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SECTION 4

**TELECOM REGULATORY AUTHORITY OF INDIA**

**NOTIFICATION**

**New Delhi, the 27<sup>th</sup> March, 2008**

**THE TELECOMMUNICATION INTERCONNECTION USAGE CHARGES  
(NINTH AMENDMENT) REGULATIONS, 2008  
(2 of 2008)**

**File No. 409-22/2007-FN.**----- In exercise of the powers conferred upon it under section 36, read with sub-clauses (ii), (iii) and (iv) of clause (b) of sub-section (1) of section 11 of the Telecom Regulatory Authority of India Act, 1997 (24 of 1997), the Telecom Regulatory Authority of India hereby makes the following regulations to further amend the Telecommunication Interconnection Usage Charges Regulation, 2003(4 of 2003) ,namely:-

1. (1) These regulations shall be called the Telecommunication Interconnection Usage Charges (Ninth Amendment) Regulations, 2008.

(2) These regulations shall come into force with effect from the 1<sup>st</sup> day of April, 2008.

2. In the Telecommunication Interconnection Usage Charges Regulation, 2003 (4 of 2003), (hereinafter referred to as the principal regulations), in the regulation 5, after clause (iv), the following proviso shall be inserted at end, namely:-

“Provided that the provisions of this clause shall, on and after the 1<sup>st</sup> day of April,2008, have effect as if the words “ADC paid in the form of percentage of Adjusted Gross Revenue” had been omitted and the provisions in this clause relating to reporting requirement after the said date shall be construed accordingly:

Provided further that nothing contained in this clause shall apply on and after the 1<sup>st</sup> day of April, 2008.”.

3. In Schedule III to the principal regulations,---

(a) in paragraph 3.1, ---

(i) in the opening portion, for the words “for International Incoming Calls” the words, figures and letter “for International Incoming Calls received during the period beginning on the 1<sup>st</sup> day of April,2008 and ending as at the 30<sup>th</sup> day of September,2008.” shall be substituted.

(ii) in Table III,----

(A) in the heading, for the words “for International Incoming Calls” the words, figures and letter

“for International Incoming Calls received during the period beginning on the 1<sup>st</sup> day of April,2008 and ending as at the 30<sup>th</sup> day of September,2008.” shall be substituted;

(B) in column (2), under the heading “Access Deficit Charge per minute”, for the letters, figures, brackets and words “Rs. 1.00 (rupee One only)”, the letters, figures , brackets and words “Re 0.50 (paise fifty only)” shall be substituted;

(iii) after Table III, the following Explanation shall be inserted, namely:-

“Explanation.---The Access Deficit Charge for International Long Distance Calls shall not be applicable on and after the 1<sup>st</sup> day October , 2008”.

(b) in paragraph 3.2, after sub- paragraph 3.2.5, the following proviso shall be inserted, namely:-

“Provided that nothing contained sub- paragraphs 3.2.1, to 3.2.5(including payment of the Access Deficit Charge, by way of percentage of Adjusted Gross Revenue), shall apply on and after the 1<sup>st</sup> day of April, 2008 and the Access Deficit Charge payable on the basis of percentage of Adjusted Gross Revenue after the said date shall therefore cease to have effect.

**(R.K.Arnold)**  
**Secretary**

Note1. The principal regulations were published vide F.No. 409-5/2003-FN dated 29<sup>th</sup> October 2003 (4 of 2003) and subsequently amended vide notifications Nos --

- (i) 409-5/2003-FN dated 25<sup>th</sup> November 2003 (5 of 2003) (First Amendment);
- (ii) 409-5/2003-FN dated 12<sup>th</sup> December 2003 (6 of 2003) (Second Amendment);
- (iii) 409-5/2003-FN dated 31<sup>st</sup> December 2003 (7 of 2003) (Third Amendment);
- (iv) 409-8/2004-FN dated 6<sup>th</sup> January 2005 (1 of 2005) (Fourth Amendment);
- (v) 409-8/2004-FN dated 11<sup>th</sup> April 2005 (7 of 2005) (Fifth Amendment), which has been set aside by Hon’ble TDSAT vide its Order dated the 21<sup>st</sup> September, 2005 in appeal No. 7 of 2005;
- (vi) 409-5/2005-FN dated 23<sup>rd</sup> February 2006 (1 of 2006) (Sixth Amendment);
- (vii) 409-5-2005-FN dated 10<sup>th</sup> March 2006 (2 of 2006) (Seventh Amendment)
- (viii) 409-2-2007-FN dated 21<sup>st</sup> March 2007 (2 of 2007) (Eighth Amendment)

Note 2. The Explanatory Memorandum explains the objects and reasons of these regulations.

