

Name of Course : E1-E2 CFA

Chapter 9

Topic : Landline VAS

Date of Creation : 21.03.2011

Value Added Services Offered On Landline

Value-added services (VAS) are those services that offer differentiation or a value to the bearer service and the ability for telecom operators to charge a premium price. For a telecom operator's perspective VAS is very important as it is a revenue driver. All the telecom service users want to have many other services over and above the basic service. VAS plays a very important role when the telecom market moves towards saturation level. BSNL as a telecom service provider is providing following value added services over basic service:

1. ISDN (Integrated Services Digital Network)

ISDN is a powerful tool worldwide for provisioning of different services like voice, data and image transmission over the telephone line through the telephone network. An ISDN subscriber can establish two simultaneous independent calls (except when the terminal equipment is such that it occupies two 'B' channels for one call itself like in video conferencing etc.) on existing pair of wires of the telephone line (Basic rate ISDN) where as only one call is possible at present on the analog line /telephone connection. The two simultaneous calls in ISDN can be of any type like speech, data, image etc. ISDN also supports a whole new set of additional facilities, called Supplementary Services.

1.1 Services Offered by ISDN

- Normal Telephone & Fax (G3) and G4 Fax
- Digital Telephone -with a facility to identify the calling subscriber number and other facilities.
- Data Transmission at 64 Kbps with ISDN controller card
- Video Conferencing

1.2 Variety of Supplementary Services supported by ISDN

- Calling Line Identification Presentation(CLIP)
- Calling Line Identification Restriction(CLIR)
- Multiple Subscriber Number(MSN)
- Terminal Portability(TP)
- Call Hold(CH)
- Call Waiting(CW)
- User to User Signaling (UUSI)

1.3 Types of Accesses

There are two types of "accesses" (connections) for ISDN.

- Basic Rate Access (BRA): 2B+D

2 Channels of 64 Kbps for Speech and Data & 1 Channel of 16 Kbps for

Signaling

- Primary Rate Access (PRA): 30 B+D

30 Channels of 64 Kbps for speech and data & 1 Channel of 64 Kbps for

Signaling.

2. Internet Facility:

BSNL is providing Internet service throughout the entire country (except in New Delhi and Mumbai) under the brand name of "Sancharnet". Sancharnet provides free all India roaming and enables it's users to access their accounts, using the same access code (172233) and user ID from anywhere in the Country. In order to make Internet available throughout the length and breadth of the Country Internet Dhabas are being commissioned at all the Block Headquarters. BSNL provides the following types of connections to access Internet to customer:

2.1 PSTN dial-up access

BSNL internet service offers flexible options of access plans for PSTN dial-up in various slabs of 25,50,100, 200, 500 and 1,000 hours. With Sancharnet dialup account you get all India roaming advantage which is not available with any other ISP because you can access Sancharnet internet by dialing '172233' from any city in India. ISDN dial up access Subscribers can have blazing fast Internet surfing and download speeds in 64 and 128 Kbps ISDN dial up connections. The uniform all India access no. for ISDN access is '172225'.

2.2 Account free Internet dial up access based on CLI

CLI based internet service is a unique method providing Internet service in which the Customer can access the Internet service from any telephone through dial up. The service allows automatic registration on first LOGIN. The authentication will be based on CLI of the telephone with the password supplied by the caller. The charging is totally usage based and the service is a post paid service like normal PSTN. The billing will be separate based on the duration of use and will be charged to telephone bill (CLI based) as Internet access charge at the prescribed rate. The service is available in selected cities. The access no. of this service is '172222' in all cities.

2.3 BROADBAND connection

Broadband service is based on DSL technology (on the same copper cable that is used for connecting telephone). This provides high speed internet connectivity up to 8 Mbps. This is always - on internet access service with speed ranging from 256Kbps to 8 Mbps.

2.4 SANCHARNET CARD

BSNL has also launched "SANCHARNET CARD" recently. The Sancharnet Card" is a prepaid Internet Access Card with following features for customers:

Self-register for internet access with your choice of user-id

Renew your existing Sancharnet Account

Wide Range of Internet Access Packages

2.5 Webfone service

This is an internet telephony service through which a subscriber can make ISD calls over internet to any fixed or mobile phone or on PC in a foreign country at a very nominal rate.

