### Consultation Paper No. 2/2008



### **Telecom Regulatory Authority of India**

# Consultation Paper On Access Deficit Charge (ADC)

New Delhi: January 21, 2008

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### **PREFACE**

Effective policy and regulatory framework play a major role in creating a modern, vibrant and growing telecom sector in any country. Liberalization of the telecom market in India has put a great responsibility on the regulator to ensure growth and at the same time protect interests of the customers. Success of our efforts is evident. The industry surpassed the government target of 2010 goal of 15% teledensity four years in advance and 2007 target of 250 million telephones at the same time achieving price levels among the lowest in the world.

The Access Deficit Charge (ADC) regime was critical in the early stages of transition from government monopoly to a liberalized competitive environment. The primary purpose of the ADC regime has been to facilitate the incumbent to transit from monopoly to competitive regime and give adequate time for tariff rebalancing. In keeping with the worldwide trend and sound economic principles, the Authority established a time bound ADC regime that would eventually be merged with Universal Service Obligation (USO) fund.

The ADC regime was first introduced by the Authority with its regulation on the interconnection Usage Charges (IUC) dated 24<sup>th</sup> January, 2003. It was reviewed and "The Telecommunication Usage Charges Regulation, 2003(4 of 2003) was issued on 29<sup>th</sup> October, 2003 in supersession of the IUC Regulation dated 24<sup>th</sup> January 2003. As stipulated in this regulation the ADC regime has since been reviewed annually on 6<sup>th</sup> January, 2005, 23<sup>rd</sup> February 2006 and 21<sup>st</sup> March 2007 to incorporate the changing reality of Indian Telecom.

The time has now come for another, and perhaps, a decisive review of ADC regime and hence this consultation paper. While standing by its earlier stipulation of phasing out ADC by 31.3.2008, the Authority is conscious of the critical need to promote effective telecommunication services in rural areas. In earlier regulations the Authority had instituted the policy of exclusion of rural fixed line revenue from calculation of ADC. The Authority feels that the current state of rural telephony still demands special attention and is of the opinion that benefit of abolition of ADC should largely go towards improvement of telecommunications in rural areas.

The ensuing consultation would be important in many ways. Not only we would together decide about doing away with the ADC in the present form, we also would focus our attention on unified point for financial subvention and ways and means of supporting rural fixed line services. Your contribution in this consultation process therefore has the potential of having profound effect on the pace of bridging urban-rural telecom divide and taking the whole country on way to greater economic development.

The Authority requests for written responses from all the stakeholders by 11th February, 2007. It would be appreciated if the response is accompanied with an electronic version of the text through e-Mail. The responses can be sent to and clarifications sought from Mr. Lav Gupta, Pr. Advisor (FN), TRAI on Tel. No. 011-23216930 email:<a href="mailto:lavgupta@trai.gov.in">lavgupta@trai.gov.in</a> and <a href="mailto:lavgupta@gmail.com">lavgupta@gmail.com</a> or from Mr. Arvind Kumar telephone:011-23220209 and email traifn@yahoo.co.in.

(Nripendra Misra) Chairman

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### Chapter-1

### **ADC- Developments so far**

### 1.1 Introduction

- 1.1.1 Prior to opening of the Indian telecom sector to private sector participation, rent and local call charges for basic services were cross-subsidized through the surplus margin available in national and international long distance calls in basic services. With competition in national and international long distance segment, this cross subsidy for basic services 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 and to give incumbent adequate time for tariff rebalancing, Telecom Regulatory Authority of India (TRAI) put the Access Deficit Charge (ADC) regime in place.
- 1.1.2 This temporary 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. The idea of instituting ADC was not to make the incumbent perpetually dependent on support but to allow them time for adjustment during the period of transition from a monopolistic environment, where cross-subsidization was possible, to a competitive business environment. A framework was established for initiation, continuance and abolition of ADC through an elaborate consultation process.

- 1.1.3 The framework of Interconnection Usage Charges (IUC) and ADC regime established bv the TRAI "The was through Telecommunication Interconnection Usage Charges (IUC) Regulation, 2003" (1 of 2003) dated the 24th January 2003. This regime came into effect from 1st May 2003. The quantum of ADC was estimated to be Rs 13,518 crores. The Authority reviewed the above regime and the revised ADC regime was notified by "The Telecommunication Interconnection Usage Charges Regulation, 2003" (4 of 2003) dated the 29th October 2003 superseding the earlier regulations referred above and became effective from the 1st February 2004. In the regime, the ADC was estimated at Rs 5340 crores, out of which Rs 4800 crores was for BSNL. This then became the principal regulation that was amended from time to time to follow the established framework and reflect contemporary industry situation.
- 1.1.4 The Authority amended the above regulation vide Telecommunication Interconnection Usage Charges Regulation dated the 6.1.2005 effective from 1.2.2005, and decided to continue the same amount of ADC fund as were specified in IUC Regulation dated 29.10.2003. Though the per minute rates were reduced due to increased minutes available to fund the ADC in this regime, yet there was no reduction in total value of the ADC fund. The Authority further amended the Regulation vide the Telecommunication Interconnection Usage Charges Regulation dated 23.02.2006 effective from 01.03.2006. The total estimated funding of ADC for the year 2006-07 was Rs. 3335 crores, out of which Rs. 3200 crores was for BSNL. By the aforesaid amendment, the ADC on ILD traffic was continued to be on per minute basis but at a reduced rate of Rs. 1.60 per minute (earlier Rs. 3.25 per minute) for incoming ILD calls and Rs. 0.80 per

minute (earlier Rs. 2.50 per minute) for outgoing ILD calls. In addition to ILD calls, ADC was also applicable as 1.5% of Adjusted Gross Revenue (AGR) of Access Providers, National Long Distance Operators (NLDOs) and International Long Distance Operators (ILDOs). No ADC was levied on revenue generated from rural wireline subscribers i.e. while calculating the ADC as a percentage of AGR of a Unified Access Service Licensee/Basic Service Operator i.e. the revenue from Rural Fixed Wireline subscribers was allowed to be excluded. The Access providers were allowed to retain ADC generated from Outgoing ILD calls originated from Fixed Wirelines and ADC as percentage of AGR of Fixed Wirelines. The Authority further amended the IUC Regulation on 21.03.2007 wherein the total estimated funding of ADC for the year 2007 – 08 was Rs.2050 crores, out of which Rs.2000 crores was estimated ADC funding for By this amendment, ADC on ILD outgoing traffic was abolished, the ADC on ILD incoming traffic was reduced to Rs.1.00 per minute and ADC was also reduced to 0.75% of AGR of Access Providers, NLDOs and ILDOs. Total funding of the ADC in various regimes are given in Table 1.1 below.

