

**Recommendation On Support for Rural Wireline
Connections, Installed Before 1.4.2002 From USOF, On
Phasing Out Of ADC**

Preface

Access Deficit Charges (ADC) regimes were established by the TRAI through “The Telecommunication Interconnection Usage Charges Regulation 2003” (1 of 2003) dated the 24th January 2003 which was later superseded by “The Telecommunication Interconnection Usage Charges Regulation, 2003” (4 of 2003) dated the 29th of October 2003 with effect from 1st February 2004.

The Access Deficit Charges (ADC) compensate a service provider, mainly the incumbent, for rental/local call charges and any other below cost tariffs to make the basic telecom services affordable to the common man and promote both universal service and universal access. It is like the traditional cross-subsidy regime in which the incumbent as a monopoly service provider was able to fund below cost services from above cost services like international calls. The ADC has an identity independent of IUC and was instituted for a limited period of time. It is an instrument for a limited period as its longer term continuation brings about significant distortions in the market. It is also well known that used injudiciously the ADC could put avoidable burden on the customers, create market distortion, give rise to grey market for international calls and be a hurdle for innovation of services.

The Principal regulation and further amendments laid down the ground rules for initiation, continuance and phasing out of ADC through an elaborate consultation process. In keeping with the worldwide trend and sound economic principles, the Authority established an ADC regime that would deplete with time and any justification for financial subvention would be passed on, by 2008-09, to the Universal Service Obligation (USOF) fund where it legitimately belongs.

Realising that the time had now come for a decisive review of the ADC regime an elaborate consultative process was carried out by TRAI. Going by the analysis of the comments of and discussions with the stakeholders and other information available with TRAI it becomes apparent that ADC should now be phased out as per earlier stipulations. This aspect has been taken care of through appropriate amendment to the regulations.

Having said the above, continued need to promote effective telecommunication services in rural areas cannot be denied. The wireline network of BSNL is a national asset that needs to be supported and nurtured. In some rural areas this is the only form of communication available. In the coming years this network could be used to provide broadband, telemedicine, tele-education and other value added services. For these reasons rural telephony still demands special attention and the Authority is of the opinion that benefit of phasing out of ADC should largely go towards sustenance and improvement of telecommunications in rural areas.

The Authority is, therefore, of the view that some form of assistance would still be needed to support BSNL in sustaining their rural fixed assets and this support should come from the USOF. Appropriate calculations have been made and Universal Service Obligation(USO) rules have been examined. The Authority is of the opinion that BSNL should be provided support for the fixed rural lines that will be left unsupported after withdrawal of ADC. The framework for this has been enunciated in detail in these recommendations. The Authority has also kept in view that the Government may take some time to examine the recommendations and operationalize the subsidy from USOF and the Authority has taken a decision to continue with ADC on incoming international calls for a period from 1.4.2008 to 30.9.2008 at a reduced rate of red 0.50(paise fifty only) so that continuity in the flow of funds is maintained.

We believe that the Government would agree with the TRAI's views regarding support to BSNL for its rural fixed wireline network and implement these recommendations at the earliest.

(Nripendra Misra)
Chairman, TRAI

**Recommendation On Support for Rural Wireline Connections,
Installed Before 1.4.2002 From USOF, On Phasing Out Of ADC**

Introduction

1. Access to the telecom services is the key to development and growth. To quote from the National Telecom Policy 1999(NTP99): *“Access to telecommunications is of utmost importance for achievement of the country's social and economic goals. Availability of affordable and effective communications for the citizens is at the core of the vision and goal of the telecom policy.”* Information and Communication Technologies (ICTs) provide new and exciting opportunities to those who have access to them. However, existing economic imbalances and social inequalities will be deepened if access is unequally distributed. Thus equal opportunities are necessary to avoid widening of the rural and urban digital divide.

2. At present, Universal Service Obligation Fund (USOF) covers both public access through public or community telephones and provision of individual household telephones in identified net high cost rural / remote areas. Rural Direct Exchange Line (R-DEL) scheme of USOF is coming to an end in March 2008 after the current extension given to the service providers for this scheme, at a much reduced rate, expires. Since its inception on 01.04.2002, USOF is providing support to the new rural lines. It may be noted that the lines installed by BSNL prior to 01.04.2002 (no other service provider has installed R-DELS before this date) were supported by USOF for a period from 1.4.2002 to 1.2.2004 on the basis of the difference between regulated rental and actual rental. USO support for these R-DELS was withdrawn from 01.02.2004 since the scope of the Access Deficit Charge (ADC) was increased to take care of the deficit arising out of cost based rental and prevailing rental in rural areas.

