

bharti airtel ltd.
india & south asia
airtel center, plot no. 16,
udyog vihar, phase - IV,
gurgaon - 122 015

www.airtel.in
call+91 124 4222222
fax +91 124 4248063

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RP/FY 12-13/084/009



To
The Secretary,
Telecom Regulatory Authority of India
MahanagarDoorsancharBhawan
Jawaharlal Nehru Marg
New Delhi 110 002

Kind Attn: Shri Manish Sinha, Advisor- F&EA

Subject: Response to Consultation Paper on Review of Tariffs for National Roaming services.

Dear Sir,

This is with reference to the TRAI consultation paper on 'Review of Tariffs for National Roaming services'. We are pleased to enclose our response to the above consultation paper.

We request TRAI to kindly consider our response favourably and we hope the Authority will grant us ample opportunity to present our submission and view in person.

Thanking you

With regards,

For Bharti Airtel Limited

A handwritten signature in blue ink, appearing to read 'Ravi P Gandhi', is written over a horizontal line.

Ravi P Gandhi

Sr. Vice President
Head Regulatory Policy
India & South Asia

“Response to the Consultation paper on Review of Tariff for National Roaming”

At the outset, we thank the TRAI for initiating a detailed consultation process on the Regulation for National Roaming Tariffs. TRAI’s policy of keeping the telecom tariffs under forbearance has enabled the industry to provide flexible and innovative tariffs to subscribers, resulting in an unprecedented growth of the industry:

- Subscribers have grown almost **6 times** that of 2006. Mobile subscribers have increased from 149 million in December 2006 to 862 Million in January 2013.
- Newer technology networks such as 3G/BWA have been rolled out.
- The Mobile Industry’s revenue have increased from about Rs. 1,00,000 Crores annualized in 2009-10, to Rs. 1,50,000 Crores annualized this year.
- The Mobile Industry’s contribution to the national exchequer from FY 2007-08 till 2011-12 alone has been Rs. 54,080 Crores by way of revenue share towards License Fee and Spectrum Fee.
- This contribution to the exchequer has also increased from Rs. 8247 Crores in FY 2007-08 to Rs. 13,606 Crores in FY 2011-12.
- The telecom growth story had been a story of inclusive growth with reduction in ARPU from Rs. **298** in the year 2007 to just Rs. **95** in the year 2013.

While the industry growth has been phenomenal the hyper competition and rising costs have resulted in the deterioration of financial health of the industry. The following facts establish that the industry does not have the cushion to absorb any reduction in revenues or increase in costs:-

- The spectrum cost in the form of reserve prices is 800 to 900% higher than the prices in the year 2001.
- Debt burden of the Industry has grown 2.5 times since the year 2008-09.
- PAT has reduced drastically since the year 2007. In case of some operators it is a high negative margin whereas in some operators’ cases PAT has reduced by almost 10%.
- And tariffs are the lowest in the world at 1 paisa per second from earlier Rs. 6-8 per minutes in the FY 2001-02.

The consultation paper refers to concepts like HPR ‘Home Price Rule’ or No incoming call charge approaches for national roaming. We sincerely request the Authority to consider the following critical consequences of implementing either HPR or Free Incoming call:

1. Masses paying for the Classes

- 1) At present around 10% of the total customer base use the National Roaming Facility. Our analysis suggests that the average revenue paid by roaming subscribers (10% of the total customer base) is around **1.6 times** of the total ARPU. These subscribers use roaming services for 4 days in a month. The remaining 90% of the subscribers do not use this facility.
- 2) Hence, one can safely conclude that the National Roaming facility is generally used by **affluent subscribers** who travel from one circle to the other and have a higher paying capacity.
- 3) There is a significant cost associated with providing national roaming services. Any reduction in roaming tariff will result in an increase in the tariff for low income subscribers in order to compensate for these costs. Low income customers constitute 90% of the majority subscriber base.
- 4) A reduction in national roaming tariff will certainly benefit affluent subscribers and make them happy but it will be at the cost of the ordinary low income subscribers who would end up subsidizing the facility enjoyed by affluent subscribers leading to **Masses paying for the Classes**.
- 5) The Authority will appreciate that such a move is not in the interest of the majority of subscribers and may potentially defeat the cardinal principles followed by the regulator ever since the inception of mobile telephony.

2. Potential National Security threat

Any removal of incoming call charges on roaming would lead to an arbitrage which will invariably, encourage SIM movement behavior in the market leading to several National Security hazards. These have been explained in detail in the query wise responses.

3. Cost of providing Roaming Service

National Roaming is an outcome of the present licensing regime wherein, the entire nation has been divided into 22 geographic circles or service areas. Each of these circles has been issued an independent License with circle wise allocation of spectrum and spectrum usage charge. The calls between one circle and another circle are treated as a “long distance calls (STD call)” and can be carried by National Long Distance Operator (NLDO) only.

Therefore, in the present CPP regime, there has to be a roaming charge by the home circle operator which is sufficient to compensate for the charges of ‘Home Circle Access Provider’, ‘Visited Circle Access Provider’ and NLDO.

