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Without Prejudice

To,

The Secretary,
Telecom Regulatory Authority of India,
Mahanagar Doorsanchar Bhawan,
Jawahar Lal Nehru Marg,
(Old Minto Road), New Delhi-110002.

File No.:1-4/2011-Regln **Dated 18th May' 2011**

{**Kind Attn**: Shri Arvind Kumar, Advisor (I & FN), TRAI}

Sir,

Subject: Comments of BSNL in response to Consultation paper dated 27.04.2011 and addendum dated 29.04.2011 issued by TRAI on "Review of Interconnection Usage Charges (IUC)".

Kindly refer to TRAI's Consultation paper no. 4/2011 dated 27th April'2011 and addendum dated 29.04.2011 on "Review of Interconnection Usages Charges (IUC)" wherein comments of various stakeholders including BSNL have been sought.

The comments of BSNL on the various issues raised and discussed in this consultation paper and addendum are submitted in the subsequent paragraphs.

2. At the outset, we highly appreciate the Interconnection Usages Charges review exercise initiated by TRAI as the same was urgently required in the light of the Hon'ble TDSAT Judgement dated 29.09.2010 in Appeal No. 2 of 2009 of BSNL Vs TRAI & Ors and direction passed by the Hon'ble Apex Court of India on 04.02.2011 in the Appeal No. 271-281/2011 of TRAI Vs. BSNL & Ors.. This is due the fact that interconnecting operators are need be compensated on the actual work done principle in the present IUC Regulations notified in March'2009 by TRAI.

3. However, we are shocked and surprised that various issues related to fixation of Interconnection Usage Charges which have already been settled/conclusively decided by the Hon'ble TDSAT in its judgement dated 29.09.2010 have again been floated by TRAI for discussion. In our humble submission, once issues have been thoroughly deliberated and decided by the Hon'ble TDSAT by hearing all the parties including TRAI, the same no more remain open for discussion or deliberations in the consultation process by the TRAI. In our view, the present exercise, which is being carried out by the TRAI in compliance to the judgement of the Hon'ble TDSAT and directions of the Hon'ble Supreme Court of India, has to be confined within the four corners of these judgements/orders. Seeking comments / views on the issues already settled by the Hon'ble TDSAT amounts to over-reaching these judgements. Accordingly, it is

respectfully submitted that the Authority may kindly confine the present consultation exercise completely in accordance with the judgement of the Hon'ble TDSAT and directions issued by the Hon'ble Apex Court of India and comments may not be considered on the already settled issues.

4. In context to above and to straighten the record, we would like to bring into your kind notice the decisions / observations given by the Hon'ble TDSAT in its judgement dated 29.09.2010 on various issues related to fixation of Interconnection Usage Charges. The relevant portions of the judgement dated 29.09.2010 of the Hon'ble TDSAT in relation to Fixed Termination Charges, Mobile Termination Charges, Carriage Charges, Transit Charges, Intra-Circle Cellular Calls handed over at LDCC TAX(s), Incoming ILD calls are reproduced as under for kind perusal:

i) <u>Fixed Termination Charge (FTC):</u>

> *"It is in the aforementioned context, in our opinion, TRAI was required to fix FTC. We may notice that the* ***<u>cost of termination in wireline network would obviously be much higher than in wireless network</u>****. Even otherwise the usage of wireline has drastically declined……."* [para 105(4)]{emphasis supplied by BSNL}.
>
> *"….It is in the aforementioned context we, are of the opinion that the recovery of CAPEX by an operator only through rentals from its own subscribers may not be justified.* ***<u>Opex only model may not take care of a wireline operator</u>*** *as not only its network should be made accessible to the subscribers of all operators on minute to minute basis, rentals in wireline network would be far below the actual cost. TRAI ought to have noticed and in fact could call for materials from the wireline operators to ascertain as to whether in the light of the prescribed tariffs by it so far as the rural and far-flung areas are concerned, the rentals is far below the actual costs or not."* [para 108] {emphasis supplied by BSNL}.
>
> *"…We also* ***<u>fail to see any logic that the fixed line operators should recover the last mile cost through rental only</u>****. It is, in our opinion, having regard to the percentage of the wireline phones and the dwindling aspect of the matter, the same was not a relevant factor, particularly in view of the fact that fixation of rental for the said purpose was not prohibited at any point of time."*[para 110] {emphasis supplied by BSNL}.
>
> *"In the light of the aforementioned findings, the fixation of symmetric termination charges by the TRAI, both for wireline and wireless operators, in our opinion, may not be held to be justified.*
>
> *We say so for various reasons; some of which are:-*
>
> *(i) Firstly because two unequals have been treated equally. As they stand on different footings, the fixed line operators could not have been compared with wireless network operator.*
> *(ii) By reason thereof the* ***<u>'cost based and work done principle' stood disregarded</u>****.*
> *(iii) It* ***<u>ought to have considered actual use of network</u>*** *in both the cases.*

(iv) It wrongly applied the sold units or actually handled minutes usage in case of wireless network and saleable units or handling capacity in case of wireline networks.

(v) Furthermore, as indicated heretobefore, TRAI has no jurisdiction to establish a cross subsidy between competitors. A cross subsidy in a wholesale market vis-à-vis a retail market would otherwise be difficult to recover having regard to the ground realities and market forces.

(vi) There does not exist any logic of alternating network to subsidize the call originating network.

