

**SUMMARY OF INPUTS RECEIVED IN THE CONSULTATION
PROCESS**

**A. CHAPTER.2 UNIVERSAL SERVICE POLICY OBJECTIVES,
DEFINITION AND SCOPE**

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- 1. What should be the scope of low speed data services? Should it be limited by the speed of a dial up Internet connection or ISDN connection or a leased line?**
 - i) Dial up access at a minimum rate of 9.6 Kbps
 - ii) Low speed data at a rate enough to meet PTIC requirement.
 - iii) No data at the moment, data to be included later based on the recommendation of advisory board.
 - iv) Speed should be limited by the technology available.
 - v) Speed of data should be 64 Kbps
 - vi) Speed of data at 25 ~ 30 Kbps with 56 Kbps Modem
 - vii) ISDN as the cost difference between 64 Kbps and ISDN is not much.
 - viii) First we should provide reliable media for exchanges .
 - ix) Speed of data to be restricted to a minimum of 2.4 Kbps
 - x) The services to the villages should be defined and the bandwidth and technology be classified accordingly.
 - xi) Market driven .

- 2. NTP 99 envisages provision of low speed data service to balance 2.9 lakh-uncovered villages in the country by the year 2002 under USO. Service is delivered through a terminal apparatus. Should it be interpreted to mean that**
 - (I) All new village phones would actually be Public Tele-info centres (PTIC) having Internet capability in accordance with the IT Policy?**
 - i) All villages to have PTICs.
 - ii) Phased approach; PTICs be initially provided in Gram Panchayats.
 - iii) Left to FSPs
 - iv) Multimedia education to be implemented.
 - v) Conversion to PTIC should be demand based.

- vi) Villages of Population greater than 5000 would have demand of PTIC.
- vii) Connect the person to messages (pagers) first, followed by tel and then PTIC.

2.(II) The existing 3.17 lakh VPTs would be upgraded to PTICs by 2002? In such a case what should be the minimum terminal equipment configuration; and should the cost of this PTIC terminal equipment be also included in the USO cost.

Minimum Terminal Equipment

- i) PC, Modem, FAX and Telephone
- ii) PC, Modem, Solar Panel, Power packs
- iii) PC, Modem, Solar Panel, FAX, UPS, Printer
- iv) Terminal configuration should not be specified as it will vary with applications and development.

Should the cost of PTIC be covered under USO

- i) Yes
 - a) Capex and Opex
 - b) May be provided by state government (need to have more state government data on web)
 - c) Where demand is there people will take up.
 - d) Provide initial USO support and when it becomes viable, may be taken out of its purview.
 - d) Cost should be shared between USO provider and franchisee. Soft loan, rural credit, money for training should be given from USO.
- ii) No
 - a. Government should incentivise Rural tel by waving import duties, excise duties and sales tax on all equipment.
 - b. USO is not intended to either define or cross subsidise terminal equipment
 - c. Should be financed from rural development funds including resources of gram panchayat.

3. Telephone on Internet:

Envisaging a situation where voice over IP is permitted in India for ubiquitous telephony services by the ISPs. Whether ISPs be asked to discharge their USO? Whether ISPs should also contribute to the Universal Service Fund(USF)?

- i) NTP'99 envisages that Internet telephony shall not be permitted at this stage. Government will continue to monitor the technological innovations and their impact on national

development and review this issue at an appropriate time. However, if at some stage the Government permits Voice on Internet, the ISPs should be required to obtain FSP license. All SPs should contribute to USO.

- ii) To increase proliferation of Internet at this stage, ISPs be left out.
- iii) Countries like Australia, Canada, People Republic of China, Australia, USA cover essentially telephone services, with respect to Basic Telephony, Mobile Telephony and such other voice telephony related services. The objectives are clearly to increase teledensity and access to affordable telephony. Internet services are therefore not covered under the category of those telecom services, which are eligible to contribute towards the USO.
- iv) ISP should discharge their USO to the extent of providing Internet access. ISP too should contribute to USF.
- v) As and when voice over Internet is actually permitted in India, ISPs may be asked to contribute to the USF.

4. Internet to all DHQs :

Whether the current state of Internet Service meets the NTP 99 objective of Internet Access to all DHQs or will it be met only after the provisioning of an Internet node at each DHQ? The stipulated target for Internet access to all DHQs is 2000. Whether ISPs be asked to provide such nodes in their service areas in addition to the incumbent?

- i) ISPs licenses issued by DOT cover almost all the DHQs in the country, which also have the necessary telephone line infrastructure. Let this issue be governed by the ISP policy or Government Policy on provision of internet at DHQs.
- ii) The incumbent operator (DTS) has already committed to provide Internet nodes at all DHQs by the Year 2000 and the funding of the same will be available from the monopoly surplus of DTS. Thus, there should be no separate requirement for the ISPs to mandatorily provide such nodes.
- iii) Though this is already being achieved by the ISP's faster than any regulation can drive it, for the benefit of competition ISPs be asked to provide such nodes.