**Explanatory Memorandum to “The Telecommunication Interconnection Usage Charges (Ninth Amendment) Regulations, 2008 (2 of 2008) dated the 27<sup>th</sup> of March, 2008.**

**I. Background**

1. 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 24<sup>th</sup> January 2003. This regime came into effect from 01.05.2003. The above regimes were reviewed and the revised IUC and ADC regimes were notified through “The Telecommunication Interconnection Usage Charges Regulation, 2003” (4 of 2003) dated 29.10.2003 which 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.
2. Further amendments to “The Telecommunication Interconnection Usage Charges Regulation” were carried out annually following proper consultation process with stakeholders on 6.1.2005, 23.2.2006 and 21.3.2007 which came into effect respectively on 1.2.2005, 1.3.2006 and 1.4.2007. Through the principal regulations and subsequent amendments a framework was established for initiation, continuance and phasing out of ADC through an elaborate consultative process. In a nutshell the framework briefly described the ADC regime as a depleting regime that would be phased out and, from the year 2008-09, any further support required would be from the Universal Service Obligation Fund (USOF).
3. The main decisions taken by the Authority and viewpoints expressed in Explanatory Memoranda to the Principal Interconnection Usage Charges Regulation and its subsequent

amendments are given in the Explanatory Memorandum to The Telecommunication Interconnection Usage Charges (Eight Amendment) Regulation 21.03.2007.

## **II Review of ADC for the Financial Year 2008-09**

4. According to the framework established earlier, the present review is of great significance. In the light of the depletion of ADC, it's phasing out and eventual taking over of the responsibility by the USO fund this was purported to be decisive in many ways. The phasing out of ADC, support for sustenance of rural wireline network from USOF and growth of rural telephony were to be settled through a consultation process. With this as the background, the Authority issued a Consultation Paper on Access Deficit Charges (ADC) on 21.01.2008. The last date for receiving comments from stakeholders was 11.02.2008. This Consultation Paper inter alia recalls the established framework of ADC regime, that has been established by the Authority and reviewed from time to time. It not only discusses about doing away with the ADC in the present form but also discusses taking over of support provided through ADC by USO Fund for growth and sustenance of rural fixed line network and possible induction of positive features for increasing affordability of services for rural consumers. The main issues on which the comments were invited and subsequent discussions were held can be grouped into 3 categories:

Issue 1: Operationalizing phasing out of ADC from 1.4.2008

Issue 2: Providing support for BSNL rural wirelines from USOF

Issue 3: Induction of positive features including possible reduction in entry charges for rural mobile subscribers

5. The Authority received comments from 26 stakeholders which have been uploaded on the TRAI website. The Open House

Discussion was also held at New Delhi on 19.02.2008. Summary of comments and analysis are given below:

### **III Issue 1: Operationalizing phasing out of ADC from 1.4.2008**

#### **6. Summary of main comments**

The **comments received showed an overwhelming response** in favour of phasing out ADC as proposed by the Authority. These comments are summarized below:

- *The concept of ADC was mooted to support networks in bucolic areas and not to make incumbent perpetually dependent upon support;*
- *Reduction in ADC has been one of the reasons for fall in tariffs over the years and the subscriber has been the prime beneficiary of the same;*
- *ADC does not put any obligation on receiver to use it for rural telephony;*
- *Does not promote investment in rural areas as no obligation on recipient to make investments in the rural areas;*
- *BSNL is not using ADC to rebalance tariffs but using it to launch predatory tariffs which only scuttle competition;*
- *It provides competitive advantage to the subsidized services;*
- *ADC results in unfair competitive advantage to a particular service and distort the market;*

- *It is an unwanted burden on the consumers;*
- *It is a disproportionate enrichment of the incumbent at the cost of competing operators;*
- *It creates arbitrage and thereby result in grey market in international calls;*
- *The removal of ADC charges on international traffic is likely to encourage the further growth of international telecommunication services in India and the resulting benefits to the India's economy;*
- *Internationally, ADC regime has always been introduced as a depleting regime which relevant for India as well;*
- *Phasing out of ADC regime will enhance affordability of services;*
- *Customer could be able to see the proper presentation of international numbers in their incoming clip;*
- *Removal of redundant instruments of service obligation levy;*
- *Make incumbent to increase the Quality of Service offered since their philanthropists' are removed;*
- *BSNL role should be spelled out i.e. whether public operator or private operator. BSNL want ADC but it does not want to share its infrastructure;*
- *Benefits are flowing to BSNL and year after year its profit is increasing especially after 2003;*

