

### **Review of Tariff on National Roaming**

The GSM World Association has defined roaming *"as the ability for a cellular customer to automatically make & receive voice calls, send & receive data, or access other services when traveling outside the geographical coverage area of the home network, by means of using a visited network". If the visited network is in the same country as the home network, it is known as national roaming.*

One of the key strategies/objectives mentioned in the recently released National Telecom Policy-2012 is to review national roaming charges with the ultimate objective of removing the roaming charge across the nation. It must also be stated that the transportation or carriage or National Long Distance Charge (NLDC) will stay.

Addressed below are the key points to be considered while reviewing the Tariff on National Roaming, without eliminating the NLDC –

1. Authority must clearly state that though the national roaming charges will be removed but the transportation or carriage or National Long Distance Charge (NLDC) will stay
2. Gross revenues earned by the incumbents from the national roaming services (10%-12%) whether inclusive or exclusive of the carriage charges, must be compensated. The gross revenue amounts to Rs 10,000-Rs 13,500 crore/- annum, according to some of the rationalists the loss of revenue could be lower to Rs 5000 crore as abolishing of roaming charges would increase the usage in terms of making or receiving calls, SMSes etc. No matter whatever measure is accepted, the loss of revenue should be compensated as it's a huge sum of money which is involved
3. The biggest flaw today in the roaming charge is that, it is flat all across the board. Authority should look at providing differential roaming charges both in rural areas and metros. This is because the cost of obtaining telecom license in a metro is much more than obtaining the telecom license in a rural area
4. The definition of Roaming Charges should be made clear in terms of whether the roaming charges include the carriage/transportation charges or not. Also it should clearly mention



other cost elements considered while fixing the roaming charges and treatment of those elements if the roaming charges are abolished.

5. Impact on Telecom Service Providers & Subscribers

Impact on the Telecom Service Providers

At present, Incumbent GSM operators earn 10-12 per cent of their gross revenues from the national roaming services, which amount to Rs 10,000-Rs 13,500 crore/- annum. It is presumed that this amount does not include NLDC. The roaming charges are levied as the current telecom licences are based on circles; operators enter into interconnect agreement to offer seamless service to the subscribers. Roaming charges are meant to recover the cost of infrastructure of the host service provider, including the use of spectrum of that circle. The charges are reciprocal in nature. In addition to the Roaming charges, there are of course carriage charges for use of National Long Distance services of a service provider. Such a facility of roaming in other networks when travelling means; that mobile phone subscribers can use their number seamlessly across the country. A by-product of no roaming charge could be a lower dependence on the need for National Number Portability (NNP). This could be a strong by product of such a move. However, we need also to study overall impact of such an action of completely eliminating the Roaming charges, but not the NLDC.

To abolish the roaming charges completely may not be productive from the TSP's point of view. Out of the total telecom revenue around 10-12% comes from national roaming. 10-12% of revenue will have to be compensated in some or the other way. If at all Government of India abolishes the national roaming charges, TSPs in turn will increase the telecom services charges which include, fixed charges, voice calls, SMSes, data services charges etc, which could be across the board to all customers of various denominations. The impact on majority may be more than the beneficiaries. It must be understood that of the entire mobile population, the Roamers are 7 to 8% contributing to 10 to 12% of the revenues, the loss to TSPs will have to be amortised over the remaining 90% or so. Therefore, it is unclear for whose benefit, if at all such a step is proposed? In addition, it is unclear whether it includes NLDC or not? Current roaming charges, without NLDC and termination/access, are given below –



<b>National Roaming Charges</b>	
Outgoing calls charges	Applicable call charges + roaming charge ranging from 75 paise per minute to Rs 1 per minute
Incoming calls Charges	Roaming charge ranging from 75 paise per minute to Rs 1 per minute
Total subscribers (as on July 31, 2012)	944.81 Million (Actual active around 600 million)
Percentage of subscribers who avail of roaming services	7-8%
Total revenue of the operators	Rs 1.35 lakh cr (TRAI)
Revenue earned from roaming services	10-12%
Total revenue from roaming services	Rs 10,000-Rs 13,500 cr (TRAI)

#### Impact on the subscribers

It's a win-win for the subscribers. Presently they pay normal call charges for outgoing calls on roaming plus the roaming charge of 75 paise to Rs 1 per minute. Moreover, while answering a call on roaming, they pay up to Rs 1 per minute. Abolishing the roaming charges will in turn increase the usage of national roaming services by subscribers as they will not have to worry about the high roaming charges.