- iv) At present DHQs have access to the nearest Internet node at local call rates, even if connection is made over long distance, implying a possible degree of cross subsidisation by the long distance service provider, currently DTS. Based on the avoidable cost approach, if there is excess capacity on the link to the node, then this degree of cross subsidisation may not be extensive. If traffic grows to the point where it requires a node, it is likely that the service would also become commercially viable.
- v) Incumbent should provide the node and get reimbursed from USO.
- vi) Till the time the long distance operations are totally open up there is no need of providing any subsidy through USO Fund to DTS.
- vii) One can access Internet at local rates from any SDCA by dialing 172XXX, till node is not provided in that SDCA. To subsidise the STD call to local call, USO should bear the difference and if more number of nodes are provided at DHQs, same should also be covered through USO.

CHAPTER -3

PRESENT SCENARIO AND FUTURE PROJECTIONS

VPTs

Technology for VPT

1. **Should a technology neutral approach be adopted for VPTs and the most cost effective technology model in a given situation be considered for disbursement from the Universal Service Fund i.e., a standard reference proxy model for a given situation.**
 - i) Technology neutral approach has to be adopted for provisioning of VPTs. The operators should be given full flexibility in exploiting the available technology in the given situation to provide connectivity in the most cost-effective manner. The reimbursement of Universal Service Fund can be done in a standard proxy model in particular area.
 - ii) Technology neutral approach may be appropriate as the accessibility of the area, terrain, geography etc. will play a role in deciding choice of technology & moreover the best technology may not always be available.

- iii) Technology neutral approach should be adopted so as to provide the operator serving a particular area with the necessary incentives to utilise the most cost effective technology in a particular area. As far as the standard reference proxy model is concerned, this may be utilised so as to determine the maximum reserve price for the subsidy bid in a particular area, though care must be taken to ensure that the proxy model reflects the geographical location, size, population etc. of a particular area. Separate proxy models may be developed for different groups of areas.
- iv) The "standard proxy model for a given situation" should be the approach adopted for VPTs. The proxy model for each situation should be practicable to implement in India taking into consideration the availability of equipment locally, availability of frequency band, maintainability under Indian conditions etc. The Universal Services Advisory Group proposed should study and recommend the appropriate standard proxy model for each given situation. To ensure reasonable period for equipment demand forecast and manufacture, each model should be in force or acceptable for at least 5 years. If there is any technological breakthrough permitting more economical system, the latter can be permitted concurrently.

Existing FSPs

- 2. **Number of uncovered villages in each area of operation of private FSPs were given in Annex of tender enquiry documents and accordingly reflected in Annex. III of license agreement. Evaluation criteria included weightage for the number of VPTs to be installed in awarding the license for basic services. Now, in the period between tender enquiry and signing of license agreements some VPTs have been provided by DOT/DTS. The issue to be considered is whether DOT/DTS should be treated as a "Carrier of last resort" and compensated for providing these VPTs? Next stage comes after signing of license agreement. Number of VPTs is not provided as per agreement and subsequently DOT/DTS provide these VPTs.**
 - i) It was never stipulated that the incumbent shall stop covering the VPTs after the licences to private FSPs are issued. The private FSPs are prepared to provide VPTs in the uncovered village under USO as stipulated in NTP'99. The primary

responsibility for providing universal service should remain with the incumbent, as is the practice in most of the countries. This is so as the incumbent has large infrastructure available to meet this obligation. Private FSPs shall be too happy to do this when their rollout infrastructure enables them to meet this requirement.

- ii) In view of DTS's vast resources and also its extensive coverage throughout the country, it would be correct & proper to designate DTS as the carrier of last resort rather than burden the fledgling new entrants with the mandatory obligations of USO. However the various types of private operators should all be encouraged to provide USO services and be suitably compensated for the same.
- iii) DOT/DTS can be compensated as a "Carrier of last resort" only after the competitor fails to respond to his share of USO after he has been awarded license. As long as the competition has been absent, the incumbent has still enjoyed all the benefits of the long distance and ISD revenues, which have historically been utilised to cross subsidize USO. Hence the question of any additional compensation doesn't arise.
- iv) DOT/DTS should be treated as a "Carrier of last resort" but compensated for only those VPTs which are provided after signing the license agreement by FSPs.
- v) It will not be possible to treat the DTS as a Carrier of last Resort and compensated for providing the VPTs on the following grounds:
 - a) There are heavy slippages between targets and actual provision of VPTs by the DTS in each year even in the Circles with private FSP licencees.
 - b) Individual villages have not been identified as to those to be provided VPTs by the DTS and by the private FSP. In the absence of such identification and slippages by DTS, it will not be possible to enforce "carrier of last resort" compensation or even claim liquidated damages.
- vi) DTS should not be compensated for VPTs already provided as they had the monopoly. For the earlier obligation, there was a migration package and therefore VPTs would be provided by FSPs if reimbursed.
- vii) Since DTS has vast reach, they could provide the VPT and should be compensated from the date when long distance is opened up. If any other SP is able to do it they should be permitted to do it and should be reimbursed.

