terms of per year per license or license fee in terms of per MHz of spectrum. The following tables will show this issue.

#### Pre 1999

(i) The comparison of license fee paid by the cellular operators and the licence fee paid by BSOs has to be done within equal parameters. Average licence fee per year, per licence, would be an appropriate parameter as stated in the following table:

Operator	Total licence/entry fee paid upto migration (July 1999)	Number of years of operation	Number of licences (including metro)	Licence/entry fee Per year per licence
Cellular	Rs.5841.87 crs	3	42	Rs.43 crs

Basic	Rs. 1115.31 crs	1.33	6	Rs.139 crs
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From this table it can be seen that the licence/entry fee per year per licence is Rs.139 crores for the basic service whereas it is Rs.43 crores only for the cellular licence.

Post 1999

- (i) After announcement of NTP 1999, the 3<sup>rd</sup> cellular licence was given to the Govt undertakings BSNL/MTNL. There was no licence fee paid by the Government operators earlier in Metro or Circle.
- (ii) 4<sup>th</sup> cellular licence in 17 circles were issued to the private operators in 2001.
- (iii) New basic service licences were issued to the private operators in 2001 in various circles.

### Cellular Service

Total entry fee quoted and paid by the 4<sup>th</sup> cellular operators is Rs. 1633 crs. for 17 licenses with performance guarantee of Rs. 250 crores, total of (1633 + 250) Rs. 1883 crs.

### Basic Service

The basic operators have paid Rs. 768 crs. as entry fee for 25 licenses and provided performance guarantees of Rs. 3072 crs., total of (768 + 3072) Rs. 3840 crs.

### Comparison

Operator	Entry fee	Performance bank guarantee	Total	Number of licenses	Average Per circle.
Cellular	Rs.1633 crs	Rs.250 crs	Rs.1883 crs	17	Rs.110.76 crs
Basic	Rs.768 crs	Rs.3072 crs	Rs.3840 crs	25	Rs.153.60 crs

It is seen from the above facts that the license fee and entry fee (either pre-1999 period or post-1999) paid by the cellular operators is higher, is totally misleading and the true and correct facts are to the contrary.

### Comparison of licence/entry fee for the same Circles (for 4<sup>th</sup> Cellular licence and basic licence)

	4 <sup>th</sup> Cellular Licence	Basic Licence
CIRCLE	Entry Fee (Including PBG) Rs Crores	Entry Fee (Including PBG) Rs Crores
Delhi	190.70	250
AP	123.01	175



Gujarat	129.01	200
Haryana	31.46	50
Karnataka	226.83	175
Kerala	50.54	100
MP	27.45	100
MH +BY	432.66	575
Punjab	151.75	100
Rajasthan	42.25	100
TN+ Chennai	273	250
UP(W)	40.55	75
UP(E)	55.25	75

Note: In the case of Maharashtra, the entry fee for Mumbai has been included and similarly for TN, fee for Chennai has been added in the case of Cellular service licence since these are a part of respective circles in case of Basic licence.

(i) It is seen from the above table that the cost of obtaining 4<sup>th</sup> Cellular licence through the bidding process in various circles was less than the cost of obtaining the basic licence in the same service area except Karnataka and Punjab circles.

(ii) Therefore, the contention that through the bidding process for the 4<sup>th</sup> cellular licence, the cellular operators have paid a higher amount than the basic service licences, is totally misleading, incorrect and contrary to facts.

#### Comparison of licence fee in terms of cost per MHz of spectrum.

The cellular operators have contended that the basic service operators have been given spectrum without any fee whereas the huge amount of licence fee paid by them is virtually for use of the spectrum.

In view of the above it would be worthwhile to compare the cost of spectrum per MHz both for the petitioners and for basic service operators as per the chart given below:

Time Line	License	License Number	Number of Licenses	License Fee Paid (Rs. Crs)			Cost of Spectrum (Rs Crs / MHz)
				Entry Fee	BG	Total	
Cellular License <----- 6.2 MHz per License							
Sep-94	First round Metro	1,2	8	442		442	9
Dec-95	Second round Circle	1,2	34	5400	368	5768	27
Feb-01	Third Round-BSNL / MTNL	3	24	0	0	0	0

Sep-01	Fourth Round	4	17	1633	250	1883	18
Basic License <----- 5 MHz per License							
Aug-96	First round	1	6	1115	150	1265	42
Jul-01	Second round	2	25	768	3072	3840	31

**COST OF OBTAINING SPECTRUM FOR THE BASIC AND 4<sup>TH</sup> CELLULAR LICENCE IN THE SAME CIRCLE**

Whether we compare the total entry fee(including PBG) paid for one licence or the cost per MHz of frequency per circle, we find the Basic service (WLL-M) have paid more than the one licence for the 4<sup>th</sup> cellular slot. This is explained in the table below:

CIRCLE	CELLULAR			BASIC (WLL-M)		
	Entry Fee (Including PBG) Rs Crores	Frequency MHz	Cost per MHz Rs. Crores	Entry Fee (Including PBG) Rs Crores	Frequency MHz	Cost per MHz Rs. Crores
Delhi	190.70	6.2	30.76	250	5	50
AP	123.01	6.2	19.84	175	5	35
Gujarat	129.01	6.2	20.80	200	5	40
Haryana	31.46	6.2	5.07	50	5	10
Karnatka	226.83	6.2	36.58	175	5	35
Kerala	50.54	6.2	8.15	100	5	20
MP	27.45	6.2	4.42	100	5	20
MH +BY	432.66	12.4	34.89	575	5	115
Punjab	151.75	6.2	24.47	100	5	20
Rajasthan	42.25	6.2	6.81	100	5	20
TN+ Chennai	273	12.4	22.01	250	5	50
UP(W)	40.55	6.2	6.54	75	5	15
UP(E)	55.25	6.2	8.91	75	5	15

Note: 1. In the case of Maharashtra, the fee for Mumbai has been included and similarly for TN, fee for Chennai has been added in the case of Cellular since these are a part of respective circles in case of Basic licence.

From the above tables it is seen that:

- (a) there has been no level playing field between -
  - metro cellular operators and circle cellular operators
  - the first two cellular operators and the third cellular operators
  - the first three and the 4<sup>th</sup> cellular operators
- (b) In the case of cellular service, different licensees have paid different entry fee for the same circle at different times. For example, in Tamil Nadu circle (excluding Chennai) the first licensee paid entry fee of Rs.238.56 crores in 1995, the second licensee paid entry fee of Rs.44.35 crores in December 1998 and the third licensee paid Nil and 4<sup>th</sup> licensee paid entry fee of Rs.79 crores in August 2001.
- (c) (i) The cost of obtaining licence, spectrum per MHz is much more in the case of basic service as compared to cellular service.
  - (ii) It may be brought out here that the amount of Performance Bank Guarantee (PBG) is also a part of total financial exposure for the licencees.

30. From the analysis, the following issues emerge:

- (i) Both the TDSAT and TRAI hold that the provision of WLL(M) by BSOs to be a supplementary or value-added service, similar to the supplementary services and roaming service permitted to the cellular operators.
- (ii) Supplementary or value-added services are provided under the license, even though they were not originally part of the license (TDSAT judgement pg. 20).
- (iii) Fast changing technological developments give value addition to the existing services, which cannot be denied to the subscribers.
- (iv) The provision of SMS, without following the regulatory procedures of license by the cellular operators resulted in wiping out the radio paging industry.
- (v) This was a technology dictated decision, welcomed by the consumers and the questions of contractual obligations or statutory limitations were not allowed to stand in the way of overall interests of the public.
- (vi) The value-added services based on technology development do not necessarily mean additional license or entry fee for the same.
- (vii) The internet telephony and permitting access providers direct access to ILD operators are technology dictated decisions.
- (viii) Email, SMS, MMS, enhanced data services through GPRS, WAP were not part of the cellular license issued in 1995. There was also no reference to roaming in this license. The provision of such service is treated as supplementary or value-added services, both by the TRAI and the TDSAT.
- (ix) There had never been a consideration either by the Government or by the Regulator for imposing any additional fee for permitting such services.
- (x) The additional entry fee for WLL(M) is being proposed on the ground that it has affected the business of the cellular industry. The TDSAT itself has recorded that the provision of SMS had wiped out the radio paging industry but still no additional entry fee was ever proposed or levied on the cellular service.
- (xi) While recommending the STD PCO for the cellular operators, the TRAI admitted that it will impact the revenues of the BSOs, but still held the view, that in a dynamic economy, the level of revenue or profitability of any enterprise cannot be guaranteed to remain in certain fixed level in perpetuity, by keeping alternate services out of the reach of the public. Despite accepting the disturbances in the BSOs' revenues, the TRAI did not recommend or impose any additional entry fee on the cellular service.
- (xii) Justification for allowing STD PCO to the cellular operators on the ground of its reference in the NTP '99 was also not correct because, the NTP policy specifically state

that it is applicable only to the new licensees. But still the benefits of NTP '99 were given to the existing cellular operators, without any additional entry fee.

(xiii) Imposition of additional entry fee will lead to increase in cost to the consumer which, the TRAI felt, should be avoided, is still valid and it will defeat the very basis on which the WLL(M) was permitted.

(xiv) The objectives with which, the WLL(M) services were permitted, i.e. increase in teledensity, faster rollout, affordable service, reach in rural areas, have all been fulfilled with the introduction of the service. Any additional fee will only hinder the further progress in this regard.

## Other Factors

31. The TRAI has rightly mentioned in its consultation paper that on account of permitting the WLL(M) service to the basic service operators, the Government has already taken several policy measures in favour of cellular operators like reduction in license fee, permitting them to provide fixed service on their existing network, allowed to retain 5% of pass through revenue etc.

32. When the TRAI recommended revenue share for cellular services at 17%, it envisaged a fairly decent IRR as well as ROE of 20% plus in all cases based on data supplied by the cellular operators. Obviously, when the revenue share was reduced to 12% due to permission of limited mobility to BSOs, the IRR and the ROE would have gone much above 25%. **This is more than compensating the cellular operators for their any alleged loss of business, when no such compensation has been ever thought of for the BSOs for loss of their business on account of STD PCO permission to cellular operators.**

33. On the other hand, the basic service operators were allowed WLL(M) services, and in the name of level playing field, they were subjected to stringent rollout obligation of covering each and every area including rural, semi-urban and urban SDCAs. The cost of such obligations is already more and any additional entry fee or license fee will add to the cost of the project and make it unviable and unaffordable.

34. While considering the additional entry fee for the WLL(M) service, the Authority has rightly stated that various factors need to be taken into account, and these are:

- (i) Difference in the bank guarantees paid by the two service providers.
- (ii) Difference in their rollout obligations.
- (iii) Charges paid for the spectrum.
- (iv) Relative subscriber base and its growth profile.
- (v) Difference in the geographical area covered by the licensee.

**35. If all the above factors are taken into account, there is no justification for levy of any additional fee on the BSOs.**

36. The Authority has also rightly indicated that another factor to be considered in this regard is that the extent of mobility in the two cases is different and hence the

comparison of relative value of mobility under the two licenses and services is a complex task. When the extent of mobility is limited to the local area, levying of additional fee on BSOs, in the name of level playing field, will make the playing field unlevelled for the BSOs. In fact, due to the benefits given to the cellular operators, on account of permission of WLL(M) to BSOs, the playing field is already unlevelled as can be seen from the chart given below :

ISSUE	BASIC (WLL-M) SERVICE	CELLULAR SERVICE
Licence Fee (revenue share)	12,10 & 8% for category 'A', 'B' & 'C' circles.	Same as for basic
Spectrum charges	2% of the gross revenue	Same as for basic
Share from the long distance revenue**	5% (In fact reduced from 60% to 5%)	Same as for basic (Introduced at 5% from Nil earlier)
Spectrum allocation	5 Mhz	10Mhz
Initial spectrum allocation	2.5 Mhz	6.2 MHz
Further allocation of spectrum	1.25 Mhz after covering rural & urban areas in equal proportion and meeting overall roll out obligations and effective utilisation of the allotted spectrum	No such restriction
Spectrum allocation procedure	Only after establishing a Point of Presence in each SDCA after getting the licence	Immediately after getting the licence.
Roll out obligation	Cover each SDCA in the circle & ensure coverage of rural, semi-urban and urban in equal proportion (2647 SDCAs all across India)	No obligation to cover rural and semi-urban areas. Cover only 50% of the DHQs in each circle(282 DHQs) in 3 years.
Choice of operator for intra-circle long distance	Choice to the subscriber is available	No such choice
Market and no. of operators	Open and free competition without any restriction on the entry of new operators	Protected market.
Mobility	Restricted to local area called SDCA	Unlimited without any restriction

\*\*Prevalent till May 2003-the date of IUC implementation.