At present, the average roaming charge is 75 paise per minute to Rs 1 per minute. In any given telecom circle, only seven-eight per cent of all subscribers opt for roaming services. However, abolition of roaming charges could lead to higher call rates, as TSPs will have to compensate for the loss of revenue (10% of the total revenue), which would be for all across the board. The moot question is for whose benefit is this exercise?



### **Suggestive Measures for Reviewing the National Roaming Charges**

We are of the view that TSP's can put a fixed charge for providing telecom services on roaming rather than charging extra on every call or SMS made. Special vouchers can be introduced for both prepaid and post-paid customers depending upon their usage as well as the number of days they are travelling. The biggest flaw today in the roaming charge is that, it is flat all across the board. Service Providers can, perhaps, consider differential charge for Metros, Rural areas. In addition, they could also consider NLDC distance based, say free up to 500km, and suitable slabs beyond.

Another measure could be, providing a service by the way of package or a fixed charge which will allow roaming subscriber to receive incoming calls from the visiting place to be treated as local calls which otherwise would be treated as STD calls. On the other hand, the subscriber who is calling the roaming subscriber from the visiting place for him/her also the call would be treated as a local call. Thus the proposed measure reduces the charge of receiving an incoming call from the visiting place while roaming and also helps in reducing the carriage charges. For example, if a subscriber is traveling to Bombay and he/she receives a call from Bombay itself, then by using the proposed service the call received will be treated as a local call. Similarly, the one who is calling the roaming subscriber will have to just shell out local rates for the call made.

Cost Elements to be considered while fixing the tariff for National Roaming –

Incoming call received by a subscriber while roaming incorporates the following cost elements:

- Carriage charge for carrying the call from the home network of the roaming subscriber to the visited network
- Termination charge for terminating the call in the visited network
- Incremental CAPEX and OPEX for infrastructure dedicated for roaming

An outgoing local call while roaming incorporates the following cost elements:

- Origination charge for originating the call in the visited network
- Termination charge for terminating the call in the called network



- Incremental CAPEX and OPEX for infrastructure dedicated for roaming

An outgoing STD call while roaming incorporates the following cost elements:

- Origination charge for originating the call in the visited network
- Carriage charge for carrying the call from the visited network to the called network
- Termination charge for terminating the call in the called network
- Incremental CAPEX and OPEX for infrastructure dedicated for roaming

### **Conclusion**

We are of the view that abolishing the roaming charges completely is not productive from the majority of consumers point of view, because TSP's are going to amortise their losses over others. Out of the total telecom revenue around 10-12% comes from national roaming. 10-12% of revenue will have to be compensated in some or the other way. If at all Government of India abolishes the national roaming charges, TSPs in turn will increase the telecom services charges which includes voice calls, SMSes, data services etc. Therefore it's the bigger section of the consumers who will suffer.

No matter whatever measure is accepted, the loss of revenue (10% of the total telecom revenue) should be compensated as it's a huge sum of money which is involved. The loss should be equally divided between the subscribers who travel frequently and their respective service operator. Subscribers who don't travel at all should not bear the burden, only the regular travelers should pay as they can certainly afford the charges and whatever measure is accepted, it won't make them stop travelling. Subscribers will continue to travel and will definitely use the telecom network for communication, so it's imperative to charge reasonable tariff rates for availing national roaming services.

In our view elimination of Roaming Charges is just a Gimmick.



**Issues for Consultation**

- 1. Should the present cost based approach for determining tariffs for National Roaming continue?**
- 2. In case your response to issue (i) is in the affirmative, what cost components should be included in the determination of such charges? You may also comment on the information sought by TRAI from the service providers in the proforma placed at Annexure.**
- 3. In case your response to issue (i) is in the negative, what should be the alternative approach for determining tariff for national roaming? Please support your view with a detailed methodology.**

<Combined Answer for 1 & 3>

We are of the view that there is definitely a need for reviewing current tariffs for National Roaming, complete elimination may not be the way forward. One approach could be to staggered/differential roaming charges for rural areas and metro areas.