- viii) Irrespective of the operator, they should be reimbursed for the VPTs already provided and to be provided. As VPTs are loss making still, subsidy would be required still. A date should be fixed on when USO would be effective (say 1/12/2000). Let DTS state their un-amortised cost of VPT keeping in mind DOT has a depreciation rate of much lower than 10 (around 4). Fix the capex on the date USO comes into force. The un-amortised cost may be reimbursed and operating costs should also be given.
- ix) Only future VPTs should be compensated. If USO is not prospective, it goes against the basic principle that margins were given in long distance for the purpose. If this issue is opened then there would be issues like
- (a) what type of tech was used?
 - (b) How opex be assessed?
 - (c) How long we go back?
 - (d) Why VPT opened 10 years back has not become profitable?
- It would be practical to do it on a prospective basis only.
- x) To make it, technically economical feasible, both FSP & DTS to call for competitive bidding for VPTs & Rural DELs. We should allocate an area which is required to be provided with rural lines & VPTs. This concept is practically feasible instead of providing one phone. There should be package of business.
- xi) Even if the Private Operator has paid the liquidated damages, their obligation for providing VPTs should remain the same as committed in the license obligation. This is necessary to meet the social obligation. If DTS provides the VPTs as a carrier of last resort, the same may be properly compensated through USO.
- xii) FSP should be absolved from providing the VPTs since they have already paid the LDs and migration package was offered to them. The Service Provider who is having the network near to the villages can only provide the VPTs. DTS are having their exchanges in such areas. For FSPs, it will be difficult for them to provide VPTs since their network rollout is in limited areas. Compensation should be provided to DTS for providing such VPTs. FSPs are ready to provide VPTs and this should also be allowed that they could connect it through nearby DTS network for carrying the calls further.

- xiii) Local initiative at village level should be involved with DTS for helping out in providing VPTs and DTS may help them by providing infrastructure.

3. Again should DOT/DTS be compensated as a carrier of last resort?

- i) DTS should not be compensated for VPTs it has installed. Installation of VPTs is a social obligation, which has been met by the incumbent. DTS enjoyed the status of a monopoly and has maintained almost total share of the market.
- ii) DTS should have claim to USO funding only after the private NLDO's become commercially operational, since till then, the incumbent will have access to the long distance monopoly surplus, which must be used to meet their "immense rural obligations."
- iii) It should also be added that DTS cannot be entitled to both a refund of its licence fee and financial support from the USO Fund as this would amount to a double reimbursement for the same activity. In the interests of objectivity and transparency and to ensure a level playing field, it is desirable that DTS's USO implementation should be funded directly through the USO and that there should be no reimbursement of licence fee.
- iv) DOT/DTS should be treated as a "Carrier of last resort" but compensated for only those VPTs which are provided after signing the license agreement by FSPs
- v) For those areas where no subsidy bids are received, DoT/DTS, keeping in view their extensive network, may be designated as the carrier of the last resort, and compensated to the extent of the maximum reserve price determined to subsidise that particular area. This status of carrier of last resort need not be indefinite, and may be subject to change in light of the possible structural and ownership changes in DoT/DTS.
- vi) It will not be possible to treat the DTS as a Carrier of last Resort and compensated for providing the VPTs on the following grounds:

- (a) there are heavy slippages between targets and actual provision of VPTs by the DTS in each year even in the Circles with private FSP licencees.
- (b) Individual villages have not been indentified as to those to be provided VPTs by the DTS and by the private FSP. In the absence of such identification and slippages by DTS, it will not be possible to enforce "carrier of last resort" compensation or even claim liquidated damages.

4. Can private FSPs be absolved of their responsibility of providing VPTs in view of paid L.D. and /or offered migration package or setting up of UAL fund?

- i) FSPs should contribute to USF for VPTs in their areas of operation. FSPs should be absolved of their obligation towards VPTs in view of LDs already paid for the purpose and formation of USO policy going forward. The private basic operators have been facing lot of difficulties including rollout of their network and getting financial closures. Considering these difficulties, government has decided to migrate the existing licensees to NTP 99. With the migration to NTP 99 the basic service licensees get covered under NTP 99.
- ii) No it won't be fair on incumbent to absolve the private operators of their share of USO absolutely, because the operator is supposed to give service. But the question of LD may not arise as long as the license has not been signed.
- iii) The NTP '99 prescribes the transition of existing operators from a license fee regime, to one of revenue sharing. Further, it rightly replaces the earlier monopolistic regime with one of competition. Considering that the existing FSPs were given the obligation of providing VPTs as a result of their monopolistic status, these FSPs may absolved of their obligations, now that the competitive environment has been changed and the same provided for transparently through a process of bidding.
- iv) It is clear that private sector can be attracted to make investments to meet the socio economic objectives of the government, not by licence conditions but by offering incentives to compensate for any losses they may incur in such investments. Provision of VPT should not be a licence condition in future, but availability of compensation from the USO fund should be highlighted as an incentive. The present FSP

licensees should also be absolved of their obligation without any penalty (difficult to impose as discussed in the para above) except that they should pay the full USO levy in respect of VPTs alone from the date of licensing to NTP-99.

- v) Pre determined liquidated damages absolve them of their liability.
- vi) It appears that both the parties have entered into contract, both parties fail to perform. The parties agree on liquidated damages. If there is no limit, the amounts reach an amount which is not possible to recover. The parties agree to cap the liquidated damages at a value. This has been the case vide which migration packages have been affected and therefore the issue of previous VPTs should not be considered

5. If DOT/DTS was providing VPTs and getting compensated through long distance revenue, then private FSP's either should pass on their compensation amount in the form of increased revenue share for a limited period or should pass on these benefits to consumer.