37. The Authority has further said in para 2.1.1 of the consultation paper, that they have received suggestions for additional entry fee as being equal to the difference between the entry fee of the new basic service operator and the fourth cellular operator.

38. In this regard, it is stated that such suggestions are not only legally untenable but also economically and commercially unviable. If the difference in the entry fee of the two has to be removed by charging additional entry fee from the basic operators, then the two services have to be made similar and all restriction of mobility, roaming, and the like, will need to be removed. The basic service operators will have to be allowed all the value added services as permitted to the cellular operators and with similar rollout obligations and bank guarantees. Such suggestions, therefore, should be considered only if the intention is to convert the BSOs to the full fledged cellular operators in each circle.

In view of the detailed background given above, there is no justification for any additional entry fee for the BSOs. This view point is explained with substantial reasoning and basis in the above analysis.

**2(b) Should the additional entry fee be charged as a one-time fee or over a specified period of time? If the latter, then why, and during which period of time.**

**ABTO (TATA - same comments)**

ABTO has provided substantive reasoning in the response to the question 2 (a) above that suggests no additional entry fee to be levied on the Basic Service Operators in the context of being allowed to provide limited mobile service. In view of that, the mode of payment i.e. one time or over a specific period of time does not arise.

**BPL Mobile**

Yes, the additional entry fee should be charged as one time entry fee.

**BSNL**

No comments in view of the reply given in para 2(a) above.

**COAI**

It is strongly submitted that the entry fee to be paid for WLL (M) be applied and recovered as a one-time charge. The concept / principle of one time entry fee has been clearly enunciated in NTP-99 and this is also the practice that has been followed for entry by all telecom players. There is no rationale or justification to deviate from this principle and apply a different yardstick to WLL (M).

**HFCL**

In light of our response to 2(a), this question is not applicable. The major concern of cellular operators is the cannibalization of their services. Upfront entry fee is a function of the assessment of the extent of cannibalization. Additional revenue share, on the other hand, can take away any subjectivity or argument over the extent of cannibalization.

**M/s Reliance Infocomm Ltd.**

In view of the answer to 2(a) above, there is no justification for additional fee, either one time or spread over a period of time.

**2(c) Since the basic service market has open entry and operators can enter even at a later time, what should be the criteria for charging entry fee from those operators which may enter at a later date.**

**ABTO/ Tata Teleservices Ltd.**

Basic Service market has open competition i.e. any one can enter the market by paying the determined entry fee fixed by the licensor. As we have stated above in our response to question 2(a) no additional fee needs to be paid by the Basic Service Operators for being allowed to provide limited mobility service, therefore, there is no case for any changes regarding changing the basic service entry fee for those operators, which may enter at a later date.

**BPL Mobile:**

As mentioned in the preconditions, the need for licensing new WLL (M) operators should be reviewed by TRAI from time to time. Unlimited competition in the mobile market is not feasible due to limited spectrum available. The entry fee to be paid by the new WLL (M) operators should be same as paid by the present operators. This may be applicable for the next two years after which the amount of entry fee paid could be reviewed for the later entrants based on the market situation at that time.

**Additional Spectrum Fee Chargeable for allocation of Spectrum beyond 5 MHz. to WLL (M) Operators**

Part of the spectrum allocated to WLL-M is in the e-GSM band and not in conformity with NFAP-2000/02.

Hence, any recommendation on spectrum licensing needs to primarily incorporate the following issues:

- All spectrum bands earmarked for GSM including e-GSM to be allocated to CMSPs.
- e-GSM band to be immediately vacated by WLL-M operators, to avoid interference resulting in deterioration of QoS of both networks.
- Each CMSP is allocated min. of 15 MHz. + 15 MHz. spectrum; international average being more than 17.5 MHz. + 17.5 MHz.
- No new license to be issued for mobile operations till the above needs are taken care of

As stated earlier, about 8,000 subscribers can be supported for a base station with 5 MHz. + 5 MHz. of spectrum in CDMA band. In case of GSM networks about 2,500 subscribers per base station can be supported with 10 MHz. + 10 MHz. spectrum (4+4+4 – 3 sector configuration). In our opinion there is no need for any additional spectrum to be allocated to WLL (M) operators beyond 5 MHz. + 5 MHz. The reasons earlier given by TRAI for allocating maximum of 5 MHz. + 5 MHz. spectrum to different WLL (M) operators still holds good. Moreover, this was one of the service



differentiations given by TRAI in justification of allowing limited mobility for basic operators.

As mentioned above, 5 MHz. + 5 MHz. spectrum is far more valuable than 10 MHz. + 10 MHz. of spectrum in GSM band. It will be really unfair to CMSPs if the same formula is applied for spectrum usage charges for both WLL (M) and cellular mobile services. In our opinion the spectrum usage charges applicable for 5 MHz. + 5 MHz. CDMA spectrum should be atleast 4% of AGR as compared to 2% of the AGR charged at present. Alternatively, CMSPs should be levied spectrum usage charges of 2% of AGR upto 15 MHz. + 15 MHz.

In the light of the above, we are giving below our replies to the specific questions raised at 3(a) and 3 (b) of the Consultation Paper:

**BSNL**

No comments in view of the reply given in para 2(a) above.

**COAI**

It is submitted that the scope of this consultation is to correct the existing imbalances between WLL (M) and cellular. It is not only irrelevant for the Authority to pose hypothetical questions on entry of future operators, but also outside the scope of the present reference.

**HFCL**

For operators who enter at a later stage, the total entry fee paid by the existing operators should be applicable.

**M/s Reliane Infocomm Ltd.**

The existing entry fee conditions may continue, even for the new operators who may enter at a later stage.

**3(a). Whether the spectrum fee chargeable for the additional spectrum beyond 5 MHz for WLL (M) service should be on the same basis as for CMSPs , i.e. spectrum beyond 4.4 MHz?**

**ABTO/ Tata Teleservices Ltd.**

Response to 3 (a) & 3 (b)

Basic service operators pay an additional revenue share of 2% of Adjusted Gross Revenue as earned from WLL subscriber as spectrum charge for allocation of spectrum in their reserved band upto 5+5 MHz. This includes royalty for spectrum for 5+5 MHz as well as license fee for the base station and subscriber terminal.

ABTO suggests that revenue share as a percentage of the Adjusted Gross Revenue (AGR) as earned from WLL (M) subscriber as spectrum charges beyond 5+5 MHz on the basis of blocks of 2.5 MHz allocated as follows:

- i) Additional spectrum of 2.5 MHz i.e. beyond 5+5 MHz i.e. a total of 7.5+7.5 MHz, then the revenue share of additional 1% i.e. (2%+1%) 3% may be levied.
- ii) Further assignment of 2.5 MHz beyond 7.5 MHz i.e. total spectrum allocated is 10+10 MHz, then revenue share may be additional 1% over (i) above i.e. total of 4% of the percentage of AGR as earned from WLL(M).

**BPL Mobile**

Answer (a) & (b)

No, the spectrum charges upto 5 MHz. of WLL (M) should be at least 4% of AGR instead of 2% at present. Alternatively, CMSPs should also be charged spectrum usage charges of 2% of AGR upto 15 MHz.+ 15 MHz. spectrum allocation. There is no need for any spectrum to be allocated beyond 5 MHz. For any spectrum to be allocated to WLL (M) licensees post revision of spectrum policy implementation , the usage charges should be atleast three times the usage charges applicable for cellular networks for the corresponding bandwidth.

**BSNL**

Spectrum is a scarce national resource and should be priced in such a way that it promotes its efficient utilization. The cost of spectrum should not be less than the estimated cost to be incurred by an operator for frequency re-use (by using additional BTS) in the condition of limited spectrum availability.

There is a case for review of the present mechanism for calculation of spectrum charges both for CMSPs as well as BSOs. The prices are required to be fixed at higher level to promote its efficient utilization and ensure Level Playing Field vis-à-vis fixed line operators. The charges may increase non-linearly, perhaps, in a geometric progression for each additional 1MHz of spectrum.

## **COAI**

At first we would like to remind the Authority that the allocation of the 5MHz spectrum to FSP has been inextricably linked to performance. The GOT-IT in its report of April 27<sup>th</sup> 2001 had interpreted the Government's spectrum allocation procedure of 23<sup>rd</sup> March 2001 and stated the conditions under which the spectrum would be allocated – which clearly required that the operator seeking spectrum must have established a Point of Presence (POP) in an SDCA in order to be eligible for the first tranche of spectrum; further instalments of spectrum being given subject to fulfillment of roll out obligations and after ensuring that the spectrum already given has been optimally utilized. The GOT-IT also noted that the 23<sup>rd</sup> March, 2001 procedure also stipulated that in the event of roll out obligations not being fulfilled the spectrum allocated would revert back to the Government.

It is submitted that this position remains unchanged and the 5MHz spectrum that is set aside for the FSPs must be allocated in strict adherence to the spectrum allocation procedure set out by the Government and duly interpreted by the GOT-IT.

a. It has already been pointed out by us that CDMA spectrum has about 5 times higher capacity than GSM spectrum. On this basis, the present spectrum allocated to FSPs for WLL (M) is already far in excess of that available to CMSPs to provide full-fledged cellular mobile services.

b. It is therefore submitted that the Authority must keep the above in mind and first bring the spectrum allocated to GSM operators at par with the capacity available on CDMA spectrum before even considering allocating any additional spectrum to the FSPs.

d. The entry fee and process for allocation of additional spectrum beyond the above should be determined by the Authority on a basis that is non-discriminatory, transparent, objective and proportionate.

### **Chandra Shekhar,A.K.** **A/31 Asiad Village, New Delhi**

Spectrum fees, interconnect and retainable access charges for CMSPs and WLL (M)-based BSOs shall w.e.f. 1.8.2003 be identical and equal to the more advantageous of the terms in force for either of the two services at present.

## **HFCL**

We pay WPC Royalty of 2% of AGR as earned from WLL subscriber for allocation of spectrum upto 5+5 MHz. For allocation of spectrum beyond 5+5 MHz, higher royalty @ 3%/ 4% could be levied similar to that levied on cellular operators.

### **Reliance Infocomm Ltd.**

#### **ADDITIONAL SPECTRUM FEE**

1. The TDSAT has very rightly concluded in para 68, page 79 that, for operation of WLL(M) service on large scale there is need for additional spectrum for WLL services

and suggested that the Government should allocate additional spectrum for WLL(M) service.

2. At present, 25 MHz spectrum is reserved for the cellular operators in the GSM 900 MHz band, but the competition is limited to only four operators in each service area. Apart from 900 MHz band, the frequency for the fourth cellular operator has been reserved in 1800 MHz band. The earmarked frequency for cellular operations is 10 MHz per each operator.

3. On the other hand, the frequency reserved for basic service operators is 20 MHz in 800 MHz band and the competition is open and free without any restriction on the number of operators. The frequency earmarked for each operator is 5 MHz to be allocated in phases on fulfillment of the rollout obligations.

4. The cellular operators are initially allotted a minimum frequency of 4.4 MHz and charged 2% of AGR as spectrum charges. On the other hand, the basic operators are allotted initial frequency of 2.5 MHz on establishment of POP in each SDCA and is still charged 2% of the AGR as spectrum charges. The additional allocation of third and fourth carriers is linked to rollout obligations. *In some cases, the additional frequency has not been given despite being available and despite the operators having fulfilled the eligibility criteria of either the establishment of POP or achieving the subscriber base of the required number, as in respect of Delhi.*

5. The above points indicate two issues which are discriminatory and against the BSOs.

With 25 MHz of spectrum for cellular operators, the number of operators (competition) is limited, but with 20 MHz of spectrum for BSOs, the number of operators is unlimited, the competition is open.

The BSOs pay 2% of AGR as spectrum charges for 2.5 MHz of spectrum whereas the cellular operators pay 2% of AGR for 4.4 MHz.

Remove the anomalies

6. Therefore, the first recommendation from the Regulator should be with regard to the level playing field for BSOs and allocation of initial 5 MHz after establishment of POP and removal of the above referred anomalies.

7. We agree that, the additional spectrum, as directed by the TDSAT is urgently required. A minimum of 5 MHz should be additionally given to each BSO using WLL systems and for the additional frequency, the same charges can be levied as in respect of the cellular operators.

