

## **Chapter 4**

# **Data Cards for GSM, CDMA & 3G**

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### **Introduction**

BSNL is India's no. 1 Internet service provider with more than 17 lakh subscribers, 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 any where in the Country. In order to make Internet available through out the length and breadth of the Country Internet Dhabas are being commissioned at all the Block Headquarters.

BSNL is also providing Internet on mobile via various mobile technologies like GPRS, EDGE ,CDMA 2000 1X , EVDO , 3G and HSDPA.

### **1. Data services through CDMA**

BSNL has launched its Data Services on CDMA 2000 1X by using BSNL Internet Connect Card (ICC). The CDMA 1X ICC provides Internet Service @144kbps to computer users on their laptops as well as on desktops. This service will be available in all those locations wherever CDMA 1X MSC based coverage is there.

All other service providers ask subscriber to purchase the data card and subscriber do not have any alternatives if he wishes to discontinue. There is no way subscriber can return the data card to get his money. But for BSNL subscriber can give the data card back after the minimum rental period and you will get the security deposit back.

#### **1.1 NIC and EVDO Cards.**

The following two types of data Cards will be available for BSNL customers:

(A) Network Interface Card (NIC) : For internet speed up to 144 Kbps.

(B) EVDO Card : Internet speed up to 2.4 Mbps

Now, BSNL is also offering roaming facility on these cards. The charges of unlimited internet usage through these NIC and EVDO Cards are as under :

<b>S. No.</b>	<b>Particulars</b>	<b>Tariff of NIC Card (Unlimited) in Rs.</b>	<b>Tariff of EVDO Card (Unlimited) in Rs.</b>
1.	Activation charges	250	500

2.	<b>Charges for Cards</b>	
	i Sale Price of ICC Card in Rs.*	2000^      2500
	<b>ii Alternate to purchase of ICC :</b>	
	ii (a) Fixed monthly charges for card	150      200
	ii (b) Security Deposit (refundable)	1000      1000

BSNL is providing NIC and EVDO cards on rent basis and also through permanent sale basis. However the facility to convert rent based plan to sale of card is also available and discount is also allowed for the transaction.

Discount Structure for conversion from Rent Based Plan to Sale of NIC/EVDO Data Card

Months (for which rent is paid)	Discount Allowed on sale price	
	NIC	EVDO
1 to 3 Months	NIL	NIL
4 to 6 Months	20%	20%
7 to 12 Months	40%	40%
13 Months and above	50%	60%

## 1.2 Cutting Edge Technology

The BSNL data card is Huawei - EC 321 which is the latest one and support ROMSIM / R-UIM card. It is CDMA2000 1X RTT, compatible with IS-95 A/B. It support Voice and SMS, Incoming Calling Display, ring prompt, call receiving while data service online (for this function Call Waiting service must be activated) and it has a large-capacity phone book

## 2 Few Important facts about BSNL data cards

- The BSNL data card support voice and text messages. With the handsfree / mic that come with the data card, we can make / receive calls. Also we can send / receive sms.
- The BSNL data card software has a phonebook which has large capacity and very useful.
- BSNL data card is meant for usage in laptop only. Theoretically, the PCI-To-PCMCIA adapter should work for PC but there is no guarantee. Neither Huawei (data card manufacturer) nor BSNL recommend the data card to be used in PC. It is better not to try the BSNL data card in PC.
- Maximum (actual speed) will be nearly 120 kbps.

- The speed is mainly depend on the distance from the BSNL CDMA tower. If you are near the tower you may get speed of 120 kbps, if you are away from the tower it will go down to 80 or 60 kbps.

### 3 3G Data Cards

With the launching of 3G / HSDPA services by BSNL, the facility of fast internet on mobile / laptop can be availed by using these technologies. Like CDMA 2000 1X and EVDO the internet connectivity through 3G / HSDPA is possible by using USB and PCMCIA based 3G data cards.

3G Data cards are meant for accessing internet and emails at anytime and from anywhere. Thus 3G Data Cards help us to work on the move with full email and web access .It provides Simple and instant internet access at mega fast speeds up to 3.6 Mbps. 3G data cards make us free from messy wires, Fixed Line Requirement, No Need of Cyber Cafe / Hot Spot to Access Internet. Thus your Lap top become truly mobile.

You have to Plug in 3G Data Card into your laptop and can get the fastest available connection. Its neat, compact design makes it easy to use; you can easily swap it between laptops for use at work, home or on the move. Laptops have a PC Card slot (also known as a PCMCIA slot), or an Express Card slot. There is PCMCIA to Express Card Converter For using 3G broadband, you need 3G Data card, network SIM card, software, user guide.

BSNL is providing USB type 3G data card of M/s. TERACOM LTD make and PCMCIA type 3G data card of M/s. Capitel Wireless Pvt. Ltd make.