3. As per the data available with TRAI, BSNL has about 99.87% wirelines in rural areas. In many areas this is the only mode of communication. In the absence of any support, sustainability of existing wireline operations of the incumbent in rural areas could be hampered. Because of intense competition in the market BSNL as a commercial entity may not like to maintain these at high cost and net loss without any compensatory financial assistance. In case there is no financial assistance the shortfall may be made up from the increase in tariff or the service provider may decide to exit from the business. In both the situations the rural urban divide would further widen thereby defeating the principle of universal access propounded in the NTP 1999 and USO policy. Sustainability of these lines is also very important from another viewpoint. This legacy fixed wireline network is an important national asset that offers a number of advantages. Digital Subscriber Line (DSL), the current dominant broadband technology, works on copper and would also ultimately be key to pushing forward broadband penetration. Though proliferation of broadband in rural areas will take some time to build-up but when it does, BSNL may be able to increase ARPU by offering value added services like IPTV, telemedicine, e-learning etc and make these line self sustaining. To make this happen it needs to be ensured that wireline connections are supported and their maintenance is taken care of through an appropriate subsidy.

4. Within the framework established through earlier regulations, the Authority invited stakeholders for a consultation on the issues of phasing out of ADC, support to rural wireline from USOF and growth of rural mobile telephones by requiring the operators to use resultant savings for developing rural network and promoting subscription for mobile services. It is expected that a larger part of the growth in the next three years would be from rural areas. There was overwhelming support for ADC being phased out and

support for rural wirelines being extended from USOF. This would allow the negative impacts of subsidy, in the form of ADC, to be obliterated and at the same time continue legitimate and much needed support to rural telephony. A subsidy for maintenance of rural wireline network will also ensure level playing field with other service providers who do not, like BSNL, have any high maintenance legacy network in rural areas and also have no compulsion to meet social obligations which allows them to make investment on the basis of sound business cases. In arriving at the recommendations contained in the following sections, the Authority has duly considered the inputs provided during the public consultations.

5. It is expected that these recommendations would help sustainability of rural wireline operations in the country after abolition of ADC through utilization of the non-lapsable Universal Service Obligation Fund towards meeting Universal Service Obligation.

Framework of the IUC/ADC regulations

6. Interconnection Usage Charges (IUC) and Access Deficit Charges (ADC) regimes were established by the TRAI through “The Telecommunication Interconnection Usage Charges Regulation 2003” (1 of 2003) dated the 24th January 2003. This regime came into effect from 01.05.2003. The Authority reviewed the above regime and the revised IUC and ADC regimes notified by “The Telecommunication Interconnection Usage Charges Regulation, 2003” (4 of 2003) dated 29.10.2003 superseded the earlier Regulations referred above and became effective from the 01.02.2004. This then became the principal regulation that was amended from time to time within the established framework and reflect contemporary industry situation.

7. The Authority amended the above Regulation vide “The Telecommunication Interconnection Usage Charges Regulation” dated 06.01.2005 effective from 01.02.2005. The Authority further amended the Regulation vide “The Telecommunication Interconnection Usage Charges Regulation” dated 23.02.2006 effective from 01.03.2006. In the Explanatory Memorandum to the above Regulation the Authority has already indicated that it would submit suitable recommendations to the Government on the issue so that finally USO regime takes care of support on account of ADC also.
8. The Authority further amended the IUC Regulation on 21.03.2007 as a part of its annual review and extended support to BSNL in the form of the ADC. With this amendment the per minute ADC component on all the calls originated by Indian consumers was removed to minimize the ill-effects of per minute ADC regime and paved the path for lower call charges.
9. The present consultation paper reiterates views of TRAI enunciated in the earlier amendments. It is proposed that ADC be phased out and USOF may take over of the responsibility of support of rural wirelines. This would not only be in line with undesirability of continuing with the ADC regime and also ensure that support from USOF is continued to meet the concern of bridging urban-rural divide in general and sustenance of incumbents’ rural operations in particular.