Addressed below are the key points to be considered while reviewing the Tariff on National Roaming, without eliminating the NLDC –

- Authority must clearly state that though the national roaming charges will be removed but the transportation or carriage or National Long Distance Charge (NLDC) will stay
- Gross revenues earned by the incumbents from the national roaming services (10%-12%) whether inclusive or exclusive of the carriage charges, must be compensated. The gross revenue amounts to Rs 10,000-Rs 13,500 crore/- annum, according to some of the rationalists the loss of revenue could be lower to Rs 5000 crore as abolishing of roaming charges would increase the usage in terms of making or receiving calls, SMSes etc. No matter whatever measure is accepted, the loss of revenue should be compensated as it's a huge sum of money which is involved



- The biggest flaw today in the roaming charge is that, it is flat all across the board. Authority should look at providing differential roaming charges both in rural areas and metros. This is because the cost of obtaining telecom license in a metro is much more than obtaining the telecom license in a rural area
- The definition of Roaming Charges should be made clear in terms of whether the roaming charges include the carriage/transportation charges or not. Also it should clearly mention other cost elements considered while fixing the roaming charges and treatment of those elements if the roaming charges are abolished.
- Impact on Telecom Service Providers & Subscribers

#### Impact on the Telecom Service Providers

At present, Incumbent GSM operators earn 10-12 per cent of their gross revenues from the national roaming services, which amount to Rs 10,000-Rs 13,500 crore/- annum. It is presumed that this amount does not include NLDC. The roaming charges are levied as the current telecom licences are based on circles; operators enter into interconnect agreement to offer seamless service to the subscribers. Roaming charges are meant to recover the cost of infrastructure of the host service provider, including the use of spectrum of that circle. The charges are reciprocal in nature. In addition to the Roaming charges, there are of course carriage charges for use of National Long Distance services of a service provider. Such a facility of roaming in other networks when travelling means; that mobile phone subscribers can use their number seamlessly across the country. A by-product of no roaming charge could be a lower dependence on the need for National Number Portability (NNP). This could be a strong by product of such a move. However, we need also to study overall impact of such an action of completely eliminating the Roaming charges, but not the NLDC.

To abolish the roaming charges completely may not be productive from the TSP's point of view. Out of the total telecom revenue around 10-12% comes from national roaming. 10-12% of revenue will have to be compensated in some or the other way. If at all Government of India abolishes the national roaming charges, TSPs in turn will increase the telecom services charges which include, fixed charges, voice calls, SMSes, data services charges etc, which could be across the board to all customers of various



denominations. The impact on majority may be more than the beneficiaries. It must be understood that of the entire mobile population, the Roamers are 7 to 8% contributing to 10 to 12% of the revenues, the loss to TSPs will have to be amortised over the remaining 90% or so. Therefore, it is unclear for whose benefit, if at all such a step is proposed? In addition, it is unclear whether it includes NLDC or not? Current roaming charges, without NLDC and termination/access, are given below –

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#### Impact on the subscribers

It's a win-win for the subscribers. Presently they pay normal call charges for outgoing calls on roaming plus the roaming charge of 75 paise to Rs 1 per minute. Moreover, while answering a call on roaming, they pay up to Rs 1 per minute. Abolishing the roaming charges will in turn increase the usage of national roaming services by subscribers as they will not have to worry about the high roaming charges.

At present, the average roaming charge is 75 paise per minute to Rs 1 per minute. In any given telecom circle, only seven-eight per cent of all subscribers opt for roaming





services. However, abolition of roaming charges could lead to higher call rates, as TSPs will have to compensate for the loss of revenue (10% of the total revenue), which would be for all across the board. The moot question is for whose benefit is this exercise?