- *There is a no change in the telecom sector to justify any change in the declared policy and it is, therefore, suggested ADC should be phased out from 01.04.2008;*
- *USOF is meeting the requirement of all operators, there is no need to compensate a single operator;*
- *Number of other revenue streams are also available on wireline services such as broadband, internet and other value added services. BSNL may also generate more revenue by unbundling the last mile for other service providers.*

Comments were also received **against the phasing out of ADC from 01.04.2008**. These comments are summarized below:

- *TRAI is aware and has recognized that cost based tariff cannot be implemented in basic service as it will make them unaffordable and non-competitive;*
- *Recognizing this, TRAI continue to regulate the tariffs of basic services in rural areas even till date, which are far below the cost based tariffs;*
- *At this stage, it is absolutely not feasible to rebalance the tariff. Such tariff rebalancing exercise could have been done only prior to opening of telecom sector for competition in India as has been followed in other countries;*
- *ADC is an integral part of IUC and cannot be abolished in isolation. Any change in ADC will necessarily require change in the complete IUC regime;*

- *The purposes of USOF and ADC are entirely different and ADC cannot be subsumed into USOF;*
- *Implicit subsidy is being provided to wireless operators by way of higher termination charges which needs to be corrected;*
- *There is an urgent need for making fresh calculation on actual cost basis for the admissibility of ADC to wireline services and its continuation;*
- *Even as on date, there is a requirement of ADC amount of approximately Rs.14,000 crores of the year 2008 – 09 for wireline services of BSNL;*
- *BSNL needs Rs.8774 crores per annum to just sustain the operations of its basic services in rural areas;*
- *BSNL once attempted to increase the rural tariff from Rs.50 to Rs.70 per month as prescribed by TRAI but was forced to withdraw this increase in the general public interest;*
- *BSNL is still discharging the social objective by providing wireline services at affordable rates below their actual cost, especially, in the rural areas where the tariff is still regulated and BNSL's tariffs are even lower than the TRAI's tariff;*
- *The tele-density, especially, in rural areas, will be adversely affected thereby further increasing the digital divide;*
- *Non-sustainability of the wireline networks, due to abolition of ADC, will severally affect the proliferation of broadband services in the country;*

- *Abolition of ADC on international calls will give benefit to the foreign carriers only;*
- *TRAI will have to consider that wireline are basically for long term broadband services, wireline cannot be discontinued because it is costly;*
- *BSNL has more than 99% connections in rural areas, therefore, it should be compensated;*
- *The country has to recognize that BSNL is carrying a burden with it, the burden of past technology they are carrying with them;*
- *BSNL should be compensated for all the standard costs incurred by it for providing below cost services;*
- *The infrastructure with BSNL is because of ADC. Instead of making investments private operators are trying to use the infrastructure of BSNL;*
- *BSNL is earning huge profits is not correct. Rs.3000 – 4000 crores have been spent for absorbing the employees in BSNL from DOT;*

### **Examination of the main comments**

7. In addition to the comments made by the stakeholders, the Authority has also taken into account informal meeting with stakeholders and other available inputs into consideration and analysed the matter further. The views of the Authority on the main issues are as follows:

### **ADC is an integral part of IUC**

8. An important comment made above is that ADC is an integral part of IUC and cannot be phased out in isolation and any change in ADC will require change in the complete IUC regime. The Authority analysed this comment in detail. In this regard, the Authority has also referred the definition of Interconnection Usage Charges given in first IUC Regulation dated 24.01.2003 and principal regulations dated 29<sup>th</sup> October 2003 which clearly spells out that Interconnection Usage Charges means the charge payable by one service provider to one or more service providers for usage of the network elements for origination, transit and termination of the calls. Relevant definition is reproduced below:

*“2 (x) Interconnection Usage Charges (IUC) means the charge payable by one service provider to one or more service providers for usage of the network elements for origination, transit and termination of the calls.”*

While calculating interconnection usage charges, no adjustment was made corresponding to ADC given to fixed line operators. Moreover, in fact altogether different principles were used for calculations of the IUC and ADC. These are clearly reflected from the following extracts of the Para 34 of the IUC regulation dated 29<sup>th</sup> October 2003:

*“Since the above WACC incorporates the concessions given by the Government to BSNL, it is appropriate for calculating the access deficit amounts that remain uncovered even after the provision of concessions by the Government. However, the above WACC is not appropriate for calculating the cost based IUC for carriage and termination, because these estimates have to be based on full relevant costs without any adjustment for concessions given to BSNL. Thus, for IUC calculations, the WACC without any effect of concessions given to BSNL is the appropriate parameter. For calculating the relevant cost based IUC (i.e. termination and carriage charges), the Authority has thus used the WACC without adjusting for the concessions provided to BSNL.”*

[Note: ‘WACC’ in the above paragraph means Weighted Average Cost of Capital]