Phasing out ADC and giving support through USOF

10. It has been said in the consultation paper that with liberalization and competition the cross subsidy available to local call charges for basic services from the surplus margin available in national and international long distance calls has effectively vanished. The situation called for a regime to manage the sustainability of the

fixed line operations and to facilitate the incumbent to smoothly transit from a monopoly to a competitive regime. To facilitate this transition the Telecom Regulatory Authority of India (TRAI) put the Access Deficit Charge (ADC) regime in place. This ADC support during transition was necessary for the network in the bucolic areas and more importantly one that was focused on important social objectives in the telecom sector.

11. It is also undisputed that prolonged ADC puts avoidable burden on the customers, creates market distortion, gives rise to grey market for international calls and is a hurdle for innovation of services. ADC therefore is a double edged sword that needs to be used judiciously and for an appropriate period. It was therefore envisaged to be a depleting regime that would eventually be phased out and the responsibility of financial assistance to rural wirelines be transferred to USOF by 2008-09.
12. Having said the above, the Authority feels that there is still a case for supporting fixed line network of BSNL in rural areas. Further, because of the unwanted effects attached with ADC the support is proposed through USOF.
13. BSNL is maintaining a network with a large footprint and providing services in remote and far-flung areas. The fixed line rural network that existed prior to 1.4.2002 was primarily set-up with government funding at high cost and was always supported by USO or ADC since inception of these regimes. These lines are expensive to maintain and their operating expenses generally exceed the revenue. Their viability is further threatened by increasing competition in national and international long distance segments and also from mobile network. The Authority is, therefore, of the view that some form of assistance would still be needed to support incumbent in sustaining their non-

remunerative operation and this support should be given from the USO Fund to BSNL.

14. In the above context, the Authority, in Para 3 of the IUC Regulation dated 23rd February 2006, indicated that

“The Authority would submit suitable recommendations to the Government on this issue so that finally USO regime takes care of support on account of ADC also.”

In pursuance of the above stipulation, TRAI had already communicated to DOT vide its letter dated 20th September 2006 and subsequent reminder dated 22nd November 2006 and 27th Dec 2007 (Copies of letters have been annexed at Annexure B) that DOT may like to consider further course of action in view of the fact that the ADC is a depleting regime and will be phased out at the end of financial year 2007-08. The present consultation paper has discussed role of ADC and USO in great detail. It was mentioned that TRAI has been proposing phasing out of ADC and taking over of the responsibility of support of rural wirelines by USOF, firstly, to avoid overshadowing of the positive fallout of ADC by pronounced ill-effects of the mechanism on the Indian telecom market and cause undue burden on the consumers. Secondly, continuance of support from USOF is desirable because of the concern of bridging urban-rural divide and sustenance of incumbents' rural operations. It is important to sustain and encourage rural operation not only for bridging urban-rural divide but also for smooth introduction and proliferation of broadband services on wireline in rural areas. The Authority had therefore forwarded a copy of the Consultation Paper through letter dated 25.1.2008 for necessary action by DOT. (Copy of the letter annexed at Annexure C)

15. Overwhelming opinion from the stakeholders was received in favour of phasing out of ADC from 01.04.2008 and if justified support to BSNL from the USO Fund. **The Authority has analysed the comments in the detail and is of the view that support for sustainability of rural wirelines may be extended to BSNL for three years.** The subsidy is proposed to be time limited so that BSNL gets time to and makes efforts to increase revenue by giving value added services and reducing cost of operations. The scheme should not provide incentive for incurring losses but should improve the performance of the service provider.
16. As already said above the Authority has been continuously taking up the matter with DOT for providing support to BSNL for their rural wireline operations post phasing out of ADC. It is, therefore, presumed that some amount of preparedness would already be there on the part of the Government. However, the Authority is convinced that the planning, accounting, budgetary proposal, Parliamentary approval etc. may take some more time and therefore it is of the opinion that for this transition period support to BSNL through ADC on incoming ILD calls should continue. The Authority has decided to continue the ADC on incoming international calls for a further period from 1.4.2008 to 30.9.2008 at the rate of Rs 0.50(paise fifty only) per minute. This is being implemented by appropriate amendment to the IUC/ADC regulations. **This amount shall not adjusted from the subsidy given from USOF.**
17. The Authority has analysed various possibilities like providing subsidy to all rural lines, wireline only, line installed before 01.04.2002 and the lines which are not getting any support in any of the scheme of the USO. In this context the Authority noted, Stream-II (a) of USO covers support from USOF to RDELs installed prior to 1.4.2002. This support was given from USOF for a limited

