

TVR/COAI/208  
31 July 2002

**The Telecom Regulatory Authority of India**  
A-2/14, Safdarjung Enclave  
New Delhi – 110 029

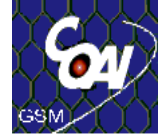
Dear Sirs,

**TRAI CONSULTATION PAPER NO. 2002/2 ON  
TARIFFS FOR CELLULAR MOBILE TELEPHONE SERVICES**

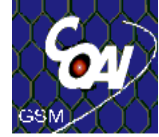
Please find enclosed our detailed response on the TRAI Consultation Paper on Tariffs for Cellular Mobile Telephone Services.

COAI has studied the views expressed and the proposals tabled by the TRAI in the said Consultation paper and would like to briefly submit the following :

- a) **The prevalent market tariffs** of Rs. 200 monthly rental and approx. Rs. 2 per minute airtime charges **are well below the TRAI reference benchmark tariffs** of Rs. 422 monthly rental and airtime charges of Rs. 4.65 per minute determined by the Authority in February 2000.
- b) In the present environment of vigorous competition, where there are upto 4 cellular mobile operators and potentially at least 4 WLL (M) operators, a tight approach to tariff setting is not warranted.
- c) However, it is **important for the Authority to ensure healthy competition and level playing field** conditions.
- d) **The Authority must put in place adequate safeguards to prevent predatory pricing and other anti-competitive practices**, especially by the incumbent operators and particularly with respect to interconnection. In this context we would like to propose that the tariff regulation of the Authority be especially focused on regulating the incumbent operator who is in position to indulge in predatory pricing and other anti-competitive practices.
- e) Further, with the entry of WLL (M) operators offering equivalent and competitive mobile services, the **Authority must address the inequities in the cost structure of WLL(M) and cellular mobile services**, which are solely / **single-handedly responsible for the differential tariffs** at which these services are being offered to consumers

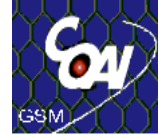


- f) We would also like to submit that the in the **approach followed by the Authority** in arriving at the proposed tariff package for cellular mobile services **many elements of cost have either been disregarded or incorrectly applied**. Consequently, in our view, **the tariff package proposed by the Authority is not indicative of the costs borne by the industry and is therefore, to that extent, in violation of the Authority's own principles to prescribe cost based tariffs for this sector**.
- g) The Authority must appreciate that the application of the proposed tariffs as cost based tariffs will leave the operators with virtually no flexibility to package the tariff offering to suit the requirements of individual customers.
- h) We further submit that the application of such a tariff will leave little scope or margin for the operators to recover their huge sunk costs.
- i) Our key Concerns on the methodology and assumptions followed in the Consultation Paper are :
- i) **Accumulated Losses suffered by the Cellular Industry have not been considered** – these total up to over Rs. 7,000 crores as on March 31, 2002. **The Authority must to incorporate** into its cost computations, **the cost of funding the huge accumulated losses that have been incurred by the first and second cellular operators**.
  - ii) **Costing Approach does NOT take into account Historic cost** - the presence of a nationwide world-class cellular infrastructure is a result of the investments of over Rs. 15,000 crores made by the 1<sup>st</sup> and 2<sup>nd</sup> cellular operators. **The Authority** cannot ignore this investment and **must ensure that avenues are provided to these operators to achieve a fair and reasonable return on their investment**.
  - iii) **Entry Fee and Return On Investment (RoI) have not been considered** - these form an important component in the operators' costs. The All India Entry Fee Paid by the two cellular operators in each service area totals to over Rs. 7,000 crores. Similarly, a reasonable return on operator investment is a necessary component while setting tariffs. **The Authority must provide for the costs incurred towards Entry Fee as also an adequate Return on Investment**.
  - iv) **Average Recurring Expense of 22% is on the Lower Side** - in its previous tariff Consultation exercise the Authority had tabled alternative cost scenarios with an ARE of 25% and 30%. And it is believed that in the final prescribed tariff package, the Authority had taken an ARE of 30%. We also believe that a 30% ARE is also the prescribed norm in the Government Units / PSUs. **The Authority may kindly consider an ARE of at least 30% for its cost computations**.
  - v) Proposed Rental Cap is computed based on Total Subscriber Base instead of Post paid subscriber base - **prepaid and postpaid are completely**



**distinct segments and in the case of prepaid subscribers there is no concept of a monthly rental.** The Authority must take this factor into consideration as also the fact that prepaid subscriber comprise 61% of the present subscriber base.

- vi) Subscriber Mix (Prepaid and Post paid) is considered constant** - the monthly ARPU from prepaid subscribers is far lower that that realized from postpaid subscribers. It is also a fact that the fixed charge for prepaid subscribers is only by way of a nominal administrative charge and that the airtime tariff per minute is higher on account of the lower usage. If the Authority prescribes a standard tariff based on the prevalent low market tariffs for post paid services, it will leave the operators will virtually no flexibility to price their tariff offerings in a manner to suit the individual requirements of specific customer segments. **The Authority must consider that prepaid subscribers constitute an increasing percentage of the total subscriber base.**
  
- vii)Subscriber numbers used for computation of Tariff is not specified** - it is not clear whether the Authority has used closing number of subscribers or average monthly subscribers for the computation of monthly rental. Since the rate of addition of subscribers in the past months has been significant, the subscriber base considered by the Authority – average or closing will have a significant impact on the tariff determination exercise. We submit that **world over telecom analysts apply the average subscriber base in their calculations. We hereby request the Authority to also adopt this approach.**
  
- viii) All Fixed Assets not included in Computation of Rental** – we believe that fixed assets such as office equipment, vehicles, etc., have not been considered in the cost computations. These account for nearly **9%-10%** of total assets. **The Authority must incorporate the cost of all fixed assets in the computation of the proposed standard tariff.**
  