**Table-1.1: Details of ADC Funding in various IUC Regulations** 

| IUC Regime  | Total<br>estimated<br>Amount<br>of ADC<br>(In Rs.<br>Crores) | Estimated<br>Amount of<br>ADC<br>funded to<br>BSNL (In<br>Rs.Crores) | Estimated<br>Amount of<br>Self<br>Funding<br>by BSNL<br>(In Rs.<br>Crores) | Net<br>Amount<br>of ADC to<br>BSNL<br>funded<br>by Others<br>(In Rs.<br>Crores) | Methodology<br>of Collection                                 |
|---|--|--|--|---|--|
| <b>24<sup>th</sup> Jan 03</b> (wef 1 <sup>st</sup> May'03)      | 13518  | 12381  | 10084  | 2297  | Per Minute   |
| <b>29<sup>th</sup> Oct 03</b> (wef 1 <sup>st</sup> Feb'04)      | 5340   | 4792   | 2264   | 2528  | Per Minute   |
| <b>6<sup>th</sup> Jan 05</b><br>(wef 1 <sup>st</sup><br>Feb'05) | 5669   | 4954   | 1650   | 3304  | Per Minute   |
| 23 <sup>rd</sup> Feb 06<br>(wef 1 <sup>st</sup><br>Mar'06)      | 3335   | 3200   | 395  | 2805  | % of AGR Per Minute on ILD                                   |
| <b>21st March 07</b> (wef 1 <sup>st</sup> Apr'07)               | 2050   | 2000   | 160  | 1840  | % of AGR of<br>Sector  Per Minute<br>only on ILD<br>Incoming |

(Source: Principal IUC regulation and its amendments)

### 1.2 Developments in ADC Regime

1.2.1 The framework of ADC Regime was established by the Authority through the principal regulation and various amendments. The main decisions taken by the Authority and viewpoints expressed in Interconnection Usage Charges Regulation, 2003 (4 of 2003) dated 29th October 2003 and its subsequent amendments are available in the Explanatory Memorandum to the Telecommunication Interconnection Usage Charges (Eighth Amendment) Regulation dated 21.03.2007. The relevant key extracts of the framework established by the Authority is as follows:

### a) ADC as a depleting regime:

In IUC regulation of 29<sup>th</sup> October 2003 and its subsequent amendments, it has been stated that ADC is a depleting regime.

- "...In this regard, it is important to recall the Authority's statement in its IUC Regulation of 29th October, 2003 that it will be gradually reducing the ADC, merging it with the USO regime in due time....(Para 25 of  $6^{\rm th}$  January 2005 Regulation)
- "...and has also decided that the ADC will be progressively decreased to be phased out in a few years time..." (Para 52 of 6th January 2005 Regulation)
- ".... However, the ADC is a depleting regime mainly to give time to incumbent, etc. for rebalancing of tariffs during a transition period and it will be phased out over time and will be merged with the USO Regime and any lines with below cost operation especially in rural areas with regulated tariffs having any justification for access deficit needs to be covered through USO..." (Para 23 of 23rd February 2006 Regulation)
- "...It is again reiterated here that right from October, 2003 Authority has been emphasising on the point that ADC regime is a depleting regime and should be replaced by or merged with USO regime from 2008 2009 onwards..." . ( Para 24 of  $23^{\rm rd}$  February 2006 Regulation)
- "... since this is a depleting regime, therefore, the earlier calculated value of ADC has to gradually come down so that it becomes zero in the year 2008-09..." (Para 43 of IUC Regulation dated 23rd February 2006)
- "...It is not the sudden decision of the Authority now but the depleting regime was made known since 2003. (Para 7.4.2 of 21st March 2007 Regulation)

### b) ADC to be time limited

- "...The Authority is of the opinion that the prevailing ADC regime should be made to transition within 3 to 5 years towards an USO type of regime." (Para 98 of 29<sup>th</sup> October 2003 Regulation)
- "...Even the ADC regime that remains for BSNL is to be phased out in general and to be merged with USO regime in 3 to 5 years..." (Para 101 of  $29^{th}$  October 2003 Regulation)
- ".... The ADC is given for a temporary period for rebalancing the tariff and it cannot continue in perpetuity if the rebalancing is not done or reversed rebalancing is resorted to...." (Para 24 of 23<sup>rd</sup> February 2006 Regulation)

"The Authority has given sufficient time for tariff rebalancing and the ADC is mainly for the historical cost and not for the futuristic cost. The Authority is of the opinion that if same amount of the ADC will continue for the incumbent or any other operator tariff rebalancing will never take place and this will put undue burden on the subscribers because of the continuity of ADC Regime in perpetuity..." (Para 26 of 23rd February 2006 Regulation)

"...The Authority considered that it was necessary to provide ADC to incumbent for a limited period to enable him to rebalance the tariff and at the same time it should not continue in perpetuity causing undue burden on the consumers and various distortions in the market. It is not the sudden decision of the Authority now but the depleting regime was made known since 2003. (Para 7.4.2 of 21st March 2007 Regulation)

### c) No need of fresh calculations for the admissibility of ADC

- "...Authority in its October, 2003 Regulation has done detailed calculations in consultation with BSNL for the total ADC amount based on historical costs and Authority does not consider it necessary to continue to do these calculations based on historical data again and again..." (Para 26 of IUC Regulation dated 23rd February 2006)
- "...Since ADC was mainly on account of deficit in the wireline cost based rentals and the number of wireline subscribers is not changing. Therefore, the ADC amount estimated earlier by the Authority need not be calculated again but since this is a depleting regime, therefore, the earlier calculated value of ADC has to gradually come down so that it becomes zero in the year 2008-09..." (Para 43 of IUC Regulation dated 23rd February 2006)
- "...The ADC framework established by the Authority envisaged that since ADC is a depleting regime, the regime cannot be continued in perpetuity, and thus the need to carry out fresh calculations for the admissibility of ADC does not arise. (Para 7.9.2 of  $21^{\rm st}$  March 2007 Regulation)

### d) ADC to be phased out and merged with Universal Service Obligation (USO) regime from 2008-09

"---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. (Para 24 of 29th October 2003 Regulation)

"The Authority has also decided that it would obtain more detailed audited cost information to assess the relevant ADC for BSOs, and would also consider phasing it out after the next review. This phasing out may be earlier than the overall phasing out of the access deficit regime that the Authority will consider, merging the ADC regime into the USO regime after a few years...-" (Para 57 of 29th October 2003 Regulation)

"...Further, the ADC regime should ideally be merged with the USO regime over time, say in about 3 to 5 years..." (Para 89 of  $29^{th}$  October 2003 Regulation)

- "...The Authority is of the opinion that the prevailing ADC regime should be made to transition within 3 to 5 years towards an USO type of regime." (Para 98 of 29<sup>th</sup> October 2003 Regulation)
- "... Even the ADC regime that remains for BSNL is to be phased out in general and to be merged with USO regime in 3 to 5 years..." (Para 101 of  $29^{th}$  October 2003 Regulation)
- ".... the Authority has already stated that the ADC regime will be phased out over time and will be merged with the USO regime..." (Para 28 of  $6^{\rm th}$  January 2005 Regulation)
- "The Authority further noted that changeover to Revenue Share Regime and its merger with USO is indeed the final solution for taking care of all anomalies and issues associated with ADC...." (Para 80 of 6th January 2005 Regulation)
- "---The Authority is of the opinion that by March 2008, i.e. next two years time frame any lines in rural segment having justification for funding access networks will be required to be considered through USO and ADC will be phased out...( Para 23 of 23rd February 2006 Regulation)
- "...the earlier calculated value of ADC has to gradually come down so that it becomes zero in the year 2008-09..." (Para 43 of IUC dated 23rd February 2006 Regulation)
- "--- ii) ADC Regime would be reduced to zero in next 2 years---" (Para 67 of 23rd February 2006 Regulation)
- 1.2.2 The above cited extracts demonstrate the framework that is already in place. It was recognized that ADC would serve the purpose of giving incumbent time to rebalance tariff and adjust to competition. It was therefore envisaged to be a depleting regime that would eventually be phased out and be merged with USO. It is 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.
- 1.2.3 Following its philosophy of making ADC a depleting regime, the total ADC amount has been annually determined in the past on a tapering basis to ensure smooth transition towards its phase-out

and merger with USO. It was also mentioned in the Regulation dated 23rd February 2006 that sufficient time had already been given for tariff rebalancing and if the same amount of ADC continued for the incumbent or any other operator, tariff rebalancing would never take place thereby causing continued avoidable burden on the subscribers.