{Emphasis supplied by BSNL}

We, therefore, are of the opinion that fixation of 20 Paise for termination charge for FTC should be considered afresh on the basis of materials on record."[para 112] {emphasis supplied by BSNL}.

ii) Mobile Termination Charges:

*"….Once the calling party regime principle, has come into being in contrast to earlier regime, where even a party receiving a call was required to pay a part of a airtime charge, **various components of IUC namely, Origination charge, carriage charge and termination charge must be held to be the established principle of cost based determination** therefor. …"* [para 114(12)] {emphasis supplied by BSNL}.

*"…It is not in controversy that **cost would include CAPEX/OPEX and depreciation**. There exists also, of course, a difference between the operators running a wire link network vis-a-vis wireless network or both…."* [para 114(12)] {emphasis supplied by BSNL}.

*"…It must not be forgotten that every operator must keep its network maintained for use by its own subscribers as well as by subscribers of another operators on equal basis. If that be so, **we fail to see any reason as to why the traffic sensitive cost contained in CAPEX should be kept out of consideration**. In any event the effect thereof should have been in our opinion taken into consideration by TRAI. Sticking to old methodology by itself may not be a virtue….."* [para 114(12)] {emphasis supplied by BSNL}.

*"…..We are furthermore of the opinion that **aggregation of cost, whether Capital cost or operating cost being based on different accounting principles, different techniques and standards for various purposes including taxing purpose may have to be applied to give effect to cost causation principle and so far as determination of IUC including termination charges are concerned**….."* [para 114(12)] {emphasis supplied by BSNL}.

iii) Carriage Charges:

*"The principal question which arises for our consideration is as to whether the same carriage charges fixed for urban and rural areas is justified? **Indisputably the ceiling fixed for both urban and rural areas by TRAI, in our opinion, may not be entirely correct.** Suffice it to say that any below cost carriage charge in rural areas may discourage investment in telecom networks therein. Furthermore the traffic in the rural and far-flung areas is low…."* [para 115(4)]{emphasis supplied by BSNL}.

"If TRAI had accepted the principle that the carriage charges payable by one operator to the other shall be on actual rather than forbearance, the same should have been followed in 2009 Regulations also." [para 115(5)]

iv) Intra-Circle Cellular Traffic:

*"…..**There cannot be any doubt or dispute that it should be in consonance with the ceiling prescribed for carriage charges at Rs. 0.65 /minute**."* [para 116(1)] {emphasis supplied by BSNL}.

"We, therefore, do not see sufficient ground and without assigning any cogent reasons as to why the same was reduced to 15 Paise." [para 116(7)]

"We, therefore, are of the opinion that the matter relating to carriage charges should receive a fresh considerations at the hands of the TRAI in the light of the observations made heretobefore as also in our aforementioned order dated 21.05.2010 in the aforementioned Appeal No. 1 of 2006 and 8 of 2006." [para 116(8)]

v) Transit Charge:

*"At the relevant time Transit charge of 19 Paise was being paid in terms of the IUC Regulations as was prevalent then. However, that part of the judgment of this Tribunal is pending consideration before the Supreme Court of India**. It is not disputed that direct connectivity between two cellular operators stands achieved.***

It is only for their own interest some of the cellular operators are receiving the benefit of the PSTN network of BSNL for transit of their cellular traffic. It is a matter of contract.

*BSNL, therefore, may not be held to be under any legal obligation after achieving the interconnection through direct connectivity with the other cellular service providers to provide an alternate facility for transit of cellular traffic**. If direct connectivity has been achieved, TRAI need not have fixed any charges in respect thereof.** This aspect of the matter has not been received due and serious consideration by TRAI. We, therefore, are of the opinion that the matter requires reconsideration at the hands of TRAI."* [para 117(7)] {emphasis supplied by BSNL}.

vi) Termination Charge on Incoming ILD Calls:

"…..We have already held heretobefore that TRAI while exercising its jurisdiction under Sec 11(1) (b) of the Act exercises power of statutory authority. It is, therefore, required to act within the four corners of the statute. Arbitrage or grey market operations are exclusively within the domain of the Central Government. For the said purpose, the Central Government has taken various steps. It had issued various circulars. It even has imposed a fine of Rs. 50 crores on one of the operators as it was found to be indulging in such activities.

We have said so, we may hasten to add, not because of acts of omission and commission on the part of an operator has been established, as the matter is pending before the Apex Court but only to show that wherever necessary, the Government of India had been taking the *requisite steps to curb the menace of grey market. In that view of the matter, it would be safe to conclude that those factors were not relevant and in any event contrary to the legal position.* ***TRAI could not have, in our opinion, considered the said issue for the purpose of fixation of incoming international calls****….”* [119] {emphasis supplied by BSNL}.

“….It has been brought to our notice that the average incoming international minute per subscriber in fact had gone down. Be that as it may, the same may not be by itself a ground, as to why, having regard to the fact that tariff is under forbearance, an Indian ILD operator would not have freedom to negotiate with the foreign operators on reciprocal basis, ***particularly, in view of the fact that even the Indian customers would be benefited thereby.***

Even otherwise namely for maintaining the level playing field between two different types of the operators, It would necessary for TRAI to consider this aspect of the matter. We would request the TRAI to consider the matter afresh.” [119] {emphasis supplied by BSNL}.