period of 22 months (1.4.2002 to 31.1.2004). Under Stream –II (b) of USO schemes, Rural Household DELs provided after 1.4.2002 in the 1685 net cost positive SDCAs out of 2647 SDCAs, are given support through a competitive bidding process to the successful bidder. The support in these 1685 SDCAs takes into account the Capital recovery, Operational expenses and Revenue to determine the net cost. Since the selection of Universal Service Provider and the rate at which reimbursement from USOF is determined through a multi-stage, informed bidding process; any support to rural fixed lines in these SDCAs could lead to vitiation of the bid process. Issue of verifiability under two different schemes covering the same period could also arise. RDELs installed after 1.4.2002, in the remaining 962 SDCAs are not being given any support as these SDCAs are net cost negative. It is therefore felt that the wirelines installed before 01.04.2002 would be left without any support after abolishment of ADC.

Amount of support from USOF for sustenance of BSNL fixed wirelines installed before 1.4.2002

18. BSNL has submitted before the Authority that it needs Rs 8,774 Crore per annum for sustaining the operation of its basic services in rural areas. It has been observed that BSNL has arrived at this figure after making assumptions for the data that may be not readily separately available in their books of accounts. Infact, such data has not even been furnished to TRAI in the accounting separation reports submitted. This may be understandable to a certain degree as BSNL has a vast pan India network which has been developed and deployed over a long period of time since when the operations were with DOT then with DTS and finally when the operations were transferred to BSNL. It has also been intimated by BSNL in a separate communication to TRAI that in view of the fact that their's being a legacy system where the same exchange

equipment and manpower are used for providing various services, it is practically not feasible to maintain dedicated segregated books of accounts.

19. In the situation mentioned above any service provider would use the available data and make assumptions to suit its case. However, taking a balanced view the Authority examined the data and calculation of BSNL on various parameters and it is found that there is wide variation in the data furnished now when compared with the information for the financial year 2006-07 filed under the Accounting Separation Regulation, 2004 and other data filed by the BSNL on the same subject from time to time.
20. As per BSNL's submission there is a shortfall of Rs. 472 per rural subscriber per month during the financial year 2006-07. The shortfall is the difference between operating expenditure and revenue recovered from its rural subscribers. BSNL has also submitted that the operating expenditure and revenue per subscriber per month for rural subscriber is Rs 643 and 171 respectively. It has also been noted that in arriving at the rural Opex, a mark-up on its average Opex per line cost by 50% had been carried out.
21. The Authority examined the calculations of Opex per line for the financial year 2006-07 of BSNL and noted that the cost information taken in calculation of Opex for basic services is not in consonance with the cost information provided in the accounting separation reports for the same period to the Authority.
22. The Authority analyzed the cost structure of BSNL for basic services and finds that generally three cost components i.e. Electricity, Fuel & Power and Network operating cost may be higher in rural areas as compared to urban areas. These costs constitute only about

16% of total Opex of Basic service. Therefore, the Mark-up factor of 1.5 cannot be applied on the whole Average Opex of Basic services but should be limited to these three cost components. According to these reasonable assumptions, the Opex cost for rural fixed line would be about Rs. 425 per month.

23. BSNL has also submitted the financial year-wise total revenue from rural telephony. BSNL has indicated that the Average revenue recovered per line per month from its rural fixed lines during 2006-07 comes to Rs.171 with rental component of Rs.68 and call charges revenue of Rs.103. BSNL has now provided, during the consultation process, the figure of rural revenue of Rs.3202 for the year 2004-2005 which does match with the data provided earlier. Similar discrepancies were also noted for the figures provided, during consultation, for financial year 2005-2006 which do not tally with the information furnished in the Accounting Separation Reports. Based on the data available in the Accounting Separation Reports 2005-06, the Authority calculated revised ARPU of rural wire line telephony which comes to Rs 307 per month per subscriber. As for the financial year 2006-07, BSNL has not provided its revenue from rural wire-line subscriber of Basic services in its Accounting separation reports, therefore, the Authority has estimated ARPU based on trends indicated in the BSNL submissions and this ARPU for Wireline comes to Rs 279 per month per subscriber for the financial year 2006-07.
24. The Authority noted that BSNL has taken into account 1.54 Crore rural wirelines (including WLL) as on 31st March 2007 to arrive at the estimated loss on account of rural operations. As mentioned in an earlier para R-DELS installed after 1.4.2002 are receiving support under the ongoing USO scheme through a bidding process. Computation of support required has therefore been

limited to R- DELs installed prior to 1.4. 2002 (i.e. 0.90 Crore rural wirelines).