Forbearance

Forbearance is a time tested policy and has worked very well in the case of general tariffs. As highlighted in the beginning, forbearance provides the necessary flexibility for operators' enabling them to offer innovative tariff plans to subscribers. This resulted in a win- win for the customers as well as the telecom industry which evidenced an explosive and unprecedented growth since 2001.

We believe that keeping the National Roaming Tariffs under forbearance will:

- Yield positive results which will benefit Customers and Industry equally
- Give operators the requisite flexibility in offering roaming tariffs to customers with several innovative plans & vouchers
- Meet the objective of NTP 2012
- Reduce the potential for arbitrage of SIMs, thereby reducing any potential KYC and Security issues.

Please find below our detailed Query-wise response:

Q1: Is competition in national roaming service in India robust enough for leaving the tariff for national roaming service under forbearance? Please support your viewpoint with reasons.

Bharti Airtel's Response:

There is ample competition in National Roaming Services in India, and we believe that tariffs for such services should definitely be under forbearance.

The presence of 7-9 operators in each circle, coupled with the availability of Mobile Number Portability services, provides enough impetus for competition in the market place. Subscribers have the option of retaining their original number, while opting to port out to any of the prevailing operators. The Authority will appreciate that the existence of so many operators is very unique to India which has led to the lowest tariffs, including National roaming tariffs, in the world. The recent discount schemes offered by various operators including airtel shows the proper functioning of the market without any regulatory intervention. The factors that contribute to competitive intensity are the number of players, industry over capacity (Actual Utilization of Capacity over Total Capacity available) that results in industry conduct which drives down tariffs. Therefore, tariffs have continued to be unsustainably low even when the industry health has deteriorated.

The policy of forbearance adopted by TRAI for general tariffs has provided sufficient flexibility to operators to offer customized tariffs to match the needs and usage of subscribers vide innovative tariff plans. This has benefited subscribers while also ensuring that the telecom industry grows exponentially in terms of subscriber numbers, usage and revenue. Any regulation or cap on the tariffs will adversely affect the operator's ability to

introduce innovative tariff plans to cater to the need of various consumer segments as well as have a negative impact on the growth of this sector.

In light of all the above submissions and keeping in mind the prevailing hyper competitive market, we humbly request the Authority to remove the existing cap on roaming tariffs and keep roaming tariffs under the time tested policy of forbearance.

Q2: Would it be appropriate to implement the home price rule (HPR) in national roaming service? What is the likely impact of such a regime on fair competition in telecom sector? Please support your viewpoint with reasons.

Bharti Airtel's Response:

In our view, it would not be appropriate to implement HPR in national roaming services. In fact, implementing HPR would have an extremely negative impact on majority of low income subscribers who do not use roaming.

As rightly observed by TRAI, implementing HPR, will result in an increase in regular tariffs. The Authority will appreciate that the reasons for any increase in regular tariff would essentially be to meet the additional and significant costs associated with roaming if HPR is implemented.

It is extremely critical to understand who will bear the brunt of an increase in regular tariff:

Roaming services are primarily used by affluent subscribers. Any reduction in roaming tariff will certainly benefit these affluent subscribers but it will be at the cost of the ordinary non roaming subscribers. The entire cost burden of increase in regular tariff will have to be borne by the ordinary non roaming subscribers who would end up subsidizing the facility enjoyed by affluent subscribers.

The TRAI will appreciate that such a move is not in the interest of a majority of subscribers.

Further, TRAI has envisaged an increase in outgoing calls due to a reduction in roaming tariffs. In TRAI's view this additional revenue would compensate for the loss of roaming revenue. While it is true that the number of outgoing calls would go up, it is equally true that the increase in outgoing calls will not be significant enough to recover the additional costs borne by ordinary subscribers or the losses suffered by operators. **Surely this is neither the objective of TRAI nor of NTP 2012.**

The various costs associated with roaming under the current licensing regime are explained in a tabular form below. For the purpose of demonstration we have taken the Bihar Service Area and highlighted various costs that are incurred when a Bihar Service Area customer roams in Delhi Service Area (*in minutes/paise*):

S No.	Cost items to be recovered from Roaming Customer through Roaming Tariffs	Incoming Roaming Call	Outgoing Roaming Call Local	Outgoing Roaming Call STD
1	Termination Charge*	20p#	-NIL-	-NIL-
2	Carriage Charge from "Home to Visited Circle"	65p	NIL	NIL
3	Carriage Charge from "Visited to Other circle"	NIL	NIL	65p
4	Origination charge of call forwarding from Home Circle to Visited Circle	<p>STD Tariff (under forbearance) from Home Circle to Visited Network</p> <p>(-)</p> <p>The Carriage Charge from Home to Visited Network mention in (65 paise) (+)</p> <p>Termination Charge (20 paise#)</p>	Not Applicable	Not Applicable
4	Call Origination Charges at Visited Network	Not Applicable	<p>Forbearance</p> <p>At present Local tariffs for visited circle networks are under forbearance too.</p>	<p>Forbearance</p> <p>At present STD tariffs for visited circle networks are under forbearance too.</p>
5	Additional Charge for Handling the Roaming Traffic *	Additional charges for Signaling, Core Network, IN, IT and billing & reconciliation for both Home and Visited Networks.##	Additional charges for Signaling, Core Network, IN, IT and billing & reconciliation for both Home and Visited Networks.##	Additional charges for Signaling, Core Network, IN, IT and billing & reconciliation for both Home and Visited Networks.