5. In our opinion, the following questions provided in chapter IV of the consultation paper are not in conformity, and rather amount to overreaching, to the directions/ observations contained in the judgment dated 29.09.2010 of the Hon'ble TDSAT, for implementation of which the Hon'ble Supreme Court of India has given a time period of four months to TRAI:

(i) Question No. 2, 3, part of 4 regarding approach to be followed for determination of IUC once it has been held that cost based and work done principle based approach has to be followed.

(ii) Question No. 5 whether CAPEX should be included in the calculation of termination charges once it has been held that CAPEX has to be included in the cost for determination of IUC.

(iii) Question No. 11 whether termination charges should be asymmetric in respect of existing and new operators after being held that IUC should be strictly cost based.

(iv) Question No. 15 whether termination charges for incoming ILD calls should be equal to domestic calls.

(v) Question No 16 whether there should be separate ceiling for rural, remote and hilly areas in respect of carriage charges once it has been held that IUC has to be cost based and cost in remote and hilly areas is higher.

(vi) Question No. 18 and 19 related to fixation of carriage charges for intra-circle cellular calls handed over at LDCC TAX of BSNL once it has been held that it should be in consonance with ceiling of 65 paisa per minute for NLD carriage charges.

(vii) Question No 20 whether transit charges should be regulated once it has been held by the Hon'ble TDSAT that there is no need of fixing this charge by TRAI after once direct connectivity has been achieved by private operators with cellular network of BSNL.

6. After having said as above, it is the submission of BSNL that all the components of the IUC should be prescribed strictly on the basis of cost based and work done principle, which is the most suitable, transparent and internationally accepted approach for suitable compensation to each and every interconnected operator in a multi-operator, multi-services and multi-networks scenario. Due to the reasons that CAPEX and OPEX are transferable from one to another depending upon the business model followed by the operators, after examining the matter, the Hon'ble TDSAT for the purpose of uniform and equitable treatment of all networks/ services has decided that for calculation of IUC, the cost should include all the relevant costs i.e. OPEX, CAPEX and any other relevant costs. Accordingly, all the relevant costs should be taken into consideration by the Authority for calculation of IUC.

7. However, for calculation of termination charges, in case it does not become possible for the Authority to segregate the relevant OPEX, CAPEX and depreciation as discussed in the consultation paper, it is suggested that a fixed percentage of the total annual cost recovery i.e. annual CAPEX recovery including Depreciation & OPEX may be used for calculation of IUC. For example 80% of the total costs may be attributed for calculation of IUC and rest 20% of the annual cost recovery should be attributed to be recovered through fixed charges, monthly rental and/or value added services etc. However, similar model should be used for the calculation of both type of termination charges i.e. for fixed line termination charges and Mobile Termination charges.

8. Admittedly cost of wireline networks is much higher than the wireless networks. Therefore, the termination charges for fixed wireline network needs to be prescribed higher in comparison to the wireless networks based on the actual costs. Further, it is submitted that due to high costs of network and low traffic, the carriage charges in the rural, remote and hilly areas should be prescribed higher in comparison to the carriage charges in the other areas wherein costs of network is lower and traffic is very high.

9. It is submitted that transit facility not being a mandatory service in terms of interconnection, the transit charges payable by one operator to another for availing of transit facility should be left for the mutual negotiation between the parties and there is neither any necessity nor any requirement for fixation of transit charges by the TRAI in present consultation process.

10. The discussions in the consultation paper try to club/ mix two separate and distinct IUC components namely "termination" and "carriage" in respect of intra-circle cellular

calls meant for termination on basic networks. In this regard, it is submitted for kind consideration of Authority that as per the present licensing and regulatory regime, intra-circle cellular calls are to be handed over at LDCC TAX of BSNL. This involves two components namely "carriage" from LDCC TAX to SDCC Tandem and "termination" for fixed networks. This being the correct position, The TRAI from the beginning of IUC regime itself has considered these two components separately, which in our opinion is correct position. Therefore, two charges are payable in respect of these calls. As far as the fixation of carriage of intra-circle traffic handed from Cellular Mobile calls from Level-II TAX to SDCC Tandem is concerned, as already held by the Hon'ble TDSAT in the judgment dated 21.5.2010 in the Appeal No. 1/2006 and 8/2006 and in the judgment dated 29.09.2010, there is no difference in the carriage of NLD calls and this carriage. Therefore, there is no requirement for treating this carriage separate and distinct from the NLD carriage and thereby there is no necessity for calculating this carriage charge separately. Accordingly, there is no requirement of segregating the cost incurred on the carriage of intra-circle cellular calls from LDCC TAX to SDCC Tandem. In our opinion, whatever carriage charges are prescribed for the NLD carriage should be applied in toto to this carriage also.

11. With regard to fixation of termination charge for incoming international calls, it is submitted that admittedly Indian operators have to pay a charge of Rs. 3-4 per minute for termination of their calls in the foreign countries and the same is finally recovered from the Indian consumer. However, in the reverse path i.e. termination of incoming international calls, the Indian access providers are getting only Rs. 0.40 per minute as termination charge in accordance with the Regulations of TRAI. In the IUC Regulation of 2009, TRAI was agreeing with the justification of fixation of same termination charges for incoming international calls as are paid for the outgoing international calls by the Indian consumers. However, as per the justification given in the regulations, these two charges were not fixed at the same level and a meager termination charge of Rs. 0.40 per minute was prescribed by the TRAI for the incoming ILD call due to following two reasons:

a) That higher termination charges on incoming international calls in comparison to domestic termination charges will lead to arbitrage and thereby result into enhancement of grey market.
b) That fixation of lower termination charges prescribed by the TRAI in the earlier IUC regime had resulted into huge increase in the incoming ILD traffic to India.