9. Therefore the principal followed by The Authority was that the every cost of all the elements of the network required for completion of a call has been accounted for in IUC and any deficit arising out of rentals and to make calls affordable was accounted for in ADC. Thus the purpose of ADC was different from IUC.
10. In this regard it may also be noted that in per minute based ADC regime, in most of the scenarios the ADC was to be paid to BSNL, even when no IUC is required to be payable to BSNL as it is not involved in the completion of the call. As an example, mobile to mobile inter circle calls, wherein the traffic originated in the mobile network of an operator in one circle, carried by an NLDO (Other than BSNL) and terminated on the network of the same operator in another circle, the ADC was to be paid to BSNL, irrespective of the fact that it is not involved in the call and no IUC is required to be paid to it. Similarly in the percentage of AGR based ADC regime all the NLDOs and ILDOs are paying ADC to BSNL, even some of them are not carrying voice traffic and not having interconnection with BSNL. In view of all above, the Authority found no merit in the argument that ADC is an integral part of IUC.

#### **Tariff rebalancing**

11. One of the significant comments made by the incumbent, who had been the beneficiary of the ADC, that it is neither desirable nor feasible to rebalance the tariff of basic services because the cost based tariff would become non-competitiveness and unaffordable vis-à-vis cellular and WLL mobile services. In their view any increase in tariffs of basic services in rural areas is not sustainable and will lead to surrender of telephones and increase in digital divide. They also said that TRAI continues to regulate tariffs of basic services in rural areas that are far below cost based tariffs. BSNL, being well aware of its social responsibilities are providing rural connections even below the tariffs prescribed by TRAI. In

addition they feel that wireless services have been given a very favourable regulatory environment in terms of free spectrum, higher termination charge and reduction in licence fee creating unfair competition.

The Authority has analysed various tariff plans, relating to voice services, filed by the incumbent and the new class of services being offered by the incumbent on the wireline access network. For example, As per the tariff plan “LAGGE RAHO BSNL DE NAAL” for basic telephone customer filed by BSNL for Punjab Telecom Circle consumers would be able to make unlimited calls to all other basic telephones of BSNL. Beside all calls from such basic telephones to the mobile phone of BSNL will have 180 second pulse in place of existing 60 second pulse. Therefore, BSNL is emerging as a price leader in some segments and is making efforts to boost their mobile services using significant market power of the landline. This cross subsidization is a traditional practice in the industry and most service providers use it in some form or the other. In addition, service providers, both fixed and mobile, are trying to improve their revenue by giving value added services to their customers. In the case of BSNL also, it has been observed that now they have plans to offer voice, Internet services and IPTV(i.e triple play) on the same line which will increase Average Revenue Per User(ARPU) of wireline services. Therefore, the Authority is of the opinion that BSNL has been able to open new streams of revenue that will have the same effect as that of rebalancing in allowing them to recover the cost of the wireline access.

**Admissibility of ADC and support from USO:**

12. The Authority examined the argument of a few stakeholders that the purpose of USOF and ADC are entirely different and ADC cannot be subsumed into USOF. The Authority recalled a key clarification regarding ADC and USO regimes given in the

Explanatory Memorandum to The Telecommunication Interconnection Usage Charges (Fourth Amendment) Regulation dated 06.01.2005 wherein it was recognized that though they are not exactly identical there is a considerable overlap among the objectives of the USO and ADC regimes. It was also noted that the Authority has already stated that the ADC regime will be phased out over time and will any further support shall be through the USO regime. The framework used by the Authority to calculate the ADC amount integrally links the USO and the ADC regimes in a way that as the assistance from USO Fund increases, the ADC amount reduces. In this regard the Authority also referred to the definition of Universal Service Obligation in the Indian Telegraph(Amendment Act), 2006(57 of 2006) “Universal Service Obligation means the obligation to provide access to telegraph services to people in the rural and remote areas at affordable and reasonable prices.” From this definition it can be inferred that the recommendations being made by the Authority as a result of this consultation with regard to use of USO fund for sustenance of rural wireline services are in conformance with the basic definition of USO as given in the telegraph act. It may also be mentioned here that USO fund has been instituted as a non-lapsable fund to meet USO requirement and has sufficient fund availability to meet the requirements of the recommendations made by the Authority as per Annexure I.