- i) Unlike DoT/DTS private operators are restricted to state wise circles and are not providing national long distance in the manner of DoT/DTS. As such there is no comparison between Private Fixed Service Providers and DoT/DTS. The FSP licensees are presently paying an interim 15% revenue share as license fee. The actual percentage to be paid as license fee will be determined by the government. UAL is to be assessed by TRAI as a part of consultation paper no.2000/3. ABTO recommends that provisioning of VPTs and coverage of rural areas should be governed by the US stipulations. Incidentally ABTO would like to point out that the rental and call charges for the FSPs are not cost based. The access charges have been determined taking into account these facts.
- ii) With competition in DLD and IDD, the concept would not apply.
- iii) In view of UAL fund, neither DOT/DTS nor FSP need getting any compensation from long distance revenue.
- iv) The current policy on long-distance tariffs contains an implicit subsidy from long-distance charges for uneconomic services, which have, until now, been provided by DTS. In a regime where private FSPs will carry long-distance calls but may not undertake USO obligations, it is legitimate to ask whether they

should retain the cross-subsidy element in the long-distance tariff or pass it on to the DTS.

- v) This however, presumes that long-distance tariffs will continue to contain a cross-subsidy element and that the USO obligations would continue to be fulfilled solely by DTS. Neither of these assumptions may hold true in an environment where long-distance services are open to competition and USO obligations are undertaken by a multiplicity of operators.
- vi) In such an open competitive environment, competition among service providers can be expected to weed out any cross-subsidy element from the long-distance tariffs. In effect, these benefits will pass on to the consumer. To the extent that such additional cross-subsidisation over and above the UAL remains a policy, a separate transparent levy such as a "*rural termination charge*" may need to be imposed. In addition the revenues from such charges would need to be transferred to the Universal Service Fund in order to ensure its usage by all operators undertaking USO obligations.
- vii) To the extent that competition for intra-circle long-distance remains restricted, such cross-subsidy elements may remain and a mechanism may have to be found to transfer revenues from such implicit cross-subsidies to the Universal Service Fund, to the extent that a specific long-distance operator does not undertake USO obligations.

6. The policy of giving extra weightage to commitments obtained for VPTs from prospective bidders while considering the grant of licence does not seem to have succeeded. Should this be continued in the present or any other modified form?

- i) This policy has failed and be discontinued.

7. Can it be considered that all VPTs may be provided by DTS with suitable compensation from USF?

- i) It is evident that DTS by itself or along with the Private FSPs will not be able to meet the Government's universal service objectives. The DTS is too big, weighed down with many social responsibilities with insufficient resources to meet all such responsibilities and preoccupied with the need to compete with private operators for survival. The private FSPs are licensed for an entire circle which include many lucrative areas which take

priority for private investment. Hence a third type of operator, small entrepreneurs, each preferably committed to the area of operation, are required to meet the objectives. He will be a Rural Service Provider (RSP), restricted to an area of operation not exceeding a SDCA (generally equivalent to a Tehsil) and total DELs not exceeding 25,000. In low density areas, he can have regular exchanges with connection to the network of DTS or the private FSP or the NLDO for long distance calls. In multi exchange local areas the third operator can provide the access network (between the customer and the service node as in fig-4-B of the consultation paper) including multiplexers and concentrators like RSUs, RLUs group PABXs etc. For the unlicensed circles there is no restriction in bringing in a third operator since the NTP 1999 permits entry of multiple operators on the recommendation of TRAI. In respect of the present 6 licensees, they should concede the entry of these small operators in exchange for absolving them of the VPT commitment and even for changeover to revenue sharing scheme. In this scenario, which I hope will be considered by TRAI for recommendation to the government, there will be three different operators for meeting the Universal Service Objectives of the government namely i) the DTS at the national level, ii) the private large FSPs at the circle level and iii) the RSPs at the SDCA level which is the level at which the preferred method of costing for USO funding is to be undertaken.

CHAPTER 4

GENERAL CONCEPT OF UNIVERSAL SERVICE AND ITS FUNDING

Should the USF be used to compensate the access deficit caused due to below cost rentals of rural DELs and low calling urban DELs as well as lower call revenues, or, the access deficit be compensated through interconnect charges and only the deficit in operating costs compensated by USF? In other words, whether interconnect charges be also an instrument of subsidy to provide rural DELs and low calling urban DELs as an alternative to the USF or complementary to it?

- i) Some opinions do not favour using interconnection charges as instrument of subsidy to provide rural DELs as an alternative to the USF or complementary to it and supports the policy of creation of USF through Universal Access Levy (UAL) to achieve the objective of Universal Service.
- ii) Urban areas, if viewed in totality are high revenue earners and the service providers in these areas need not be separately compensated for some low calling urban DELs. A large contributory factor in the low revenues for the rural DELs is the

non-availability of STD / ISD facilities. COAI believes that rural DELs will become economically viable, maybe even profitable, if they are provided STD/ISD facilities and therefore would not need to be compensated from the USO Fund. In view of the above, there is no justification for any subsidy through interconnect charges for rural DELs or low calling urban DELs.

However, in the case of areas where there is no rural telephone exchange within a distance of 10 kms, the first / smallest rural exchange (128 port CDOT Exchange) and the transmission link should be funded from the USO Fund.