3. Intelligent Network Services:

3.1 FLPP (Fixed Line Pre-Paid Telephone)

FLPP (Fixed Line Pre-Paid) Service enables a subscriber to make calls from a prepaid account linked to his telephone number. Unlike the prepaid card 'ITC' service, where the authentication is done every time through a 16-digit PIN the authentication of FLPP is linked to his telephone line & the user is not required to dial the Account number/ PIN for authentication making it simpler to use. Fixed Line Prepaid service offers:

- Conversion of fixed line to Pre Paid and get rid of telephone bills.
- Easy de-linking from telephone line when prepaid is not required on any number
- No need to dial Account number/ PIN every time you make a call.
- STD/ISD Facility
- On Line balance enquiry
- Follow on feature' on no reply, busy and called party release to dial another number for subscribers other than PCO.
- Easy recharge and no problem of bills
- Free Level 1 service like 100, 101, 102 etc. available.
- Free Level 1 IN services which are free to end-customers like Free Phone etc. are available.

There can be four types of FLPP accounts namely

- PCO FLPP Account,
- PCO Local FLPP Account,
- General FLPP Prepaid Account and
- General FLPP Prepaid + Post paid Account.

Presently this service has been started on PCO and on post paid numbers as General

FLPP+ Post paid account.

3.2 The other IN services offered are:

- Free Phone or Toll free number service
- Virtual Card Calling (ITC)
- Account Card Calling
- Premium Rate Service
- Tele-voting

- Universal Access Number
- Universal Personal Number
- Virtual Private Network
- Number Portability

4. Call Now Cards

It is a normal ITC card but specifically designed tariff to suit the requirement of users making heavy International/STD calls. Dialing procedure and features are same as that of ITC but the tariff is different from ITC and also different for different denomination of Call Now cards.

5. Personalised Ring Back Tone service

This service is just like the caller tune service in mobile phones. The landline subscribers can also set the ring back tone to be heard by the calling customer as per his choice. This service is under testing phase and will be available commercially very soon.

6. Multi Play

Multi play service allows the customer to have data, video and voice service on the same line. The video service can be IPTV (broadcast) and video on demand. Presently this service is started only in few cities like Pune, Bangalore, Kolkata etc.

7. Audio Conferencing

Audio Conferencing service allows multiple participants to converse with each other regardless of their location through the normal fixed line telephone or cellular phone. An audio conference subscriber can add two or more participants in a particular conference. The customers can schedule their audio conferences through the Web or through IVR. The service is available to existing BSNL subscribers only. Conference can be scheduled one time or standing. A standing conference is always on. The authorized participants have just to dial in a particular telephone number followed by a password to enter into a conference. On demand conference can be made. The chairperson can invite several users one by one in the conference without using the web. He/she has to just dial a number followed by certain number and the called party number for doing a conference call.

8. Video Conferencing

Video Conferencing service allows multiple participants to converse with each other regardless of their location through the video end-points or Personal computers. It involves Video and Audio communication. A video conference subscriber can add two or more video participants in a particular conference. The customers can schedule their video conferences through the Web. The video conferencing service can be availed by any user through IP or ISDN interface. The service is available to existing BSNL subscribers only. Personal computer user can download the software called "PVX" from BSNL's Video Conferencing Portal to avail the Video Conferencing facility with their web-cam.

9. Short Message Service

SMS can be send and received through landline telephones. For this the subscriber will have to purchase a SMS enabled handset.

10. Online Billing Enquiry and payment

Online billing enquiry and payment service is made available by BSNL for many cities where one can see the status of telephone bills as well as pay the bills online.

11. ECS (Electronic Clearance Scheme)

This service is a recognized service by RBI through which a subscriber can pay his telephone bills through their bank accounts. The willing customers have to get registered for this service.

12. Centrex Service

Centrex is a communication service which integrates a subscriber's all multi located Telephone lines (Existing and New) into a single highly functional communication group with more distinctive features without any additional equipment (like EPABX) at the subscriber's premises. A subscriber having two or more telephone connections can avail this service in which a Centrex group will be formed. All the calls made between the numbers of the group will be made by using a short code and will not be charged. But all the calls made outside the group will be charged at the normal applicable tariff. In a way Centrex facility is like having a PBX like facility between the numbers which are geographically distant away in a city without owning a PBX and maintaining it.