13. As on earlier occasions, BSNL has again raised the requirement of Rs 14,000 crore as ADC. The Authority recalled that when this requirement was raised in 2003, the calculations of ADC in the principal regulation was done in consultation with BSNL based on the historical cost data and the estimated admissible amount arrived at was about Rs 4800 crores. This has been clearly explained in Para 24 of Explanatory Memorandum to the principal regulation that is as under:

*“24. The Authority noted that the difference between historical costs and forward looking costs would be large, and relying on costs based only on modern and forward looking technologies would imply a large burden from the stranded costs for BSNL. While the Authority feels that change over to FLLRIC model is imperative, it examined the implications of a sudden changeover against a gradual changeover. Since BSNL is the major supplier of telecom services in the country and has also contributed the maximum for achieving the targets of rural tele-density and in supporting low paying subscribers, a changeover to FLLRIC at present would adversely affect the services provided not only to rural and low paying subscribers but also the telecom industry in the country as a whole. The Authority noted that BSNL is already deploying latest technology and lower cost equipment in its expansion programme. Since wireless technology is being used, it is expected that some of the existing network will also be gradually replaced by such equipment. In short, the approach is to achieve full shift to FLLRIC cost in a gradual manner over a few years rather than a single year change. The latter would leave heavy stranded cost and would be quite impractical. The Authority therefore, decided to rely on costs for the current year, based on as recent audited costs as possible. For this purpose, it worked with more recent data than was used in the initial IUC exercise. The Authority was of the view that with the changes in technology and a reduction in equipment costs taking place rapidly, the amount of funding required for ADC would decline. Over time, within a few years, therefore, it may be possible to do away with the ADC regime, and the ADC regime could be merged with the USO regime. This would be similar to the situation in most other countries, where the ADC regime had been combined with the USO regime, rather than the ADC funding being provided through a separate ADC regime.”*

14. Presently, the Government is collecting the USO amount as 5% of the Adjusted Gross Revenue as part of revenue share licence fee. Prior to 1.4.2004 USOF was supporting all rural wirelines installed before 1.4.2002, and was stopped when support became available through ADC. As per the current policy USOF is being used for new lines and new infrastructure. It is however seen that the utilization of the fund is far lower than collections. Once the ADC is phased out these non-remunerative rural lines would need support for keeping them viable.

15. 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.” TRAI had already communicated to DOT vide its letter dated 20th September 2006 and subsequent reminder dated 22nd November 2006 and 27<sup>th</sup> Dec 2007 (Copies of letters have been annexed with the recommendations in 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 with the recommendations in Annexure C)
16. In this regard, the Authority has also taken note of BSNL’s submissions that BSNL still need the financial support to the tune of Rs.8774 crore per annum to just sustain its basic services in rural areas. While TRAI is receptive to the support to BSNL’s fixed line network operations in rural areas through USOF, however, this amount of the financial support as calculated by BSNL on

some assumptions deserved further examination to reach a realistic figure. This has been explained in the recommendations to the Government on taking over the responsibility of providing support for rural wirelines installed before 1.4.2002 by USOF being sent to the Government simultaneously with these regulations. Such a change in the method of subsidy may require modification in the USO rules and will be in line with the Authority's earlier communication with the Government wherein TRAI mentioned that if wireline in rural areas require some further support beyond 2007 – 08 due to below cost rental and local call charges it should be through USOF.

### **Termination Charge**

17. BSNL has further argued that implicit subsidy is being provided to wireless operators by way of higher termination charge and this needs to be corrected. The Authority examined the principal regulation issued on 29.10.2003 wherein termination charges for fixed line and mobile were prescribed. It has been found that it is clearly mentioned in Explanatory Memorandum to the Interconnection Usage Charges Regulation dated 29.10.2003 that the cost based termination charge for BSNL has been estimated at Rs.0.23 per minute. Relevant Para is reproduced below:

#### **“(i) Cost of call termination for fixed line**

*78. Taking account of the methodology mentioned earlier, the cost based termination charge for BSNL has been estimated as Rs. 0.23. per minute. This is the same estimates as in the previous exercise. In view of the decision for a common termination charge because it will ease implementation and limit the distortions in the competitive regime, the Authority has specified a termination charge of Rs. 0.30 for all calls. As mentioned above, the additional revenue accruing to fixed line (BSNL) on account of revenue exceeding costs has been taken into account in the calculation of access deficit, i.e. the access deficit has been adjusted downwards to account for this revenue.”*

As far as the mobile termination charge is concerned the termination charge for cellular mobile came to Rs.0.26 for metros and Rs.0.30 for circles per minute. Relevant Para is reproduced below:

*“80. On the basis of the above estimates, the termination charge for cellular mobile comes to Rs. 0.26 per minute for metros and Rs. 0.30 per minute for circles. Thus, a termination charge of Rs. 0.30 can be applied for cellular mobile also.”*