- iii) The worldwide trend by operators is to increase network usage rather than increase complacency and inefficiency by compensating for under utilized network sources.
- iv) USF be used to compensate the deficit in operating cost only and access deficit be compensated through interconnect charges.
- v) Interconnect charges may be used as an instrument of subsidy. This would be complementary to the USF and would reduce the estimated maximum reserve price for subsidy bids. The level of such interconnect charges would depend on the Authority's view on the appropriate level of long-distance charges. It would be possible to continue an implicit cross-subsidy from long-distance charges if the national long-distance market is opened to free competition, as it should be. The continuance of the cross-subsidy would then require the imposition of a transparent rural termination charge to be paid by all national long distance operators terminating a call in a designated rural area. USO Fund for urban services However, we do not support the use of such subsidies for low calling urban DELs,.
- vi) All operators who provide i) VPTs ii) Rural/Remote DELs and iii) Low calling Urban DELs are eligible for reimbursement of shortfall in revenue from the USO fund. With multiple providers of fixed local services, intra circle long distance services and national long distance services, it essential to change over to an access charge regime where the long distance interconnection revenue compensates for the deficit in access only, which is the difference between access cost (normally for capex recovery) and the rental received (normally below cost on affordability criteria). With this access charge regime the compensation criteria for the above three types of service provision have to be different.

i) For the VPTs, where there is no rental, both the capital and operational expenses should

reimbursed as in VPT - Model 2 in the consultation paper.

- ii) For the low calling urban DELs, only the operational cost need be compensated from the USO fund since the capital cost is recovered through the rental and interconnection charges. It is assumed that there is no difference in the capital cost for providing service to high calling and low calling DELs in urban areas.**
- iii) For the rural DELs, in addition to the operational cost, 40% of the capital cost also need to be compensated since the capital cost of a rural DEL is 40% higher than the national average cost per line. It is presumed that access charges will be uniform for the rural and urban DELs.**
- vii) First, tariffs should be on cost basis. Having done that, subsidized tariffs should be fixed for rural or LCUS. The difference between cost based and these should be from USO. Interconnection charges should not provide any element of subsidy. All subsidies should be transparent. No cross subsidy to be there.
- viii) Instead of contribution is coming from interconnection, it should come through incoming charges.
- ix) Cost based termination charges may be provided
- x) Capex was already recovered through high STD charges hence opex should come from USO.
- xi) Only for future opex.
- xii) When in future long distance charges become cost based then only deficit on opex should be reimbursed through USO.
- xiii) USO may compensate deficit in opex from the date when TRAI has put a cap on STD charges. Total rebalancing will take place in 5 to 10 years of duration.
- xiv) Opex should be compensated from the date when NLDO will be opened up since the charges will go down.

2. What should be the definition of Eligible Revenue for the purpose of UAL?

i) The revenue eligible for calculating universal access levy should be as follows:-

"Licensable revenues" would imply only that portion of the total revenues that arise due to the licensed activity of providing telecommunication services. Any revenues earned by the operators from other allied activities should be excluded, for example -

- Revenues from activities linked to other licenses and services which are not likable to revenue share, such as Internet, Voice Mail, ASPs etc.
- Sale/lease of customer equipment
- Sale/lease of assets,
- Interest and other returns from investments,
- Database marketing, etc.

Further, only the "net" licensable revenue should be considered i.e after reducing -

- All interconnection/access charges payable by the operator to other operators (including the incumbent)
- Settlements to be paid (say international calling)
- Cost of telecom services taken for resale
- Discounts and bad debts
- Other levies such as service tax/sales tax etc.

ii) In the interests of standardization and ease of application, the Regulator should adopt the same definition of revenues for the purpose of calculating the UAL as would be used for the determination of revenue share licence fee for all service providers. The USO levy, as when decided by the Telecom Commission should be charged from a prospective date and only once the NLDOs become commercially operational. Also for the purpose of Income Tax, USO levy should be treated as a revenue expenditure.

iii) The definition of gross revenue will be the revenue after taking out all interconnection charges.

iv) The definition of Eligible Revenue may be the same as that used to calculate revenue share, but should not include revenue accrued on account of providing supplementary/value added services, as these could have been provided by an operator even without obtaining a license.

- v) The total income billed by the operator shall be the eligible revenue for purposes of UAL.
- vi) Net licensable revenue may be taken as eligible revenue. Exclude the earnings from non-licence activities

3. What class of operators should fund the UAL?

- i) All Telecom Service Operators as stipulate din NTO'99 should contribute to Universal Service fund in the form of Universal Access Levy.
- ii) All FSP's, CMTS, and ISP's may contribute to UAL.
- iii) All licensed service providers carrying voice telephony may fund the UAL.
- iv) All operators who provide public voice service shall contribute to the USO fund. This will include operators of fixed services, cellular mobile services, national and international long distance services and GMPCS. ISPs and VSAT operators should be included when they are permitted voice services to the public. All those contributing to the USO fund should be eligible to receive compensation if they provide the eligible services especially the VPTs. As per NTP -1999, the cellular operators are free to provide PCOs and if they are VPTs they should be eligible for compensation from YUSO fund. A proxy model for this can also be developed. Since all those funding the UAL are also eligible to make use of the fund there should be no difference in the percentage contribution of UAL by the different service providers.