#The Termination charge of 20 paise is currently sub-judice.

* Additional cost for roaming already submitted to the Authority.

The above table clearly shows the various costs such as Carriage Charge, Termination Charge, Origination Charge for Call Forward and additional network costs which need to be recovered through roaming tariffs. The implementation of HPR, free incoming would result in non recovery of these costs from roaming customers and hence will result in increase of general tariffs.

A detailed analysis of each of these cost items is as follows:-

1) Recovery for Carriage Cost:

- TRAI has acknowledged in the consultation paper that the removal of roaming charges would need to be compensated by a general increase in tariffs in order to recover carriage costs. TRAI has suggested that implementation of HPR will result in substantial increase in roaming traffic which in turn will compensate for the losses due to non recovery of carriage charge. However if this elasticity had existed then the operators would have already exploited this as an opportunity.
- The assumption of compensatory revenue through higher roaming traffic is incorrect because any increase in roaming traffic will result in a corresponding increase in the carriage cost also. Therefore it can never compensate for the loss due to non-recovery of carriage charge. Eventually the increased roaming traffic will be an additional burden on non-roaming subscribers.
- As a prudent economic policy, TRAI through its various regulations/policy measures had been proposing the reduction in cross subsidies. Implementation of HPR in roaming will result in introduction of a new cross subsidy, thereby **contradicting TRAI's earlier policies**.

2) Recovery of the origination(Call Forwarding) cost from the home circle to visited circle:

- We wish to also state that any call landing on a roaming subscriber number first lands in the Home Circle and then is forwarded as an STD call to the visited circle. Thus, an incoming roaming call charge is actually the charge for the forwarded STD call from the home circle to the visited circle. The Outgoing roaming charge is the charge for originating a call in the visited circle. Hence, effectively both Roaming - Incoming and Outgoing call charges are 'Origination Charges' and are borne by the roaming subscriber in the CPP regime. This has also been supported by TRAI's 5th Amendment to the TTO'99. The relevant extract of the order is stated below:

*"Call Forwarding shall be treated as two calls, one from **calling party to called party** prior to call being forwarded, another from **called party to the number where call is forwarded**. The tariffs specified in this order apply to the calling party in each of these two calls. In the case of the second call (i.e, the forward call), the called party that forwards the call shall be treated as the calling party for that call"*

“Roaming shall be treated as two calls, similar to call forwarding. One from the calling party to the called party, prior to the transfer of calls (if any) to the called party in case of roaming, the other, in case of roaming, from the called party to the roaming party. The tariff specified in this order apply to the first portion of the call, with the second portion (i.e, forwarding the call to the roaming party) at present subject to forbearance.”

- For an incoming roaming call, the home circle incurs substantial cost in its network apart from the carriage charge paid to the NLD Operators. This cost is on account of origination of the forwarding leg of the call. The origination cost is substantially higher than the termination charge which has been fixed way below the cost at 20 paise per minute. At present the fixation of termination charge at 20 paise is also sub-judice.
- In case of HPR, the home circle operator will not be able to collect any charge from its customer for the incoming calls which will lead to the subsidization of the origination charges in the home network. This subsidy would further increase due to increase in incoming traffic on implementation of HPR with nil roaming tariffs for the incoming calls.

Other than the issue of recovery of costs, HPR coupled with no incoming call charge would also result in the following:

3) **Wide variation in costs Across Circles:**

- The spectrum costs vary by as much as 77 times between the lowest priced circle and the highest priced circle.

For example : the spectrum cost difference between J&K and Delhi is 77 times i.e, Rs. 21 Crs Vs Rs. 1941 Crs for 5 MHz of spectrum in 1800 MHz band.

- There is an absolute increase in spectrum charges by way of reserve prices fixed in the year 2012 which has resulted in a situation where the spectrum charge has become a major component of the overall cost of providing the service.

*For example: The spectrum price during the auction in November' 2012 as compared with the prices of 2001 is on an average 8.48 times higher. In some circles like Bihar and Delhi the spectrum charges are as high as **18 times and 10 times respectively.***

- Apart from these spectrum costs, other operational costs such as energy, fuel, RoW, wages, salaries, Capex and Taxes have also gone up and have a huge variation from circle to circle.

Therefore, the Home tariffs in visited location may not be sustainable due to the above cost differential. Any HPR would result in cross subsidization of roaming calls from one circle to the other circle and more importantly, the low cost circle would end up subsidizing the high cost circle.

4) Arbitrage between STD/Roaming and potential Security issues:

- Introduction of HPR will result in a situation where the incoming roaming tariffs will become 'Nil'. It will incentivize subscribers to use roaming SIM cards from other circles to obviate the need for any party (Calling or called party) to make STD (national long distance) calls from the Home or Visited service area.