- ix) Spectrum charges are based on the lowest slab of 2%** - operators are paying between 2-4% of their revenues as spectrum usage charges. We urge **the Authority to take the spectrum usage charges at the highest band of 4% in the computation of the proposed standard tariff.**
  
- x) Equal incoming and outgoing airtime charge have been considered for computation of airtime tariffs per minute** – this is an unrealistic assumption, as the Authority is aware that with the fierce competition from WLL (M) services where incoming calls are free. **Airtime tariff set by the Authority must be adequate to cover all effective airtime costs and that the rate per minute is calculated in conjunction with the monthly rental component**
  
- xi) Normated Network Design cannot adequately represent incurred cost** – it is apprehended that single uniform network design is not possible across the widely diverse service area categories. **We request the Authority to**



**share with us details of the normated network design used by it in the present exercise**

- xii) Capacity Utilization Cannot be 100% - networks are configured to meet the specified grade of service during busy hour utilization and therefore telecom networks by design will always have idle capacity. A capacity utilization factor of 70% may be taken as a reasonable benchmark by the Authority.**
- xiii) Supplementary and Roaming Revenues do not constitute 20% of ARPU -as per data available with us these add up to around 13%. The Authority may kindly share with us details of the data available with it for supplementary and roaming revenues**
- xiv) Market fragmentation as a result of WLL (M) – we would like to understand from the Authority the details of how they have factored into their cost calculations the aspect of fragmentation of the market by upto 8 mobile operators.**

We would once again like to reiterate that we believe that **the Authority should adopt a light touch approach to regulation and focus on ensuring healthy competition and level playing field conditions.**

**In the event that the Authority deems it necessary to prescribe tariffs for this sector, we do hope that it will take cognizance of the above very critical issues while finalizing the proposed tariff package for cellular mobile services.**

We are working with the same data as submitted to the TRAI for deriving tariffs and making proposals that incorporate all the above-mentioned points. These would be submitted to the Authority for its kind consideration before 15<sup>th</sup> August'2002.

Kind regards,

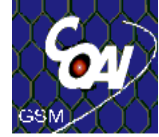
Sincerely yours,

**T V Ramachandran**

**Director General**

**Distribution:** Chairman, TRAI  
: All TRAI Members  
: Secretary, TRAI  
: Advisor (Economic), TRAI  
: Advisor (MN), TRAI

**Encl:** Detailed Response



## COAI RESPONSE TO TRAI CONSULTATION PAPER NO. 2002/2 ON TARIFFS FOR CELLULAR MOBILE TELEPHONE SERVICES

### I. Introduction

COAI has studied the views expressed and the proposals tabled by the TRAI in its Consultation Paper on Tariffs for Cellular Mobile Telephone Services and hereby provides its response to the Consultation Paper, the views aired by the Authority as also the specific issues that have been posed by the Authority for consultation.

At the outset, we would like to submit that in the present environment of vigorous, in fact, excessive competition, where there are upto 4 cellular mobile operators and potentially at least 4 WLL (M) operators, a tight approach to tariff setting is not warranted.

The Authority is aware that **the prevalent market tariffs** of Rs. 200 monthly rental and approx. Rs. 2 per minute airtime charges **are well below the TRAI reference benchmark tariffs** of Rs. 422 monthly rental and airtime charges of Rs. 4.65 per minute determined by the Authority in February 2000.

The prevalence of competition is evident from the fact that less than 1% of the subscriber base has opted for the standard tariff package The Authority itself has noted

COAI would like to submit that **the heavily discounted market tariffs are well below costs and are driven by market compulsions and the need to meet consumer expectations, enlarge subscriber growth & gain market share.**

We believe that it would be far more beneficial for the consumer and the market if the Authority would focus its role on ensuring free and fair competition and the viability of the businesses. This is **critical to incentivise investments into the sector.**

Foreign investors looking for a return on their investment are deterred by the lack of level playing field conditions and the high imposed costs of this sector.

We therefore submit that for attracting investments into this sector, it is **important for the Authority to ensure healthy competition and level playing field** conditions.

**The Authority must put in place adequate safeguards to prevent predatory pricing and other anti-competitive practices**, especially by the incumbent operators and particularly with respect to interconnection. In this context we would like to propose that the tariff regulation of the Authority be especially focused on regulating the incumbent operator who is in position to indulge in predatory pricing and other anti-competitive practices.

Further, with the entry of WLL (M) operators offering equivalent and competitive mobile services, the **Authority must address the inequities in the cost structure of WLL(M) and cellular mobile services**, which are solely / **single-handedly**



**responsible for the differential tariffs** at which these services are being offered to consumers. Aspects of inequity include :

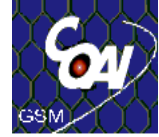
- i) Differential Entry Fee
- ii) Inequitable Interconnect arrangements
- iii) Discriminatory Spectrum Usage Charges

These inequities must be addressed to ensure similar cost structures and level playing field conditions.

In the context of the Consultation Paper, we would like to make the following submissions :

## II. **Prevalent Tariffs DO NOT Cover Costs**

- a) We would first like to respectfully submit that there is an **incorrect prima facie assumption** by the Authority that **the prevalent tariffs for cellular mobile services, not only cover the costs of the operators, but also provide them with a suitable margin of return.**
- b) We would like to unequivocally state that **nothing could be further from the truth.** It is a well-documented fact that the cellular industry continues to run with huge accumulated losses. In fact, the accumulated losses of the industry have mounted steeply in the last 12 months. The accumulated losses for the cellular industry have gone up from almost Rs. 6900 crores on March 31, 2001 to over Rs. 7700 crores on March 31, 2002. Details of the company-wise investments, revenues and losses are already available with the Authority.
- c) We submit that the **in approach followed by the Authority in arriving at the proposed tariff package** for cellular mobile services, **several elements of cost have either been disregarded or incorrectly applied.** Consequently, in our view, **the tariff package proposed by the Authority is not indicative of the costs borne by the industry and is therefore, to that extent, in violation of the Authority's own principles to prescribe cost based tariffs for this sector.**
- d) The Authority must appreciate that the **application of the proposed tariffs as cost based tariffs** will leave **the operators with virtually no flexibility to package the tariff offering to suit the requirements of individual customers.**
- e) We further submit that the application of such a tariff will leave **little scope or margin for the operators to recover their huge sunk costs.**
- f) In this context, we would like **to urge the Authority to review the cost structure of the industry to reconcile the prevalent market tariffs with its own principles of cost based tariffing.** This is necessary to improve the viability of the sector. In this context, we would like to remind the Authority that as per the Preamble to TRAI Act as amended in January 2000, the Authority is required to protect the interests of Service Providers.