4. Whether the percentage contribution of UAL from different operators providing different services be the same or different? If it should be different, the criterion thereof?

- i) Universal Access Levy contribution should be linked with eligible revenue of the service provider
- ii) To ensure transparency and non-discrimination amongst service providers, it is advisable to levy a uniform USO levy on all service providers in the same service area. NTP 99 also postulates that the Universal Service Levy be a percentage of

revenue earned by all operators under various licenses. However, keeping in mind the different levels of economic development and existing tele-density of the various service areas, it would be desirable to levy graded USO obligations for different service areas. It must be reiterated that all types of service providers within a particular service area should be liable to pay the same level of UAL.

- iii) It should be different. Contribution should be arrived as a percentage of ARPU.
- iv) Customer doing less calls may contribute less towards USO levy and customer doing more calls may contribute more towards USO levy.

5. Whether there should be a Proxy Model for evaluating the claims of USO submitted by the eligible carriers?

Yes

- Assessment of cost, based on a well defined network segment is the most appropriate and transparent method. The high cost area approach (para 10 of chapter 5) with each SDCA considered as a separate cost and revenue centre should be initially adopted, though this may require collection of more data (After gaining experience attempts can be made to group the SDCAs into different categories or to identify loss making areas and adopt other approaches) A proxy cost model for calculating the cost of serving a particular SDCA should be developed to evaluate the claims of eligible operators.
- Population as well as income level may be determinants for deciding proxy model.
- An average proxy model will not be sufficient to be described for all the area. It should be different for difficult areas particularly for area in North Eastern regions and J&K, etc. SDCA covers urban & rural areas. Hence it is difficult to decide a single proxy model for a SDCA. It is impossible. There may be more models for a single SDCA.
- Different percentages for different classes like CMTS, DLD, ISD and class like Paging etc.

6. Should adjustments be made for the reimbursement to DOT (DTS) of the licence fee while considering their claim for payment from US Fund?

- i) The license payment and UAL payment are two separate issues. For having a level playing field DOT/DTS should not be reimbursed license fee. However, in case it is decided, the license fee reimbursement should be adjusted out of Universal Service Fund reimbursement to DOT/DTS.
- ii) Reimbursing the licence fee to DTS as also providing it funding support from the USO fund to fulfil its rural obligations would tantamount to doubly advantaging the incumbent operator. In the interests of transparency and non-discrimination, it would be more appropriate if all funding to fulfil USO obligations is sourced directly from the USO Fund and there should be no reimbursement of licence fee.
- iii) The license fee reimbursement to the DoT mentioned in the NTP 99 is to compensate for the social obligations imposed by the Government on the DOT as a Government Dept. These relate to over employment provision of services to government agencies and legislatures with high probability of writing off bills, long distance connection (not covered by USO) to remote and strategic areas without adequate return, disaster management telecom facilities with no return etc. Even these reimbursement may be affected when DOT is corporatized and later privatized without much change in obligations. Hence contribution to the USO fund and reimbursement from the fund should not be linked with any other contribution or reimbursement. Any such linkage will give rise to many claims and counterclaims by different operators.

3. ASSESSMENT OF COST – APPROACHES AND METHODOLOGIES

VPTs:

1. Should the capex recovery for VPTs installed prior to NTP 99 be considered for support from USO Fund?

- (i) There should be no recovery of capex for VPTS already provided prior to NTP'99. The capex recovery may be permitted for the VPTs to be provided in the uncovered villages as stipulated in NTP'99.

- ii) Most VPTs set up before NTP '99 were established by DoT. These were mostly financed through cross subsidies from long-distance calls. Further, most incoming calls to these VPTs generated revenue for DoT, as these were made from DoT's network elsewhere. Therefore the case for recovery of capex on these installations is weak. In addition, as the Consultation Paper recognizes, the performance of the analogue MARR technology, which comprises over half the existing VPTs has not been satisfactory and therefore compensation would also need to be reviewed on account of inadequate service standards.

2. Estimates for costs of providing VPTs vary over a wide range. For the purpose of support from USF, should standard costs for ordinary, hilly and tribal areas be adopted?

- i) Standard costs should only be used as a benchmark, while determining the maximum reserve price for subsidy bids.

Rural / Remote

3. Is it reasonable to assume that average cost of rural DEL is 40% higher than that of Urban DEL?

- i) Cost estimate as mentioned above appears to be reasonable.
- i) The magnitude of the variation will have to be established through a proper & detailed costing exercise. The cost of rural DEL can be reduced further as mentioned in Point 2(2), by waiving the customs duties, excise duties, and sales tax on all equipment to facilitate delivery of affordable services to the rural consumer.
- iii) With competition in the DLD and IDD, the compensation from interconnect may be difficult. USF may finance only the capital investment in local loop. The concept of recurring deficit of providing rural tel lines wouldn't hold good in a competitive, market driven economy as once invested, the operator can actually exploit that local loop to his advantage by increased network usage.
- iv) The average cost of a rural DEL is 40% higher than that of urban DELs. Rather, we feel this will vary considerably based on geographical location, size, population etc. of a particular area. Even for purposes of the proxy model, such an assumption should not be made, since it would affect the maximum reserve prices in a perverse manner.