For example : If a person moves from Orissa to Delhi permanently with a SIM card from Orissa Circle having roaming facility, his family members could make calls to him at local tariffs of Orissa instead of making an STD call. This customer could also make local calls in Delhi service area on Orissa HPR which would be far cheaper rates compared with that of the higher rates in Delhi due to its higher costs

A migrant from Bihar who is working in Delhi could buy a Delhi SIM and send it to his family in Bihar. Using any of the local Delhi number, specially On-net packs which give low local rate or free local minutes, he will have the option to call his family in Bihar on the free roaming SIM without paying any STD charges, while the home circle operator bears the carriage cost in addition to the revenue loss on STD.

- The above arbitrage would result in mass migration of SIM cards from one circle to another on a permanent basis either by customers or through the informal channels of retailers/traders.
- Therefore the impact of free roaming with HPR is much beyond the incoming roaming carriage charge, as it impacts overall home network, STD and local tariffs.
- Arbitrage led SIM migration would also be a **National Security threat** since, it will allow miscreants to escape detection from LEAs by using the SIMs of different circles and hence complicating the whole process of lawful interception and monitoring.
- Mass migration of SIMs would make traceability of the customers very difficult for LEAs/Security Agencies.

5) Present roaming charges are due to the current Licensing regime

- Access Licenses (CMSP/UASL) are Circle/Service area wise.
- There are 22 separate LSA wise UASL/CMTS. These licenses have separate spectrum allocation and charges, separate revenue shares and rollout obligations.
- The Intra Circle Long Distance Calls are carried under the NLD license. Some of the UASL/CMTS does not have their own NLD license and there are some stand alone NLD licenses.
- A roaming call involve the work done by different operators i.e. the Home Circle, Visited Circle and the NLDO accordingly the revenue of roaming services need to be shared between the various operators.
- Therefore the roaming tariffs are an advent of the licensing regime and therefore in a CPP regime, where the charges are only collected from the calling/charged party, the sharing of roaming revenue between various operators i.e. Home Circle, Visited

Circle and NLDO will continue. The HPR would result in out of pocket expense for the home circle operator.

In light of the above submissions, we believe that the option of Home Price Rule (HPR) will result in cross subsidization of roaming calls, cannibalization of STD traffic, mass migration of Sims and potential threat to national security. We humbly request the Authority not to adopt the HPR approach.

Q3: Would it be appropriate to implement Home Price Rule (HPR) in national roaming service with the provision of recovery of carriage charge on account of incoming call from the calling party? Please support your viewpoint with reasons.

Bharti Airtel's Response:

We do not find it appropriate to charge a calling party for the cost of carriage to make a call to a roaming customer due to following reasons:-

- 1) The proposal **goes against the Calling Party Pays (CPP) Regime.**
- 2) As a worldwide practice, operators do not charge the calling party for making a call to a roaming subscriber.
- 3) **Pre- Announcement is Impractical:**
 - TRAI's proposal to play a pre call announcement message to inform the calling party that the called party is roaming , is highly impractical for the following reasons :
 - Increase the call set up time & mean holding time
 - Increase the signaling load on the network
 - Poor customer experience.
 - Intrusion of privacy - Subscriber privacy would be compromised incase each calling party is deliberately made aware that the called party is roaming outside the home service area.
 - Increase in Cost - Majority of present switches do not support this functionality
 - Many customers may not be able to follow the local language therefore the announcements will have to be played in multiple languages.

We therefore, disagree with any view to play pre announcement for the calling party as this is not only technically very difficult but also requires a high cost of implementation. More importantly it results in huge inconvenience to the majority subscriber base that does not use roaming services.

4) Charging Subscribers and Inter Operator Settlement:

- The network of the originating operator would not know the location of the called subscriber. It would only send the call to the GMSC on the basis of number series analysis.

- Any wrong messaging/announcement may result in wrongly charging the STD charge from the calling party.
- This would also lead to lack in transparency and increased billing complexities.
- In the absence of full proof mechanism for the originating operator to know about the roaming status of the called party at the network level, the charging of carriage charge to the calling party may not be accurate which will also lead to disputes.
- Inter operator settlement of IUC shall become more complex as the CDRs of the calling party operator will not be containing the roaming status of the called party. This will make the IUC billing and reconciliation very difficult and prone to disputes.

In the present regime the Called Party while roaming nationally has the option to receive only those calls, for which they are willing to pay, we believe that the roaming charges for incoming calls should continue to be borne by the Roaming Party. This is logical since the entire facility of receiving the call seamlessly while travelling out of the home circle is also being availed by the roaming subscriber. Therefore, we strongly believe that the roaming charges should be borne only by the roaming customer.

In view of the above, we disagree with the TRAI's proposal of recovering the cost of incoming calls while roaming from the calling party.

Q4: Would it be appropriate to rationalize the tariff for national roaming service on the basis of present costs? Please support your view with reasons.

Bharti Airtel's Response:

In view of our above mentioned submissions we feel that forbearance of roaming tariffs is the most constructive way forward. We request the Authority to remove the ceiling tariffs applicable as per the 44th Amendment Order to TTO '99.

TRAI, in this consultation paper, while discussing a reduction in roaming tariff ceiling has assumed that the costs have reduced. However, practical reality of the telecom industry in present times has been totally overlooked and ignored. The Telecom Industry is under huge pressure of escalating costs, debt, declining tariffs and reduction in the operator's margins - EBITDA, RoCE and PAT.