### III. Relevance of Prescribing Tariffs in the Current Environment

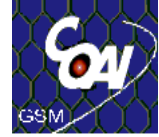
- a) In any event when there is enough competition in the sector and the prevalent market tariffs are running far below costs, the need for tariff regulation itself needs to be questioned.
- b) With the presence of 3-4 cellular mobile operators in every service area and upto 4 WLL (M) operators who will be providing equivalent mobile services at below cost tariffs, in our opinion, there is no requirement for the Authority to prescribe standard tariffs.
- c) **We believe that the Regulator should adopt a light touch approach in the matter of tariff regulation.** It should focus on collecting cost data from the operators to arrive at benchmark cost tariffs, which it should then use to address instances of anti-competitive practices and predatory pricing.
- d) It may further be noted that in any event all tariff plans are filed by the operators with the Authority who is fully empowered by the Act to intervene at any stage.

### IV. COAI's Earlier Submissions on the Tariff Review Exercise

- (a) At this juncture, we to recall the attention of the Authority to COAI's letter dated May 23, 2002 on the subject of the tariff review exercise. In the said letter, COAI had emphasized that since :
  - i) **Market tariffs were well below the benchmark tariffs** prescribed by the Authority there was a **strong case for the Authority to opt for a light touch regulation** and in the matter of tariff setting.
  - ii) There is considerable **uncertainty on the degree and extent of competition from WLL (M)**; it would be very **difficult to reasonably predict the business economics of the industry.**
  - iii) Since **Interconnect costs play an important role in determining end user tariffs** it may be advisable to **wait for the costs for interconnection that were being finalized** by the Regulator.
- (b) We would like to strongly reiterate the above submissions for consideration by the Authority. A copy of our earlier letter is once again enclosed for your kind consideration.

### V. Concerns on the Approach followed for Tariff Setting

- Despite our strong belief that in the present environment of vigorous competition, there is no requirement for the Regulatory Authority to prescribe tariffs, we would nonetheless like to respond to the issues raised, methodology followed and assumptions made in the current Consultation Paper to arrive at the proposed standard tariff for cellular mobile telephone services.



- From our understanding of the data tabled and views expressed in the Consultation Paper, we would like to point out a few anomalies and lacunae in the methodology and assumptions adopted by the Authority in arriving at the Proposed Tariff
- In addition to the above, we will also be **submitting a detailed tariff proposal on behalf of the cellular industry which will be based on the same data that has been submitted by the industry to the Authority** and will be addressing all our key concerns about the methodology followed and the assumptions made in arriving at a cost based tariff.

**We would like to request the Authority to share with us the data, assumptions and calculations carried out by the Authority to arrive at the proposed standard tariffs.**

- Our key Concerns on the methodology and assumptions followed in the Consultation Paper are :

(a) **Accumulated Losses suffered by the Cellular Industry have not been considered**

- In this context, we would like to reiterate our concern that the alternative scenarios tabled by the Authority in the Consultation Paper, are based on the incorrect premise that the prevalent tariffs as on March 2002 cover all operator costs and also provide margin. We would like to once again emphasize **that the approach adopted by the Authority, does not take into account the losses suffered by operators at the prevailing tariffs.**
- We would like to submit that till date the first and second operators have invested huge sums in Entry Fee, capital expenditure and initial cash losses. **The past losses of the industry are in the form of investments that have been made by the industry looking at future market potential, and therefore must yield a return in future.** Going forward, the industry will need to continuously invest in capital expenditure out of the projected cash profits. However, the present TRAI proposal would leave the industry with little if any margin, to pay back this investment. It is submitted that any tariff proposal by the Authority must take into account the pay back period, return on investment, IRR, etc.
- We would like to strongly submit that any attempt / proposal for a further reduction in tariff from the prevailing tariffs, which will only add to the huge accumulated losses of the cellular industry. This would seriously impact its very viability and survival.

**We hereby request the Authority to incorporate into its cost computations, the cost of funding the huge accumulated losses that have been incurred by the first and second cellular operators.**



(b) **Costing Approach does NOT take into account Historic cost**

- From the Consultation Paper, we understand that the Authority has carried out a normation exercise in order to convert historic cost of network assets into current cost. This has been done by applying current prices for the equipment as obtained from a new service provider who has recently ordered equipment for CMTS.
- The Authority is aware that the prices of equipment and also the customs duties have fallen sharply since 1995.
- We would like to submit that if the current costing method is adopted by the Authority to prescribe tariffs, then the first and second cellular mobile operators, who have invested huge sums of money in their network assets from 1994 onwards, will be unable to recover their investments and will have to suffer losses to the extent of difference between historic cost and current cost.
- The Authority will appreciate that **the presence of a nationwide world-class cellular infrastructure is a result of the investments of over Rs. 15,000 crores made by the 1<sup>st</sup> and 2<sup>nd</sup> cellular operators.** The Authority cannot ignore this investment and **must ensure that avenues are provided to these operators to achieve a fair and reasonable return on their investment.**
- It is further submitted that **the 3<sup>rd</sup> and 4<sup>th</sup> operators cannot compete on the basis of incremental cost alone.** If the Authority is of the view that the 3<sup>rd</sup> and 4<sup>th</sup> operators are vital for the expansion of the market, then it **must ensure that they are able to get a genuine return on their investment.** With the telecom sector going through a bad phase internationally investors are viewing this sector as a high-risk investment. It is therefore submitted that the Authority must ensure at least an 18% return on equity.
- In this context, we would like to inform the Authority that COAI had commissioned Price Waterhouse Coopers to do an industry benchmarking study for the 12 month period ended September 2001. Using the data compiled by PwC and applying the same to the average subscriber base for the year ended March 31, 2002, we find that the TRAI proposed tariffs will result in ARPUs that are as much as 40% lower than the expected ARPUs based on the industry's cost structure as is clear from the following table :