The Hon'ble TDSAT, in its judgement dated 29.09.2010 has decided that addressing the issue of grey market operations does not fall within the purview of TRAI and TRAI could not have considered this issues while prescribing the charges for international incoming calls. Similarly, the contention with regard to increase in the incoming ILD traffic due to lower termination charges for ILD calls in India has not been found to be correct and the Hon'ble TDSAT has held that this should not be any ground for prohibiting the Indian operators to have negotiation with the foreign operators for fixation of termination charges on reciprocal basis.

Accordingly, it is our humble submission that Indian Access Providers may kindly be permitted to have negotiations with the ILD operators for termination charges on reciprocal basis. This arrangement would benefit the Indian consumers as any extra amount recovered by the Access Providers due to higher termination charges will be passed on to the Indian consumers. Or else the termination charges for incoming international calls may be prescribed in the range of Rs. 3-4 per minute in tune with weighted average of termination charges being paid to other countries.

12. It is observed that while the present consultation process has been floated by TRAI in relation to reviewing the interconnection usage charges i.e. charges payable by one operator to another interconnected operator for usage of resources of later by the former, in the consultation paper addendum dated 29.04.2011, the TRAI has raised issue related to tariff i.e. charges to be recovered by an operator from its customers for provisioning of service. In our submission, the IUC and tariff are two entirely separate issues. While the first i.e. interconnection is an exercise which falls under Section 11 (1)(b), the second i.e. tariff falls under Section 11(2) of TRAI Act, 1997 as amended in the year 2000. Therefore, in our submission, any exercise related to amendment in tariff, required if any, may kindly be initiated separately.

13. Without prejudice to above, it is submitted that admittedly cellular operators have to perform extra work on the provisioning of roaming facility and after considering this aspect only, the TRAI had allowed the operators to recover the higher call charges from the roaming customers. This principle is still continuing and there is no change on this aspect. It is submitted that extra cost of operators towards handling roaming service should be recovered from such customers only who avail the roaming facility and this burden should not be passed to the customers who have no correlation whatsoever with this cost. This is also in tune with principle of cost causation. Therefore, in our opinion, there does not arise any occasion for excluding the item "incremental cost for roaming serviced" from the computation of tariff ceiling for national roaming.

14. Based on the above suggested approach, BSNL has carried out the calculations to determine the cost based termination charges for wireline and wireless networks. In these calculations, financial data have been taken from the latest available Accounting Separation Report of the year 2009-10.

15. The actual minutes of usages (MOUs) of GSM services for the financial year 2009-2010 & 2010-2011, which are being submitted to TRAI on quarterly basis, have been used for the calculation of Mobile Termination Charges. The brief of the same is annexed as **Annexure-A** and **Annexure F.**

16. The minutes of usages (MOUs) for fixed line services (as attached in the **Annexure G**) have been arrived at by using the actual data for the financial year 2009-2010 & 2010-2011 from Inter-operator billing System of BSNL (IOBAS) for the incoming and outgoing MoUs of BSNL network with other private operators. The MoUs for incoming and outgoing calls from BSNL's fixed network to BSNL's CMTS network have straight way

been picked up from the MoUs report with respect to CMTS for the year 2009-2010 & 2010-2011. However, the MoUs for the calls originating and terminating within the fixed network of BSNL have been projected using the latest sample Call Details Records (CDRs) data from CDR billing system of BSNL covering all the four zones for the month of March' 2011. The projection has been done on the basis of %age distribution of MoUs for different segment using sample data for O/G calls only. The data received from IOBAS for last two years and the sample CDR data for the month of March 2011 are attached as **Annexure-B and Annexure-C.**

17. As per the suggested approach in para 7 above, BSNL has calculated the annual cost recovery by summing up the annual CAPEX recovery, depreciation and OPEX after excluding sales and marketing cost. From this annual cost recovery, amounts attributed to be recovered through fixed charges, monthly rental and/or value added services etc. @ 20% for both, wireline and wireless networks, have been deducted. The rest of the annual cost recovery to be made through IUC and usage charges has been divided by the annul minutes of usages (MOUs) of the year 2009-2010 for calculating the termination charges. By applying this principle, cost based termination charges for fixed wireline and mobile/wireless services of BSNL comes to about Rs. 1.45 per minute and Rs. 0.30 per minute respectively, as per the detailed calculations enclosed at **Annexure-D and Annexure-E respectively**.

18. It may be seen that, the termination charges for wireline networks is much higher in comparison to the wireless networks, thereby, fully justifying the asymmetric termination charges for two different types of networks.

19. While reiterating our views that the termination charges should be fully cost based following an equitable treatment of CAPEX and OPEX as explained above, it is submitted that it will make cellular to fixed line calls expensive in comparison to cellular to cellular calls. Therefore, following termination charges in different scenario with respect to fixed line network should be made applicable, which will not only arrest the decline of the fixed line subscribers base and increase proliferation of fixed line and broadband services in the country but will also encourage the investment and rollout of fixed line services in the rural, remote and hilly areas as well which have practically been stopped due current unfavorable regulatory and licensing regime for fixed line services:

a. Fixed-line Termination Charges (FTC) should be kept at sufficiently higher level as compared to Mobile Termination Charges say **Rs. 0.20 more than MTC** or **one & a half times the MTC** whichever is lower so as to recover some part of cost of the fixed line network without distorting the traffic of fixed line network.

b. There should not be any termination charges for wireline to wireless calls. This is also in conformity to the terms and conditions of the license agreements of basic service operators (BSOs) which does not prescribe any termination charges to be paid by them to wireless networks while making a call by former to later's network.

c. In addition, the wireline networks may be compensated for recovery of their costs by fully exempting their revenues from the payment of license fee including USO contribution.