In this regard, it may be noted that the last review to set a ceiling for roaming tariffs was carried out in year 2007, however the cost of provisioning telecom services have increased substantially since the year 2007. Some of the direct and indirect costs that have increased are as follows;

1) Increase in Spectrum Cost & Reserve price

- a. The Absolute cost of Spectrum, by way of **fixed reserve prices** in the year 2012, has gone up substantially. As submitted in our response to Q2, the Spectrum cost in the year 2012 has gone up by **10 times in Delhi Service Area** and **18 times in Bihar** compared with the year 2001 prices respectively.

- b. Apart from the onetime charge of spectrum, even the **recurring spectrum usage charge** has been increased from 2-6% to 3-8% of AGR for GSM operators.
- c. Further, there is a wide variation in **spectrum cost** between LSAs which is as high as 77 times.

For example; the variation in spectrum charges between J&K Vs Delhi is Rs. 21 Crs Vs Rs. 1941 Crs for 5MHz of spectrum in 1800 MHz band.

2) **Increase in Other Costs:**

The additional cost items/burdens which have been ignored by TRAI in its present consultation paper are as follows:-

- a) **Up-gradation of existing infrastructure:** Operators have made significant investments for acquiring 3G /BWA spectrum and roll-out of these services. The cost of this spectrum was not considered while finalizing a ceiling for roaming tariffs during the year 2007.
- b) **Replacement costs:** Operators have to incur significant costs, for replacement of existing equipment completing its serviceable life or on account of rapid changes in technology, on an ongoing basis for providing continuous, uninterrupted services while maintaining the quality of service.
- c) **Regulatory and security requirements:** High regulatory costs for implementing security measures, MNP,LBS, EMF radiation compliance, CCCPR, Subscriber Verification Registration, Excessive charges by local authorities for RoW and towers, usage of renewable energy (having higher capex and cost per unit of consumption).
- d) **Cost of Right of Way (RoW):** These charges have also increased substantially with the increase ranging from 11% to 63% from state to state. All operators need right of Way to lay fiber across service area to connect their BTSs.
- e) **Energy Costs:** The energy and fuel costs have gone up substantially by 2012. Diesel price has gone up by almost 58% compared with February 2007 retail prices. In 2013 **bulk fuel prices** have been introduced making diesel almost 88% dearer. The industrial and retail energy prices have also been revised by almost 40%.
- f) **Taxes and Levies:** The state and central taxes and levies have also increased since the year 2007. Additional taxes such as Entertainment tax etc have been introduced.

PWC in its report on "Sustainability of mobile Industry" published in 2011" showing the increase in cost is enclosed.

Inspite of the above mentioned submissions if the Authority still wishes to review the ceiling tariffs for roaming, we request the Authority to consider the following;

- i. While revising the present ceiling a detailed analysis of the increase in all costs mentioned above should be conducted and the review exercise should not be undertaken solely on the basis of a revised IUC.

- ii. The termination charges of voice calls fixed by the Authority under the 10th Amendment to IUC regulations are far below actual cost of termination. The methodology to determine the termination charges by TRAI was not accepted by operators, who have challenged the said regulation and the matter is now sub judice. Therefore, until there is a final order from the Hon'ble Supreme Court in this matter, we suggest that any review of roaming tariffs on the basis of the present IUC should be kept in abeyance.
- iii. The incoming roaming tariff is actually the tariff for the 2nd leg i.e. the STD call forwarding. Therefore, comparing this with simply the NLD carriage charge is not appropriate. TRAI's contention of recovering only the carriage charge of Rs. 0.65 or lower is incorrect and against the tariff orders and the IUC regime.
- iv. In the IUC regulation based on CPP regime, MTC has been fixed while the origination charge has been left to forbearance. Therefore, TRAI's suggestion of equating the origination charge to the termination charge would lead to ceiling tariff which is much below the cost.
- v. The ceiling tariff is the highest tariff which an operator is allowed to charge. The actual tariff can be much lower than the ceiling tariff. Fixation of ceiling tariff close to the cost will tantamount to fixation of tariff itself which we believe is neither the intent nor logical in the present IUC regime. Therefore, the ceiling tariff should be sufficiently high so as to allow the operators to recover their highest cost with a reasonable margin and also provides the flexibility for market driven tariffs while protecting consumer interests against any misuse. Fixing the ceiling tariff below cost would be catastrophic and will result in cross subsidies.

In summary, we request the Authority to remove the present **ceiling on roaming tariffs and allow National roaming tariffs to be under forbearance.**

Q5: Would it be appropriate to revise ceiling tariff for national roaming service in such a manner that incoming calls while roaming are made free of charge while the cost of incoming calls is recovered through outgoing roaming calls?