Suggestion

8. In brief, the suggestion is that, the initial allocation to the BSOs should be 5 MHz and the charges to be the same as at present (2% of AGR). The additional spectrum of 2.5 MHz should be allocated on completion of 40% rollout obligation and the charges for the same may be 1% extra i.e. total of 3% for 7.5 MHz. The last chunk of 2.5 MHz

should be allocated on completion of 60% rollout obligation and the charges for the same can be 1% more i.e. total of 4% of the AGR for 10 MHz of frequency.

9. With the above background, the questions raised by the TRAI can be answered as follow :

As explained above, firstly, the allocation of frequency should be streamlined and the anomaly as stated in para 42 above, should be removed. The spectrum charges may be 2% for the first 5 MHz. 1% additional when 2.5 MHz spectrum is additionally allocated and 1% more when the last chunk of 2.5 MHz is allocated. This is in line with the charges for the cellular operators of 2% increasing to 4%, when additional chunks are allocated.

**3(b) Should the additional spectrum charge be identical in terms of revenue share, as for CMSPs, or should it differ for some reason? Please explain your response.**

**ABTO/ Tata Teleservices Ltd.:**

Same as in 3(a) above.

**BSNL**

BSNL's comments in this regard are given as above.

**Reliance Infocomm Ltd.**

In view of the background and the response given above, the additional spectrum charges should be identical in terms of revenue share as for CMSPs.

**COAI**

a. The Authority in its recommendations of January 8, 2001 has observed that the formula for spectrum charges for use of WLL frequencies is the same for FSPs and CMSPs and has then gone on to recommend that the existing mode of frequency charges i.e. whatever is applicable to CMSPs should also be applied for WLL (M).

b. However at present CMSPs and WLL (M) operators are paying differential spectrum usage charges. Further, as stated above the spectrum allocated to FSPs is equivalent to about 25 MHz of GSM spectrum – this means that at present FSPs are paying less than half the charges as a percentage of revenue share for about 5 times the allocation of spectrum. FSPs are paying 2% of their revenues for 5 MHz CDMA spectrum equivalent to 25 MHz GSM spectrum, while CMSPs are required to pay 4% of their revenues for spectrum allocation upto 10MHz.

c. It will be extremely difficult to equate the two spectrum usage charges based on their respective capacities. It is therefore submitted that the Authority adopt / recommend a common yardstick and apply a uniform spectrum usage charge of 2% of revenues on both FSPs as well as CMSPs. As has been enunciated by the Authority in its recommendations on WLL (M) higher revenues will automatically translate into higher revenue share fees to the Government.

**HFCL:**

Same as 3(a) above.

**4(a). In circles, should CMSPs have POIs with Basic Service Operators at tandem level? Should the Regulator leave the issue of level of interconnection to mutual agreement amongst the operators, or should interconnection be mandated at the SDCA level also?**

**ABTO/ Tata Teleservices Ltd.**

TRAI in its determination of 8<sup>th</sup> January, 2001 opined that the cellular network in circles cover a large geographical area and should therefore normally, be interconnected at the level of long distance network.

ABTO proposes interconnectivity for all services at LDCA level and at tandem level with mutual agreement. This would reduce the number of POIs and enable reduction of cost of installation. With LDCA level connectivity proposed by ABTO, ABTO feels there is no need to mandate interconnection at SDCA level.

**BPL Mobile**

The interconnection at SDCA level should be mandated, if required by CMSPs, subject to technical feasibility.

**BSNL**

Interconnection of Cellular Mobile Telephone Networks with Basic Network at the SDCA Level should not be considered due to following reasons :-

- i) PSTN and cellular network are two dissimilar networks. SDCA is at the lowest level of hierarchy in PSTN and MSC is at the highest level of hierarchy in cellular network. Interconnection of the switch at highest level of one network with a switch at the lowest level of other network results into serious network complications, violation of National Fundamental Plans, inefficient use of network elements, managerial difficulties and bypass of the telephone traffic/revenues of PSTN by the cellular network. Interconnection between two networks, therefore, should only take place at the same level of hierarchy. This is already an agreed principle of interconnection between FSPs. As far as cellular networks are concerned, this practice of hierarchical interconnection is being followed in most countries like Australia, Japan, USA etc.
- ii) The switches at the SDCA level are not capable of performing desired gateway functions and hence are technically non-feasible.
- iii) There are 2647 SDCAs and almost all of them are not capable of performing desired gateway function for providing interconnection. The upgradation of such large number of switches, accounting systems and their management shall be extremely expensive and is a Herculean task.
- iv) It will pose serious practical difficulties to operate and maintain a large number of Points of Interconnect because of many observations and large data acquisition required for proper operation, maintenance, billing, charging, revenue sharing and other regulatory purposes. Presently, there are only two operators and there are 322 LDCAs. Even as per the present arrangements, when we are providing POIs with level-II TAXs at the LDCC level, the number of POIs will be about 1288. If POIs are

provided at the SDCC level, the number of POIs required to be created will be of the order of about 10500. **It will be extremely complex and unmanageable to operate and maintain such large number of POIs and provide inter-network accounting arrangements.**

v) The clock stability in the local exchanges below level-II TAXs may not be as accurate as that of the TAX. The traffic from cellular networks, specifically data transmission, through such POIs may encounter disconnection and distortion. These switches may, therefore, not meet the prescribed quality of service parameters. It is, therefore, not desirable to have POIs from such switches.

In addition, BSNL has already submitted following points for kind consideration of the Authority while deciding on the interconnection regime :-

(i) **Number of POIs should be limited to a maximum of 3 to 4 in a circle based upon traffic requirements/ number of MSCs of the cellular operators.** This will enable building up necessary capabilities whenever required, by appropriate upgradation of the limited interconnecting switches in order to meet all the technical feasibility requirements. Otherwise, any upgradation required shall have to be carried out in the whole network, which is time consuming and extremely expensive. The cellular network in a Circle has one or limited number of MSCs. Hence, for them, it is not difficult to upgrade, but for FSPs, it is.

(ii) **The service provider whose subscriber originates the call should be given its legitimate right to carry the call to the farthest end in its network and liberty to deliver at a Point of Interconnection of his choice.** This right is already available to both parties in the case of Interconnection Agreement between BSNL and private FSPs. There is no reason to differentiate on this matter in respect of cellular networks. In the present interconnection arrangement ordered by TRAI, the choice of delivery for both type of calls i.e. PSTN to cellular and cellular to PSTN, has been given to the Cellular Mobile Telephone Service Providers **which is discriminatory and not justifiable.**

(iii) De-link routing and charging completely. Charging and routing has been inter linked only for PSTN to cellular calls and vice-versa as per order of the TRAI dated 25.4.1997 which has resulted into serious problems of demand for multiple Points of Interconnection even at technically non-feasible switches, which are unmanageable, not capable of performing desired gateway functioning and cause inefficient use of the network elements. The problem of bypass of STD network of FSPs has also been aggravated with increasing number of POIs because of increasing number of destinations becoming available on local call charge basis instead of STD call charges

iv) As far as PSTN to PSTN calls are concerned, charging and routing are already de-linked in our country as is the practice world over and same principle should apply for cellular to PSTN and PSTN to cellular calls.

**In spite of the reasons given above, if still due to any reason the Authority feels that the interconnection should take place at the SDCA level it may be permitted only subject to the fulfillment of the following conditions on the same lines as applicable for basic services :-**



- i) CMSPs will have interconnection with BSOs either at the level of Level-I TAX or at the SDCA level. No other interconnection point shall be permissible. The POI at Level-I TAX shall be used for all types of STD/ISD calls in both directions and also for intra-circle calls.
- ii) Connectivity at SDCA level shall be only for the terminating traffic of that SDCA meaning thereby that the POI at SDCA level shall be a one-way POI.
- iii) The BSO shall handover the traffic originated from its network at the Level-I TAX by following the principle of far end handover.
- iv) The BSOs may be allowed to charge a flat tariff for intra-circle fixed to cell call depending upon their commercial policy.
- v) Since the BSO will make a far end handover, utilization of CMSPs network for carriage of calls will be reduced. Therefore, the termination charge payable to the CMSPs should also be reduced.
- vi) Since the BSNL switches at the SDCA level are not designed to handle additional interconnection from cellular operators, these will be required to be upgraded/replaced. The cost of such upgradation / replacement shall have to be borne by the cellular operators only.

**COAI**

- a. In the case of a FSP, interconnection with BSNL and other FSPs is available at the SDCA level. Since the FSPs are also now allowed to provide WLL (M) service, it follows therefore, for WLL (M) service also, interconnection is available at the SDCA level.
- b. On the other hand the CMSPs, by the TRAI Interconnect determination of January 8<sup>th</sup> 2001, have been restricted to interconnection only at Level I and Level II TAXs.
- c. This means that CMSPs are eligible for 322 POIs as compared to 2647 POIs for WLL (M). This means that cellular consumers are forced to pay a long distance charge because their calls have to be carried all the way to the POI at the SSA Level (Level II TAX).
- d. The effect of this inequity is evident from BSNL Tariff Order No. 3-8/2003-R&C dated May 13, 2003, the pulse rate (time duration) for local calls is as follows:

Particulars	Pulse Rate (time duration) for local calls	
	In SDCA where POI is located	In Other SDCAs
Fixed to Cell	60 seconds	30 seconds
Fixed to WLL(M)	90 seconds	90 seconds

e. The pulse rate from 60 seconds is thus applicable only for local calls within the same SDCA, where the Point of Interconnection (POI) of the concerned cellular network is located. The charging pulse for fixed to cellular intra circle calls from other SDCA, (i.e., where there is no POI), is 30 seconds.

f. As a result of the above Tariff Order, for local fixed to mobile calls made in SDCA where the CMSP does not have a POI costs the consumer Rs. 2.40 per minute and Rs. 1.20 per minute in SDCA where the CMSP does have a POI. In contrast a fixed to WLL (M) local call costs the consumer Rs. 1.20 for 90 seconds that is effectively 80 paise per minute because the WLL (M) operator is allowed a POI in every SDCA. Thus, BSNL is taking advantage of the fact that CMSPs are not allowed POIs at the SDCA level and making fixed to cellular calls three times more expensive than fixed to WLL (M) calls. This is totally against consumer interest.

g. Because of this difference in the pulse rate, it discourages the PSTN subscribers to make calls to cellular phones. In order to provide level playing field, it is necessary that all types of mobile services, whether WLL (M) or cellular, when a call is made from a fixed phone to a mobile phone within the same SDCA, the pulse rate should be the same.

h. To correct the imbalance between WLL (M) and cellular, it is imperative that CMSPs too should be entitled to interconnect at the SDCA level. This will enable the CMSPs to opt for the most optimal routing plan and provide most affordable services to their consumers.

i. The decision on level of interconnection between CMSPs and BSOs cannot be left to a mutual agreement amongst the operators. After the issue of the TRAI determination of January 8, 2001, CMSPs have, on a number of occasions, taken up this matter with BSNL to provide interconnection at the SDCA level, but BSNL has refused to provide the same. Since mutual agreement has not been possible for the last three years, it becomes imperative that entitlement for interconnection at the SDCA level should be mandated by the TRAI for CMSPs, so that there is level playing field between the BSOs who are providing WLL (M) service and the CMSPs.

### **HFCL**

It would be impractical to have POIs at SDCA level, as it would increase the number of POIs. We believe that all POIs, whether between BSOs and BSOs or those between BSOs and CMSPs should be at the LDCA or higher level.

The implication of SDCA level POI can be severe for BSNL, where network consists of several SDCA level switches. In our network, as well as other private BSOs, the number of switches are fewer as the network has non-hierarchical architecture. So, the number of POIs with CMSPs is naturally fewer. In our case, we have 3 Switches at 2 locations for our services operational in 27 SDCA. Thus, the number of POIs with CMSPs is 2, same as number of switch locations.

## **Reliance Infocomm Ltd.**

Unless various existing anomalies between BSOs and CMSPs with respect to call routing, numbering, tariffs etc. get addressed, CMSPs should not be permitted to have PoI with BSOs at SDCA level. The various reasons for this are

### **i. Commercial issues**

This aspect of the Cellular PoI level is closely linked to the most important commercial issue of 'bypass of intra-circle revenue' by Cellular operators. This is because CMSPs can pick up the call at near end itself. With present cellular Poles at level II Tax locations, BSOs are at least able to recover revenue for traffic originating/terminating in SDCC locations. If CMSPs permitted to establish PoI at SDCC locations, this will further aggravate the present problem resulting into complete bypass of BSO's intra-circle revenue by CMSPs.