**TABLE-1**  
**Comparison between Expected ARPU based on Historic Cost and TRAI Proposed Tariff based on Current Cost**

(in Rupees)

Particulars	Average Subscriber Base (YE March 2002)		
	Metro	Circle A	Circle B
Cumulative Capex per subscriber *	15,187	17,400	16,622



Rental per month after applying 22% ARE, License Fee & Spectrum Charges	324	371	354
Opex per MOU with License Fee & Spectrum charges	2.46	4.12	3.73
No of MOUs per sub as on March 31, 2002	218	282	163
Monthly Airtime Charges per sub (based on cost)	535	1,161	608
<b>Expected ARPU based on cost structure as on Sep 30, 2001 (excluding Return on Investment and Entry Fee) (A)</b>	859	1,532	962
<b>Expected ARPU based on TRAI Proposed Tariff (B)</b>	<b>836</b>	<b>895</b>	<b>649</b>
<b>Difference (B-A)</b>	<b>(23)</b>	<b>(637)</b>	<b>(313)</b>

\* Cumulative capex as on September 30, 2001(as per a Benchmarking Study carried out by Price Waterhouse Coopers)

- The above table clearly shows the variation in expected ARPU due to difference in current cost approach proposed by the Authority and the historic costs incurred by the first and second operators. Based on above assumptions i.e even without taking into account the costs of Entry Fee and Return on Investment, the **TRAI proposed tariffs will result in an ARPU loss of Rs 23 per month for the Metro Service Areas, Rs. 637 per month for the Category “A” Service Areas and Rs. 313 per month for the Category “B” Service Areas. Application of the proposed tariff would only serve to drive the industry further into the red.**

**(c) Entry Fee and Return On Investment (RoI) have not been considered**

- We would also like to point out that **both Entry Fee and Return on Investment which form an important component in the operators’ costs, have not been taken into consideration in the current tariff setting exercise.**
- In the case of Entry Fee, the Authority has mentioned that the same is a cost borne by the service providers, but there is no defined provision in the Consultation Paper for recovering the Entry Fee paid by the cellular operators.
- It may be noted that **the All India Entry Fee Paid by the two cellular operators in each service area totals to over Rs. 7,000 crores** and constitutes a significant component in the costs incurred by them in setting up their businesses.
- We would also like to recall the Authority’s attention to its earlier Tariff Consultation Paper on Framework and Proposals for Telecom Pricing released in September 1998, wherein the Authority had tabled three alternatives for recovering the fixed License Fee (now the Entry Fee) either through rental or



airtime. In its final recommendation, the License Fee (Entry Fee) was equally allocated between both monthly rental and usage charges.

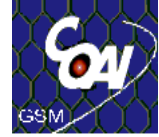
- Similarly, a **reasonable return on operator investment is a necessary component while setting tariffs**. It may again be noted that in its Consultation Paper of September 1998, the Authority had calculated the price caps for the various telecom services on the basis of a profit rate ranging from 10-20%.
- To demonstrate the impact of both Entry Fee and the Return on Investment on the operators' investment, we have incorporated these components into the historic cost based ARPUs arrived at in the above TABLE-1. It may be noted that by assuming a RoI of 12.3% on operating expenses, ARE and Entry Fee and by allocating the Entry Fee paid over the period of license, the contrast in the ARPU with the TRAI proposed tariff increases still further.

**TABLE-2**  
**Comparison between Expected ARPU based on Historic Cost (with Entry Fee & RoI) and TRAI Proposed Tariff based on Current Cost**

(in Rupees)

Particulars	Average Subscriber Base (YE March 2002)		
	Metro	Circle A	Circle B
Cumulative Capex per subscriber*	15,187	17,400	16,622
Rental per month after applying 22% ARE, License Fee & Spectrum Charges	324	371	354
Opex per MOU with L Fee & spectrum charges	2.46	4.12	3.73
No of MOUs per sub as on March 31, 2002	218	282	163
Monthly Airtime Charges per sub (based on cost)	535	1,161	608
ARPU based on cost structure as on Sep 30, 2001 (excluding RoI and Entry Fee)	859	1,532	962
<b>RoI**</b>	<b>12.3%</b>	<b>12.3%</b>	<b>12.3%</b>
<b>Entry Fee Allocated ***</b>	<b>15</b>	<b>101</b>	<b>55</b>
<b>Expected ARPU after RoI and Entry Fee (A)</b>	<b>982</b>	<b>1834</b>	<b>1142</b>
<b>Expected ARPU based on TRAI Proposed Tariff (B)</b>	<b>836</b>	<b>895</b>	<b>649</b>
<b>Difference (B-A)</b>	<b>(146)</b>	<b>(939)</b>	<b>(493)</b>

\* Cumulative capex as on September 30, 2001



\*\* Assumed as 12.34% (weighted average cost of capital with debt-equity ratio: 1.3, cost of equity 18% & cost of debt: 8%) on operating expenses, ARE and Entry Fee.

\*\*\* Entry Fee paid allocated over the period of license.