We do not support this approach due to following reasons;

- 1) The roaming service is used by a very small number of affluent subscribers (approx 10%). Therefore, any benefit of lowering the roaming tariff would be directed only towards those subscribers while the cost of such benefit would be borne by ordinary subscribers not using the roaming facility.
- 2) In case if the charges for incoming roaming calls are recovered from the outgoing roaming calls then subscribers would tend to convert their outgoing call to free incoming calls using the missed call facility thereby dis-incentivize the use of outgoing calls while roaming. Such a move will disrupt the present traffic mix of outgoing/incoming calls.
- 3) Every incoming roaming call has an additional cost in the form of carriage charge to NLDO and origination charge for call forwarding from home network to visited

network. In the event, the incoming roaming call is made free of charge then the home network will have to recover both these charges from the outgoing roaming tariffs by way of a substantial increase in the same.

- 4) Difference between the tariffs for outgoing and incoming roaming calls will lead to an even greater imbalance between incoming and outgoing calls making the outgoing calls costlier.
- 5) In addition to above, the free incoming call will result in migration of SIM from one circle to the other and lead to National Security issue.
- 6) As explained in the response to Question 2, the migration of SIM from one circle to the other will also obviate the need for STD (National Long Distance) Call and will have a serious impact on the operator's revenue from STD services. The loss of STD revenue will also have to be recovered from the outgoing roaming calls or through the increase in general tariffs which will put the burden of roaming facility on the ordinary subscribers.

We humbly request the Authority to take the following points into consideration while formulating its views on making incoming roaming calls free of charges;

- Recovery of the cost of incoming roaming call from the ordinary subscribers leading to cross-subsidization.
- Recovery of carriage charge
- Recovery of origination charge in the home network
- Mass migration of SIM cards from one circle to other circle would lead to;
 - A loss in STD revenues to the operators.
 - Traffic imbalance resulting in higher incoming calls than outgoing calls.
- The present financial health of telecom sector does not allow the operator to absorb any additional cost or further loss of revenue.
- Substantial increase in various input costs including that of spectrum.
- The KYC and security issues specially the traceability of subscribers in case of bulk/permanent migration of SIM from one circle to another to avail the benefit of this tariff arbitrage between free incoming call and STD call.

In conclusion, we are of the opinion that making incoming calls free while roaming will put additional burden on the operators as well as the ordinary subscribers not availing the roaming facility.

Q6: In case your response to Q5 is in the affirmative, which of the following approaches would be more appropriate?

(i) With Immediate Effect: viz. by fixing zero tariff for incoming calls and ceilings for outgoing calls while on national roaming allowing recovery of additional cost on account of free incoming calls, from the outgoing calls while on national roaming

(ii) Through a Glide Path: viz. approaching zero tariff for incoming calls in a phased manner (over a period of say three years) and fixing year-wise tariff ceilings for outgoing calls while on national roaming allowing recovery of additional costs on account of progressively cheaper incoming calls, from the outgoing calls while on national roaming

In light of the answer to the Q5, we believe that the roaming tariff for the incoming call should not be free.

- As submitted in our response to Q1 above, roaming tariffs including rentals should be kept under forbearance allowing operators to innovate in their product offerings targeting them to meet the needs of various customer segments.
- Roaming rentals could be fixed by an operator for a month or a shorter period allowing them to recover a fixed amount to provide free incoming calls. This will provide a direct benefit to roaming subscribers who would get free incoming calls while roaming. The rental/fixed component would also act as a deterrent against misuse of the free incoming roaming call facility.

We believe that roaming tariffs should be forborne and incoming calls while roaming should not be free. Any roaming rentals or fixed charges should be kept under forbearance allowing operators to offer innovative tariffs.

Q7: Do you agree that there is no need to prescribe a tariff for video calls while on national roaming?

AND

Q8: In case your response to Q7 is in the negative, please support your viewpoint with a detailed methodology to determine the tariff for video calls.

Yes. We agree that there is no need to prescribe a tariff for video calls while roaming nationally.

- 1) Video calling is at a very nascent stage in India.
- 2) It forms a miniscule component of the overall quantum of calls and therefore, needs to be viewed as a nascent service availed by a selected set of high end customers.
- 3) The 3G spectrum facilitating such calls has been acquired at a very high price, and hence any tariff prescriptions at this stage would undermine the huge investment made to deliver the service.

We believe that the tariffs for the video calling should be left to the market forces.

Q9: In case the tariff for national roaming service is set, would it be appropriate to prescribe that the tariff for an outgoing SMS while national roaming should not be more than that for an outgoing SMS from home service area?

Q10: In case your response to Q9 is in the negative, please support your viewpoint with reasons. In case, you favour prescribing separate ceiling tariff for outgoing SMS while on national roaming, please support your viewpoint with a detailed costing methodology.

Bharti Airtel's Response to 9& 10:

We believe that the roaming tariffs for SMS should be forborne the reasons have been submitted in detail in response to query No. 1. Additionally the matters related to SMS termination are also Sub-Judice and the outcome of the same would assist in determining the charges. Meanwhile, we request TRAI to kindly keep these charges under forbearance.

Q11: Should Special Tariff Vouchers (STVs) with roaming benefits be allowed? Please support your viewpoint with reasons.

AND

Q12: In case your response to Q11 is in the affirmative, what regulatory restrictions should be imposed on such STVs?