- 1.2.4 The Authority has noted that from time to time BSNL has been restructuring the existing plans and also offering new plans to the existing and new customers. BSNL has also now started offering bundled services that are aimed at increasing revenue for such subscribers using the same resources that are used for voice. These initiatives are attempts at rebalancing of tariff.
- 1.2.5 In order to promote rural telephony, the Authority had, in the previous Regulations, advocated and persisted with the policy of exclusion of revenue earned from rural fixed wireline subscribers from the AGR used for calculation of ADC. With the abolition of ADC regime, it may be appropriate if a framework is evolved and implemented to ensure that the benefits of abolition of the regime translates into growth of tele-density in rural areas and for effective integration of rural areas into the mainstream Indian economy.
- 1.2.6 In the context of the USO Fund, the Authority had earlier indicated that it would submit suitable recommendation to the Government on this issue so that finally USO regime can take care of support on account of ADC also. The Authority has already communicated to DOT vide letter number 409-12/2006-FN dated 20th September, 2006(Annexure I) and subsequent reminders 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.

1.2.7 In the previous Regulations the Authority had also mentioned that it expects that reduction in ADC amount would be largely passed by the telecom service providers to the consumers and would pave the way for lower telecom tariff and sustained growth of telecom sector. Looking at the overall picture it is seen that certain movements have taken place in tariff over the years and perhaps reduction in ADC could have influenced whatever has happened. For example, in the last amendment of ADC regime, the Authority had abolished the ADC of 80 paise per minute on ILD outgoing calls and also reduced ADC on AGR from 1.5% to 0.75 %. Though nexus between reduction of ADC on AGR and the tariff plans cannot be established in general, the benefits of reduction of per minute ADC on ILD outgoing calls has been passed on to the subscribers as reflected in the tariff plans submitted by the service providers to TRAI.

### 1.3 Proposed line of action

Rural services are of vital importance. BSNL is maintaining a network with large rural footprint and providing services in remote and far-flung areas. There is a view that certain form of assistance would therefore be needed for supporting incumbent in sustaining their non-remunerative rural operations. If considered justified, support can be given from the USO fund to the BSNL for this purpose. Fixed line operations in rural areas have become more important in the context of the information age and the need to facilitate the growth of broadband services. Additionally, in view

of phasing out of ADC it is also expected that, as a result of the saving that would accrue to the service providers, there is a scope for them to make telephony in rural areas increasingly more affordable.

More details of these proposals are discussed in Chapters 2 and 3.

### Questions on Chapter 1: ADC - Development so far

Q1. As envisaged in the IUC/ADC regulations, TRAI is operationalizing the phasing out of ADC from 1.4.2008. If you have a contrary view kindly explain.

### Chapter 2

### **Subsumption of ADC into USO**

### 2.1 Introduction

2.1.1 Access to telecommunication is of utmost importance for achieving social and economic growth. Availability of affordable and effective communication for the people is the purpose and vision of the progressive policies initiated by the Government and Telecom Regulatory Authority of India (TRAI). The Telecom sector has become the centerpiece of Indian economic reforms. TRAI is making all efforts so that it continues to perform well and, at the same time, all players get level playing field and consumers tariffs affordable in both rural and urban areas. The communication divide between rural and urban needs to be bridged and entire country integrated for effective functioning of Indian democracy. State of rural and urban network is given in Figure 2.1

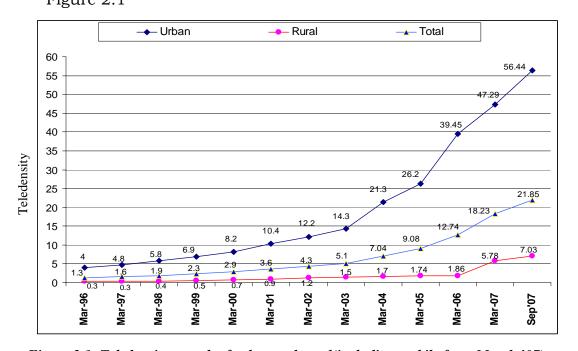


Figure 2.1: Teledensity growth of urban and rural(including mobile from March '07)

(Source: from data reported by service providers)

- 2.1.2 When any sector of the economy is opened and competition is brought in, the incumbent has major structural balancing issues and adjustment to competition becomes a time consuming process. As cross subsidies vanish, incumbent need external support, in the form of subsidy, to sustain legacy infrastructure and transit smoothly to new regimen of tariff rebalancing, restructuring, new services etc. Mainly two types of subsidy mechanisms have been used in the Indian context:
  - (a) Universal Service Obligation Fund (USOF), a non-lapsable fund created through a statute to provide financial support for network expansion in rural and remote areas
  - (b) Access Deficit Charge (ADC), to compensate 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 to promote both universal service and universal access. It is instituted for a limited period of time.

The following sections present key features and applicability of USO fund and the dynamics of both the mechanisms.

2.1.3 BSNL has a critical role to play and recognizing this the government has supported this effort through various schemes. State support to BSNL in various forms including ADC and USO is given in table annexed in **Annexure II** 

### 2.2 Universal Service Obligation

2.2.1 The concept of 'Universal Service Obligations' (USOs) is based on the premise that telecommunication services play such a fundamental role in economic and social development that everyone should have access to a basic level of telecommunications facilities and services, if they are to participate fully in modern society. Communication networks help bring people together, allow them to be informed, get integrated and be better citizens in a democracy. Accordingly, the spread and usage of telecommunications services is socially desirable and should be encouraged.

- 2.2.2 Rural urban-divide can be looked at in terms of a two-gap model market efficiency gap and access gap. The market efficiency gap is the difference between what markets actually achieve under current conditions and what they could achieve if market barriers are removed. This gap can be bridged through effective competition and can be done without subsidies. The access gap (people and places remaining beyond the limits even with most attractive and liberal market conditions) remains unless additional investments are mobilized through intervention in the form of subsidies to encourage service providers to enter.
- 2.2.3 Universal access is the goal adopted by many countries to provide convenient and affordable access to communications, at least on a community basis, through a combination of private and public access facilities such as payphones and telecentres. On the other hand in many developed countries USO not only includes access to Public Switched Telephone Network (PSTN), but also to directory services, selective outgoing call barring to premium service, emergency services and installation of payphones. In these countries, increasingly, USO also includes internet access to public schools and libraries at discounted prices. In developing countries, the focus continues to be on basic voice services. International Telecommunications Union (ITU) in its note titled

"Methodological note on universal service obligations", dated 9.10.98 has said "Each member state has the right to define universal service and the manner of its funding in the way it sees fit."