20. There appears to be no need of reviewing the present ceiling of carriage charges on high traffic routes as NLD operators are already offering carriage charges lower than what has been prescribed on such routes. However, there is an urgent need for upwardly revising the carriage charges on the actual cost basis for hilly, remote and difficult terrains areas wherein in many cases calls are carried through costly satellite media. Alternatively, as sufficient competition is existing in the NLD segment, it is suggested that these charges may be forborne for all areas.

21. Reiterating our views as submitted above, issue wise comments on the issues raised in the Consultation Paper are enclosed as **Annexure-1.**

Encl.: (i) Anexure-1
(ii) Annexure–A to Annexure-G (Confidential and NOT to be Published without prior permission of BSNL)

Yours faithfully,

(Ashok Kumar Rawat)
Addl. GM (Regulation - II)-CA

Annexure-1

BSNL's comments on the issues for consultation on "Review of IUC"

Issues	BSNL's Comments
1. Do you agree that the IUC regime determined through this consultative process should be applicable for 3 years? If not please indicate your preferred time period with justification.	BSNL feels that a period of three years, as validity period once IUC charges becomes effective, is a sufficient time and it agrees with the proposal that the IUC regime determined through this consultative process should be applicable for 3 years. This is also in accordance with the Hon'ble TDSAT judgement dated 29.09.2010 in Appeal No. 2 of 2009 of BSNL Vs TRAI & Ors, which inter-alia state as follows: *"….We would, however, request it to consider the desirability of informing all the stakeholders in advance, if it is otherwise not inconvenient, that the charges determined by it shall remain valid for more than one year and preferably three years so that the stakeholders or the operators may arrange their business accordingly and submit their representation keeping in view that aspect of the matter….."* Therefore, the IUC regime determined through this consultative process should be made applicable for 3 years.
2. Keeping in view the time period indicated by you in question 1, which of the following approaches would be most appropriate for the Indian telecom sector? (a) Cost oriented or cost based; (b) Bill and Keep; Please provide justification in support of your answer. In case you feel that the approach should vary according to service, please explain why?	It is submitted that the cost based IUC regime based on the work done principles is the most accepted approach world-wide. This compensates all the interconnected networks based on the actual work performed by every operator in the completion of call. In this approach, amounts are distributed /shared among the interconnecting networks on call by call basis on the basis of actual work performed by every operator in the completion of call. Accordingly, cost based IUC regime gives greater certainty to the Inter-operator settlements and facilitates interconnection agreements. Bill and keep is totally against the basic principles of work done and, thereby, against the principles of level-playing field. In this approach, all the charges for call are collected from the customer and retained by call originating operators only and not passed on to any of the interconnecting networks for the works performed by them in the completion of call. Thus, call originating network gets the charges more than the work actually performed by him and the terminating networks are deprived of the charges for actual work performed by him. Accordingly, this approach completely evades the level-playing field in which some of the members get more than their due share and the others do not get even their basic minimum. Hon'ble TDSAT has also stated in it's judgement dated 29.09.2010 in Appeal No. 2 of 2009 of BSNL Vs TRAI & Ors:
3. In case your answer to question 2 above favours the cost oriented approach, would it be appropriate to permit Bill and Keep between service providers who have symmetric	

traffic?	
4. If the cost-oriented or cost based approach is used for Interconnection Usage Charges, do you agree that fully allocated cost can be used with historical cost data submitted by various service providers in their audited Accounting Separation reports, published documents or any other information submitted to TRAI? If not, please give your alternate solution with explanation, required data and proper justification.	*"Its jurisdiction being limited to determine the charges on cost based and work done principle, could not have granted any subsidy far less artificial cross-subsidy..." [101(5)]* In view of above, it is respectfully submitted that TRAI should not deviate from the principle articulated by the Hon'ble TDSAT and hence set the components of IUC strictly according to the cost based and work done principle. Further, there should not be asymmetric termination charges for the same service on the ground of symmetric traffic or new and old operators. It should be strictly as per the cost based and work done principle. Every service provider is submitting the audited Accounting Separation report which must be available with TRAI up to the year 2009-2010, therefore, the same should be used for determining the interconnection usage charges. Therefore, in view of above and in addition to our comments on this issue as submitted in para 6 & para 7 above in the main letter, BSNL would like to reiterate that Top Down Costing approach with historical cost should be used to arrive at the cost of the various network segments for the purpose of determination of IUC in accordance to cost based and work done principle.
5. Should CAPEX be included in calculating/ estimating termination charge? If so, which network elements from the ASR data should be included in the cost base?	CAPEX is an important component while calculating the cost of any item and therefore can not be ignored and left out of calculation. Further, TRAI is well aware that the different operators employ different business models i.e. outsourcing, owning, franchising etc. Some of the major GSM operators have changed their business models from buying to hiring thereby shifting the CAPEX recovery to OPEX resulting into higher termination charges as per the approach adopted by TRAI and thus passing on their CAPEX cost recovery to the interconnecting operators, which is contrary to the basic tenets of cost based IUC regime. Thus the ONLY OPEX methodology adopted by TRAI lead to an anomalous situation wherein although the wireline networks are much more expensive than wireless networks, almost same termination charges had been arrived by TRAI for both the networks. It is, therefore, once again submitted that CAPEX and OPEX both should be taken into account for calculation of termination charges as mentioned above. For the purpose of uniformity and equitable treatment of all networks/ services, it is suggested that a fixed percentage of the total annual cost recovery i.e. annual CAPEX recovery including Depreciation & OPEX