25. The Authority also noted that BSNL has deducted total revenue (Rental +Call Revenue) from the operating expenditure to arrive at the shortfall in rural operation. As per the generally accepted practice, the Authority considered only operating revenue against the operating expenditure to assess the operational sustainability of the service providers. As per this principle, it is estimated that there is a shortfall of Rs 214 per month per rural wireline subscriber, requiring a support of about Rs 2300 crore for rural lines installed before April 2002. **To address the disconnection of lines over a period of time, the amount can be restricted to Rs 2000 crore per annum for 3 years.**

Modifications in the rules and suggested method of release

26. In accordance with the Indian Telegraph (Amendment) Rules, 2004 framed under the Indian Telegraph Act, 1885, support for rural household DELs has been provided under two schemes from the Universal Service Obligation Fund (USOF). Stream-II (a) of USO covers support from USOF to RDELs installed prior to 1.4.2002. This support was given from USOF for a limited period of 22 months (1.4.2002 to 31.1.2004). The Rules also recognize need for support till such time the ADC takes into account such difference. Only a modification to the Indian Telegraph Rules for support from USOF to RDELs installed prior to 1.4.2002 would be required in order to take care of reimbursement based on operational sustainability with net cost being determined taking into account opex and revenues excluding rental, as the Indian Telegraph Rules(ITR) provided for reimbursement towards the difference in rental actually charged from rural subscribers and rent prescribed by TRAI. Suggested insertion in the **Indian**

Telegraph(Amendment) 2004 Rule 525 (2) (ii) (a) is given at Annexure A.

27. The Funds may be released in four quarterly installments at the beginning of each quarter. BSNL should furnish a certificate for funds having been utilized towards operation and maintenance of RDELs provided prior to 1.4.2002, before the release of next quarterly installment.
28. In so far as availability of funds is concerned, till FY 2006-07, the contribution from service providers towards USO has been approx. Rs 15,000 crores, out of which a sum of Rs. 5000 crore (approx.) has been spent over the same period. Taking into account the ongoing schemes and the annual disbursement from USOF, the annual fund utilization would be around Rs 2000 crore. Considering the amounts collected so far towards USO, the annual collections and annual disbursements, sufficient funds would be available to meet the additional requirement for support towards RDELs installed prior to 1.4.2002, without the need for augmentation through increase in the USO levy.

Summary of the recommendations

1. The Authority recommends that BSNL should be provided support for sustenance of fixed rural wirelines installed before 1.4.2002
2. This amount should be Rs 2000 crores per year for a period of 3 years effective from 1.4.2008
3. The amount would be payable in four quarterly installments paid in the beginning of each quarter.
4. BSNL should furnish a certificate for funds having been utilized towards operation and maintenance of RDELs provided prior to 1.4.2002, before the release of next quarterly installment.

Annexure A

“ Provided from the financial year 2008-09 for household Direct Exchange lines installed prior to 1st day of April, 2002, eligible service provider shall be reimbursed Rupees two thousand crores (Rs. 2000 crore) per annum for a period of three years.

Provided that the Central Government may after seeking recommendation of TRAI, on review; continue the reimbursement at the same rate or at a lower rate beyond three years, for a period as may be decided by the Central Government from time to time.

Explanation- For the purpose of item (a) of Stream II, “eligible operator” means Bharat Sanchar Nigam Limited.”