- It may be noted that **the variation in expected ARPU, taking into consideration the Historic cost, Entry Fee and a nominal return on investment, results in an ARPU loss of Rs 146 per month for the Metro Service Areas, Rs. 939 per month for the Category “A” Service Areas and Rs. 493 per month for the Category “B” Service Areas** when compared with the ARPUs derived from the TRAI proposed standard tariff.
- We would like to submit that it would be **extremely incorrect of the Authority to prescribe, as a cost based tariff, any such tariff that is far below costs and would result in a monthly ARPU loss of the above magnitude.**

**We hereby urge the Authority to adopt the principle of historical costing and also provide for the costs incurred towards Entry Fee as also an adequate Return on Investment.**

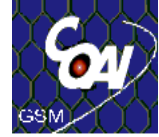
**(d) Average Recurring Expense of 22% is on the Lower Side**

- We note that the Authority has assumed an ARE of 22% in its computations. The rationale of this number is not readily understood.
- It may be noted that in its previous Tariff Consultation exercise, the Authority had presented alternative cost scenarios with an ARE of 25% and 30%. It is verily believed that in the final prescribed tariff package, the Authority had taken an ARE of 30%.
- We also believe that a 30% ARE is also the prescribed norm in the Government Units / PSUs.

**COAI submits that a 22% ARE is too low and the Authority may kindly consider an ARE of at least 30% for its cost computations.**

**(e) Proposed Rental Cap is computed based on Total Subscriber Base instead of Post paid subscriber base.**

- It appears that the Authority has computed the monthly rental by applying a 22% factor on network assets for average recurring expenses (ARE) and dividing the same by the total number of subscribers, including prepaid subscribers.



- We would like to submit that **prepaid and postpaid are completely distinct segments**. This distinction that has not been made in the tariff model of the Authority while arriving at the proposed monthly rental of Rs. 200.
- The Authority's approach appears to be based on the assumption that pre-paid subscriber will also pay a monthly rental. This is incorrect as prepaid subscribers allocate a far lower monthly expense for their mobile services. Consequently, the cellular operators are able to recover a very nominal administrative charge from prepaid subscribers by way of a fixed monthly recurring charge. This charge cannot under any circumstances cover the full fixed monthly per subscriber costs incurred by the operators.

**We would like to submit that since there is no defined pricing method for recovering the complete rental from pre-paid subscribers and since they currently account for 61% of the total subscribers as reported in the Consultation Paper, the Authority must take this factor into account while arriving at a prescribed cap for monthly rental.**

(f) **Subscriber Mix (Prepaid and Post paid) is considered constant.**

- We have noted from the data submitted by the operators that the Authority has not asked the industry to submit data separately for prepaid and post paid subscribers. We therefore believe that prepaid –postpaid subscriber mix for the industry given in Tables 2.1, 2.2 and 2.4 for September 2001, December 2001 and March 2002 have been obtained from data already available with the Authority.
- We believe that possibly as a result of the above, the Authority has not considered a change in the future composition of subscriber mix into pre-paid and post paid. The assumption that the subscriber mix will remain static at the current level is unrealistic. Worldwide trends indicate that as a proportion of total, the prepaid subscriber base grows at a far higher rate as marginal subscribers are added to the network.
- The Authority itself has noted that the monthly ARPU from prepaid subscribers is far lower than that realized from postpaid subscribers. It is also a fact that the fixed charge for prepaid subscribers is only by way of a nominal administrative charge and that the airtime tariff per minute is higher on account of the lower usage. **If the Authority prescribes a standard tariff based on the prevalent low market tariffs for post paid services, it will leave the operators with virtually no flexibility to price their tariff offerings in a manner to suit the individual requirements of specific customer segments.**
- We would like to point out that if the Authority prescribes a standard tariff of Rs. 200 monthly rental and airtime tariff of Rs. 2 per minute, the industry will suffer an immediate adverse impact on its prepaid revenues as is evident from the



table below. **There will be an ARPU loss of Rs. 201 on each prepaid subscriber.** This loss will be further accentuated if the prepaid : postpaid ratio of 60:40 subscriber move upwards in favour of pre-paid subscribers.

**TABLE-3**  
**Comparison of ARPU between Present and Proposed Tariffs**

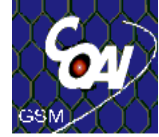
Particulars	Present Scenario		Proposed Scenario		Difference	
	Prepaid	Postpaid	Prepaid	Postpaid	Prepaid	Postpaid
<b>ARPU</b>	454.00	1,270.00	253.00	1,270.00	<b>(201.00)</b>	-
<b>Monthly rental</b>		202.00		200.00		2.00
<b>VAS</b>	67.00	283.00	67.00	283.00	-	-
<b>Airtime Charges</b>	387.00	785.00	186.00	787.00	<b>(201.00)</b>	2.01
<b>Minutes of usage</b>	93.00	394.00	93.00	394.00	-	-
<b>Rate per minute</b>	4.16	1.99	2.00	2.00		

(in Rupees)

Note:

- (a) In the Present Scenario, ARPU, Monthly Rental, VAS and MoU are as per TRAI Consultation Paper whereas Airtime Charges and Rate per minute are derived numbers.
- (b) In the Proposed Scenario, MoU and VAS are assumed to remain same as the Present Scenario and ARPU is a derived number based on the Proposed Tariff of Rs 200 Rental and Rs 2 per minute of Airtime Charge.

- **COAI hopes that the prepaid services will be continue to be under forbearance as the application of such tariffs as are being proposed by the Authority would destroy the business economics of a segment (prepaid) which is driving the growth of the market and contributing to increased mobile tele density**
- COAI would also like to draw the attention of the Authority to its Consultation Paper of September 1998, wherein the Authority, while stating the main elements of the framework for tariff regulation had enunciated the principle that **the price mechanism should maintain flexibility for the operator.** The Authority had opined that such an approach would lead to :
  - A more competitive interaction between the operators,
  - Provide greater scope for prices to reflect effect of improved technological alternatives,
  - Give the operators the freedom to distinguish between different types of customers and
  - Ensure better price and quality for the customer.