The details of USB and PCMCIA 3G data cards are given below:-

S. No	Vendor (Type)	Make/ Model	Data Speed	Frequency Band	MRP (Rs.) (Incl. of all taxes) (Maha.& M.P.)	MRP (Rs.) (Incl. of all taxes) (Other Circles)
1	Teracom Ltd. (USB Type)	Linktop / LW272	3.6 MBPS	Single Band	2200	2000
2		Linktop / LW273	7.2 MBPS	Tri Band	2600	2500
3	Capitel Wireless Pvt. Ltd (PCMCIA Type)	Option / GTMAX having Qualcom chipset 7200 Globe Trotter HSUPA	3.6 MBPS	Single Band	4000	4000
4			7.2 MBPS	Tri Band	4500	4500

BSNL 3G data services are available in both post paid and pre-paid schemes.

### 3.1 3G Postpaid and Prepaid Data Service

**Activation of Data Plans:** SIM and Activation charges as applicable to 3G Postpaid & Prepaid voice plan will also be applicable for 3G data services.

(i) In place of existing FRC 120 for activation of 3G data plan, the following new FRCs for activation of data plan are introduced.

Particulars	FRC 51
MRP of FRC (Incl. of S.Tax)	Rs.51
Free usage value in Rs.	Nil
Validity	180 days
Free Data usage	1 GB per Month for 2 months
Availability	Through C-Topup
Applicability	Any data plan with sale of BSNL data card or any of the BSNL bundled data card
Base Voice Tariff plan	As per prepaid General 120 plan

- In case of postpaid connections, the customer will be allowed 1GB/Month for two months or 500MB/Month for 3 months from the date of activation depending upon the data card purchased by customer.
- The customer buying data card from open market will have to use FRC 120 for activation of data plan and use any of the data RCV for usage.
- The above free data usage will be allowed at the time of activation only.

### 3.2 3G Postpaid Data Plans & Prepaid Data Recharge Vouchers

#### a) 3G Postpaid Data Plans

Fixed Monthly Charge in Rs.(Service Tax Extra)	Day/Any time usage in GB	Night * usage in GB	Total bundled free Usage in GB	Data Charges in Rs./10 KB**** (except APN 'bsnlstream')	Data Charges in Rs./MB*** (For APN bsnlstream)
249	0.50	--	0.50	0.02	0.25
399	1	--	1	0.02	0.25
549	1	5	6	0.02	0.25
649	2	--	2	0.02	0.25
999	10	--	10	0.02	0.25
1359	15		15	0.02	0.25
2720	35		35	0.02	0.25

**b) 3G Prepaid Data Plans**

Data RCV in Rs.(Inclusive Service Tax)	Day/Any time usage in GB	Night * usage in GB	Total bundled free Usage in GB	Validity (days)**	Data Charges in Rs./10KB*** (except APN 'bsnlstream')	Data Charges in Rs./MB*** (For APN bsnlstream)
275	0.50	--	0.50	30	0.02	0.25
440	1	--	1	30	0.02	0.25
606	1	5	6	30	0.02	0.25
716	2	--	2	30	0.02	0.25
1102	10	--	10	30	0.02	0.25
1500	15		15	30	0.02	0.25
3000	35		35	30	0.02	0.25

\*11.00 PM to 07.00 AM

\*\* This will increase the validity of main and dedicated accounts both.

\*\*\* Data charges beyond free usage shall be deducted from the available balance in his main account. Free data usage is available both from home LSA and while roaming.

**3.3 Short term validity data recharge vouchers for 3G prepaid services**

MRP of RCV in Rs. (Incl. of Service Tax)	Service Tax in Rs.	Cost of RCV in Rs.	Free data usage in MB	Validity in days
10	0.93	9.07	20	1
25	2.33	22.67	50	3
50	4.67	45.33	100	7

**3.4 3G Data Top-up Voucher**

Type of Voucher	MRP (Incl. of S. Tax)	Free Usage in MB	Validity
3G Data Top-up	Rs.197	500 MB	Nil

**3.5 3G Combo Data Plan****FMC/RCV for 3G Combo Data plan**

Fixed Monthly Charges in Rs. (Postpaid)	RCV Amount in Rs. (Incl. of S. Tax) (Prepaid)	Free 3G Data Usage in MB	Total (Local+ National) Min	Total SMS	Local Video call in Min

300	331	300	300	300	30
500	551	500	1000	500	50
1000	1103	1024	2000	1000	100
2000	2206	3072	5000	2000	200

For more details visit BSNL web site.

### 3.6 Trial Pack :( Inclusive of Service Tax)

1	MRP of Trial pack in Rs. (Incl. of S. Tax)	<b>Rs.121</b>
2	Free usage in MB	300 MB
3	Validity in days*	15 days

Data charges for trial pack customers after use of 125MB / 300MB or 15 days expiry shall be as per his base plan.

\*This will increase the validity of Main and dedicated accounts both.

### Some Important Terms

GSM	Global System For Mobile Communication.
GPRS	General Packet Radio Service.
EDGE	Enhance Data Rate for GSM Evolution.
UMTS	Universal Mobile Telecommunications System.
CDMA	Code Division Multiple Access.
EVDO	Evolution for Data Only.
HSDPA	High Speed Downlink Packet Access.
NIC	Network Interface Card.
PCMCIA	Personal Computer Memory Card International Association.
FRC	First Recharge Coupon.
RCV	Recharge Coupon Voucher.
APN	Access Point Name.

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