18. To have simplified IUC regime in place and prevent disputes in reconciliation between operators, the Authority has had specified uniform termination charge. In view of the decision for a common termination charge the additional revenue accruing to fixed line on account of revenue exceeding cost has been taken into account in the calculation of access deficit and the deficit has been adjusted downward to account for this revenue.
19. Termination charges were further reviewed through the Consultation Paper issued on 17.03.2005 that covers Carriage Charges, Termination Charges and Access deficit charges. After consultation process and internal discussion the Authority deliberated upon the issue and decided to keep them same for both mobile as well as fixed termination charge. The detailed reasoning of keeping it at the same level is provided in IUC Regulation dated 23.02.2006. Relevant Para is reproduced below:

***“h) Mobile Termination Charge and Fixed line Termination Charge***

*58. Due to increased volume of traffic, it is likely that the termination charges especially for mobile services may come down. The Authority has also estimated and found that mobile termination charges as well as fixed termination charges could be lower than the present specified level of Rs.0.3 per minute. In spite of this, the Authority did not reduce the mobile termination charges and fixed termination charges mainly on account of the following reasons:-*

- i. *With the increased growth of subscribers, the addition in capacity of the network also has to match both in terms of the radio equipment capacity and also switching and transmission equipment capacity. If these additions in capacity do not match with the growth of subscribers then the quality of service deteriorates which is also a major concern of the Regulator. Regulator expects that along with the growth the service providers adds to the capacity of networks so that there is no deterioration in the quality of service which is being experience now for various parameters which has been laid down by TRAI in its QoS Regulation dated 8<sup>th</sup> July, 2005.*
- ii. *Mobile termination charges in India are not only equal to fixed termination charges but they are even lower than one US cent per minute, which is not only lowest in the world but also it is 12 to 24 times lower than mobile termination charges in other countries of the world. **(Indicated in the table below)** This also should be noted that in all countries, the mobile equipments are supplied by the same set of vendors.*
- iii. *As mentioned earlier, the mobile coverage in terms of population in India is only about 35% of the population which is lowest in the world and mobile operators have to increase their penetration into rural areas and therefore, large investments are to be made to cover even the 77% (world average) of the country's population. As networks penetrate into interiors and there is evidence that this is happening.*
- iv. *The exponential growth in mobile subscribers has been possible because of various innovative and competitive tariff schemes which may have a higher component of incoming calls. If mobile termination charges are decreased then the viability and sustainability of these tariff plans may not be possible and this may retard the growth of mobile subscribers in the country. It should be noted that the main concern of the Authority here is not to ensure the viability of a tariff plan because that is the main responsibility of service provider in an unregulated tariff regime but the Authority has a responsibility to achieve a higher growth and tele-density in the country, and therefore, it is a matter of concern.*

**Table - 11: Termination Rates per minute for mobile service in different countries (June, 2004)**

Name of the country	Termination rates per minute	
	Fixed (US\$)	Mobile (US\$)
Australia	0.016	0.152
Brazil	0.020	0.080
China	0.010	0.025
Switzerland	0.017	0.163
Japan	0.022	0.130
India	0.007	0.007

59. Further, the World Bank (InfoDev Division) in its Report on Regulating Competition, Interconnection and Prices dated December 23, 2005 has mentioned as follows:-

**”c. Mobile Termination Charges, Mobile Penetration and Universal Service Goals** - Developing countries with low penetration levels are experiencing a growing tension between encouraging further penetration of mobile services with above-cost mobile termination charges and the downward pressures of mobile termination rates coming from market and regulatory forces. This is especially valid in low penetrated markets in which there could be theoretical and practical justifications of having mobile termination charges above cost in order to cross subsidized access to the service (basically the handset) and mobile-to-mobile and mobile-to-fixed calls.....

.....However, in most of developing countries where landline penetration is far less ubiquitous, mobile telephone development is enabling countries to achieve universal service goals to segments of populations where landline or other telecommunication services have not ever penetrated before. High-income segments of population within developing countries are easily penetrated in the first stages of mobile telephony. The great challenge of the mobile industry is to continue penetrating low-income segments of the population and it is there where the source of industry growth will be coming from in most of developing countries. Any regulatory intervention to reduce mobile termination charges should weight the effects of reducing interconnection revenues that are used to cross-subsidized handset prices (i.e. access to the network to poorer segments of population) and outbound mobile prices, against the purported benefits that a reduction of charges would produce.”

*Keeping all these facts in view, the Authority decided not to review the termination charges and keep them same for both mobile as well as fixed termination charges. The Authority expects that mobile service providers would increase their penetration into rural and remote areas and the Authority would continue to monitor their progress in this regard.”*

20. Therefore, the Authority took account of the fact that it has already deliberated on the issue of mobile termination and fixed termination charges in 2006. The present consultation process was limited to Access Deficit Charges only and review of termination charges was not part of the consultation process.