- We would like to reiterate our support for the above principles and hope that the same will find a place in the present tariff setting exercise of the Authority.
- We further submit that if a weighted average ARPU and cost are to be taken for determining the 'standard tariff', it is imperative the Authority assume the correct weightage for prepaid services. Going by the current trends in India and Asia, the growth of the cellular industry is being triggered by the growth in prepaids – which account for as much as 80-85% of total additions. In fact in the highly penetrated Delhi market, during the past 6 months – prepaids have accounted for 100% of the total net adds. It is therefore submitted that the future computation of minutes of use (MoUs) per subscriber be based on a higher mix of prepaid to total consumers. It is suggested that the Authority may consider prepaid to account for 70% of the subscribers in FY03, 75% in FY04 and 77.5% in FY05.
- Further, we would also like to bring to the notice of Authority **an error in their calculations as the derived rate per minute for prepaid and postpaid based on data provided in the Paper itself comes to Rs.4.16 and Rs.1.99 respectively and NOT Rs.1.89** as mentioned in Table 2.5

**We hereby request the Authority to consider the clear rising trend of prepaid subscribers while prescribing the tariff for postpaid services.**

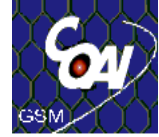
**(g) Subscriber numbers used for computation of Tariff is not specified.**

- From the information given in the Consultation Paper, it is not clear whether the Authority has used closing number of subscribers or average monthly subscribers for the computation of monthly rental.
- We would like to submit that **since the rate of addition of subscribers in the past months has been significant, the subscriber base considered by the Authority – average or closing will have a significant impact on the tariff determination exercise.**

**We submit that world over telecom analysts apply the average subscriber base in their calculations. We hereby request the Authority to also adopt this approach.**

**(h) All Fixed Assets not included in Computation of Rental**

- From the Consultation Paper, it appears that the Authority has considered only Network Equipments for computation of monthly rental.



- We would like to submit that other fixed assets for e.g. office equipment, vehicles, etc., have not been considered. It appears that data for the same has not been collected from the operators, as this item is not included in the data annexure of the Consultation Paper.
- As per industry sources, we would like to inform the Authority that the above accounts for nearly **9%-10%** of total assets.

**We request the Authority to incorporate the cost of all fixed assets in the computation of the proposed standard tariff.**

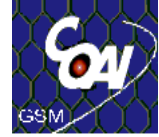
**(i) Spectrum charges are based on the lowest band.**

- In the matter of spectrum charges, we note that the Authority has considered the same at 2% of the revenues. The Authority is aware that the license fee revenue share on account of spectrum charges varies based on frequency allocated to the operator and spectrum usage charges will increase when additional frequencies are allocated.
- In fact the metro operators of Delhi and Mumbai are already paying 4% of revenues as spectrum usage charges, the other operators are paying upto 3% of their revenues as spectrum usage charges. We submit that the Authority must factor in the differential spectrum charges paid by the industry.

**We urge the Authority to take the spectrum usage charges at the highest band of 4% in the computation of the proposed standard tariff.**

**(j) Proposed Airtime Tariff does not allow for flexibility in variation in Incoming and Outgoing charges**

- The Authority has **considered equal incoming and outgoing airtime charge for computation of airtime tariffs per minute**. This again appears to be an **unrealistic assumption**, as the Authority is aware that **with the fierce competition from WLL (M) services** where incoming calls are free, cellular operators will be compelled to offer flexible tariff packages, where incoming charges will be very low maybe even close to zero.
- We are further given to understand that **for calculating the airtime rate per minute, the Authority has also considered free minutes** given by the operators. We would like to submit that this would **result in incorrect estimates** especially in the case of package plans with higher monthly rentals and free incoming calls and free limited outgoing calls.



- To overcome this problem, it is suggested that the **concept of effective rate per minute be considered by the Authority** i.e. the rate per minute should be calculated in conjunction with the monthly rental component.

**Therefore, it is imperative that an airtime tariff set by the Authority is adequate to cover all effective airtime costs and that the rate per minute is calculated in conjunction with the monthly rental component.**

**(k) Normated Network Design cannot adequately represents incurred cost**

- We understand that the Authority has used a normated network design to arrive at an efficient configuration for the network. In our opinion, **a normated network design is not possible with the given topographical diversities** that exist between and across network categories namely Metros, Circle 'A', 'B' and 'C' and cannot therefore adequately represent incurred costs.
- COAI apprehends that the **normated network design would be entirely theoretical as a single uniform network design is not possible across the widely diverse service area categories.**

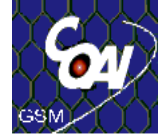
**We would like to request the Authority to share with us details of the normated network design used by it in the present exercise.**

**(l) Capacity Utilization Cannot be 100%**

- In the context of network design, we note that the Authority has also opined that the subscriber must not pay for additional capacity.
- It may however be noted that **all networks are configured to meet the specified grade of service during busy hour utilization** and therefore telecom networks by design will always have idle capacity.
- Therefore, **telecom networks by design must always have idle capacity**, as they must be configured to meet the specified grade of service in busy hour utilization. Further, **since additional capacity has to be added in steps, the costs will be semi-variable and cannot be fully variable with subscriber addition.**

**COAI believes that a capacity utilization factor of 70% may be taken as a reasonable benchmark by the Authority.**

**(m) Supplementary and Roaming Revenues considered on higher side**



- In Para 2.7 of the Consultation Paper, the Authority has stated that revenues other than rental and airtime charges, add up to about 20% of the ARPU. We submit that this figure appears to be on the higher side. Based on data available with us from the industry benchmarking study carried out by Price Waterhouse Coopers in September 2001, the supplementary charges and roaming charges constitute about 13% of total revenues.

**We request the Authority to share with us details of the data available with it for supplementary and roaming revenues. This data may be shared with us in a coded form so as to ensure confidentiality of the information.**

(n) **Market fragmentation as a result of WLL (M)**

- As mentioned earlier, the cellular industry will have to face **fierce competition from WLL (M) services** which will be in a position to fully meet the voice telephony requirements of a mobile subscriber within the SDCA at local fixed call tariffs.
- The **introduction of WLL (M) will definitely result in far lower subscriber adds for the cellular industry.** This in turn would impact the per subscriber capex incurred by them. This aspect must be incorporated by the Authority into its rental computations for the cellular industry.