Bharti Airtel's Response:

We feel that all national roaming tariffs should be forborne to allow operators to offer flexible and innovative plans to customers. There is no monetary value stored in STVs; therefore, we believe Special Roaming Tariff Vouchers (SRTV) for only *roaming benefits* should be allowed.

For roaming tariffs to be more innovative in meeting subscriber's needs in various segments, the operators would require the flexibility to offer roaming tariff vouchers. Roaming subscriber would benefit from Special Roaming Tariff Vouchers (SRTVs) especially with offers that reduce their incoming charges or roaming tariffs against a fixed fee/charge.

We would also like to submit that in case the HPR approach is implemented then the STV's would have no meaning. Moreover, operators will cease to provide the present STVs in some home markets for the fear that the associated SIM cards would get migrated to other circles, thereby making the offer of STVs uneconomical.

In conclusion, we strongly support forbearance of Roaming tariffs. This would boost the market offerings to customers allowing a market lead model develop infusing further flexibility to operators to direct benefit subscribers. If at all tariff vouchers have to be introduced allowing Roaming benefits to be passed on through Special Roaming Tariff Vouchers (SRTVs) would be a preferred route.

Q13: Is there any other relevant issue which should be considered in the present exercise of review of the tariff for national roaming service?

Bharti Airtel's Response:

We would like to bring to the kind notice of the Authority the deteriorating financial health of the Industry and will request the Authority to kindly take into account the same while

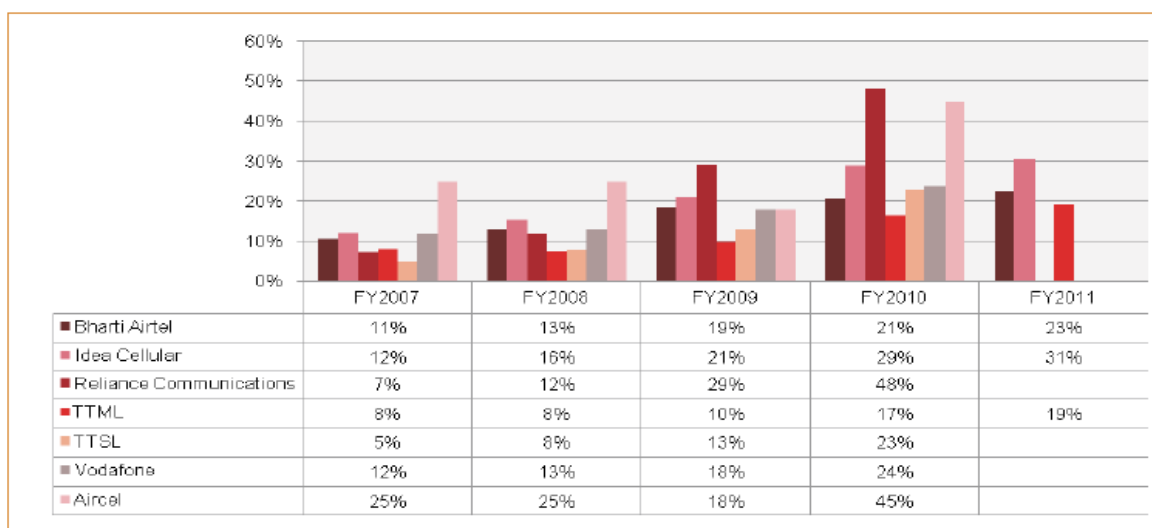
finalizing any view on the subject of tariffs for national roaming that would negatively impact cost and revenues.

The mobile phone industry is going through a difficult phase where it cannot afford any further reduction in roaming revenue which is around 8% of the total revenue as also the STD revenue which is around 22% of the total revenue. The industry is under huge financial stress with continuous decline in EBITDA margins, ROCE and PAT during the last 5 years. The Industry's debt burden and the operational costs have also increased substantially.

1) Key Indicators of the Telecom Industry show financial stress;

As per the PWC report on *Sustainability of Mobile Telecom Industry* published in 2012, the Industry is under tremendous financial pressure. Some of the highlights of the report are as follows:-

Network Operating Costs: The operating expenses of the service providers have been increasing substantially due to inflationary pressure. The following graph shows the rise in network operating expense as % of revenue for some key players in India:-



[Source: COAI - PWC report on Sustainability published in 2011]

Debt Burden: The debt burden of the Indian telecoms industry has increased significantly since 2009 to reach at Rs 185,720 Crs. as on March 2012.

	2008-09	2009-10	2010-11	2011-12
Domestic Debt (Rs Cr)	46,980.00	80,807.00	94,319.00	93,594.00
External Debt in other currencies (USD Mn)	7,331.00	9,208.67	14,222.27	18,425.27
Exchange Rate (Rs per USD)	48.76	46.66	46.15	50.00
Total Debt (Rs Cr)	82,725.96	123,774.65	159,954.78	185,720.35

Source: PWC report-2011

The RoCE (Return on Capital Employed): As is evident in the table below, ROCE has been decreasing continuously and even negative in some cases, thus making it nearly impossible to absorb further costs.