- 2.2.4 There are several reasons attributed to imposition of USO. Firstly, it is thought that poor communications is one of the main impediments in the path, not only of rapid economic growth, but also of development in its broader sense, including poverty alleviation. Then there are policymakers around the world who believe in the principle of equity and consider telecommunications as a basic necessity along with other utilities like water and electricity that should be available to all.
- 2.2.5 A smaller network with comparatively less number of people shall be less utility to those connected to the network than the one in which incentives were offered to allow more people to connect. A USO may be required to correct this market failure. Such regulatory measures aimed at providing access to the network at subsidised rates can help ensure that positive network externalities are maximized.

#### USO in the Indian Milieu

2.2.6 The New Telecom Policy '99 (NTP'99) envisages provision of access to basic telecom services to all at affordable and reasonable prices. Universal Service was one of the main objectives of NTP'99. In India the Universal Service Support Policy came into effect from 1.4.2002.

- 2.2.7 The Indian Telegraph (Amendment) Act, 2003 giving statutory status to the Universal Service Obligation Fund (USOF) was passed by both Houses of Parliament in December 2003. The Fund is to be utilized exclusively for meeting the Universal Service Obligation and the balance to the credit of the Fund will not lapse at the end of the financial year. The resources for implementation of USO are raised through a Universal Service Levy (USL) which has presently been fixed at 5% of the Adjusted Gross Revenue (AGR) of all Telecom Service Providers. In addition, the Central Govt. may also give grants and loans.
- 2.2.8 Subsequently, an Ordinance was promulgated on 30.10.2006 as the Indian Telegraph (Amendment) Ordinance 2006 to amend the Indian Telegraph Act, 1885 in order to enable support for mobile services and broadband connectivity in rural and remote areas of the country. Later, an Act was passed on 29.12.2006 as the Indian Telegraph (Amendment) Act 2006 to amend the Indian Telegraph Act, 1885. The Rules for administration of the Fund under this Ordinance, Indian Telegraph (Amendment) Rules 2006 have been published on 17.11.2006.
- **2.2.9 USO levy collections & disbursements made:** The contribution from Service Providers towards USO collected and allocated for disbursement are given in Table 2.1:

Table 2.1 USO fund position as on 30.09.2007

| Year    | Funds collected as Universal<br>Service Fund Levy in FY(Rs Cr) | Funds disbursed(Rs Cr)                              |
|---------|--|---|
| 2002-03 | 1653.61  | 300.00  |
| 2003-04 | 2143.22  | 200.00  |
| 2004-05 | 3457.73  | 1314.585  |
| 2005-06 | 3533.29  | 1766.85   |
| 2006-07 | 4211.13  | 1500.00   |
| 2007-08 | 5100.00<br>(estimated)   | 293.77<br>(against an allotment of<br>Rs1800 Crore) |
| Total   | 20,117.96  | 5375.205  |

(Source: with inputs from DOT website http://www.dot.gov.in/uso/Table%20VI.xls)

From the Table 2.1 it is observed that till 2006-07 against a total collection of approximately Rs 15,000 crores, the disbursement has been about Rs 5100 crores. The entire budgetary provision of Rs. 5081.435 Crore allocated for the financial years 2002-03 to 2006-07 was fully utilized. A sum of Rs. 1800.00 Crore has been allocated and is expected to be utilized during the Financial Year 2007-08.

2.2.10 The current activities include operation and maintenance of village public telephones(VPT), provision of new VPTs, provision of RCP (rural community phones), provision of household telephones in rural and remote areas, replacement of MARR, creation of infrastructure for mobile and general infrastructure creation in rural areas. Details of activities supported by USO Fund are as follows:

### 2.2.11 USOF ACTIVITIES

As per the USO Rules, the following services are supported by the Fund, namely:-

Stream-I: Provision of Public Telecom and Information
Services -

(a) Operation and Maintenance of Village Public Telephone in the revenue villages identified as per Census 1991 and Installation of Village Public Telephone in the additional revenue villages as per Census 2001.

**Existing Village Public Telephones:** About 5,64,000 Village Public Telephones (VPTs) are currently eligible for financial support for operation and maintenance.

**New VPTs in the Uncovered villages:** For the remaining uncovered eligible 66,822 villages as on June 2004. Capital recovery is also taken into account in addition to operational expenses while determining the net cost.

- (b) Provision of additional rural community phones in areas after achieving the target of one Village Public Telephone in every revenue village: 46,253 villages with population exceeding 2,000 are being provided with a Rural Community Phone (RCP).
- (c) Replacement of Multi Access Radio Relay Technology Village Public Telephone 1,86,872 VPTs which were earlier working on Multi Access Radio Relay (MARR) technology and installed before 01.04.2002 are being replaced as most of these

were non functional. Both capital and operational expenses after taking into account revenues are being supported for this activity.

## Stream-II – Provision of household telephones in rural and remote areas as may be determined by the Central Government from time to time:

- (a) For rural household Direct Exchange Lines (90.5 lakh lines) installed prior to 1.4.2002, the difference in rental actually charged from rural subscribers and rent prescribed by Telecom Regulatory Authority of India for such subscribers was reimbursed from 1.4.2002 till 01.02.2004.
- (b) For rural household Direct Exchange Lines installed after 1.4. 2002, in the net cost positive Short Distance Charging Areas (SDCAs) capital Recovery, Operational Expenses and Revenue has been taken into account to determine the Net Cost. These have been grouped into two categories. Those installed between 1.4.2002 and 31.3.2005, are eligible for support from USOF for a period of 5 years from 1.4.2002 and those installed between 1.4.2005 and 31.3.2007(recently extended to 31.3.2008) to a subsidy for 5 years from 1.4.2005

### Stream-III: Creation of infrastructure for provision of Mobile Services in rural and remote areas:

A percentage of the Capital Recovery for the infrastructure for provision of mobile services is being taken into account to determine the Net Cost. A scheme has been launched to provide subsidy support for setting up and managing 7871 number of infrastructure sites (towers) in 500 districts spread over 27 states for provision of mobile services in the specified rural and remote areas, where there is no existing fixed wireless or mobile coverage. The infrastructure so created shall be shared by three service providers for provision of mobile services including other Wireless Access Services like Wireless on Local Loop (WLL).

### Stream-IV: Provision of Broadband connectivity to villages in a phased manner

This scheme will cover Common Service Centers (CSCs) being set up by Department of IT, schools, primary health centers and Gram panchayats in a phased manner. A percentage of the Capital Recovery for the infrastructure for broadband connectivity shall be taken into account to determine the Net Cost.

### Stream-V: Creation of general infrastructure in rural and remote areas for development of telecommunication facilities

For creation of general infrastructure for development of telecom facilities, it is proposed to improve the OFC network between the Block HQs and the District HQs to begin with. M/s TCIL has been entrusted with the work of compiling the details of existing network set up by the Service Providers to identify where the OFC network is to be set up in rural areas. A percentage of the Capital Recovery for the development of general infrastructure shall be taken into account to determine the Net Cost.