- v) The 40% higher cost for rural DELs as estimated by the DOT and the private operators should be accepted till the Advisory Board comes up with standard costs for the proxy models.
- vi) Much more

As revenue sharing on interconnect compensates for access deficit, should USF be used only to subsidize the shortfall caused by excess of operational expenditure over revenue? Whether USF should finance only the capital investment or recurring deficit of providing a rural telephone.

- i) USF should compensate both capital expenditure as well as the recurring deficit for providing a rural telephony.
- ii) The USO resources should be provided to meet the capital investments and operational expenditure for provision of VPTs and PTICs. Urban or rural DEL's should not come under the ambit of USO funding.
- iii) With competition in the DLD and IDD, the compensation from interconnect may be difficult. USF may finance only the capital investment in local loop. The concept of recurring deficit of providing rural tel lines wouldn't hold good in a competitive, market driven economy as once invested, the operator can actually exploit that local loop to his advantage by increased network usage.
- iv) In respect of rural DELs the compensation should cover the operational costs and 40% of the capital costs in view of the 40% higher capital cost of providing a rural DEL. The consultation paper estimate of Rs. 4,724 and the DTS estimate of Rs.2,232 as the annual revenue per rural DEL need to be reconciled. As per DOPT annual report, among the circles, Karnataka Circle has the highest average annual income of Rs. 10,039 per DEL, the lowest being Himachal Pradesh with Rs. 4,855. The rural DEL revenue estimate of Rs. 4.724 is based on *data from Karnataka circle and could be on the higher side*. The all India average for rural DEL could be nearer Rs. 2,232.
- v) Capital cost and operational expenditure should be considered.
- vi) There should be one time funding of part of the capital cost of VPTs and rest should be based on revenues. To ensure that the installed equipments should be in use, the maintenance etc.

should come through usage. Only apprehension is that if the person is getting compensation towards maintenance, there should not be any incentive to improve its packaging, efforts towards improving its revenue, etc. If it is not generating usage, the same may not be entitled for USO

Low calling Urban DEL:

5. Whether UAL should be raised to provide Universal Access in both urban as well as rural areas? This will involve subsidizing of loss making telephones irrespective of their geographical location in the service area.

- i) UAL should be raised to provide Universal Access only in rural areas.
- ii) UAL should be used to provide VPTs and PTICs in rural areas as well as the first rural exchange as mentioned in Point 4(1).
- iii) To limit the discussions to provision of local loop (i.e. the capital expenditure) rather than the usage of network resources.
- iv) UAL should be raised to provide Universal Access in both urban as well as rural areas.
- v) At least 70% of the DELs can be categorized as low calling subscribers (TTO-99) while the rental and access charges may compensate the capital costs, the average call charges income from these low users are too low to compensate the operating costs. A private FSP has announced that he will focus on business and commercial clients, the so called high usage customers. The Hindu of 9, July 2000, while reporting the fall in FDI in telecom sector states "As much as half of the investment went to the cellular sector which made a mockery of the reason d'etre behind liberalizing the segment which was to make available phones on demand." To attract investment in fixed services to the low usage customers it is essential to provide incentive in terms of compensation from the USO fund.
- vi) Group telephones for low calling urban lines may be the answer which will reduce down the requirement of external

components. We should connect more subscribers in a buildings by grouping. EPABxs can also be one of the solutions for providing communication in a building

6. Whether low calling urban subscriber should be defined as those upto 500 metered calls per month or upto 200 metered calls per month.

- i) Low Calling Urban subscribers should be defined as those who makes not more than 200 calls per month of a billing cycle.
- ii) The USO levy is sensitive to the average annual revenue and the assessment of this revenue has to be made with care. The total rental plus call charges for 200 calls and 500 calls as derived from Annexures 5-J-2 and 5-K-2 comes to Rs. 2,396 and Rs 4,716. The national average revenue per DEL of DTS, including MTNL, for the year 1998-99 (DTS annual report 1999-2000) was Rs. 8,43 per month or Rs. 10,116 for the year. The average low user revenue of Rs. 4716 with 500 call comes to 46.6% of the national average. This appears too high considering that the revenue distribution curve has longer and longer tail as the tele density (mainly due to addition of residential subscribers) increase. The average of Rs. 2,396 with 200 calls appears too low since it is lower than the rental revenue as per TTO-99, which DTS is bound to adopt considering their falling revenue. While the limit of 200 or 500 calls to identify low user subscriber may be applicable in tariff fixation, their application to USO fund reimbursement may not be realistic. The proxy model for costs and revenues are based on SDCA which can have wide variations in average revenue. On a circle basis, the average annual revenue varies from Rs 4,855 in Himachal Pradesh through 10,039 in Karnataka Circle to Rs 16,583 in Chennai district. Hence for calculating the USO reimbursement on a SDCA basis in respect of low urban callers another approach is necessary to assess the total income from low callers. One approach could be a below.

A survey carried out by DOT a few years ago indicated that about 70% of subscribers pay less than the average revenue per DEL. TTO -99 states that low user subscribers comprise more than 70% of the total subscribers. Hence it appears appropriate to define low user subscribers in a SDCA as those paying less than the average for that SDCA. The total annual revenue from the low user subscribers can be calculated as the sum of the annual revenue from those subscribers whose annual payment is less than the average. This will not call for any more effort than aggregating the revenue from those making less than 500 calls per month in a billing cycle.