	should be attributed to be recovered through fixed charges/monthly rental and/or value added services etc. and rest should be attributed to be recovered through usages and IUC. For example if for wireless services 20% of the total annual cost recovery is attributed to be recovered through fixed charges/monthly rental and/or value added services and 80% is attributed to be recovered through IUC, then, for the wireline services also, only 20% of the annual cost recovery should be attributed to be recovered through fixed charges and balance 80% through IUC.
6. Do you agree that with inclusion of CAPEX in the calculation of termination charges, rental/ administrative or any other fixed charge component should be removed from the retail tariff by regulatory intervention? If not, please give reasons.	After fixation of cost based termination charges calculated by including the entire CAPEX, the settlement of IUC should be strictly on that basis. However, how the call originating operator recovers the charges including the IUC to be paid to other interconnecting operators from its customers through tariff should be left to it. Some operators may like to recover the charges through fixed charges only with free call by call charges. Others may do it by only through call by call charges without any fixed charges. Some may be do the same through mix of both. This also increases the competition among the operators as well as provides various tariff options to the customers. Thus, how the charges are recovered by call originating network operator from customers i.e. tariff should be entirely left to the operator without any restriction by the TRAI. Therefore, in our opinion, there is no justification for removal of rental/ administrative or any other fixed charge component from retail tariff by regulatory intervention even after inclusion of CAPEX in the calculation of termination charges, otherwise there will not be any innovation in the tariffs to be offered by operators to their customers and fruits of competition will not be available to them.
7. Should TRAI continue with the existing rate of return of around 15% in the form of pre tax WACC as adopted in other regulations? If you do not agree with the above, please state what should be the rate of pretax WACC, along with justification for your proposed rate.	Yes, we agree that existing rate of return of around 15% in the form of pre tax WACC as adopted in other regulations by TRAI should be continued.
8. Would it be appropriate to adopt	We do not agree with adoption of Straight Line Method with an average life of 10 years for all network elements for

Straight Line Method with an average life of 10 years for all network elements for taking into account depreciation? If you do not agree with this proposal, please give your alternative method with justification.	taking into account depreciation. In our opinion, since fully allocated cost with historical cost is proposed to be used, the existing WDV (Weighted Depreciation Value) method may be adopted. Since fully allocated cost with historical cost is proposed to be used, the existing WDV method may be adopted.
9. Do you agree with the proposal for treatment of the cost items as indicated in Table 3.2? If not, please give your proposal with justification.	Yes, we agree.
10. Do you agree that revenue can be used as a driver for segregating the cost pertaining to VAS services from the total cost indicated in the ASRs? If not, please provide a template with appropriate method for separating the cost items for value added services from the cost data provided in the ASR.	BSNL is of the view that there should be a deduction from the total cost comprising of annual CAPEX recovery, depreciation and OPEX to account for the revenue while fixing the voice termination charges for wire-line and wireless networks. BSNL has calculated the annual cost recovery by summing up the annual CAPEX recovery, depreciation and OPEX. From this annual cost recovery, amounts attributed to be recovered through fixed charges, monthly rental and/or value added services etc. @ 20% for both, wireline and wireless networks have been deducted. The rest of the annual cost recovery to be made through IUC and usage charges and therefore has been used for calculating the termination charges. However, in case it is possible for the Authority to segregate the relevant OPEX, CAPEX and depreciation as discussed in the consultation paper, BSNL agrees with the proposal that the revenue can be used as a driver for segregating the cost pertaining to VAS services from the total cost indicated in the ASRs.
11. Should termination charges be asymmetric in respect of existing operators and new entrants or between different types of networks? What should be the criteria to distinguish between an existing operator	In our opinion, as submitted in the main letter, in a multi-operator, multi services regime, termination charges for wireline and wireless networks need to be strictly cost based. Accordingly, there should not be any difference between the termination charges for existing service providers and new entrants for the similar networks/services. Hence, there is no justification for prescribing asymmetric charges in respect of existing operators and new operators and all the components of IUC should be prescribed strictly following the cost based approach and work done principles.