### Stream-VI: Induction of new technological developments in the telecom sector in rural and remote areas

For induction of new technologies in rural and remote areas, USOF has recently invited applications from the eligible companies to undertake Pilot Projects for demonstrating their products/services in the field of Rural Broadband, Rural Telephony (Fixed, Wireless in Local Loop, Mobile), Transmission Media in Rural Areas, General Telecom Infrastructure in Rural Areas like Tower, Batteries, Power Plant etc., Hybrid power, other solutions for meeting power requirement of rural telecom installation, Customer Premises Equipment etc. Pilot projects to establish new technological developments in the telecom sector, which can be deployed in the rural and remote area, may be supported with the approval of the Central Government.

Details of total support through USO are as follows:

Table 2.2 Activity-wise disbursement as on 30.09.2007

| <b>S1.</b> | Activity                    | Total   | Beneficiaries          |
|------------|-----------------------------|---------|------------------------|
| No.        |                             | (Rs.    |                        |
|            |                             | Crores) |                        |
| 1.         | O&M of VPTs                 | 533.53  | BSNL, Reliance, TTL,   |
|            |                             |         | TTL(MH), Bharti, HFCL, |
|            |                             |         | Shyam Telecom          |
| 2.         | Replacement of MARR VPTs    | 355.21  | BSNL                   |
| 3.         | RCP                         | 81.30   | BSNL, Reliance         |
| 4.         | VPTs in uncovered villages  | 88.58   | BSNL                   |
| 5.         | R-DEL (prior to 01.04.2002) | 1191.78 | BSNL                   |
|            |                             |         |                        |
| 6.         | R-DEL installed from        | 1878.66 | BSNL, Reliance         |
|            | 01.04.2002 to 31.03.2005    |         |                        |
| 7.         | R-DEL installed after       | 1246.15 | BSNL, Reliance, TTL,   |
|            | 01.04.2005                  |         | TTL(MH)                |
|            | Total                       | 5375.21 |                        |
|            |                             |         |                        |

(Source: with inputs from data on DOT website http://www.dot.gov.in/uso/Table%20VII.xls)

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- 2.2.12 In the absence of any support, sustainability of existing wireline operations of the incumbent and new addition of R-DEL in rural areas could be hindered. This is particularly important as Digital Subscriber Line (DSL), the current dominant broadband technology, works on copper and would also ultimately be the key to pushing forward broadband penetration in these areas. BSNL is already in the process of deploying broadband through DSL over copper wires in about 20,000 villages where fixed line exchanges and fiber connectivity exists.
- 2.2.13 The Authority has analyzed the financial support provided to BSNL for not only provision of public phones such as VPT, but also rural household phones (R-DELs) in loss making i.e. net cost positive rural and remote areas through USO. This support for household lines installed by BSNL is divided into three different parts. A onetime subsidy of around Rs.1192 crores has been provided to BSNL for about 90.5 lakh R-DELs installed prior to 01.04.2002. This subsidy covered the difference between the TRAI mandated standard rental and BSNL tariff below this rate and was given from 01.04.2002 to 31.01.2004. The subsidy was then terminated on account of the ADC scheme coming into effect from 1.02.2004. In this ADC Scheme, ADC was calculated on the basis of actual rental revenue received by BSNL for rural as well as urban areas.
- 2.2.14 The second and third part of the subsidy involves providing support towards the net cost after taking into account CAPEX, OPEX and revenue for the R-DELs installed in 1685 identified net cost positive SDCAs where BSNL emerged as the successful bidder in 1267 SDCAs, during the period 01.04.2002 to 31.03.2005. The support was extended at the same rate that emerged through a

bidding process for the lines installed during 01.04.2005 to 31.3.2007. The support from USOF was envisaged for a period of 5 years from installation for the RDELs installed during 1.4.2002 to 31.3.2005 and from 1.4.2005 for RDELs installed during 1.4.2005 to 31.3.2007. This period stands extended to 31.3.2008 at a lower level of support.

### 2.3 Subsumption of ADC into USO

- 2.3.1 The framework of ADC, described in chapter 1, called for phasing out of ADC regime and merging ADC with the USO regime in 3 to 5 years i.e. by 31.3.2008. By proposing merger with USO while phasing out ADC, the Authority had indicated that if there arises a situation where network/services need to be supported then this should be done through USO fund to avoid the ill effects of ADC. The primary reasons for this have been mentioned earlier and are summarized here:
  - ADC was instituted for the limited purpose of supporting incumbent at the time of transition from monopoly to competitive environment and allow them to rebalance tariff.
  - ADC puts unfair burden on new entrants
  - ADC distorts market conditions
  - ADC is a source of arbitrage and thereby results grey market operations in international incoming calls.
- 2.3.2 In the context of USO fund, 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 Annexed in **Annexure I**) 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. In this connection the Authority also noted in 21st March 2007 Regulation that "Since the matter has already been referred to competent Authority viz. DOT, for consideration, therefore the Authority is of the view that any subsequent action in this regard will be from DOT."

2.3.3 To elaborate the above point further, one can read two objectives behind the explanations given in the earlier regulations. Firstly, the ADC should be abolished from 1.4.2008 to avoid pronounced ill-effects of this mechanism on the Indian telecom market overshadow the positive fallout and cause undue burden on the consumers. Secondly, the concerns of bridging urban-rural divide and sustenance of incumbents' rural operations was flagged by mentioning that such support after 31.3.2008 should come through the USO regime. 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.

### 2.4 Possible treatment of ADC and USO

2.4.1 The objective of expanding overall tele-density, and rural telephone density in particular, would perhaps be better served by support of infrastructure of network in rural areas so that expansion of network into rural areas does not automatically lead to loss of revenue to telecom service providers. Such a policy towards support and sharing of infrastructure in rural areas will provide

better incentive to telecom service providers for expanding their network.

- 2.4.2 At this stage the Authority is required to balance two main Firstly, to increase the attractiveness of providing connections and adequate services in areas that would otherwise not be a focus of attention for commercially oriented service provider in a competitive environment i.e. rural and remote SDCA which are particularly high cost and low revenue areas. This also includes the support for sustainability of existing rural wirelines. Secondly, to make this support efficient in such a way that it's level gets adjusted to the profitability of rural operations. The support should get eliminated when the average cost goes down either because of increasing tele-density in the area or fall in the network operating cost or increase in revenue. It is also very important to keep in mind that whatever scheme is finalized to meet the above objectives should not provide incentives for incurring losses but should promote improved performance of the service provider.
- 2.4.3 Although Service providers are increasing rural tele-density through wireless connections but it will take time before the infrastructure being supported through USO gets fully exploited and its gains become evident. It is also observed that many of the private service providers are contributing a significant number of rural wireless subscribers. Operator-wise detail of rural wireless subscriber is given in Table 2.3:

Table 2.3 Operator wise rural susbscribers

| Sl. |                         | Subscribers as | Rural         | Percentage of |
|-----|-------------------------|----------------|---------------|---------------|
| No. | Wireless Group(no of    | on Sept-07     | Subscribers   | rural         |
|     | circles)                | (In millions)  | (In millions) | Subscribers   |
| 1   | Bharti Group (23)       | 48.88          | 9.80          | 20.05         |
| 2   | Reliance Group (23)     | 36.32          | 6.11          | 16.83         |
| 3   | Vodafone/Hutchison (16) | 35.66          | 9.73          | 27.29         |
| 4   | BSNL (21)               | 34.13          | 10.87         | 31.86         |
| 5   | Tata (20)               | 19.50          | 1.04          | 5.33          |
| 6   | Idea Group (11)         | 18.67          | 3.74          | 20.05         |
| 7   | Aircel Group (9)        | 6.77           | 2.28          | 33.73         |
| 8   | Spice (2)               | 3.48           | 0.37          | 10.63         |
| 9   | MTNL (2)                | 2.99           | 0.00          | 0             |
| 10  | BPL (1)                 | 1.07           | 0.00          | 0             |
| 11  | HFCL (1)                | 0.15           | 0.003         | 1.96          |
| 12  | Shyam (1)               | 0.10           | 0.001         | 0.55          |
|     | Total                   | 209.07         | 43.98         | 21.03         |

(Source: reports of service providers to TRAI)

2.4.4 It has also been noticed that wire-line connections in rural areas are decreasing despite support for new rural household lines through USO. The support price is discovered through a bidding process and one reason for lower level of rural operations could be commercial non-viability despite some level of support from USO. Substitution of fixed lines by mobile in some rural areas could also be a reason for surrender of fixed lines. Year-wise detail of rural wirelines are given in Table 2.4 and rural DEL supported after 1.4.2005 through USOF are given in Table 2.5:

Table 2.4: Rural wireline share of BSNL

### **Number of Rural Wireline**

| Month & Year | Total Wireline | BSNL       | Share of BSNL |
|--------------|----------------|------------|---------------|
| March' 03    | 10,997,567     | 10,994,166 | 99.97%        |
| March' 04    | 11,638,500     | 11,637,154 | 99.99%        |
| March'05     | 12,445,122     | 12,437,065 | 99.94%        |
| March'06     | 12,851,585     | 12,842,119 | 99.93%        |
| March'07     | 12,562,390     | 12,549,077 | 99.89%        |
| Sept' 07     | 11,987,947     | 11,972,897 | 99.87%        |

(Source: reports of service providers to TRAI)

Table 2.5 - Details of rural direct exchange lines (RDELs) supported and provided after 01/04/2005

| SI.N     | Service Area      | Total number of | No.    | of RDELs pro | vided as on 3° | 1.03.2007 | Total   |
|----------|-------------------|-----------------|--------|--------------|----------------|-----------|---------|
| О.       |                   | eligible SDCAs  | BSNL   | RIL          | TTL            | TTL (MH)  | 1       |
| <u> </u> | Andaman & Nicobar | -               | NA     | NA           | NA             | NA        | 0       |
|          | Andhra Pradesh    | 117             | 64218  | 102209       | NA             | NA        | 166427  |
| 3        | Assam             | 26              | 29082  | NA           | NA             | NA        | 29082   |
| 4        | Bihar             | 56              | 34886  | 2295         | 45034          | NA        | 82215   |
| 5        | Jharkhand         | 66              | 23639  | NA           | NA             | NA        | 23639   |
| 6        | Gujarat           | 120             | 68048  | 76674        | NA             | NA        | 144722  |
| 7        | Haryana           | 16              | NA     | 9410         | 64852          | NA        | 74262   |
| 8        | Himachal Pradesh  | 22              | 11268  | 23353        | NA             | NA        | 34621   |
| 9        | Jammu & Kashmir   | 19              | 11398  | NA           | NA             | NA        | 11398   |
| 10       | Karnataka         | 117             | 67015  | 128288       | 51350          | NA        | 246653  |
| 11       | Kerala            | 15              | -160   | 106486       | NA             | NA        | 106326  |
| 12       | Madhya Pradesh    | 230             | 138991 | 28906        | 70114          | NA        | 238011  |
| 13       | Chhattisgarh      | 88              | 19015  | NA           | NA             | NA        | 19015   |
| 14       | Maharashtra       | 228             | 193317 | 31236        | NA             | 209149    | 433702  |
| 14       | North East-I      | 27              | 10375  | NA           | NA             | NA        | 10375   |
| 15       | North East-II     | 50              | 6577   | NA           | NA             | NA        | 6577    |
| 16       | Orissa            | 96              | 60821  | NA           | NA             | NA        | 60821   |
| 17       | Punjab            | 18              | 8242   | 1744         | 117345         | NA        | 127331  |
| 18       | Rajasthan         | 203             | 66358  | 31114        | 203925         | NA        | 301397  |
| 19       | Tamil Nadu        | 24              | 16005  | 115964       | NA             | NA        | 131969  |
| 20       | UP( East)         | 84              | 44067  | 28964        | 139282         | NA        | 212313  |
| 21       | UP(West)          | 21              | NA     | 30991        | 35013          | NA        | 66004   |
| 22       | Uttaranchal       | 29              | 14493  | NA           | NA             | NA        | 14493   |
| 23       | West Bengal       | 13              | 3651   | 19573        | NA             | NA        | 23224   |
|          | TOTAL             | 1685            | 891306 | 737207       | 726915         | 209149    | 2564577 |

Note:

NA - not applicable

 $Source: DOT\ website\ http://www.dot.gov.in/uso/able\%20V.xls$ 

- 2.4.5 Table 2.5 shows that despite support for 25,64,577 lines from USO fund for the period 1.4.2005 to 31.3.2007, the net addition of wirelines is only 1,17,268. This simply shows that operators are not aggressively pursuing to increase wireline rural tele-density that would also pave way for low cost broadband service in rural and remote areas. The situation is likely to further deteriorate when focus of USO shifts from RDEL to infrastructure. Support from USO fund for new RDEL has been extended for a period upto 31.3.2008 at much reduced rate.
- 2.4.6 Though the rural fixed line tariff is regulated, lines installed before 01.04.2002 would not be getting any support from USO and ADC after abolition of ADC. Similarly there is no support available either in the form of CAPEX or OPEX for installing new lines in rural areas in the net cost negative SDCAs. These may justify some some support from USOF. However, it is expected that the lower OPEX of fixed wireless lines would be covered by the revenue earned by these lines therefore they may not require any further support.

### 2.4.7 The above situation could be summarized thus:

- The number of wireline DELs is declining in rural areas and without appropriate subsidy there is a risk of further decline
- Competition in long distance, proliferation of mobile and cost oriented tariffs are leaving very little margin for cross subsidization for rural areas.
- To increase teledensity and rural broadband; wireline connections need to be sustained and increased.

• The old wireline network in certain areas may need upgradation for offering new services like broadband.

Support to the incumbent may be considered necessary for their rural wire-line operations. This probably is of importance to BSNL as of all rural wireline subscribers BSNL has 99.87% share (Table 2.4) and about 37.15% of its fixed line subscribers reported to be in rural areas while other operators hardly have any presence in rural areas. Table 2.6 provides the detail of rural lines of all operators as a percentage of their total fixed lines.