### **ii. Licensing issues**

As per license conditions, BSOs have SDCA based roll-out obligation whereas CMSPs are required to cover only 50% of total DHQs. Moreover unlike BSOs, CMSPs are allowed to establish PoI with just transmission equipment i.e. without establishing Point of Presence (PoP).

With such different licensing obligations, only BSOs can have PoI connectivity at SDCA level.

### **iii. Technical & other issues**

If POIs for CMSPs are provided at SDCA level, for 4 CMSPs more than 10,000 POIs would be required. It will be a rather unmanageable task to operate and maintain such large number of POIs creating other issues for inter network accounting and settlement, clock stability, E1s provisioning, QoS, as well as management of the necessary technical arrangements at all these POIs.

Thus the permission to CMSPs to establish PoI with BSOs can be considered only when the difference in license conditions (i.e. establishment PoI by CMSP without establishing PoP) get addressed and principle of far end handover is mandated at all Poles (as explained in 4b below) to avoid bypass of intracircle long distance revenue.

**4(b). To have level playing field between BSOs and CMSPs should the principle of far-end handover (wherever possible) be followed for Basic to Mobile and Mobile to Basic intra circle inter-network calls? Would such a change also require a change in the numbering plan? In your responses to the above questions, please also take account of the likely implications for tariffs for different types of calls, and the relevant regulatory concern or policy that should be emphasized in that context.**

**ABTO/ Tata Teleservices Ltd.**

Such a scheme would require a change in the numbering plan prevailing particularly in the cellular segment. India has a peculiar cellular numbering plan which is not based on SDCA linked numbering scheme followed by basic operators. The numbering scheme should be LDCA based.

ABTO has been constantly emphasizing that there is need to review the National Numbering Plan and bring in the concept of LDCA linked numbering scheme. The present numbering plan of cellular mobile coupled with TRAI's determination on interconnection dated 8<sup>th</sup> January, 2001 and subsequent letter dated 29<sup>th</sup> January, 2001 has enabled CMSPs to by-pass legitimate intra circle long distance traffic of BSOs over last few years resulting in revenue loss of several thousands crores of rupees to basic service operators.

The present numbering plan has lost its relevance as it was based on legacy network of erstwhile DoT now BSNL, which has more than 32500 exchanges. Expansion of the numbering range based on LDCA based linked numbering, therefore is essential.

The main advantages of LDCA linked numbering scheme and LDCA connectivity are:

- a) Fewer points of interconnection—(4 BSOs and 4 NLDOs) interconnectivity at SDCA level leads to more than 20,000 interconnections. This gets reduced to 1800 in case of LDCA connectivity).
- b) Less than 350 national STD codes instead of more than 2600 codes.
- c) Local call in the entire LDCA.
- d) Faster roll out of BSOs' network as POIs required are fewer. This would considerably ease the pressure on BSNL who have capacity constraints and have to cater to the needs of private operators and their expansion plans.
- e) Simplified inter network calls and simplicity in NLDO connectivity and accounting.
- f) Simplified tariff setting.

TRAI should recommend for the implementation of LDCA based numbering plan in a time bound manner.

### **BPL Mobile**

The existing principles of handover between basic and cellular networks should be continued in the interest of the consumers. The detailed justification for this has already been given in the above paragraphs.

### **BSNL**

The principle of far end handover should be followed even in the situation when the POIs with the CMSPs are limited to Level-II TAXs as per the present regime as per our comments already submitted in para 4(a) above.

### **COAI**

a. It is submitted that the above issue does not fall within the scope of Order of TDSAT and the present reference by DoT.

b. In any event, keeping the consumer interest in mind, handing over of calls between BSOs and CMSPs should take place at the Point of Interconnect for intra-circle inter-network calls. This arrangement does not require a change in the numbering plan. The issue of numbering plan has already been decided by the DoT in the Numbering Plan document issued by the DoT in April 2003.

### **HFCL**

We believe that the principle of far-end handover between BSOs and CMSPs should be applied. The originator of the call should have the option of far-end handover if its network extends to the far-end.

This, however, is only feasible if the numbering plan of the Cellular Operators is changed. With the current numbering plan of Cellular Operators, it is not possible for a Basic Operator to do a far-end hand-over. We believe that a LDCA based numbering is ideal & optimal for both basic and cellular operators. The current numbering plan of CMSPs also leads to bypass of intra-circle long distance traffic, causing revenue loss and customer disquiet to basic operators.

### **Reliance Infocomm Ltd.**

At present for BSO to BSO call, originating operator has right to carry the call till far end. However for BSO to CMSP call, as a result of TRAI's decision dated 29<sup>th</sup> January 2002, originating BSO is required to handover the call to CMSP at originating end itself. This has resulted into disparity between intra-circle retail tariffs of BSO to BSO call (charged as distance based STD call) and BSO to CMSP call (charged as local call irrespective of distance).

To avoid this disparity between BSO to BSO call & BSO to CMSP call, which results into bypass of BSO's intra-circle revenue by CMSP, the principle of far-end handover should be followed for Basic to Mobile as well as Mobile to Basic intra circle inter-network call.

However due to peculiar nature of the Cellular mobile numbering, it will not be possible to implement far-end handover completely for BSO to CMSP calls. To address this disparity, it is required to change numbering plan of CMSPs to SDCA linked numbering. Moreover due to the present CMSP numbering scheme, for CMSP to BSO intra-circle call, CMSPs are not required to pay ADC, whereas BSO has to pay ADC for the same distance call. This has provided undue advantage to CMSPs for intracircle calls to BSOs. Thus change CMSP numbering plan will also help to address these various anomalies in IUC implementation.

As a an interim measure, TRAI must prohibit CMSPs from picking up the call at originating Pol itself and permit BSOs to carry BSO to CMSP calls upto the Cellular MSC.

**4(c) If points of interconnection are provided at a lower level of the routing hierarchy, should it be for all types of traffic or for only restricted types of traffic (e.g. traffic only within the SDCA?)**

**ABTO/ Tata Teleservices Ltd.**

In response to issues under 4 (a) & 4 (b) above, ABTO has emphasized the need of interconnectivity among different services at LDCA level or any other level once it is mutually agreed between the operators. ABTO has also urged the need for a change of the present SDCA based link numbering plan to LDCA based link numbering plan & connectivity, which have distinct advantages over SDCA based link numbering plan & connectivity and to bring the cellular services under the ambit of LDCA based link numbering plan.

This should be the ultimate aim and should be implemented in a time bound manner.

**BPL Mobile**

In case of basic to cellular traffic, all types of traffic originating in the SDCA could be handed-over at the PoI existing at the SDCA. If no PoI is available at SDCA level, it should be handed over at the PoI at the LDCA TAX. In case no PoI is available even at the LDCA TAX of the originating LDCA, the call may be handed-over at the GMSC of the cellular operator. In the reverse direction i.e. for traffic from cellular to basic network, the traffic could be handed-over at the terminating LDCA TAX/SDCA tandem depending upon the availability of the PoIs, otherwise at the Level-I TAX.

**BSNL**

This has been explained in 4(a) above.

**COAI**

If the POI is provided at the SDCA level, this should be used for traffic originating and terminating within the same SDCA.

**HFCL**

We believe that a SDCA level POI is not desirable. However, if it is still provided, then it should be only for local traffic, like that between BSO and BSO. However, as pointed out earlier, the current numbering plan of CMSPs does not allow differentiation of the local traffic from inter-SDCA traffic.

**Reliance Infocomm Ltd.**

As detailed in response for 4(a) and 4(b), CMSPs should not be permitted have interconnection at SDCA level. Even if such connectivity is proposed for intra-SDCA traffic only, with present cellular mobile numbering scheme it will not be possible to implement the same.

**4(d) Should points of interconnection be only one-way so that all handover may be far-end handover?**

**ABTO/ Tata Teleservices Ltd.**

The point of interconnection should be one way so that all handover may be at far-end / near-end at the choice of the originating BSOs till such time LDCA based plan is implemented for CMSPs. Relevant interconnection usage charges at the POI must apply.

**BPL Mobile**

No, interconnection should be both way in the interest of the consumers and on account of detailed reasons given above.

**BSNL**

This has been explained in 4(a) & 4(b) above. It is to reiterate that the Points of Interconnection should be only one-way.

**COAI**

As enunciated in the Authority's Order of April 25<sup>th</sup> 1997, CMSPs must be granted both way connectivity at points of interconnect, as also any number of points of interconnect and multiple GMSCs to the cellular network operators as they may require. Therefore, all POI should be for both way traffic and not for one-way traffic.

**HFCL**

As mentioned earlier above, the originator of the call should have the option of far-end handover or near-end handover (incase the network does not extend to the far end). Consequently, POIs should be allowed to be one-way.

**Reliance Infocomm Ltd.**

To avoid bypass of revenue, it is imperative to have interconnection only one-way for implementation of far-end handover for all types of calls. Only in case of mutual agreement between two parties or non-feasible cases (such as originating operator having no presence at the terminating location etc.), near end handover may be permitted.



Increasing the Retention of 5% Access Charge of CMSPs to a reasonable level

**BPL Mobile:**

The TDSAT judgement in this regard would be applicable only for the period – 25/1/2001 to 30/4/2003. With introduction of IUC Regime w.e.f. 1<sup>st</sup> May'2003, retention of a fixed %age of the pass thru' revenue by a CMSP has become irrelevant.

Since both WLL (M) and Cellular Mobile Services are substitutable mobile services within the SDCA and the tariff for the calls is forborne by TRAI in both the cases and also the termination charges as per IUC Regulations of 24/1/2003 are the same for terminating the calls in either network for providing level playing field between the two services, the IUC charges as prescribed should become applicable retrospectively w.e.f. 25/1/2001 for calls between WLL(M) and Cellular networks. For calls to fixed networks the CMSPs should be allowed to retain atleast 10% of the pass thru' revenue for the period: 25/1/2001 to 30/4/2003 in order to compensate them adequately for billing, collection and bad debts.

**BSNL**

Not applicable in view of promulgation of IUC Regulation before the decision of TDSAT was announced.

On the contrary, there is a case for considerable reduction in the termination charges payable to CMSPs as per the IUC Regulation of January 2003. Admittedly the per line cost of cellular network is one third that of the fixed line network. Therefore, the termination charges payable to cellular networks or unjustifiably high. The CPP regime has given advantage to the cellular operators to the extent of about Rs. 2400 crores per annum at the cost of the fixed line operators. This has resulted in very high growth of the cellular services and negative growth of the fixed line services. There is a case to review this arrangements immediately so that fixed line services and its customers are not put to a disadvantageous position vis-à-vis customers of cellular services and WLL (M) services.

**COAI**

a. In the context of 5% access charges, we would also like to draw the attention of the Authority to the TDSAT's observations in Para 35 of its judgment wherein the Tribunal has noted :

“The recommendations of TRAI was considered by the full Telecom Commission on 24.01.2001 and approved. .... The Commission also observed that the concession proposed by TRAI for cell operators will become operative from the date of issue/announcement of guidelines for issuance of licence for basic services...”

b. It is therefore submitted that in addition to the requirement that the 5% be increased to a reasonable level, the Tribunal has also observed that the same has to be applicable from January 25<sup>th</sup> 2001.

c. The Authority is aware that the 5% which was enunciated by the Authority in January 2001 was in fact applied only with effect from February 2002. It is submitted that in the light of the Tribunal's clear observation that the concessions were applicable from January 25<sup>th</sup> 2001, the Authority must ensure that the 5% share is first given to the CMSPs with retrospective effect from January 25<sup>th</sup> 2001, pending the determination of a suitable higher level. The difference could be paid to CMSPs later.

d. Further, although the Authority has noted that the IUC Regime came into force on May 1<sup>st</sup> 2003, which has rendered the 5% issue redundant, it is submitted that for the period from January 25<sup>th</sup> 2001 to April 30<sup>th</sup> 2003, this issue of 5% is valid and must be resolved by the Authority.

e. In line with the TDSAT's directions, the Authority must review this figure and increase it to a reasonable percentage and also apply the revised / increased percentage for the entire period of its validity – from January 25<sup>th</sup> 2001 to April 30<sup>th</sup> 2003.

f. An indication / reference point for a reasonable percentage could be the PCO policy followed by the DoT where the PCO allottee is entitled to 20 paise per call unit.

g. Terms and conditions for grant of PCOs by DoT are given in DoT Memo No.31-13/91-PHB dated July 24, 1993 and Memo No.31-15/98-PHB dated November 29, 1999. A PCO operator is provided with a telephone connection in his premises by DoT/BSNL. This telephone connection is free of normal rent. The PCO operator gets a commission of 20 paise per call.