and a new entrant? Please justify your answer.	However, due to difference in the cost of wireline and wireless networks, fixation of higher termination for wireline networks in comparison to wireless networks in fully justified. In this regard, the Hon'ble TDSAT in its judgement dated 29.09.2010 has observed as under: *"…We may notice that the cost of termination in wireline network would obviously be much higher than in wireless network. Even otherwise the usage of wireline has drastically declined..." [105 (4)]* *"….There exists also, of course, a difference between the operators running a wire link network vis-a-vis wireless network or both…."* [114(12)] *"In the light of the aforementioned findings, the fixation of symmetric termination charges by the TRAI, both for wireline and wireless operators, in our opinion, may not be held to be justified…."[112]* It may also be seen from the calculation of FTC & MTC, as submitted by BSNL, that cost based termination charges for wireline networks is much higher i.e. five times in comparison to the wireless networks, thereby, fully justifying the asymmetric termination charges for two different types of networks. While reiterating our views that the termination charges should be fully cost based following an equitable treatment of CAPEX and OPEX as explained above, it is submitted that it may make cellular to fixed line calls expensive in comparison to cellular to cellular calls and the same may result in shifting of mobile to fixed line traffic into mobile to mobile traffic and will be detrimental to fixed line services which are already declining due to absence of any support from licensing and regulatory regime. Accordingly, in our humble submission, the termination charges in different scenario as submitted in the **para 19(a) & 19(b)** in the main letter with respect to fixed line network may be made applicable. The Authority is well aware that penetration of Broadband is very low in India. Further, as per recommendation dated 08.12.2010 of TRAI on "National Broadband Plan" every 10% increase in penetration of Broadband accounts for 1.38% increase in the per capita GDP growth in developing economies. Worldwide, DSL is the main technology for providing Broadband services to the consumers and India is not exception to it. As per quarterly performance report for Dec'2010 published by TRAI in on 29.04.2011, only 2.68% broadband connections are working on wireless technology and rest are working through fixed lines

	including copper line, fibre, leased line, cable modem etc. It is notices that as per latest report of Dec'2010, 86.29 % of total broadband connections in India are working on copper lines through DSL technology. Therefore, for proliferation of broadband services, which is the topmost priority of the Authority and the Government at present, the copper lines or fixed line are of utmost importance. Accordingly, in order to sustain the existing wirelines and encourage roll-out of further wirelines by telecom operators, the regulatory support is urgently required. Additional supports, as stated in the para 19(c) of the main letter, will give huge boost to further enhancement of wireline networks and thereby in proliferation of broadband services and will go long way in sustenance of wireline services. Further, to some extent, this will share the burden on spectrum, which is a scarce resource. Due to this support, fixed line operators will be encouraged to adopt the technologies like FMC (Fixed Mobile Convergence) which will not only solve the problem of coverage in household but also will reduce the demand of further spectrum by the wireless operators. This support is very meager in comparison to estimated expenditure of Rs. 60,000/- crores on the National Broadband Plan.
12. Should the TRAI treat the work done in origination and termination of a call as identical for the purpose of determining termination charges? If not, please provide justification in support of your answer.	As per the practice followed earlier, the work done in origination and termination of call should be considered identical for the purpose of determining termination charges.
13. What should be the criteria to estimate the traffic minutes for the fixed line network as actual traffic minutes for the fixed network are not available with TRAI? Please provide justification in support of your answer.	As mentioned in the main letter, BSNL is submitting the sample traffic data for outgoing calls extracted from the CDR billing system covering all the four zones for the months of March' 2011. This data have been used to project the MoUs of calls originating and terminating calls of the BSNL (F) to BSNL (F) call scenario. The MoUs for the calls with respect to private operators have been taken from the IOBAS billing data after making the necessary correction with respect to MoUs of CMTS services of BSNL. MoUs data with respect to Call originating and terminating in the call scenario of BSNL (F) to BSNL(C) have been taken from the MoU Quarterly Report for the year 2009-2010 and 2010-2011 already submitted to TRAI. Both reports are attached as Annexure-B and Annexure-C.

BSNL's comments on the issues for consultation on "Review of IUC"

14. Do you agree with the policy that origination charge should be under forbearance? Please provide justification in support of your view.	Yes, we fully agree that origination charge should be under forbearance. The forbearance of origination charges provides the flexibility to the access service providers to offer different and innovative tariff plans to the customers. In case the origination charge is also prescribed by Authority under the said regulation, it would tantamount to virtually fixation of the whole tariff and there would not be any incentive for the operators to increase their efficiency and bring new and competitive tariff plans. In our opinion, this move will be anti-competitive and growth of sector may get seriously hampered. The Authority, in its earlier regulation also, had kept origination charges under forbearance and had noted in its Explanatory Memorandum to "The Telecommunication Interconnection Usage Charges (Tenth Amendment) Regulations, 2009" that *leaving origination charge under forbearance allows the service providers flexibility to offer innovative tariff plans. This constitutes an important tool for generating competition in the market and works in favour of the customer in a competitive scenario. Therefore, keeping in view the policy of tariff forbearance, the Authority decided to continue with forbearance in origination charge for normal voice calls.* Therefore, the policy of keeping origination charge under forbearance should continue.
15. Which of the following is the best option for International Termination Charge? (a) Left for mutual negotiation between access providers and ILDO (b) Reciprocal arrangements with other countries (c) Higher than the domestic termination charge (d) Same as domestic termination charge	The detailed comments on this issue are submitted in para 11 of the main letter. The same may kindly be considered.
16. Is there a need to specify separate ceilings for carriage charges for remote and hilly areas? If yes, how should the costs corresponding to	Yes, as already decided by the Hon'ble TDSAT and in our submission, the carriage charges for remote and hilly areas need to be fixed higher in comparison to other areas wherein cost is lower and traffic is higher. The cost of providing services in rural areas generally comes to about 1.5 times than other areas. Therefore, in our opinion carriage charges for rural, remote and hilly areas, wherein cost is higher and traffic is very meagre, may kindly be