13. Answering Machine Service

On the landline numbers answering machine service can be provided by the centralized equipment installed at the exchange. The subscriber can divert his/her calls to answering machine in case of no reply or busy to record some messages and later on he/she can take the messages from the answering machine.

14. 12555 Service

On landline numbers by dialing 12555 the subscribers can have many types of services like:

- Latest Bollywood songs
- Old classic songs
- Jokes
- Horoscope
- International/National news
- Cricket news
- Different contests
- Finance/stocks related news
- Travel information etc
- Different services can be added /deleted from time to time as per the agreement with the third party content provider.

15. Other Supplementary services (Phone plus services)

15.1 Abbreviated Dialing

You may be calling a few people very frequently. It is possible to program these numbers as abbreviated codes of 1 or 2 digits. A maximum of 20 numbers can be programmed for abbreviated dialing. It is ideal for STD/ ISD. For registration Dial 110+short code (say15) +destination number (with STD code).For use Dial 111+short code i.e. 11115

15.2 Call Waiting

This facility lets you receive incoming calls even when your telephone is busy. You will get a short duration pip-pip tone when you are busy talking indicating that another call is waiting for you, provided you have activated this facility. You can talk to any one of the callers keeping the other waiting. Complete secrecy of communication between the two callers is maintained.

- For activation of the service dial: 118 (wait for the tone)
- For deactivation of the service dial: 119 (wait for the tone)

15.3 Hot Line

You may want to be connected directly to a pre-determined number as soon as you lift the hand set even without dialing. At the same time you may want to have the flexibility to dial any other number of your choice. It is possible to have this facility in the digital exchanges by the delayed hotline feature. The number of your choice can be programmed by the exchange staff at your request. After doing so if you lift the telephone and do not dial within 5 seconds you will be automatically connected to the programmed number. However if you start dialing within 5 seconds, you can make an outgoing call as usual.

15.4 Call Transfer (Call Forward)

Useful for very mobile persons who may not want to miss incoming calls. Using this facility Calls can be forwarded to another telephone number designated by you. For activation Dial 114 and the number for which the call is to be transferred. For deactivation dial 115 and wait for acceptance tone.

15.5 Automatic Wake-Up/Reminder Call Service

When you want to be given reminder at a specific time, all you have to do is to call the exchange and leave the time you want to be reminded. The facility allows you to initiate a call automatically by the exchange at a fixed time specified by the user of the telephone. Dial 116 followed by the time you wish to be reminded or woken-up say at 06.15am (06.15hrs), you will dial 1160615. Dial 117 (the cancellation code) followed by the time you booked the call.

15.6 Number/Call Hunting Service

If you have more than one telephone line, this facility is very helpful for your caller. If the called line is engaged, your caller does not have to disconnect and dial other line(s). This facility automatically transfers the incoming call to whichever line is free.

15.7 Calling Line Identification Presentation (CLIP)

The subscriber has to buy separately the CLIP display device from market. Using this facility you can see the number of the calling party before lifting your telephone. Very useful to trace malicious caller. However, the CLIP instrument shall be procured and installed by the users themselves.

15.8 Calling Line Identification (CLI)

Announcement Service: Dial 164 and listen to the number of the phone line that you have used to make the call. Very useful when in doubt about your phone number.

15.9 Electronic Locking For STD/ISD (Dynamic Locking Facility)

For 100% protection against improper use, you can lock your telephone electronically. Here, you only know the secret code. You can lock/allow Local, STD or ISD calls in many way viz. all calls allowed, only local calls allowed, only STD & Local calls allowed, all outgoing calls barred etc.

To Register Secret Code Dial 123 0000 ABCD then wait for the acceptance tone. (ABCD is the secret code chosen by the subscriber)

- dial 124 ABCD 1 STD/ISD will be barred
- dial 124 ABCD 0 STD and ISD will be opened
- dial 124 ABCD 3 STD will be opened, ISD barred
- dial 124 ABCD 4 STD/ISD and local will be barred
- dial 124 ABCD 2 STD/ISD /Trunk call/95 will be barred

15.10 Call Conferencing

With this service telephonic conference can be set up within 3 or more parties. This service is available subject to technical feasibility.

15.11 Review Questions on VAS (LL)

1. Name few VAS based on landline.
2. Name few IN services based on Landline.
3. What are the types of ISDN connections?
4. What is the capacity of D-chl of PRI?
5. Name few Phone Plus services.
6. Name few services offered by FLPP.

XXXX