In the case of CMSPs, junction from MSC to the Point of Interconnect are paid for by the CMSPs. The CMSPs also pay the port charges to BSNL for the junctions, based on the tariffs as prescribed by the Authority. Thus, the entire expenses for the junctions are borne by the CMSPs, which is in total contrast to the situation of a PCO operator.

CMSPs incur billing and collection costs and bad risks as well, whereas in the case of a PCO operator, there are no billing and collection costs as payment in cash is received on the spot after a person makes an STD / local call. There is no element of bad debt also.

In view of the above, there is full justification for payment of 20 paise per call unit to the CMSPs.

**Reliance Infocomm Ltd.**

In view of the implementation of the IUC regime with effect from 1<sup>st</sup> May, 2003, and the expected new IUC regime, this question is no longer valid.

## General Comments

### **ABTO**

#### **Rollout Obligations:**

Rollout Obligations are different for different categories of service providers.

CMSPs have lenient rollout obligations in terms of coverage of 50% DHQ / towns in lieu thereof over a 3 year period from their effective date.

BSOs have more onerous rollout obligations in terms of phased-wise SDCA coverage in equal proportion to urban, semi-urban and rural SDCAs over a 7 year period from their effective date of which 80% SDCA coverage must be done individually over 5 years and balance 20% can be collectively done by the private licensees in 2 years.

#### **Performance Bank Guarantees (PBGs):**

Performance Bank Guarantees (PBGs) are provided to meet rollout obligations of the licensees in their respective service areas. It can be seen from the table above that apart from the high amounts furnished as PBGs as collaterals to meet the rollout obligations provided by BSOs – both pre-NTP '99 and post NTP '99, the rollout obligations are also more stringent on the BSOs as compared to the CMSPs. PBGs provided by BSOs are released in phases as rollout obligations are completed and as high as 50% of the PBGs are only released upon the completion of 100% rollout obligation at the end of the 7<sup>th</sup> year.

### **BPL Mobile**

Based on Hon'ble TDSAT's order, we are happy to note that TRAI has come up with this Consultation Paper within 10 days of the reference being made by DOT vide its letter dated 18<sup>th</sup> August'2003. We are also happy to note that TRAI has promptly recommended to DOT to amend/clarify the licences of the BSOs so as to ensure that roaming outside the SDCA in which WLL (M) subscriber is registered, is not possible through multiple registrations and call forwarding. TDSAT in its judgment dated 8<sup>th</sup> August'2003 has clearly defined the scope of the WLL (M) licences and the service distinction between WLL (M) and Cellular Mobile Services. We hope that TRAI would with the same promptitude recommend revocation of licences of those WLL (M) operators who do not comply with the terms and conditions of their licences, including the scope of service as clarified by TDSAT in its majority judgement as enjoined upon TRAI under Section-11 (1) (a) (iii) and Section-11 (1) (b) (i) of TRAI Act.

We are giving below our views on the various issues raised in the Consultation Paper No. 4/2003 dated 28<sup>th</sup> August'2003.

Under no condition our response should be treated as an acceptance by CMSPs of the TDSAT majority judgment. We reserve our right to appeal to the Supreme Court against the majority judgment or resort to any other legal options that may be available under the law of the country.

Our response is subject to the following pre-conditions:

#### Implementation of the TDSAT judgment

TDSAT judgment must be implemented in letter and spirit by the Govt. either by clarifying the scope of WLL (M) Licence or amending the agreements, as already recommended by TRAI It must be ensured that:

WLL (M) Services are strictly restricted to SDCA limit

Handset cannot be authenticated outside the SDCA in which it is registered.

Inter base station controller/manager authentication is not permitted.

Virtual roaming through multiple registrations and call forwarding outside SDCA is banned.

#### Limiting of unrestricted entry in WLL (M)

As per NTP'99 the need for entry of more mobile operators in a service area is to be based on the recommendations of the TRAI who will review this from time to time keeping in view the spectrum availability, requirements of market, competition and other interest of public. As per Section-11 (i) (a) (i) of TRAI Act, the TRAI is required to make recommendations to the licensor on the need and timing for introduction of new service providers. Since at present there is no limit on the number of BSOs which can be licensed in a service area, to allow them to provide WLL (M) Services would tantamount to having unlimited players in the mobile market, which would be against the provisions of NTP'99. Therefore, entry of new WLL (M) players should be based on the review by TRAI from time to time, as stated above.

#### Compensation to CMSPs

The Consultation Paper does not address the most important issue of compensating the CMSPs for the loss of market share on account of entry of unlimited number of BSOs in the mobile market which was hitherto fore the exclusive preserve of the CMSPs.

Though TRAI in its recommendations dated 8<sup>th</sup> January'2001 had recognized that the consequences of permitting the BSOs to offer WLL Services with mobility will be quite noticeable and it will adversely affect the CMSPs' market share as well as the ARPUs and revenues, it did not take any action to compensate the CMSPs for this loss. We are reproducing below the relevant extracts of para (iv) of TRAI's recommendations dated 8<sup>th</sup> January'2001:

“A detailed examination of the issue undertaken by TRAI indicates that the consequences of permitting the BSOs to offer WLL Services with mobility will be quite noticeable. While for the consumers, the basic service operators and for the overall growth of telecom in the country, the consequences will be beneficial, for the CMSOs it will be quite different. They are likely to experience a fall in their ARPU. There may also be initial reduction in total revenues earned until such time as the reduced levels of tariffs enable them to gain a much wider subscriber base, enough to neutralize the effects of fall in tariffs. Another adverse impact that they are likely to experience could be on the valuation of their business which may register a fall as a result of lowered prospects of future profit realization -----  
-----.

TRAI estimates that generally CMSOs are likely to face a reduction in the rate of their growth as well as ARPU of the order of 10-20% in the first two years of effective introduction of WLL Services-----.

But, the above mitigating factors notwithstanding, it should be acknowledged that WLL Mobile Service will provide to the BSOs entry into an area which till now the CMSOs consider to be exclusively theirs. As a result of this development, they may have to recast their business projections and some of their financial plans.”

We differ with TRAI’s assessment of loss of market and ARPU to be of the order of 10-20% only. With entry of two WLL (M) players in each service area having four cellular mobile operators, the loss of market share to WLL (M) operators would be about 33-40%. This is corroborated by the actual number of WLL (M) and cellular subscribers registered in the last few months. Tariffs have fallen by more than 50% and ARPUs have sharply come down. The loss of market share and ARPUs is not temporary for the first two years only but for the entire licence period of 20 years. The total financial loss over the license period may work out to thousands of crores of rupees.

It is an established practice worldwide that whenever due to any actions of the licensor/policy change by the Govt. the licensees are adversely affected, they are compensated suitably for the loss of business. To compensate CMSPs for the negative fall out of introduction of WLL (M), a monetary relief package needs to be factored into the redressal measures to be adopted to correct the imbalance in the level playing field.

Subject to the above, our considered response on the four issues -highlighted in the Consultation Paper is as follows:

Additional Entry Fee payable by BSOs for WLL (M) Services:

The amount of entry fee which a licensee may be willing to bid/pay for the licence to provide a telecom service will depend upon:

- The business potential of service over the licence period
- Cost of setting-up the infrastructure
- Operating cost
- Rate of return on the investment

In the absence of the competitive bidding process for WLL (M) licences, we will have to work out the entry fee based on collateral information for the 4<sup>th</sup> cellular licences which were awarded based on multi-stage bidding process around the same time as the WLL (M) licences were issued. More than 75% of cellular subscribers remain confined to a single SDCA and do not avail the roaming facility. Within the SDCA, WLL (M) Service and Cellular Mobile Service are substitutable. Therefore, the business potential of WLL (M) can be assumed as 75% of the potential of cellular business in the same service area.

4<sup>th</sup> Cellular licensees were allocated frequency in the 1800 MHz. band whereas WLL (M) operators have been allocated spectrum in the 800/900 MHz. band. Due to higher attenuation in 1800 MHz. band and the higher building penetration losses, the number of base stations required for providing prescribed quality of service and coverage is about 80-100% higher in 1800 MHz. as compared to 800/900 MHz. band for the same technology viz. GSM or CDMA. Therefore, the entry fee which a licensee is willing to pay for providing Mobile Services in 800 MHz. band would be about 1.8 times the entry fee which he is willing to pay for providing same service in 1800 MHz. band.

Even though, the 4<sup>th</sup> cellular licences are technology neutral and the licensees have a choice to adopt any technology, all the operators have deployed GSM technology only. The frequency allocated for the 4<sup>th</sup> cellular licences was in the GSM band as per NFAP'2000. Similarly all the WLL (M) licensees have used CDMA technology because the frequency allocated is for CDMA networks as per NFAP'2000. Therefore, for correctly assessing the entry fee for WLL (M) licensees we will have to work out the relative infrastructure cost per subscriber for the same traffic carrying capacity by the two technologies. With 5 MHz. + 5 MHz. of spectrum allocated to each WLL (M) operator and frequency reuse factor of 1, a WLL (M) base station is capable of handling upto 240 erlangs of busy hour traffic (3 sector – 4+4+4 configuration) catering to about 8,000 subscribers @ 0.03 erlangs per subscriber. In case of GSM networks with 6.2+6.2 MHz. frequency allocation and 4 cell frequency reuse pattern, a GSM base station can handle maximum of about 57 erlangs of busy hour traffic (3+3+3 configuration) catering to about 1,900 subscribers @ 0.03 erlangs per subscriber. Therefore, the number of base stations required for GSM technology for catering to the same number of subscribers will be more than 4 times higher than the CDMA technology in the same frequency band. This would make the CDMA licences far more attractive from the point of view of infrastructure capital cost and operating cost.

All the 3 factors mentioned above i.e. Business Potential, frequency band and infrastructure cost of CDMA vis a vis GSM for catering to the same number of subscribers in a service area should be kept in view while determining the Entry Fee to be paid by WLL (M) operators vis a vis the Entry Fee paid by the 4<sup>th</sup> cellular operator in the same service area.

The entry fee should be payable from the date of issue of the licence. The WLL (M) licensees must pay the balance entry fee with interest @ PLR + 5% from the date of issue of licence till actual payment, the interest rate prescribed in the licence agreements for all delayed payments.

## 2) Concessions for Cellular Operators

In para 2.6 of the Consultation Paper TRAI has listed out the concessions given to CMSPs as a sequel to allowing limited mobility to basic operators. We believe that these concessions do not in any way impact the entry fee which the licensees for WLL (M) Services would have bid had there been an open bidding process for the award of these licences.

The reduction in revenue share license fee from 15% to 12, 10 & 8% for category 'A', 'B' & 'C' circles, respectively, for CMSPs does not give them any advantage viz a viz the basic operators who are already paying revenue share licence fee at reduced rate. In fact there was no justification earlier to charge higher licence fee from the CMSPs. To the extent of revenue sharing licence fee the playing field between Basic Operators and CMSPs has now been leveled.

None of the Cellular Mobile Service Providers either asked for the concession or is providing fixed service using GSM network. Bharti is the only CMSP who is also providing basic service in certain circles for which it has obtained separate basic service licences. This concession is only an eyewash and was given by DOT on its own so as to justify their action in permitting WLL (M) service under the Basic Service License.

The interconnection regime was earlier highly skewed in favour of incumbent and basic operators and was not based on fair principles of competition. While no termination charges were earlier payable by the FSPs for terminating their calls on the cellular networks, the cellular subscribers had to pay a transit charge of Rs. 1.20 per three minutes for terminating a local call on the FSPs' network. Retention of 5% of pass thru' revenue by the CMSPs has been actually allowed from 31/1/2002 till 30/4/2003 though it should have been allowed w.e.f. 25/1/2001, to compensate CMSPs for the loss of collection, billing and bad debts which is far less than the actual amount spent by the CMSPs for providing these services to the FSPs. In fact TDSAT has also recommended in its majority judgment that this amount should be suitably increased. Moreover, 5% retention of pass thru' revenue was allowed under TRAI's determination dated 8/1/2001 in respect of 6 issues on interconnection between cellular and Basic Networks and was not allowed as a quid pro quo for allowing WLL (M) service under FSP licence. However, with the implementation of the IUC Regulations w.e.f. 1<sup>st</sup> May'2003, this has become irrelevant and is no more applicable.