remote/ hilly areas be segregated for carriage charges to/ from remote/ hilly areas, as the Accounting Separation Reports of the NLD operators provide only a consolidated cost for pan India operations?	fixed at 1.5 times higher. It is pertinent to mention that in these areas in many cases calls are carried through very costly satellite media. Fixation of higher carriage charges for rural areas will boost building of telecom infrastructure by other operators also in these areas. **Alternatively, as sufficient competition is existing in the NLD segment, it is suggested that these charges may be forborne for all areas.**
17. Do you feel that TRAI should intervene in the matter of International Settlement Rates? If so, what should be the basis to determine International Settlement Rates?	BSNL would like to reiterate its comments submitted vide its letter no. 1-41/2010-Regln/1235 dated 19.11.2010 that as per the existing regulatory and licensing regime, Indian ILDOs have got full freedom to negotiate the charges payable by them on the outgoing ILD calls as well as charges to be recovered by them from foreign operators on the incoming ILD calls. Further, as per provisions of the TRAI Act'1997 as amended in the year 2000, the Authority has power to regulate arrangement amongst service providers of sharing their revenues derived from providing telecommunications services. In the Act, word 'service provider' refers to Indian telecom licensees / service provider only. Intervening in the matter of International Settlement Rates means nothing but fixing the revenue share between the Indian ILDOs (Indian Telecom Entity) and foreign carriers (Foreign Telecom Entity). Therefore, It is our humble and respectful submission that TRAI should not prescribe International Settlement Rates between Indian Telecom Operators and foreign carriers being beyond its jurisdiction as per the provisions of the TRAI Act.
18. How can the cost of providing transit carriage be segregated from the cost data in the ASR? Please provide a method and costing details to separately calculate this charge.	The detailed comments on this issue are submitted in para 10 of the main letter. The same may kindly be considered.
19. If the cost of all relevant network elements are taken into account in the calculation of the fixed line termination charge, is there any further justification to have a separate transit carriage charge? Please give reasons for	

your answer.	
20. Is there a need to regulate the TAX transit charges or should it be left for mutual negotiations? In the event transit charge is to be regulated, please provide complete data and methodology to calculate TAX transit charges.	In our opinion, the issue of transit charge is not open for consultation/ discussion after clear verdict of the Hon'ble TDSAT that these charges are to be left for mutual negotiation between the parties. The relevant paragraphs/ portion of the Hon'ble TDSAT judgment has already been reproduced in the main letter and the same are not being repeated herein for the sake of brevity. The Authority is already aware that transiting of calls is not a mandatory services and is based upon the mutual arrangement between the operators as per their techno-commercial decisions. It is further submitted that the direct connectivity has been established between the cellular networks of BSNL and networks of private operators across all the service areas and BSNL is proactively providing ports for augmenting the same wherever required. Transiting of calls via BSNL's PSTN network is extended wherever the cellular operators are specifically requesting for the same. It may also be noted that the transit of calls is not limited to accessing the cellular services of BSNL only but the same is for transit in general including the transit charges for calls of one private operator to another private operator through BSNL's network for short period when no direct connectivity is available between the two or as a overflow arrangement between two private operators' networks for smooth flow of their traffic. It is worthwhile to mention that BSNL shall provide such service to other operators only if it is commercially viable and mutually beneficial for both. Therefore, in view of above and in accordance to the judgement of Hon'ble TDSAT as mentioned in the main letter at para 4(v), transit charges should not be regulated at all and be left for mutual negotiations.
21. Is there any need to prescribe separate termination charges/ carriage charges for video calls? If yes, how should this charge be calculated in the absence of cost data? Please provide the methodology and data to be used.	Video call involves allocation 1 Radio Access Bearer (RAB) of 64 KBPs while a voice call is of 16.6 Kbps (considering AMR of 12.2 Kbps). Thus network resources involved in terminating a Video call are around 4 times that for terminating voice. As such it is proposed that Video call termination charges may be **four times** of the Voice termination charges.

Annexure-1

BSNL's comments on the issues for consultation on "Review of IUC"

22. Do you agree that a deterrent termination charge should be imposed for commercial SMS? In your view, what would be the most appropriate level of termination charge for commercial SMS?	TRAI already has regulations on commercial SMS which includes penalty on unsolicited SMS. BSNL is of the view that termination of both commercial as well as non commercial SMS should be charged. SMS is sent on the same control channels that are used for voice call set up and location updates. IF SMS volumes increase dramatically (other operators may broadcast bulk commercial SMS) then the same can increase blocking probability of Voice calls as well as SMS. As such, SMS termination charges are important and may be a fraction of the Voice termination charges i.e. $1/4^{th}$ of the Voice (mobile) termination charges.
23. Do you agree that Bill and Keep regime should be put in place for other types of SMS (non-commercial SMS)? Please provide justification for your response.	BSNL does not agree with Bill and Keep regime. It is proposed that SMS termination charges may be as stated in Answer to Q. No. 22.
24. Is there any need to prescribe SMS carriage charges or should it be left for mutual negotiation? If SMS carriage charges are to be calculated, what methodology should be used to calculate these charges? Please provide all cost details and methodology.	The SMS carriage charge calculation is very complex and practically not feasible with different network architecture deployed by the various operators. It is technically complex to determine SMS carriage charges carried over by SS7 signaling network. Therefore, it is suggested that levying of SMS carriage charge may not be considered at this stage as the solution of such billing and administrative work may cost more as compared to the revenue earned from SMS Carriage.
25. Do you agree that with the inclusion of all costs in the calculation of Interconnection Usage Charges, the item "incremental cost for roaming services" should be excluded from the computation of tariff ceiling for national roaming? If not, please give reasons.	The detailed comments on this issue are submitted in **para 12 & para** 13 of the main letter. The same may kindly be considered.