- iii) 500 calls may be taken as figure for passing USO subsidy
- iv) USO should not cover low urban calling subscribers. We have to push the operators to provide such services. Atleast it can provide enough incentives for applying innovative ideas to significantly reduce the cost such as providing shared phones. It is possible to generate profits by applying innovative models. Subsidy will provide disincentive in this respect. Incremental cost for providing urban lines is roughly in order of Rs. 8000-1000/-. This will meet the deficit of lines through rental only

CHAPTER 6

ORGANIZATIONAL ARRANGEMENT FOR ADMINISTRATION OF USO

How should the administration of USF be organised?

- i) USO should be administered by an independent agency to be decided By the Government.
- ii) TRAI should administer the USO Fund through a USO Board comprising of an independent and reputed firm of Chartered Accountants, representatives from the industry and Telecom Consultants who have the required professional expertise to undertake this task. Further, it would be preferable to have a real fund with actual inflows and outflows and not a settlement mechanism between service providers, as the latter could get easily derailed through disagreements / defaults / litigation.
- iii) By a strong Independent Regulator.
- iv) The administration of the USF would entail setting maximum reserve prices for subsidy bids, laying down conditions for achieving teledensity targets, and deciding on phased payments of subsidies etc.
- v) Setting up a separate body, reporting to TRAI, to administer the universal service fund will be the most appropriate. This body will operate under the guidance of TRAI. The routine functions of collection, assessment and disbursements should be with this body. The TRAI will issue guidelines and also monitor and review the functioning of this body.
- vi) Should be represented by all service providers who contribute to USF.

- vii) A. separate independent board reporting to TRAI with competence in finance and accounting. It should be capable of interpreting the decisions of TRAI / GOVT. Purely professional body with a specific function of collection and disbursement.

2. Who should monitor the achievement of teledensity target in rural areas and decide on the quantum of subsidy to be given from the USF?

- i) The licensor should monitor the achievement of tele-density target in rural areas and the USF administrator should decide the quantum of subsidy to be given from the USF.
- ii) TRAI should, with the assistance of the USO Board, have the responsibility to monitor the achievement of rural telephony and tele-density targets as laid down in NTP 99.
- iii) This monitoring should be done by the TRAI or if the Authority so decides, by another *independent* agency. It should not be made by the DOT/DTS. The quantum of subsidy would be determined by the minimum bid or reserve price as the case may be.
- iv) TRAI will continue to have the responsibility of ensuring effective compliance of the universal service objectives. TRAI will monitor the increase in VPTs and teledensities and advise Government on the progress along with changes required in the policy. The guidelines for implementing the USO and managing the USO fund will be issued by the TRAI, but TRAI should leave the routine functions of collection, assessment and disbursements to the separate body above.

3. Recognising that Universal Service is a dynamic concept and needs to be reviewed periodically for defining its scope, commensurate with development of communication technologies and information services, should a Universal Service Advisory Board, with experts from operators, financial institutions and consumer groups, be constituted, under the aegis of TRAI, for the purpose to undertake annual review of the services to be covered under Universal Service Obligation, proxy network model?

- i) A Universal Service Advisory Board with experts from operators, financial institutions and consumer groups be constituted under the aegis of the Administrator.

- ii) Universal Service Advisory Board with due representation from the industry / financial institutions, etc to oversee the working of the Fund, deployment of resources, monitoring of tele-density, etc. Rather than the services, it's the provision of the media in the local loop, the services will automatically evolve in a market driven economy because of will to exploit existing infrastructure
- iii) Such a Board can be constituted if the Authority is of the opinion that the Board would assist it in refining its estimates of universal service for purposes of the benchmark model and calculation of the minimum reserve price and in responding to the evolving nature of universal service. However, in such a situation, an annual review is likely to become an audit exercise, rather than a constructive advisory engagement.

4. Should the UAL be shown and charged separately in a customer's bill like service tax or be embedded in the cost and reflected in tariff?

- i) UAL can be shown separately in a customer bill. However, the type of customer in whose bill the UAL can be charged should be determined by the Administrator.
- ii) It would be preferable to show USO levy as a separate charge in a customer's bill issued by any service provider, including ISPs, as is being currently done for service tax. This would ensure clarity and transparency to the customer as otherwise, it will be passed on to the customers as a hidden cost in the form of higher tariffs. This transparent approach will also ensure the direct remittance of the UAL into the USO Fund without undergoing multiple transfers through the service provider, licensor, etc.
- iii) There is a merit in showing it in bill but there is a genuine fear that it would become an additional cost for the consumer. Incumbent has lost 2000 crore. If this becomes an additional levy, the subscriber would react initially. Therefore, carefully it has to be handled and the rates will have to be reduced along with the levy.
- iv) USO to be met from his own fund and not to be charged separately from consumer
- v) Less than 200 calls should not have the USO shown in the bill.

vii) It should be part of total bill

5. For USO funding, separation of accounts of various service products is essential. For clarity and transparency, should the accounting formats and procedures for unbundled services be standardised?

i) Yes. The requirements of accounting separation should immediately be rolled out for the incumbent operator and then to the other players also. TRAI should standardise clear and transparent accounting formats for the unbundled service.