### **Suggestive Measures for Reviewing the National Roaming Charges**

We are of the view that TSP's can put a fixed charge for providing telecom services on roaming rather than charging extra on every call or SMS made. Special vouchers can be introduced for both prepaid and post-paid customers depending upon their usage as well as the number of days they are travelling. The biggest flaw today in the roaming charge is that, it is flat all across the board. Service Providers can, perhaps, consider differential charge for Metros, Rural areas. In addition, they could also consider NLDC distance based, say free up to 500km, and suitable slabs beyond.

Another measure could be, providing a service by the way of package or a fixed charge which will allow roaming subscriber to receive incoming calls from the visiting place to be treated as local calls which otherwise would be treated as STD calls. On the other hand, the subscriber who is calling the roaming subscriber from the visiting place for him/her also the call would be treated as a local call. Thus the proposed measure reduces the charge of receiving an incoming call from the visiting place while roaming and also helps in reducing the carriage charges. For example, if a subscriber is traveling to Bombay and he/she receives a call from Bombay itself, then by using the proposed service the call received will be treated as a local call. Similarly, the one who is calling the roaming subscriber will have to just shell out local rates for the call made.

Cost Elements to be considered while fixing the tariff for National Roaming –

Incoming call received by a subscriber while roaming incorporates the following cost elements:

- Carriage charge for carrying the call from the home network of the roaming subscriber to the visited network
- Termination charge for terminating the call in the visited network
- Incremental CAPEX and OPEX for infrastructure dedicated for roaming



An outgoing local call while roaming incorporates the following cost elements:

- Origination charge for originating the call in the visited network
- Termination charge for terminating the call in the called network
- Incremental CAPEX and OPEX for infrastructure dedicated for roaming

An outgoing STD call while roaming incorporates the following cost elements:

- Origination charge for originating the call in the visited network
- Carriage charge for carrying the call from the visited network to the called network
- Termination charge for terminating the call in the called network
- Incremental CAPEX and OPEX for infrastructure dedicated for roaming

### **Conclusion**

We are of the view that abolishing the roaming charges completely is not productive from the majority of consumers point of view, because TSP's are going to amortise their losses over others. Out of the total telecom revenue around 10-12% comes from national roaming. 10-12% of revenue will have to be compensated in some or the other way. If at all Government of India abolishes the national roaming charges, TSPs in turn will increase the telecom services charges which includes voice calls, SMSes, data services etc. Therefore it's the bigger section of the consumers who will suffer.

No matter whatever measure is accepted, the loss of revenue (10% of the total telecom revenue) should be compensated as it's a huge sum of money which is involved. The loss should be equally divided between the subscribers who travel frequently and their respective service operator. Subscribers who don't travel at all should not bear the burden, only the regular travelers should pay as they can certainly afford the charges and whatever measure is accepted, it won't make them stop travelling. Subscribers will continue to travel and will definitely use the telecom network for communication, so it's imperative to charge reasonable tariff rates for availing national roaming services.

In our view elimination of Roaming Charges is just a Gimmick.



- 4. In your opinion, should the burden of the cost for the incoming call be removed from the roaming subscriber? If yes, how should this cost be recovered? Would removal of the burden of the cost for the incoming call while roaming lead to an increase in overall call traffic across the country?**

Tariff of incoming call (Local and STD) on national roaming includes the following cost components -

- Carriage charge for carrying the call from the home network of the roaming subscriber to the visited network
- Termination charge for terminating the call in the visited network
- Incremental CAPEX and OPEX for infrastructure dedicated for roaming

In case the burden of these costs is removed from the roaming subscriber, these costs will remain uncovered. We are of the view that TSP's can put a fixed charge for providing telecom services on roaming rather than charging extra on every call or SMS made. Special vouchers can be introduced for both prepaid and post-paid customers depending upon their usage as well as the number of days they are travelling. The biggest flaw today in the roaming charge is that, it is flat all across the board. Service Providers can, perhaps, consider differential charge for Metros, Rural areas. In addition, they could also consider NLDC distance based, say free up to 500km, and suitable slabs beyond.