Table 2.6 Operator-wise rural wire lines as a percentage of their total wirelines(as on 30th September 2007)

| Service Provider | % of Rural lines in Opertaror's Fixed Lines |
|------------------|---|
| BSNL             | 37.15%                                      |
| MTNL             | 0.00%                                       |
| Bharti           | 0.00%                                       |
| TATA             | 0.03%                                       |
| Shyam            | 9.10%                                       |
| HFCL             | 0.00%                                       |
| Relinace         | 0.07%                                       |

(Source: reports of service providers to TRAI)

2.4.8 A number of options could be considered for providing support to BSNL rural wireline operations through USOF. Rural fixed wirelines that were installed prior to 1.4.2002 were, after introduction of competition, supported initially through USOF and then through ADC. After abolition of ADC there may be a case for continuing support for these lines through USOF. The support might be based on the difference between the rental mandated by TRAI and the actual rental charged by BSNL in rural areas or it may be calculated on the basis of capital recovery, operational

expenses and the revenue from those lines. Further, in view of USO support to RDELs being restricted to 1685 net cost positive SDCAs, there might be some justification for capex and opex support to rural DELs of the remaining SDCAs as well. While suggesting suitable option(s), the stakeholders may also discuss the issues like period and amount of support.

### Questions on chapter 2: ADC and USO

- Q2. Is there a case for providing support to BSNL from USOF for their fixed wireline operations in rural areas? If no, give reasons.
- Q3. If the answer to Q2 is yes, suggest a suitable framework, specifying the details of implementation like amount of subsidy, period of support etc.

### Chapter-3

### ADC abolition and its impact on affordability of service for rural consumers

3.1 In India, tariffs for telecommunication services are under forbearance except for fixed lines in rural areas, national roaming tariffs in case of mobile phones and tariff for leased circuits. Fixed line tariffs for rural areas have been fixed by TRAI in the form of Standard Tariff package. However, flexibility rests with the operators of fixed line service in rural areas to offer alternative tariff packages to suit different segments of the population.

### 3.2 ADC funding to BSNL

ADC has been annually worked out on tapering basis, according to the framework established by the TRAI described in chapter 1. The details of total estimated ADC funding and ADC made available to BSNL have been given in Table 1.1 of Chapter 1. It can be seen from the table that in the five years of existence of ADC, estimated total funding made by the other service providers to BSNL is about Rs 12,774 crores

### 3.3 Reduction of ADC in various years

Table 3.1 gives separately the structure of ADC funding in different regimes since its inception

Table 3.1 Breakup of Estimated ADC Funded by Others to BSNL (In Rs. Crores)

| IUC Regime                     | % of Revenue<br>Share | Funded by Mobile<br>Service Providers for | Funded by ILDOs for   | Total |
|--------------------------------|-----------------------|---|-----------------------|-------|
|                                | (Mobile Service       | Domestic and                              | International         |       |
|                                | <b>Providers</b>      | International                             | <b>Incoming Calls</b> |       |
|                                | +ILDOs+               | Outgoing Calls on Per                     | on Per Minute         |       |
|                                | NLDOs)                | Minute basis                              | basis                 |       |
| 24 <sup>th</sup> Jan 03        |                       |   |                       |       |
| (wef 1 <sup>st</sup> May'03)   | NA                    | 762                                       | 1535                  | 2297  |
| 29 <sup>th</sup> Oct 03        | NA                    |   |                       |       |
| (wef 1 <sup>st</sup> Feb'04)   |                       | 1048                                      | 1480                  | 2528  |
| 6 <sup>th</sup> Jan 05         | NA                    |   |                       |       |
| (wef 1 <sup>st</sup> Feb'05)   |                       | 1641                                      | 1663                  | 3304  |
| 23 <sup>rd</sup> Feb 06        |                       |   |                       |       |
| (wef 1 <sup>st</sup> March'06) | 853                   | 152                                       | 1800                  | 2805  |
| 21st March 07                  |                       |   |                       |       |
| (wef 1 <sup>st</sup> April'07) | 440                   | 0   | 1400                  | 1840  |
| Total                          | 1293                  | 3603                                      | 7878                  | 12774 |

(Source: principle IUC regulation and amendments)

If we consider gains from reduction and abolition of ADC on AGR we see that in the ADC regime notified under 23<sup>rd</sup> Feb 06 Regulation, which was applicable from 1<sup>st</sup> February 2006 to 31<sup>st</sup> March 2007, the applicable rate of AGR based ADC was 1.5% of AGR of all service providers and the total estimated ADC on this account was Rs 853 crores. The rate was reduced from 1.5% to 0.75% vide amendment dated 21<sup>st</sup> March 2007 and the estimated contribution towards AGR based ADC from Mobile, NLD and ILD services is placed at Rs. 440 Crores.

If we now consider the changes in the ADC funded by mobile operators in terms of outgoing call minutes then we see from Table 3.1 that this component of ADC was Rs 1641 crores in the period Feb '05 to Jan '06 and was reduced to Rs 152 crores in the period Feb '06 to March '07 was totally eliminated for the year 2007-08

Thus the total ADC (excluding international incoming) reduced from Rs 1641 crores in the period Feb'05 to Jan '06 to Rs 1005 crores and then to Rs 440 crores in the successive periods.

ADC on International incoming calls has always been considered to be a source of arbitrage which sustained grey market operations. Abolition of ADC could therefore pave the path for all calls coming through legitimate route and thereby increase the revenue of service providers. Evidence available with the Authority suggests that the quantum of incoming international calls had increased consequent upon every reduction in the Access Deficit Charges applicable on such calls.

### 3.4 Effect of ADC reduction on tariff

3.4.1 In carrying out the rationalization of ADC, the Authority expected that the benefits accruing from the reduction of ADC amount would to a large extent be passed on by telecom service providers to the consumers. In making an assessment in this regard the Authority notes that it is difficult to establish direct and transparent nexus between the savings on account of ADC and reduction of tariff. For instance, it is not possible to establish a correlation between reduction of ADC on incoming international calls and the direct and immediate benefits to telecom consumers in India, as this is paid by users in other countries calling Indian consumers. As stated earlier reduction of per minute ADC on outgoing international calls bas been passed on to consumers. As regards the local calls, service providers limited the benefit of reduction to their on-net calls instead of all types of calls to increase their subscriber base. Examination also reveals that even after abolition of per minute ADC on mobile to fixed calls, service

providers continued to offer higher tariffs for mobile to fixed calls compared to mobile to mobile calls. The differential and higher charges levied by cellular mobile service providers for calls to fixed lines do not have adequate justification. This can be viewed as an attempt to promote substitution of fixed line traffic by mobile traffic and may lead to forced substitution of fixed lines by mobiles thereby reducing the target market for fixed line broadband. Of late some effort is visible in the direction of reducing the gap between onnnet and offnet calls but is limited to intra service areas.

3.4.2 The Authority reviewed the inter circle tariffs offered by the various service providers and it is found that in most of the tariff plans the tariff for inter circle calls ranges from Rs. 2.40 per minute to Rs 2.75 per minute. Notable exception in this context is the one India Plan in which STD call tariff is as low as Re 1 per minute. However, such plans in mobile services come with a higher fixed monthly charges. STD tariffs have been firming up for a while now although special tariff packages have been offered by mobile service providers wherein for a fixed monthly charge discounted tariffs are made applicable for domestic long distance calls. Difficulties associated with the collection and analysis of data at discounted package level would render any conclusive remark on the usefulness or otherwise of such packages less scientific-Increasingly it is seen that while mobile operators have contributed to enhanced levels of competition in the local call segment in a big way, as far as long distance calls are concerned competition does not appear to be very effective despite several favourable regulatory and policy measures. However, the Authority expects that the service providers shall utilize whatever savings that accrue from abolition of ADC for the overall growth of telecom sector especially for rural areas that are still awaiting concrete steps from the service providers for same level of services as available in urban areas.