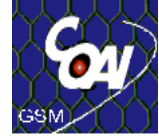
**We would like to understand from the Authority the details of how they have factored into their cost calculations the aspect of fragmentation of the market by upto 8 mobile operators.**

**VI. COAI Response to Specific Issues Posed by TRAI**

The answers to the specific issues posed by the Authority are given below :

**I SELECTED FEATURES OF THE CELLULAR INDUSTRY IN INDIA**

1. **In the light of the trends witnessed in the cellular sector relating to changing technologies, falling costs, consolidation and increasing competition, the last particularly due to the entry of the third and in some service areas the fourth operator, should the present mode of tariff regulation for cellular services be retained?**



The Authority itself has noted that the tariffs for cellular mobile services are prevailing well below the cost based tariffs that have been prescribed by the Authority.

COAI submits that with these low market tariffs and the vigorous competition prevailing in the cellular mobile market, there is no requirement for micro-management of cellular mobile tariffs and that the Regulator must adopt a light touch approach to regulation.

It may be noted that in any event all tariff plans are filed by the operators with the Authority, who is fully empowered by the Act to intervene at any stage.

However, the Regulator must ensure is that the competition is free, fair and on level playing field terms.

We submit that **the Authority must put in place adequate safeguards to prevent predatory pricing and other anti-competitive practices**, especially by the incumbent operators and particularly with respect to interconnection. In this context we would like to propose that the tariff regulation of the Authority be especially focused on regulating the incumbent operator who is in position to indulge in predatory pricing and other anti-competitive practices

**2. Should different methods of tariff regulation be adopted in different stages of cellular market development as it transitions to the stage of effective competition? If so, what should be the modalities of such stage wise tariff regulation?**

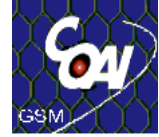
COAI submits that the need for tariff regulation arises when the market is not adequately open and competitive so as to ensure the best prices for the consumers.

In a scenario where in every service area there are 3-4 cellular mobile operators plus upto 4 WLL (M) operators offering competitive mobile services, we believe that a highly prescriptive approach to tariff regulation is not necessary.

**3. Has the market reached a stage in which only a price cap regulation, say CPI - X methodology, will meet the regulatory requirements of monitoring and sustaining the development of markets?**

CPI-X is an approach followed in some economies to encourage and incentivise efficiency in a sector. This approach can only be adopted when the market has reached a stage where all the operators are recovering costs and generating profits.

Such an approach is inapplicable in the Indian scenario where the industry is still battling with huge accumulated losses.



Further, it may be noted that in the Indian market, the tariffs are falling continuously. It would therefore be irrational to link the tariff benchmark to an index that is rising year-on-year.

**4. Since there is significant difference in the market and operating conditions of various types of circles, such as A, B and C and also between circles and metros, should there be different tariffs for these circles?**

Yes. We would like to submit that Metro and Circles are clearly distinct and separate business cases with different licensing costs and operating conditions. These must be separately treated.

In fact COAI had made this submission even in its response to TRAI Consultation Paper 98/3 wherein we had clearly pointed out that the cost structure was very different for Circles which included :

- Significantly higher investment for establishing backbone
- Lower subscriber density and penetration resulting in less efficient capacity utilization and hence higher costs.
- Higher cost of license fee.

COAI had clearly stated that the above aspects must be clearly addressed in the tariff setting exercise.

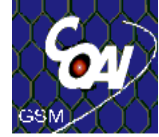
However, due to the huge license fees and low subscriber density, the Circle tariffs arrived at by the Authority were exorbitant and disproportionate. Thus in the earlier tariff setting exercise, Circle economics were ignored and tariffs were set based only on the data submitted by the Metro operators.

We believe that this anomaly must be corrected in the present exercise. The Authority must differentiate between Metro, A, B and C category service areas and prescribe tariffs that take into account the separate and distinct costs incurred by these service areas for setting up their networks to provide services to the consumers.

The actual tariffs that will be offered by the service providers, will, as always, continue to be determined by consumer demand, extent of competition, etc.

## **II. METHODOLOGY FOR TARIFF DETERMINATION**

**1. In the tariff exercise for the Telecommunication Tariff Order 1999, fully allocated current costs normated for optimal capacity utilisation was used. Should the same methodology be continued in the present exercise also? If not, what alternative costing methodology should be considered for adoption? For instance should incremental costs be used in view of the rapid growth that has taken place in the CMTS**



## **industry in the last few years?**

We would like to submit that in any tariff setting exercise carried out by the Authority, the huge costs that have been incurred by the existing licensees, cannot and must not be disregarded.

The Authority will appreciate that the presence of a nationwide world-class cellular infrastructure is a result of the investments of over Rs. 15,000 crores made by the 1<sup>st</sup> and 2<sup>nd</sup> cellular operators. The Authority cannot ignore this investment and must ensure that avenues are provided to these operators to achieve a fair and reasonable return on their investment.

The Authority is aware that the prices of equipment and also the customs duties have fallen sharply since 1995. We would like to submit that if the current costing method is adopted by the Authority to prescribe tariffs, then the first and second cellular mobile operators, who have invested huge sums of money in their network assets from 1994 onwards, will be unable to recover their investments and will have to suffer losses to the extent of difference between historic cost and current cost.

The above view has also been voiced in our response to TRAI Consultation Paper 98/3 wherein we had stated that the historic costs incurred by the operators must be taken into account in the tariff setting exercise.

As regards incremental costs, it is submitted that the 3<sup>rd</sup> and 4<sup>th</sup> operators cannot compete on the basis of incremental cost alone. If the Authority is of the view that the 3<sup>rd</sup> and 4<sup>th</sup> operators are vital for the expansion of the market, then it must ensure that they are able to get a genuine return on their investment. With the telecom sector going through a bad phase internationally investors are viewing this sector as a high-risk investment. It is therefore submitted that the Authority must ensure at least an 18% return on equity.