Annexure B

No.409-12/2006-FN

Dated 20th September 2006

To

**The Secretary,
Department of Telecommunication,
Sanchar Bhawan,
New Delhi – 110 001.**

**Subject:- Universal Service Obligation Fund (USOF) – Alternative to
Access Deficit Charge (ADC) from FY 2008 – 09.**

Sir,

In October 2003, the Access Deficit Charge (ADC) regime was put in place by the Telecom Regulatory Authority of India (Authority) as a part of its Interconnect Usage Charge (IUC) Regulation, so as to ensure the sustainability of the operations of the fixed lines in an environment where on account of social requirement the access charges are below cost. This support is particularly important for network with substantial rural coverage, specially to keep the rural rental as well as local call charges affordable. However, the ADC is generally a depleting subsidy regime and was introduced mainly to give time to the incumbent for rebalancing its tariffs during the transition period and was planned to be phased out over time.

2. Keeping in mind the fact that ADC is a type of subsidy and therefore cannot be continued in perpetuity, TRAI in its Interconnection Usage Charges (IUC) Regulation dated 23rd February 2006 and earlier had indicated that the ADC shall be phased out from the FY 2008 – 2009. Therefore, to meet the social objective of below cost rural rental and to keep the local call charges within affordable limit, some other option to meet the above policy objective, is required to be explored. The Authority also indicated in its IUC Regulation dated 23rd February 06 that it will submit suitable recommendations to Government on this issue so that finally USO Regime takes care of support on account of ADC also (para 3 of explanatory memorandum).

3. The Authority is of the view that since there is already an instrument available to support the rural telecom service in India i.e. USO, there is a case for utilizing this fund for the purpose of supporting the below cost rural rentals and call charges. In many other countries, to support the affordable rural telephony only one of such instruments is used.

4. In this context, it is mentioned that DOT is already providing USO support towards installation of Rural Household Direct Exchange Lines to the individual customers in rural areas for 1685 short distance charging areas (SDCA), which are high cost low income (Net Cost) areas out of a total 2647 SDCA in the country. Although both ADC and USO are two separate schemes, they have some commonality in the objective and are overlapping as regards to admissibility.

5. In the light of the above, Authority is of the view that in case it is considered that the fixed lines in rural areas require some further support beyond 2007 – 08 due to below cost rental and local call charges from national policy perspective, it could be considered for support through alternative mechanism like USO. DOT may like to consider further course of action in view of the fact that the ADC is a depleting regime and will be phased out by March 2008.

6. This issues with the approval of Authority.

Yours faithfully,

Sd/-
(Rajendra Singh)
Secretary

No.409-12/2006-FN

Dated the 22nd November, 2006

To

The Secretary,
Department of Telecommunications,
Sanchar Bhawan, New Delhi.

Subject:- Universal Service Obligation Fund (USOF) – Alternative to Access Deficit Charge (ADC) from FY 2008 – 09.

Sir,

Please refer to TRAI's letter of even number dated 20th September, 2006 on the above subject (copy enclosed). The main thrust is in para 5 of the letter wherein the Authority conveyed that in case it is considered that the fixed lines in rural areas require some further support beyond 2007 – 08 due to below cost rental and local calls charges from national policy perspective, it could be considered for support through alternative mechanism like USO. DOT was accordingly requested to consider further course of action keeping in view the fact that the ADC is a depleting regime and will be phased out by March, 2008.

Since TRAI is in the process of reviewing the IUC/ADC Regime for the year 2007-08, the Authority proposes to issue consultation paper on this subject by December 31, 2006. It will be highly appreciated if TRAI is apprised of the status of the action being taken on its letter dated 20.9.2006 referred above.

Yours faithfully,

Sd/-
(Rajendra Singh)
Secretary

Enclosure: As above

REMINDER

F.No.409-12/2006-FN

Dated the 27th December, 2007

To

The Secretary,
Department of Telecommunications,
Sanchar Bhawan,
New Delhi.

Subject:- Universal Service Obligation Fund (USOF) – Alternative to Access Deficit Charge (ADC) from FY 2008 – 09.

Sir,

Please refer to TRAI's letter of even number dated 20.9.2006 and subsequent reminder dated 22.11.2006 on the above subject (copies enclosed). The Authority had stressed that in case it is considered that the fixed lines in rural areas require some further support beyond 2007-08 due to below cost rental and local calls charges from national policy perspective, it could be considered for support through alternative mechanism like USO.

2. It is requested that TRAI may be apprised of the status of the action taken on its letters referred to above.

Yours faithfully,

Sd/-
(R.N. Choubey)
Secretary In-charge

Encl: as above