Another measure could be, providing a service by the way of package or a fixed charge which will allow roaming subscriber to receive incoming calls from the visiting place to be treated as local calls which otherwise would be treated as STD calls. On the other hand, the subscriber who is calling the roaming subscriber from the visiting place for him/her also the call would be treated as a local call. Thus the proposed measure reduces the charge of receiving an incoming call from the visiting place while roaming and also helps in reducing the carriage charges. For example, if a subscriber is travelling to Bombay and he/she receives a call from Bombay itself, then by using the proposed



service the call received will be treated as a local call. Similarly, the one who is calling the roaming subscriber will have to just shell out local rates for the call made.

- 5. In your opinion, if the difference between the tariff while roaming and the tariff in the home network is done away with, how would such an arrangement operate within the framework of the present licensing regime? What are the likely issues that may arise upon its implementation?**

Under the existing telecom licensing regime, licenses are issued separately for each service area. The visited network in which a subscriber is roaming is compensated by the home network according to the terms and conditions between them. Some service providers have a pan-India presence while others have a presence in few service areas. According to the existing terms and conditions of license, it is not mandatory for a service provider to enter into roaming arrangements with other service providers. Therefore, a particular service provider will demand a higher rate for allowing roaming facility to the subscribers of other service providers. This will result in the roaming subscribers having to pay a differential higher rate for off-net roaming.

In such a situation roaming agreements will have to be mandatory for the reasons as above. It's unfair for the TSP who doesn't have all India presence as the subscribers of that particular TSP will have to pay a differential higher rate for off-net roaming. Also, consumers may not take the TSP's connections at all. Regulation should be such that no TSP remains handicap in terms of providing the telecom services to its subscribers on roaming.

- 6. In your opinion, is there a need to prescribe a tariff for video calls while roaming? If your answer is in the affirmative, what methodology should be adopted for calculation of such tariff? In case cost based tariffs are to prescribed, the service providers may kindly provide the cost data and costing methodology to be used.**



In our view, the charges of video calling while roaming should be similar to the charges levied by the operators on other data services on national roaming.

- 7. In your opinion, should TRAI also prescribe a tariff for SMS while roaming? If your response is in the affirmative, what method of calculation for such tariff should be adopted? In case cost based tariffs are to be prescribed, the service providers may kindly provide the cost data and costing methodology to be adopted.**

Currently there is no ceiling for SMS while roaming except that the incoming SMSes while roaming are free. The rates offered by the service providers is Rs.1.50 for a local/STD SMSes while roaming. In some cases, the charge for an outgoing SMS while roaming exceeds the charge for outgoing voice call while roaming.

TSP's can put a fixed charge for sending SMSes while roaming rather than charging extra on every SMS sent. Special vouchers can be introduced for both prepaid and post-paid customers depending upon their usage as well as the number of days they are travelling. In addition, they could also consider NLDC distance based, say free up to 500km, and suitable slabs beyond.

- 8. In your opinion, would it be appropriate to allow special tariff vouchers for roaming subscribers?**

We are of the view that TSP's can put a fixed charge for providing telecom services on roaming rather than charging extra on every call or SMS made. Special vouchers can be introduced for both prepaid and post-paid customers depending upon their usage as well as the number of days they are travelling. As per the present tariff framework, no fixed charge is permitted for accessing roaming service or in lieu of free/concessional roaming usage.

The biggest flaw today in the roaming charge is that, it is flat all across the board. Service Providers can, perhaps, consider differential charge for Metros, Rural areas. In



addition, they could also consider NLDC distance based, say free up to 500km, and suitable slabs beyond.

Another measure could be, providing a service by the way of package or a fixed charge which will allow roaming subscriber to receive incoming calls from the visiting place to be treated as local calls which otherwise would be treated as STD calls. On the other hand, the subscriber who is calling the roaming subscriber from the visiting place for him/her also the call would be treated as a local call. Thus the proposed measure reduces the charge of receiving an incoming call from the visiting place while roaming and also helps in reducing the carriage charges. For example, if a subscriber is travelling to Bombay and he/she receives a call from Bombay itself, then by using the proposed service the call received will be treated as a local call. Similarly, the one who is calling the roaming subscriber will have to just shell out local rates for the call made.

- 9. Is there any other relevant issue related to 'tariff for national roaming' which the Authority should keep in mind while carrying out the proposed comprehensive review of the framework for tariff of national roaming services?**

<Same as Answer Number 1>