COAI urge the Authority to adopt the principle of historical costing so that the 1<sup>st</sup> and 2<sup>nd</sup> operators are able to recover the huge investments that they have made since 1995 to put up a nationwide cellular infrastructure.

## **2. In order to encourage subscriber growth it would be desirable to keep the rentals as low as possible. For this purpose, would it be appropriate to account for the entire license fee and spectrum charges in the airtime charge?**

We would like to submit that low rentals might encourage take up but not usage. The Authority recognized this fact in 1998-99 when the rental for cellular mobile services was extremely low at Rs. 156 per month.

The Regulator must ensure that the fixed costs of the service provider are recovered from the monthly rental.



In any event, budget conscious subscribers who do not want the burden of a fixed monthly charge will always have the option to use prepaid services.

In this matter, we continue to favour the earlier approach followed by the Authority, wherein the fixed license fee was recovered 50% from rental and 50% from usage charges.

This approach must now be extended to allocation of entry fee, annual revenue share license fee as well as annual spectrum usage charges.

In the context of spectrum usage charges, we would however like to point out that the 2% spectrum charges that have been considered by the Authority in its workings are the very minimum that have to be paid by the service providers. It is however a fact that the most operators are now paying 3-4% as spectrum usage charges. The Authority must take the highest charge of 4% for spectrum usage into account while computing tariffs.

3. **There are a number of joint and common costs, such as power plant, building, etc. which may be used for providing more than one service. This possibility could increase in the future, affecting costs and sources of revenues. At present, is there any need to take this into consideration, and if so how?**

As a principle of cost based pricing has been adopted by the TRAI, joint and common costs of integrated operators must be allocated on a pro rata basis between different services. However the basis for allocation such costs may be addressed in the accounting separation exercise that has been mandated by TRAI.

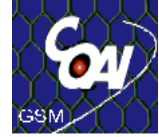
### **III. THE ESTIMATES FOR MONTHLY RENTALS AND AIRTIME CHARGE**

1. **What should be the basis for arriving at cost based rentals i.e. should all capital costs incurred in rolling out the network be attributed to rental or should a part of both capital costs (capex) and operational costs (opex) be attributed to rentals? If the latter, then on what basis should the network elements be apportioned to the two heads?**

We would like to submit that all capital expenditure should be recovered from monthly rentals.

As regards, Entry fee, annual revenue share license fee and annual spectrum usage charges, these may be allocated between rental and usage charges.

- 2 **A monthly rental of Rs. 200/- and airtime charge of Rs. 2/- per minute appears feasible taking into account the revenues coming from roaming and other supplementary services. In view of this and considering that this source of revenue is likely to grow quite fast, is there room for further reduction in monthly rentals and/or airtime charges, i.e. below**



**Rs. 200/- per month for rental and Rs. 2/- per minute for airtime which may form part of the standard tariff package?**

This is totally incorrect.

We would also once again like to point out that the current tariffs prevailing in the market do not cover operators' costs, but are driven by market compulsions and the need to meet consumer expectations, enlarge subscriber base and gain market share.

A clear pointer in this regard is the accumulated losses of the industry that have been steadily increasing and currently stand at well over Rs. 7,000 crores.

We would thus like to firmly state that the tariff package of Rs. 200 monthly rental and an airtime charge of Rs. 2 per minute can under no circumstances be considered to cover costs of the operators. This is evident from the tabulations given by us in earlier paragraphs.

We submit that applying the above below cost tariff as a standard tariff would not only fly in the face of the Authority's own commitment to prescribe cost based tariffs, but would leave the operators with little or no flexibility either to tailor their product offerings or to recover their sunk costs.

At this juncture we would like to once again request the Authority to share with us the data, assumptions and calculations carried out by the Authority to arrive at the above proposed tariffs.

**3 The situation with respect to Metro and "A" Circles on the one hand and "B" and "C" Circles on the other differ substantially. Should there be different tariff approaches in the two situations?**

No.

The Authority must follow a uniform tariff approach for cellular mobile telephone services. However as mentioned earlier, the tariffs arrived at would be different for different service area categories on account of their differential cost structures.

For further details refer to our response in I - (4)

**4 Many CMTS operators are sharing infrastructure such as backhaul facility with each other. This certainly has a bearing on costs. What would be the best way to estimate and incorporate it in the analysis for determining standard tariffs?**



Although sharing of infrastructure is a much desired end objective, the actual progress on the ground in this regard is minimal.

In any event, all payments for shared infrastructure will be reflected in the data submitted by the operators and therefore there is no requirement to separately consider this expense.

**5 CMTS operators are to be allotted additional spectrum depending upon their subscriber base. This will have effect on future roll out of the network, and on the cost viability. How should this be factored into the tariff analysis?**

As mentioned earlier cellular operators are paying between 3-4% of their revenues as spectrum usage charges. The Authority must factor this into its tariff setting exercise.

**7 Optimum capacity utilization for different network elements is affected by different factors. What factors should be taken into account to determine optimum capacity utilization? What should be the benchmarking for optimum capacity utilization for each of the network elements?**

Optimum capacity utilization for different network elements would depend upon the factors like:

- Trend of equipment cost variation (upward and downward) with time.
- Optimum ordering size.
- Minimum time for procurement, installation and commissioning of the infrastructure.
- Level of bulk discounts and the availability of funds and the interest levels.
- Impact of the regulatory regime and the growth rate of the subscribers.
- Quality of service.

It will be very difficult to predict the optimum capacity utilization for each network element.

It may however be noted that all networks are configured to meet the specified grade of service during busy hour utilization and therefore telecom networks by design will always have idle capacity.

We believe that a capacity utilization factor of 70% can be taken as a reasonable benchmark by the Authority.

We would also like to reiterate that as additional capacity has to be added in steps, the costs will be semi-variable and cannot be fully variable with subscriber addition.