**Phasing out of ADC on international calls**

21. BSNL has also argued that abolition of ADC will mainly benefit the foreign carriers, who will save Re.1 per minute on all international calls carried by them from their countries which are of the order of 1200 crores minutes per annum. They further argued that the Indian consumer will hardly get any benefit on this account, on the other hand the estimated ADC at current rate in 2008-09 would be Rs 2000 crores and may provide enough cushion to support loss-making rural operations.
22. The Authority examined the proposition made by the BSNL and found that ADC on international incoming calls has always been considered a source of arbitrage that sustains grey market operation. Phasing out of ADC would, therefore, pave the path for all calls coming through legitimate routes and thereby increase the revenue of service providers. Evidence available with the Authority shows that the number of international minutes is increasing very fast through voice over IP. Therefore, it becomes more important to reduce arbitrage available for switched telephony for getting advantage of elasticity available in international incoming calls.

23. It is a matter of fact that reduction in ADC from time to time on international incoming calls has exploited the elasticity available in international minutes and increased the international incoming minutes in a big way through legitimate routes. However, at this stage the Authority has to balance two main objectives viz. providing support for rural fixed line provided by BSNL and reduction in arbitrage available in international incoming calls. It is acknowledged that reduction in ADC rate for incoming international minutes will further depress the grey market and boost international minutes through legitimate route. 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 partial 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 of 6 months i.e. up to from 1<sup>st</sup> of April, 2008 to 30<sup>th</sup> of September, 2008 at the rate of Re 0.50(paise fifty only) per minute. This amount shall not be adjusted from the subsidy given from USOF for the year 2008-09. It will be additional adjustment support to BSNL.**

**Calculation of financial assistance required**

24. In earlier amendments the Authority had taken a view that detailed calculation of ADC was done in 2003 and in later years this would come down according to the established principle of depletion and would be phased out and the responsibility will be taken over by USO Fund by 2008-09. The Authority is convinced on both the

counts that ADC needs to be phased out and also the fixed rural network operations need to be supported through USO fund. TRAI has assessed the operational cost and revenue accruals and consequently the losses incurred by incumbent for their wireline operations in rural from the data made available to them by BSNL. Details of these all assessment have been given in the recommendation to the Government being sent simultaneously with the issue of these regulations and are given in Annexure 1 of the explanatory memorandum.

### **Decisions of the Authority**

25. The Authority has maintained that ADC is an instrument that has the positive effect of allowing incumbent to smoothly transition from a monopoly to a competitive regime by sustaining its fixed line operations. It is also known 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 if continued for a long time. 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 taken over by USO by 2008-09. The Authority has now decided to phase out ADC as described below and recommend continuation of subsidy for rural wireline operations from USOF.
26. The phasing out of ADC has been discussed above. **ADC as a percentage of AGR would be phased out on 1.4.2008.**
27. **Support to BSNL through ADC on incoming ILD calls for a further period of 6 months i.e. up from 1<sup>st</sup> April, 2008 to 30<sup>th</sup> September, 2008 at the rate of Re 0.50 (paise fifty only) per minute to ensure continuity and to provide time to DOT to**

**work out some definite support during this period of change of subsidy from ADC to USO.**

#### **IV Other issues in the consultation paper**

##### **Issue 2: Providing support for BSNL wireline rural network from USOF**

28. This issue dealt with the question of providing support to BSNL from USOF for their wireline operations in rural areas and deciding the amount of subsidy. From the stakeholders' comments it was evident that there was general support for the idea of providing subsidy to BSNL from the USO fund. BSNL however contended that ADC should not be subsumed with USO and both should be available. However they said that if support for rural wireline services is to be provided from USOF then amendments to the USO policy will be required to be carried out the Government and it has to be ensured that payments of requisite amounts on the actual cost basis start flowing from the USO fund before phasing out of ADC.
29. The Authority has deliberated on the matter in sufficient detail. Appropriate calculations have been done and USO rules have been examined. The Authority has taken a view that BSNL should be provided support from USOF for the fixed rural lines that will be left unsupported after withdrawal of ADC. The framework for this has been enunciated in detail in the recommendations sent to the Government and given in Annexure 1. The Authority has also kept in mind that the Government may take some time for planning, preparing budgetary proposal, getting budgetary allocation and operationalizing subsidy from USOF and therefore has taken the decision given above so that continuity in the flow of funds is maintained. The amount paid through ADC on incoming international calls during the period 1<sup>st</sup> April, 2008 to 30<sup>th</sup>

September, 2008 shall not adjusted from the amount payable from USOF.