In para 2.7 it is mentioned that CMSPs were granted additional facility of providing Mobile PCOs. A PCO provided through mobile handset does not fall in the fixed service domain. Moreover, CMSPs are allowed to provide Mobile PCOs as per NTP-99 itself. This facility cannot be treated as quid pro quo for allowing FSPs to provide WLL (M) Service.

From the above it will be obvious that the above concessions do not in any way impact the entry fee for the WLL (M) Service that the Govt. would have got in an open bidding process. Moreover, all these concessions were known to the bidders at the time of bidding for the 4<sup>th</sup> cellular licences and hence the bidders would have taken this into consideration while bidding for the entry fee for 4<sup>th</sup> cellular licences.

With regard to the points raised in para 2.8 of the Consultation Paper our comments are as follows:

The bank guarantees do constitute some cost for the operator and the Govt. may reduce the BGs to a reasonable lower level, as considered adequate to ensure compliance of their rollout obligations by BSOs. However, the Entry Fee and PBGs for the new Basic Service Licensees are the same as recommended by TRAI for providing fixed services i.e. Wireline/fixed WLL and were not modified consequent to permitting BSOs to provide WLL (M) Service.

None of the basic operators has met its rollout obligations viz a viz VPTs, rollout in rural and semi-urban areas as well as the number of SDCAs to be covered. The Govt. should strictly enforce these obligations. Simply having the obligations mentioned in the licence but not taking any action to ensure its implementation, is of no use.

The charges being paid per subscriber by basic operators @ 2% of AGR for 5 MHz. + 5 MHz. of spectrum in 800 MHz. CDMA band are considerably less than the charges paid per subscriber by cellular operators for 4.4 MHz. + 4.4 MHz. of spectrum in 900/1800 MHz. GSM band when considered in the context of number of subscribers which can be supported by the spectrum allocation to them. The number of subscribers which can be supported per MHz. in case of CDMA network is considerably more than the subscribers per MHz. in case of GSM network. In our opinion the charges to be paid for usage of spectrum by any operator should be based on the usage to which the spectrum can be put and the revenue earning potential thereof. The same principles should apply for determining the spectrum usage charges by the WLL(M) vis-à-vis cellular mobile operators as are applied for determining the entry fee.

The geographical areas covered by the cellular and basic licensees are the same except in the case of four metros viz. Delhi, Mumbai, Kolkata and Chennai. In case of WLL (M) licences the metro areas of Mumbai, Kolkata and Chennai form parts of Maharashtra, West Bengal and Tamil Nadu Circles, respectively. Therefore, for determining the entry fee payable by WLL (M) licensees for these circles, the entry fee paid by 4<sup>th</sup> cellular operators for the metro and the corresponding circle of which it forms a part for the WLL (M) license should be considered.

As regards the impact of change in termination charges specified earlier in the licence, it may be mentioned that as per the IUC Regulations, same termination charges are payable for terminating calls on WLL (M) and cellular networks. In case the entry fee payable by WLL (M) operators is to be linked to the entry fee paid by the 4<sup>th</sup> cellular operators, this factor will not have any impact as the same IUC Regime would be fully applicable for both types of licences.

## **COAI**

At the outset, we would like to submit that our response is not and should not be taken as an endorsement of or our acquiescence to the decision of the Government to permit FSPs to offer WLL (M) services. It is also without prejudice to our rights to challenge the TDSAT Majority Judgment in WLL (M) Case, our rights in other pending cases; and subject to our right to make any other or further submissions at any stage, including before or after the steps proposed herein are implemented; and also subject to other steps / actions, we may be advised at any stage.



## II. TDSAT JUDGMENT HAS TWO ASPECTS :

We would also like to submit that the above TDSAT judgment on the basis of which the Authority has initiated its consultation exercise has two distinct aspects:

The TDSAT has first defined the product / service of WLL (M) as has been permitted to FSPs as a clearly distinct service from cellular mobile service offered by CMSPs. And secondly, based on this differentiated product offering, directed the DoT / TRAI to initiate suitable action to correct imbalances on the basis of select parameters that have been identified as possibly unfair to CMSPs.

### A. THERE IS A CLEAR SERVICE DISTINCTION BETWEEN WLL (M) AND CELLULAR

To define the product / service of WLL (M), the Hon'ble Tribunal has relied upon inter alia the decision of the Telecom Commission on September 21, 2000, the TRAI recommendations of January 8, 2001, the Government Guidelines of January 25<sup>th</sup> 2001 and the new FSP License of July 2001. The various service distinctions that have been noted by the Tribunal in its judgment of August 8, 2003 are reproduced below for ready reference:

“WLL (M) has to be seen as value addition to WLL service, provided the nature and features of this service are qualitatively different from that of the cellular mobile service.” (Page 19, Para 11)

“What has to be seen is whether WLL itself is a part of basic service or cellular service and if its is a part of basic service as it is in this case, the limited mobility has to be viewed as an offshoot of WLL service as the features of limited mobile service based on WLL and cellular mobile service have been kept distinct.” (Page 44, Para 28)

“The services on WLL platform implied that the numbering plan of the local area is to be followed and Interbase Station Controller / Authentication would not be permitted.” (Page 46, Para 30)

“...the full Telecom Commission...considered this matter.... And there was a general consensus in regard to the lifting of bar in use of the handheld instrument .... But this consensus ... was for permission only in local area i.e. SDCA and not permitting Interbase Station Controller / Authentication....” (Page 46, Para 30)

“TRAI also addressed the validity of the arguments against permitting WLL mobility. It held that as long as there is a significant difference in the scope of services in terms of coverage and facility, such as seamless roaming nationally and internationally as well as a large number of tele and supplementary services which the GSM is capable of offering and the basic is not, the quality and scope of service provided by the Cellular Mobile Service Operators will continue to be different....” (Page 48-9, Para 31).

“The counsel for Telecom watchdog in his written submission as well as the counsels for ABTO and Union of India in their averments have brought out the differences in the features of the two services which to put in a nutshell are as follows:- “... Cellular mobile service provides seamless roaming throughout the country or even internationally whereas mobility in WLL is confined to SDCA and roaming nationally and internationally is prohibited;

Local numbering plan is followed in the case of WLL Service and handover of subscriber from one SDCA to another is prohibited while it is not so in the case of Cellular Mobile Service....” (Page 56-6, Para 40)

TRAI in its recommendations .... has also observed that the two services are clearly distinct and different in terms of coverage facility such as seamless roaming (nationally and internationally) as well as large number of tele and supplementary networks which the GSM network is capable of offering whereas basic service is not.” (Page 57, Para 41)

“TRAI had also held that in cellular mobile systems which are operational in a large number of telecom circles in the country, there is a Mobile Switching Centre (MSC) capable of extensive mobility, management/roaming function while the WLL systems are engineered differently to provide the so called “Last Mile” linkage with the existing exchange and they do not have an exchange namely, MSC as part of the WLL system. Keeping this essential difference in view and the intrinsic character of WLL, the TRAI recommended that basic service operator be allowed to offer WLL with mobility within the local area i.e. SDCA.” (Page 57-58 Para 42).

“We also recognize that to an ordinary subscriber in a SDCA who does not want any roaming outside the SDCA or any other supplementary services offered by CMSPs it would appear as if there is virtually no difference between WLL (M) services offered by Basic Service Operators and those offered by CMSPs without supplementary services, excepting one important difference – WLL (M) services are non-functional outside the SDCA even though the service area of the Basic Service Operator may comprise of several SDCAs.” (Page 59, Para 45)

“The most crucial difference however is that the WLL (M) handset cannot be authenticated except in the SDCA itself. It has been alleged by CMSPs that several basic service operators are flouting this restriction on mobility and that it is not possible to police this restriction. If this is indeed so, appropriate action would have to be taken by the Government to ensure that this does not happen; but that would be a different issue and we are separately looking into it.” (Page 60, Para 45)

“...this issue viz., use of MSC by WLL(M) Operators is the subject matter of another challenge by the CMSPs which is already before us for consideration, we do not find any express permission to the use of MSC architecture by FSPs in the guidelines issued by the Government on 25.01.2001. (Page 61, Para 46)

“...it is important to ensure that mobility in the case of WLL (M) service remains restricted to SDCA and no hand-over from one SDCA to another is allowed under any circumstance. It should be possible to ensure this through application of appropriate software. (Page 77, Para 67)

It is clear from the above that the service distinctions noted and upheld by the Tribunal include :

WLL (M) handset cannot be used outside the SDCA in which it is registered, under any circumstances.

Inter Base Station Controller authentication is not allowed.

Use of MSCs is not permitted in WLL networks.

The scope and coverage of the two services is different. There will be several tele and supplementary services that can be offered by CMSPs but not by WLL (M)

iii) Furthermore, the TDSAT has clearly recorded in Para 98 of its Order that “As long as WLL (M) service is provided as a value-added service under a FSP licence, the existing distinctions between fully mobile Cellular Mobile Service and Limited Mobile Service being provided by WLL(M) service-providers would have to be maintained.”

#### B. EVEN WITH THIS SERVICE DISTINCTION, THERE IS A NEED FOR LEVEL PLAYING FIELD

Having defined WLL (M) as a clearly distinct service, the TDSAT held that dispensation of WLL (M) had nonetheless disturbed the level playing field for CMSPs. This is clear in Para 98 of the Order where the Tribunal has observed “We are conscious of the fact that allowing WLL service with limited mobility will cause disturbance in the level playing field. Hence, we have suggested a number of steps which should be considered and taken for ensuring level playing field” thus, it was to correct these imbalances caused by the introduction of a distinct mobile service, that DoT / TRAI were given a timeframe of 4 months from the date of the Order.

Relevant extracts from the TDSAT Order on the imbalances perceived by the Tribunal, are reproduced below for ready reference:

“However, since permission to allow limited mobility to WLL operators in the basic service stream is bound to disturb the level playing field and since the compensation / reliefs so far given are not considered enough to restore level playing field, we have to examine what further steps would be needed in the matter. (Page 74, Para 64)

“Keeping these distinct features of the two categories of service in view it is equally important to correct the imbalance by ensuring level playing field.” (Page 77, Para 67)

“...there is no doubt in our mind that entry of Basic Service Operators with Limited Mobility services has affected the Cellular Mobile Service Providers in an area where competition hitherto was limited...” (Page 77-78, Para 68)

“...we have not found the reasons given by the TRAI for not recommending any additional entry fee for this service as convincing enough as this is an enormous value-added service over the fixed service which the Basic Service Operators have been providing. (Page 78, Para 68)

“... we feel that there is enough justification for imposing additional entry fee over and above what they are paying as required under the basic service licence agreement. (Page 78, Para 68)

“.....there would be a case for levying additional spectrum charge for WLL(M) service over and above what is being paid at present if allocation of additional spectrum becomes a necessity for operation of this service on a large scale as also for improving the quality of service. (Page 79, Para 68)

“.....The modality for determining additional entry fee may be examined and recommended by the Telecom Regulator (TRAI) by following a transparent process

with due consultation with all the concerned stake-holders. The same method may be followed in case additional spectrum is made available. (Page 79, Para 68)

“...Further, some relief should be given to the cell operators in regard to the points of interconnection and whether these points should go beyond Level I and Level II TAX upto Tandem Exchange level may be considered by the TRAI.”(Page 79, Para 68)

“...In regard to retention of 5% access charges which has been allowed to cellular operators there is a case for increasing this percentage to a reasonable level. Higher percentage in this regard could be recommended by the Telecom Regulator after due and comprehensive consideration of the issue in a transparent manner. (Page 79-80, Para 68)

“.....What is not so understandable is its [TRAI's] decision not to charge any fees for the entirely new value-added service, even though both NTP 1999 as well as DoT's own reference to TRAI on 9<sup>th</sup> October 2000 envisaged levying of such a charge. . (Page 80, Para 69)

“.... We must record our disagreement with these reasons [given by TRAI for not imposing an additional entry fee for WLL(M)] as we believe that this was one much-debated value-added service which merited imposition of a fee on several considerations. Keeping in view the enormity of value addition that WLL(M) Service will invest fixed service as also the imperatives of restoring level playing field, we have already made observations regarding justification for levying additional entry fee and additional spectrum charges in Para 68.(Page 81, Para 69)

“.....we consider that the Government should have, both on policy considerations as well as on economic grounds, levied an appropriate fee for permitting the Basic Service Operators to provide limited mobility within the SDCA. What should be the quantum of such fee; whether it should be linked to revenue-sharing; ..... are issues which are best decided by the Government in consultation with the Regulator, viz., TRAI. However, decision in this respect should be taken quickly in a time-bound manner, preferably within 4 months from the date of this order. (Page 102, Para 96)

“...The Government would however immediately initiate action in terms of what has been stated in Para 68 and complete the exercise in a given timeframe, preferably within 4 months from the date of this order.” (Page 103, Para 99)

### III. FSPs ARE VIOLATING THE SERVICE DISTINCTIONS

While the nature and extent of mobility under WLL (M) is allegedly different from that which is offered by CMSPs, the ground reality is that these distinctions and limits are being openly breached and violated by the FSPs. The Authority is well aware of the violations, as is evident from its letter to DoT dated August 14, 2003, where the Authority has informed DoT that WLL (M) operators are violating the TDSAT Order by breaching the SDCA limits and offering virtual roaming through multiple subscriptions, call forwarding etc and the Authority has called upon DoT to take necessary steps to stop / prevent these violations.