Low & decreasing Pre-tax return on Capital employed of Operators					
	FY2007	FY208	FY2009	FY2010	FY2011
Vodafone	11%	13%	8%	7%	
Idea	13%	16%	10%	10%	9%
Aircel	6%	14%	3%	-11%	
Reliance	8%	8%	7%	2%	
Bharti	29%	29%	30%	25%	19%
TTSL	-20%	-14%	-4%	-2%	
MTNL	9%	7%	3%	0%	

Source: PWC report-2011

Profit after Tax: PAT margins have also declined to single digits for all operators barring one from 2007 to 2012. It was negative in many cases as is evident from table below.

	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012
Vodafone	17%	11%	0%	-3%	0.01%	NA
Idea Cellular	11%	15%	9%	8%	4%	4%
Aircel	35%	9%	-8%	-66%	-42%	NA
Reliance	22%	29%	27%	22%	7%	5%
Bharti	23%	25%	24%	26%	20%	14%
TTSL	-46%	-35%	-33%	-21%	-41%	NA
TTML	-22%	-7%	-8%	-14%	4%	-21%
Shyam Sistema	-53%	-158%	-620%	-616%	-310%	NA
HFCL Infotel	-42%	-57%	-96%	-11%	-93%	NA
MTNL	14%	12%	4%	-68%	-71%	-101%
BSNL	20%	8%	2%	-6%	-22%	NA

Source: PWC report-2011

The facts stated above clearly demonstrate that the mobile telecom industry is under immense financial stress. **Any further increase in costs or reduction in revenue will cause irreparable damage to the Industry.**

Some of the approaches such as HPR and Free Incoming Call, proposed in the Present consultation paper would result in increase in costs and reduction in revenues.

2) **Potential Impact of Costs of Operations;**

- With the steep increase in Spectrum charges, (almost 8-9 times higher than the market driven spectrum prices in the year 2001), coupled with an increase in the

spectrum usage charges, the financial position of the industry is set for further deterioration. The reserve price for spectrum in 900 MHz band is twice the price of spectrum in 1800 MHz band. Such high spectrum price is a major contributor to the increased cost of network operations.

- Further, service providers have also made large amounts of investments in 3G/ BWA spectrum and network rollout where they are yet to see a steady revenue stream.
- Other costs of operations such as energy, fuel, RoW, wages, salaries, Capex and Taxes have also increased substantially. Under these circumstances it is not feasible for the industry to absorb the costs of providing free national roaming. Any decrease in national roaming rates will result in an increase in general tariff negatively impacting the majority customer base.

3) *Different Service Areas have substantially different spectrum costs;*

- There is a huge variation as high as 77 times between the lowest and highest priced circle, in the spectrum costs.
- *For example : the spectrum cost difference between J&K and Delhi is 77 times i.e, Rs. 21 Crs Vs Rs. 1941 Crs for 5 MHz of spectrum in 1800 MHz band.*
- Such a high and varying increase in costs results in different cost structure for each circle leading to different local tariffs in each circle.
- *Consequently the tariff in Metros and A Category Circles will be 30% higher than the tariffs in 'C' category circles.*

4) *Impact on Telecom Revenues;*

The Mobile Telephony Industry today earns around 8% of its revenue from the roaming services and around 22% from the STD services. The introduction of free roaming will have a significant negative impact on these revenue streams.

The approach of HPR as suggested by TRAI in the consultation paper would result in implementation of home circle tariffs while roaming i.e. free roaming including free incoming call on roaming. HPR will straight away impact the roaming revenue which is around 8% to the total revenue. Free incoming call during roaming would also result in a serious arbitrage vis-a-vis STD tariffs.

The arbitrage between the STD call and incoming call to a roaming subscriber will incentivize subscribers to use roaming SIM cards from other circles to obviate the need for the calling part to make STD (national long distance) call. For Example, if a person moves from Orissa to Delhi permanently with a SIM card from Orissa Circle having roaming facility, his family members could make calls to him at local tariffs of Orissa instead of making an STD call. This arbitrage would incentivize the mass

migration of SIM cards from one circle to another on a permanent basis either by customers or through the informal channels of retailers/traders.

Such mass migration of SIM on permanent basis will also force the operators to match their STD tariffs with local tariffs to avoid migration of the STD traffic to the local calls on the roaming SIMs. This will certainly lead to a huge loss of STD revenue and will put further financial pressure on the operators. Resultantly, to recover the loss of STD revenue, operators will be compelled to increase their local tariffs for the ordinary customer.

The present financial health of industry does not permit the operators to absorb any reduction in revenues or increase in cost and therefore they will be left with no choice except to increase the local tariffs affecting ordinary/non roaming customers. Therefore, the poor/non-roaming customers will have to face the brunt of the cost of providing a cheaper roaming service to the richer/affluent roaming customers. This will defeat the cardinal principles followed by the regulator ever since mobile telephony began.

We have already submitted revenue and minutes data including costs as sought, by TRAI in the format prescribed by the Authority. However, we feel there are several other additional costs and factors which must be taken into account while dealing with the subject matter such as increase in costs since 2012 namely spectrum reserve prices, spectrum usage charges, regulatory costs and increase in other costs which have occurred since the last review of roaming tariff was undertaken.

We request the Authority to kindly allow us ample opportunity to represent our costs and view point before taking any final decision.