### 3.5 Desired effect of ADC removal on service affordability

- 3.5.1 It would only be reasonable to expect that the cumulative effect of reduction of ADC over the last few years and the benefits of abolition of ADC regime in its present form should be considered to make services more affordable to rural customers and service providers will make all efforts for rural telecom development, as has been demonstrated in metros and other urban areas.
- 3.5.2 As mentioned in section 1.3, the proposed line of action also involves mobile service providers doing their bit in promoting rural teledensity. Through this consultation process, the Authority is inviting comments from the stakeholders for formulating proposals by which the benefits of ADC abolition are passed on to the consumers in a visible and transparent manner.
- 3.5.3 In formulating the scheme it is important to keep in mind that the objective of expanding rural density would perhaps be better achieved by minimising the entry charges for a mobile telephone connection for rural subscribers. A variety of plans are available from service providers in their service areas. These plans offer different combinations of registration charges, activation charges, rental, call charges, free call minutes, SMS charges etc. In general the post paid mobile plans have entry level charges that include registration, activation and security charges. In Prepaid plans the entry mainly include activation charges.

3.5.4 The objective is not to micromanage the market but to ensure that the benefits of abolition of ADC are effectively transferred to achieve the objective of increasing the rural teledensity by making the services affordable which would thus bridge the urban rural divide and increase rural tele-density. At the same time Authority would not like to disturb the existing policy of forbearance on tariff for telecom services. It is in this context, stakeholders' views are solicited to suggest suitable proposals to lower the entry barrier for rural customers and to make service more affordable

### Questions on chapter 3: ADC and tariff

- Q4. Should the Authority, consequent upon abolition of ADC, mandate reduction of entry level charges applicable for mobile subscribers in rural areas? If yes, suggest a suitable framework for implementation. If no, give reasons.
- Q5. Do you have any other proposal for making mobile services more affordable for rural subscribers.

### Chaper 4

### Issues for consultation

- Q1. As envisaged in the IUC/ADC regulations, TRAI is operationalizing the phasing out of ADC from 1.4.2008. If you have a contrary view kindly explain.
- Q2. Is there a case for providing support to BSNL from USOF for their fixed wireline operations in rural areas? If no, give reasons.
- Q3. If the answer to Q2 is yes, suggest a suitable framework, specifying the details of implementation like amount of subsidy, period of support etc.
- Q4. Should the Authority, consequent upon abolition of ADC, mandate reduction of entry-level charges applicable for mobile subscribers in rural areas? If yes, suggest a suitable framework for implementation. If no, give reasons.
- Q5. Do you have any other proposal for making mobile services more affordable for rural subscribers?

### **List of Abbreviations Used**

| S.No. | Abbreviation | Expansion                             |  |  |  |
|-------|--------------|---------------------------------------|--|--|--|
| 1     | ADC          | Access Deficit Charge                 |  |  |  |
| 2     | AGR          | Adjusted Gross Revenue                |  |  |  |
| 3     | BSNL         | Bharat Sanchar Nigam Limited          |  |  |  |
| 4     | BSO          | Basic Service Operator                |  |  |  |
| 5     | CAPEX        | Capital Expenditure                   |  |  |  |
| 6     | CSCs         | Common Service Centers                |  |  |  |
| 7     | DELs         | Direct Exchange Lines                 |  |  |  |
| 8     | DOT          | Department of Telecommunications      |  |  |  |
| 9     | DSL          | Digital Subscriber Line               |  |  |  |
| 10    | ILD          | International Long Distance           |  |  |  |
| 11    | ILDO         | International Long Distance Operator  |  |  |  |
| 12    | IT           | Information Technology                |  |  |  |
| 13    | ITU          | International Telecommunication Union |  |  |  |
| 14    | IUC          | Interconnection Usage Charges         |  |  |  |
| 15    | MARR         | Multi Access Radio Relay              |  |  |  |
| 16    | MH           | Maharashtra                           |  |  |  |
| 17    | NLD          | National Long Distance                |  |  |  |
| 18    | NLDO         | National Long Distance Operators      |  |  |  |
| 19    | NTP'99       | New Telecom Policy, 1999              |  |  |  |
| 20    | OPEX         | Operating Expenditure                 |  |  |  |
| 21    | PSTN         | Public Switched Telephone Network     |  |  |  |
| 22    | RCP          | Rural Community Phones                |  |  |  |
| 23    | R-DEL        | Rural Direct Exchange Lines           |  |  |  |
| 24    | SDCA         | Short Distance Charging Area          |  |  |  |
| 25    | SMS          | Short Message Service                 |  |  |  |
| 26    | TRAI         | Telecom Regulatory Authority of India |  |  |  |
| 27    | USL          | Universal Service Levy                |  |  |  |
| 28    | USO          | Universal Service Obligation          |  |  |  |
| 29    | USOF         | Universal Service Obligation Fund     |  |  |  |
| 30    | VPT          | Village Public Telephones             |  |  |  |

### Annexure I

No.409-12/2006-FN

Dated 20<sup>th</sup> September 2006

Tο

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 <u>rural rental</u> 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 II**

| SI. |   |                      |         | stance to B | - CITE  |         |         |         |          |
|-----|---|----------------------|---------|-------------|---------|---------|---------|---------|----------|
| No. | Particulars   | 2000-01 <sup>1</sup> | 2001-02 | 2002-03     | 2003-04 | 2004-05 | 2005-06 | 2006-07 | Total    |
|     |   |                      | •       |             | (Rs in  | Crore)  |         |         |          |
|     | Reimbursement of Licence fee and                        |                      |         |             |         |         |         |         |          |
| 1   | Spectrum charges  | 0                    | 2300.00 | 2300.00     | 2300.00 | 1765.9  | 582.96  | 0       | 9248.86  |
| 2   | Moratorium on payment of Interest <sup>2</sup>          | 543.75               | 1087.5  | 1087.5      | 1087.5  | 1087.5  | 0       | 0       | 4893.75  |
| 3   | Recoverable from USO                                    | 0                    | 0       | 230.20      | 310.25  | 1117.07 | 1765.75 | 1719.15 | 5142.42  |
| 4   | Access Deficit Charge from other operators <sup>3</sup> | 0                    | 0       | 0           | 2298    | 2528    | 3304    | 2805    | 10935    |
| 5   | Exemption on Entry Fee <sup>4</sup>                     | 0                    |         | 1650        |         |         |         |         | 1650     |
|     | Total   | 543.75               | 3387.5  | 5267.70     | 5995.75 | 6498.47 | 5652.71 | 4524.15 | 31870.03 |

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<sup>&</sup>lt;sup>1</sup> For six months only
<sup>2</sup> The Government Loan of Rs 7500 Crore to the BSNL had a moratorium on repayment of the principal and interest thereon up to 31<sup>st</sup> March 2005; currently BSNL is paying the interest @14.5% p.a.

<sup>3</sup> Yearly estimated amount in IUC Regulations of TRAI

<sup>4</sup> Based on 4<sup>th</sup> cellular operators entry fee for all India presence