In fact, it is submitted that even within the SDCA too they are offering identical cellular mobile services through wrongful use of MSCs despite the fact that the same are clearly precluded to them.

The various aspects of service distinction have been clearly stipulated in the TDSAT Order, which has also noted the incidence of violations and opined that appropriate action should be taken in this regard. The Order of TDSAT is executable as a decree and the Authority is also duty bound to enforce the terms of the FSP License as they have been interpreted and upheld by the TDSAT.

We find it very difficult to thus respond to consultations where academically WLL (M) is supposed to be a truly limited mobile service but is de facto operating as a full-fledged cellular mobile service.

#### IV. TRAI MUST BOTH ENFORCE THE SERVICE DISTINCTIONS AS WELL AS TAKE SUITABLE ACTIONS TO CORRECT THE IMBALANCES

In the light of the above, it is respectfully submitted that the Authority cannot disregard the service distinctions that have been emphasized by the Tribunal and only initiate action on the imbalances pointed out by the Tribunal.

In fact it is submitted that the Authority itself, in its recommendations of January 8, 2001 had first emphasized the distinctions between the two services and only then gone on to recommend ameliorative measures to correct the imbalances that would nonetheless be caused by the introduction of this distinct and differentiated mobile service.

Therefore, the Authority must first ensure that the WLL (M) service is offered strictly within the parameters that have been defined it and correctly interpreted by the TDSAT before initiating consultations on correction of imbalances.

It is submitted that TDSAT has interpreted the terms of the FSP licenses and that the Authority is duty bound to exercise its powers under Section 11(1)(b)(i) of the Act and ensure compliance of terms and conditions of license and further that if the FSPs continue to blatantly violate license terms, the Authority is empowered under Section 11(1)(a)(iii) to recommend revocation of FSP licenses for non-compliance of terms and conditions of license.

#### V. OUR RESPONSE IS ON THE BASIS THAT WLL (M) IS OFFERED STRICTLY ON THE CONDITIONS / TERMS LAID DOWN BY TDSAT

As mentioned in pre-paras TDSAT has defined the parameters on which WLL (M) is permitted and has on that basis asked the DoT / TRAI to correct the imbalances caused due to the introduction of the service.

Our response to the Authority's Consultation Paper is thus on the clear assumption and understanding that WLL (M) will be offered only strictly within the parameters and conditions that have been laid down by the Tribunal. Further, this is without prejudice to our rights to challenge the TDSAT judgment before the Hon'ble Supreme Court of India, and our rights in other pending cases.

## CHAPTER 2

### Additional Entry Fee payable by BSOs for WLL (M) Service

At the outset it must be pointed out that the imbalances as pointed out by TDSAT and as referred by the DoT, have to be corrected between WLL (M) and cellular and not between fixed and cellular. The terms and conditions on which FSPs have been permitted to offer “fixed” services are of no relevance in this context. It is only the dispensation of limited mobility and the terms on which it has been permitted vis-à-vis the terms and conditions applicable to CMSPs that needs to be corrected.

It is therefore submitted that the reference in Para 2.2 to the Entry Fee and Performance Bank Guarantees applicable to fixed services are of no relevance in the process of this consultation.

It must be pointed out that the TDSAT judgment has stated “Government should have, both on policy considerations as well as on economic grounds, levied an appropriate fee for permitting the Basic Service Operators to provide limited mobility within the SDCA.” It is therefore submitted that any entry fee recommended by the Authority must be applicable with retrospective effect with the FSPs required to pay the applicable figure at appropriate PLR rates as the WLL (M) services have been allowed since January 25, 2001.

As mentioned above, the imbalances noted by the TDSAT are between WLL (M) and cellular and it is these imbalances that have to be corrected by Government / TRAI. Entry fees paid by the existing / new FSPs for provision of fixed services have no relevance in these consultations. The entry fee paid by FSPs for WLL (M) services is NIL as has been clearly recorded by the Authority in its WLL (M) recommendations, and it is from this starting point that the Authority must initiate its consultations. It is therefore submitted that the tabulation of the entry fees paid by FSPs in Annexure III is not only irrelevant as no entry fee has been paid for WLL (M) services, but also creates confusion as to the real issues for determination. The Authority should have proposed an entry fee for WLL (M) services, rather than comparing the entry fees of CMSPs and FSPs, since the latter does not pertain to WLL(M) services. In this context we would like to draw the attention of the Authority to the judgment of Hon’ble Mr. Justice D P Wadhwa in WLL (M) where he has observed that “ ..... it would be seen that the approach itself was faulty. It posed the wrong question and got a wrong answer.”

We would like to respectfully submit that the basic approach of the Authority in this regard is defective / flawed. The Authority is posing the wrong question and therefore cannot expect / anticipate a correct answer. The pertinent question to ask is whether any entry fee has been paid by the FSP for providing WLL (M) services, to which the answer is a categorical “No.” This is also the recorded view of both the Authority as well as the Tribunal. Accordingly, the Authority must moved forward from this premise to determine a correct entry fee for the right which has been given to FSP to offer WLL (M) services.

In any event there are a number of simple arithmetical errors in the Authority’s calculations in Annexure III. These are tabled below:

In Gujarat, the difference in the entry fee paid by the existing CMSPs and the existing FSPs is Rs. 332.99 crores and not Rs. 451.16 crores, as tabled.

In the case of Punjab, the difference in the entry fee paid by the existing CMSPs and the existing FSPs is Rs. 181.41 crores and not Rs. 340.45 crores, as tabled.

In the case of Andhra Pradesh, the difference in the entry fee paid by the existing CMSPs and the existing FSPs is Rs. 124.17 crores and not Rs. 268.79 crores, as tabled.

In the case of Madhya Pradesh, the difference in the entry fee paid by the existing CMSPs and the existing FSPs is Rs. 2.77 crores and not Rs. 8.08 crores, as tabled.

f. Further, it is pointed out that in the case of Maharashtra, Tamil Nadu & West Bengal, the Authority must compare the entry fees paid by the FSPs for the above states with the entry fees paid by the CMSPs for the respective state and Metro. By tabulating it separately, the Authority is indulging in double counting and deducting the entry fee paid by the FSPs twice over – once while comparing it with the entry fee of the Circle as then again the same fee is deducted in the case of the Metro. This gives an incorrect and misleading picture. The following anomalies are pointed out to elucidate this point:

In the case of Maharashtra, the difference in the entry fee paid by the existing CMSPs (Rs. 473.07 crores for Rest of Maharashtra + Rs. 88.86 crores for Mumbai) and the existing FSPs (Rs. 532.55 crores for entire Maharashtra) is Rs. 29.38 crores and not Rs. 456.39 crores as tabled. Further, the difference in the entry fee paid by the new CMSPs (Rs.189 crores for Rest of Maharashtra + Rs. 203.66 crores for Mumbai) and the new FSPs is Rs. 277.66 crores and not Rs. 74 crores for Maharashtra + 88.66 crores for Mumbai. The entry fee of Rs. 115 crores has been deducted twice to give a misleading picture.

In the case of Tamil Nadu, the difference in the entry fee paid by the new CMSPs (Rs. 79 crores for Rest of Tamil Nadu and Rs. 154 crores for Chennai) and the new FSPs (Rs. 50 crores for entire Tamil Nadu) is Rs. 183 crores and not Rs. 29 crores for Tamil Nadu + Rs.104 crores for Chennai. The entry fee of Rs. 50 crores has been deducted twice to give a misleading picture.

In the case of West Bengal, as there was no bid for the 4<sup>th</sup> CMSP license, the entry fee of the existing CMSP license can be taken as a reference benchmark. Accordingly, the difference in the entry fee paid by the new CMSPs (Rs. 12.24 crores for Rest of West Bengal + Rs. 78.01 crores for Kolkata) and the new FSPs (Rs. 25 crores) is Rs. 65.25 crores and not Rs. 53.01 crores as tabled.

g. The “concessions” mentioned by the Authority in Para 2.6 of its Paper have no relevance in the present context of the Order of the TDSAT as well as reference made by DoT.

In any event we have repeatedly submitted that these “concessions” were neither sought nor desired by the CMSPs. The CMSPs were not given a choice in the matter in the extension of these ‘concessions’ - it was not as if provision / permission of WLL (M) was tied to the acceptance of these concessions by CMSPs. As has been rightly questioned by Hon’ble Mr. Justice S B Sinha of Supreme Court whether the concessions given to the CMSPs were asked for by them or not and / or whether only

because they received such concessions they were estopped or precluded from raising the issues.

It must also be noted that lower license fee, issues with regard to points of interconnection, retention of percentage of pass through revenues were the result of an independent and separate dialogue with the Authority that was initiated well before WLL (M) was even conceived of. Their linkage to WLL (M) is inexplicable.

In any event these “concessions” were either meaningless or inadequate gestures that were unilaterally thrust upon the CMSPs. The permission to offer fixed services on existing GSM infrastructure was an empty and meaningless gesture as not one single CMSP took up this offer of the Authority / DoT. The retention of 5% of pass through revenues has been recognized even by the TDSAT to be extremely inadequate and the DoT / TRAI have been asked to review and increase this percentage to a reasonable level.

k. To refer to Mobile PCO’s in Para 2.7 as an additional facility granted to CMSPs in the context of WLL (M) is completely incorrect. CMSPs are allowed to offer all types of mobile services. This right was upheld by the Authority itself and this right was further and explicitly endorsed by NTP-99. We are unable to understand why this facility is time and again being portrayed as a special concession given to CMSPs in the context of WLL (M). We would like to emphasize that the two issues are completely unrelated.

l. The differences between FSPs and CMSPs terms and conditions listed by the Authority in Para 2.8 are completely irrelevant. At the cost of being repetitive and driving home the point, we would like to once again reiterate that the terms and conditions on which FSPs have been permitted to provide fixed services is of no relevance in the present context and comparing the FSP and CMSP license terms is neither necessary nor warranted in the scope of the present consultations which are based on the Hon’ble TDSAT’s judgment of August 8, 2003.

m. In any event we would like to submit that Performance Bank Guarantee as the name clearly indicates is only a guarantee for ensuring performance vis-à-vis the rollout obligations and other commitments of the service providers. It is not a cash outgo, it is released once the service provider has fulfilled his commitment. This is clear from the following para of the Authority’s own recommendations on FSPs dated August 31, 2000:

“...it has also to be kept in view that the performance bank guarantee furnished by the new operators, is not a cash outgo. It is only a bank guarantee which is to be released in phases subject to the operator fulfilling the network roll out obligation stipulated for them in our recommendation. Network roll out is to be completed in phases and specified amounts of the guarantee amount are to be refunded on completion of the stipulated roll out at the end of each phase. Under this arrangement, therefore, subject to the operator fulfilling his roll out obligations, the guarantee will be fully released and the Entry Fee paid by him will be only the amount paid in cash at the time of the issue of the licence.”

n. It must also be pointed out that the FSPs are still woefully short of meeting their rollout obligations whereas the CMSPs have not only met, but exceeded their rollout



obligations. Therefore to talk about differential rollout obligations in the abstract presents a misleading picture.

o. The proposal tabled by the Authority in Para 2.11 that the additional entry fee levied on WLL (M) be made equal to the difference between the entry fee of the new basic service entrant and the fourth cellular mobile operator, is completely unacceptable. As stated by us above, the entry fee paid by FSPs is to provide ‘fixed services,’ the entry fee paid for WLL (M) is NIL This fact has been recorded by the Authority as well as acknowledged by the Tribunal.

p. We also object to the statement that the 4<sup>th</sup> CMSP bid in full knowledge of WLL (M). The Authority is aware that the permissibility of WLL (M) was under challenge by the CMSPs and also the fact that entry into cellular was a closed door regulated process. CMSPs desirous of enhancing their cellular footprint had no choice but to bid for the 4<sup>th</sup> license.

q. Further, the TDSAT had passed an Interim Order on January 29, 2001 in Petition 1 of 2001, which had clearly stated that

“In the meantime, any license granted will abide by the result of this petition. If any license is granted, it will contain a clause that the license will be revoked, if the decision goes in favour of the petitioners in this case....”