30. The recommendations sent to DOT in this regard are at Annexure I

**Issue 3: Financial incentive for subscribers in view of phasing out of ADC**

31. The Authority also deliberated on the issue of mandating provision of financial incentive for mobile subscribers in rural areas. Here the opinion was divided with Operators Associations and Service providers not being in favour of this reduction of charges for the reasons that cost of delivery in rural is more, there would be a possibility of misuse and forbearance policy in mobile tariff should continue. The consumer organizations were in favour of mandating such a reduction to make services more affordable in rural areas.

32. Analysis showed that reduction of ADC in the earlier years had made available extra finances to the service providers but it has not been possible to establish a direct nexus between this reduction and passing on the benefit to the customer by way of lower tariff. With the current decision of phasing out of ADC as a percentage of AGR the service providers are going to retain funds to the tune of about 750 crores for 2008-09. The Authority noted that even if this money were fully passed on to all the mobile subscribers then the spread of benefit would have been miniscule and it would not have been a feasible option. The Authority therefore has appealed to the service providers to come with innovative and attractive plans to give financial incentives to the rural subscribers to increase rural teledensity and bridge rural-urban divide. The Authority would like the service providers to

declare the year 2008-09 as the year for increasing rural penetration.

33. The Authority has decided to phase out ADC on Adjusted Gross Revenue of telecom service providers from 1.4.2008. Thus the ADC will no longer be applicable in the domestic sector and all domestic calls will be free from the incidence of ADC. It has been the endeavour of the Authority to evolve a framework which would ensure positive gains to consumers once the ADC is removed from the domestic sector. On the issue of induction of positive features including possible reduction in entry charges for rural mobile subscribers. The Authority has organized a series of consultation in this regard with the telecom associations i.e. AUSPI, COAI and also with the service providers. The concern of the Authority in this regard as also poor penetration in rural areas was conveyed effectively. One of the options actively considered by the Authority was for lowering of start-up expenses of the new rural subscribers. The two telecom associations have assured that they are actively consulting their members and would come up, within a week, with constructive proposals for the consumers. They would particularly focus on rural telecom subscribers. Therefore, the Authority has decided that any pro-active measure from the Authority should be deferred and the Authority would prefer to evaluate the proposals of the telecom companies. Nevertheless, the Authority has appealed to the service providers to come with innovative and attractive plans to give financial incentives to the rural subscribers so that it clearly conveys the message that the year 2008-09 is the year for substantially increasing rural penetration and reducing digital divide. The year 2008-09 may be declared **‘the year of increasing rural teledensity’**. The Authority has sought cooperation of service providers to really give effect to the slogan **“Aao rural telephony aur aage badhaen”**

## **Summary of the main decisions**

- 1. ADC as a percentage of AGR shall be phased out on 1.4.2008**
- 2. ADC on international incoming minutes shall per continued @  
Re 0.50(paise fifty only) for the period from 1<sup>st</sup> April, 2008 to  
30<sup>th</sup> September, 2008.**
- 3. Recommendations are being sent to the Government to  
provide subsidy from USOF for BSNL's rural wireline  
operations. The amount of annual subsidy has been estimated  
as Rs 2000 crore for a period of 3 years.**
- 4. The Authority will take a decision on taking any proactive  
measures after evaluating the proposals of the telecom  
companies related to induction of positive features including  
possible reduction in entry charges for rural mobile  
subscribers**

Annexure 1

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

## **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 24<sup>th</sup> 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 23<sup>rd</sup> 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 20<sup>th</sup> September 2006 and subsequent reminder dated 22<sup>nd</sup> November 2006 and 27<sup>th</sup> 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 higher in rural areas as compared 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 31<sup>st</sup> 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 1<sup>st</sup> 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 20<sup>th</sup> 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 23<sup>rd</sup> 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 23<sup>rd</sup> 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 22<sup>nd</sup> 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 20<sup>th</sup> 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 27<sup>th</sup> 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

**Annexure C**

D.O. No.402-4/2005-FN (Pt.)  
January 25, 2008

Dear Shri Behura,

As you are aware the Telecommunications Interconnection Usage Charge Regulation, 2003 was issued on 29<sup>th</sup> October, 2003. The ADC regime has since been reviewed on 6<sup>th</sup> January, 2005, 23<sup>rd</sup> February 2006 and 21<sup>st</sup> March, 2007 to reflect the changes determined in the ADC regime. A fresh consultation paper on Access Deficit Charge (ADC) has been issued on January 21, 2008 and a copy of the paper along with a copy of press release was sent to you vide D.O. letter No. 409-22/2007-FN dated 21<sup>st</sup> January, 2008. The Consultation paper is for necessary action.

With regards,

Yours sincerely,

**(Nripendra Misra)**

**Shri Siddhartha Behura,**  
Secretary  
Department of Telecommunications,  
Sanchar Bhavan,  
New Delhi.