The 4<sup>th</sup> cellular license tender was invited on March 23, 2001 and the bids were finalized on July 31, 2001 while the above dispute was still pending before TDSAT.

While determining the entry fee for WLL (M) it must be kept in mind that the FSPs have been given 5 MHz CDMA spectrum in the 800 MHz band, which has a far higher subscriber capacity and, consequently, far higher value than the equivalent spectrum in the GSM Band. It may be noted that 5 MHz in CDMA IS 95B systems which were being used in 2001 provides about 4-5 times more erlangs per cell site compared to equivalent spectrum in GSM. Further now, the FSPs are using CDMA 2001x systems, which provide around 6 times more erlang capacity than equivalent GSM spectrum. This is elucidated in the table below:

Capacity in 5 MHz Spectrum

	GSM	CDMA 2001x
Simultaneous Calls / Sector / Carrier	8	32
Carrier Bandwidth Mhz	0.2	1.25
Carriers / Sector	$5 / 0.2 / 9 = 2.77$	$5 / 1.25 = 4$
Simultaneous Calls / Sector	$8 \times 2.77 = 22.22$	$32 \times 4 = 128$
Erlangs / Sector	14.89	$24 \times 4 = 96$
Erlangs / Cell	$14.89 \times 3 = 44.67$	$96 \times 3 = 288$

This higher capacity of CDMA spectrum effectively means that the 5MHz that has been allocated to FSPs is equivalent to at least 25 MHz of GSM spectrum.

This has also been confirmed by the FSPs in TDSAT where they have placed evidence that a single 10 MHz license with CDMA yield 177% the erlang capacity of a 30 MHz license with GSM.

**Chandra Shekhar,A.K.**  
**A/31 Asiad Village, New Delhi**

The issues framed are with respect to TDSAT's order noted the differences in the Licenses for CMSPs and BSOs providing WLL (M) services. The differences pertained to operating area beyond which handover of calls is not permissible, no. of players of the service allowed within the operational area, USO requirements and spectrum. The order requires TRAI to determine on a transparent basis additional entry fee on BSOs providing WLL (M) service, extra spectrum fee for increased spectrum for such BSOs, extending points of interconnect to be provided to CMSPs from TAX at Level I and II to Tandem Exchange level and upward revision of access charges of 5% retained by CMSPs to make up for the identified differences so as to bring about the level playing field conditions between the two services.

In my view, the diagnosis of the problem by TDSAT is correct regarding the differences to be bridged for bringing about the level playing field conditions between the CMSPs and WLL (M)-based BSOs. However, their prescriptions to bring about the level playing field conditions will

- (a) vitiate the technological neutrality objective of the National Telecom Policy 1999 (NTP 1999),
- (b) perpetuate the differences/anomalies of the two services making unification of these services inter se and as between both of them with the rest of the services as aimed at by the NTP 1999 even more difficult if not impossible, and
- (c) the solutions if implemented would lead to even more intense disputes than is at present the case, which will retard the growth of the services and prevent inflow of direly needed inflow of equity and debt funds for enabling the required growth of the services.

Hence for level playing field conditions to be ensured as between the CMSPs and WLL (M)-based BSOs without disturbing technological neutrality while encouraging unification of licenses and avoiding further litigations between the operators of the different services, the following broad policy and license agreement changes need to be made by Government: WLL (M)-based Basic Services and GSM-based Cellular Mobile services are recognized as two alternative forms of Wireless Mobile services without imposing on either service any artificial restrictions on their service area for call hand over, spectrum allocation or no. or type of points of interconnect.

**HFCL**

We would like to highlight the real impact of our WLL(M) services on the Cellular Operators. As would be evident from the details below, there is no impact of our WLL(M) on cellular services.

We offer WLL(M) services in four large cities (Chandigarh, Ludhiana, Jalandhar & Amritsar) and one small town (Jagraon) in Punjab. As shown in the map, these are non-adjointing SDCA. A customer’s mobility is restricted to the SDCA. The handset is non-operational under any circumstance outside the SDCA in which the customer is registered.



From our experience, we have found the demand volume for WLL(M) services in the smaller cities to be insufficient to make the services viable. The chances that a user would need to go out of the SDCAs are significantly higher in the smaller towns. Hence the demand for WLL(M) services is low, despite tariffs being lower than that of Cellular services. The demand amongst business users is even lower. The introduction of CPP has taken away a major USP (free incoming) of the WLL(M) services.

We believe that unless mobility is permitted to be extended beyond a SDCA, the attractiveness of WLL(M) services to customers and threat to Cellular services would remain low. This is also borne out of the following trends in the subscriber base of various service providers in Punjab:

Month	HFCL Infotel WLL(M)	Reliance Info WLL(M)	All Cellular	Notes
Jan'01	Nil	Nil	1,44,390	Launch of our services after permission to offer WLL(M). Only one cellular operator in Punjab.
Feb'03	36,399	Nil	8,69,428	Month of peak subscribers achieved by us and launch of country-wide services by Reliance Infocomm

July'03	24,572	1,48,496	12,46,164	
Aug'03	24,925	1,84,152	13,02,045	

As evident from the table above, the growth of cellular subscribers has continued at a scorching pace inspite of launch of our services or that of Reliance Infocomm. The growth in cellular subscribers is essentially due to increase in cellular players from one (Spice Corp.) in Jan '01 to three (Spice, Airtel, BSNL) now and the resultant decline in tariffs.

Lastly, we would like to cover the macro aspect of the reliefs and benefits that have been conferred on the Cellular Operators over a period of time, including when the WLL(M) services were permitted:

- Reduction in the annual licence fee from 17% to 12%/10%/ 8% as applicable for BSOs
- Permission to provide PCOs and fixed telephony on GSM platform
- Direct inter-connection amongst cellular operators within a circle and with NLDOs
- 5% share in the PSTN charges collected from the consumers pursuant to the GOT-IT recommendations
- Under the new IUC regime, a Mobile Termination Charge of 40 p/ min for incoming calls; Simultaneously, flexibility granted in retained share in outgoing calls (only charges payable for carriage & termination prescribed in UC Regulations; there is no limits on retained share of originator)

On the other hand, we are handicapped by:

- More onerous Roll-Out Obligations and PBG terms
- Impact of by-pass of legitimate long distance traffic by cellular operators within the circle on revenues and customer base
- Higher capital cost for fixedline services

The monetary value of the licence fee reduction alone would wipe out the differential between the entry fee paid by the cellular operators and us. All the aspects taken together, the level playing field is actually tilted in favour of cellular operators.

### Summary

*TRAI has maintained a view that Level Playing Field (LPF) must be maintained so that one set of operators are not put to any kind of advantage at the cost of the other which could lead to more advantageous entry terms and abuse of fair competition.*

*Thus, any recommendations that TRAI now makes pursuant to the TDSAT Orders must incorporate the recommendations it earlier made on 31<sup>st</sup> August 2000 and 31<sup>st</sup> October 2000 on Level Playing Field for pre NTP'99 BSOs.*

Given the higher entry fee paid and other inferior licencing/ operating terms mentioned above, there is no ground for imposing any new entry fee on BSOs, particularly on pre-NTP'99 operators like us. If TRAI decides to prescribe any additional entry fee for WLL(M) services, then the pre-NTP'99 BSOs like us need to be exempted on account

of the higher entry fee paid and the other differential terms under which we operate. On the contrary, there is a need for TRAI to reiterate its earlier recommendations, so as to provide the suitable relief to pre-NTP'99 BSOs, particularly in terms of entry fee, roll-out obligations and Performance Bank Guarantees.

Such recommendations would ensure that level-playing field is provided and that the competitive level are not compromised.

**Sidharth Sinha**

**Professor, Center for Telecom Policy Studies, Indian Institute of Management, Ahmedabad**

The choice of WLL (with or without mobility) for access provision will depend upon the cost of the scarce spectrum resource. Currently the choice of WLL for local access is based largely on the speed of rollout and not necessarily on its cost advantage, inclusive of spectrum costs. In fact, in many cases, WLL is likely to be replaced with fibre or copper for the long run. A meaningful comparison between WLL and other modes of local access can only be made once the spectrum is priced appropriately. The price of spectrum will depend upon its alternate uses. Therefore, the question of use of WLL for local access cannot be answered without answering the question of efficient utilization of frequency spectrum.

The most common approach to regulating the use of spectrum is to divide the spectrum into non-overlapping blocks and issue licenses for exclusive rights to transmit in one such block in a given geographic region. There are two alternative approaches to the license terms and conditions. In the first case, for each block of spectrum, the government can determine which application will be selected, and it can also determine the transmission standard. Under the traditional central planning approach, governments have generally done both. An alternative is the 'flexible use' doctrine whose goal is to allow market forces to influence decisions, whenever it is possible, within a licensed spectrum management framework. Under the flexible use approach, license holders are free to decide what they will use their spectrum for, provided that interference levels for adjacent frequency blocks and neighbouring geographical regions do not exceed set thresholds. There may be additional terms and conditions related to the transfer of licenses and the choice of technical standards.

The main advantage of the flexible use policy is that it allows individual firms, rather than the government, to decide how exactly to use each block of spectrum. Spectrum is then used to provide the most valuable services, with the most cost-effective technology. Generally, it would be difficult for regulators to predict which services and technology will prove to be the most valuable. With this flexibility innovation is encouraged, since firms need not wait for approval to offer a new service. This approach also encourages development of applications which conserve on spectrum utilization. The extent of flexibility may need to be circumscribed by the need to promote applications with significant economic externalities but low financial viability, for example, rural and remote area coverage.

The second question in spectrum management is deciding who gets spectrum. The auction mechanism appears to be emerging as the preferred mode for answering this

question.. For example, the TRAI has recommended an auction mechanism for the entry of the fourth cellular operator. As noted by the TRAI, 'If limited entrants can function in a telecom service market (due to spectrum limitations or size of the market), then competitive bidding is the most appropriate method". (TRAI's recommendations on Cellular Mobile Service, Explanatory Memorandum, page 10, June 23, 2000).

The objective of the foregoing discussion is not to provide a detailed blueprint for spectrum management but only to raise the broad issues which would be relevant for resolving the question of WLL with mobility. One implication of the discussion on spectrum management policy is that with a flexible use policy for spectrum it should not be necessary for the government to exactly define the characteristics of the WLL plus mobility service. This is fortunate since, in any case, it would be virtually impossible for the government to exactly define service characteristics satisfactorily, given the dynamic nature of technology in this area. Instead the government should approach this issue from the perspective of spectrum management and allocation.

I describe below the outline of a possible approach for the government. The government can auction spectrum with the potential for use in WLL. However, the license should provide some degree of flexibility in the eventual use of the spectrum. Ultimately, it should be left to the judgement of the auction winner to determine the exact use of the spectrum. It is possible that at the winning bid it may not be worthwhile to use the spectrum for WLL. This may be true for high-density areas where the spectrum may have alternative higher value uses. On the other hand, in the case of sparsely populated areas the winning bid may not be high and it could be economical to use the spectrum for WLL. Questions related to the extent of mobility and other features of the service should be left to the judgement of the service provider. The license should not specify detailed roll-out obligations but could require a certain minimum degree of activity related to spectrum usage. The auction could be open to both basic and cellular mobile license-holders. Each of them, of course, would view the spectrum as a part of their broader strategies and the winning bid would reveal the most valuable use of the spectrum. This may or may not be WLL.

To conclude, the main advantages of this approach are:

1. It does not pre-judge the choice of WLL technology for local access.
2. It does not require the TRAI to specify features of WLL. It permits the service to be tailored to specific needs and circumstances.
3. It does not freeze the product characteristics and permits rapid absorption of new technology.
4. It minimizes regulatory intervention in a technologically dynamic sector.