

Wireless Broadband in Nepal Telecom

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Wireless Broadband

- Mobile phone:
 - fast becoming the dominant technology for voice communications
- Mobile phone:
 - becoming less & less of a narrowband device as it evolves through 2G to 2.5G to 2.75G to 3G
- The 3G device function :
 - as a phone, a computer, a television,a pager, a videoconferencing center, a newspaper, a diary and even a credit card...

Why Mobile Broadband

- Around 60% of world's broadband delivered over telephone networks and only 40% over cable
- Mobile networks:
 - cheaper & easier to install
 - overtaken fixed networks in many countries & represent the maximum growth opportunity
- Everywhere coverage
- Full Mobility
- High Data speed

Why Mobile Broadband (Contd..)

- Broadband access for laptop users
- Powered by EDGE/WCDMA/CDMA2000 networks
- Global availability:Roaming gives broadband freedom across the borders

Nepal Telecom GSM

- **1999:**
 - GSM voice service launched with 10 K subscriber
- **2001:**
 - International Roaming service started
- **2003:**
 - Prepaid service launched

Nepal Telecom GSM (Contd..)

- **2007**
 - GPRS service launched
- **2010**
 - 3G WCDMA service launched

Nepal Telecom GSM (Contd..)

- Types of GSM services
 - Post paid
 - Namaste Pre paid
 - 3G Data card

GSM Data Service

- GSM Data Service:
 - GPRS
 - offers 56-114 kbps
 - Services on GPRS
 - Internet browsing, email on move
 - 3G WCDMA
 - offers 384 kbps downlink, 64 kbps uplink
 - Services on WCDMA:
 - video call
 - video on demand
 - Live TV capture and video streaming
 - High speed data connection including internet and email
 - High Speed Downlink Packet Access(HSDPA)

Nepal Telecom CDMA

- 2005
 - CDMA 2000 1x Technology Soft launched
- 2006
 - CDMA launched with limited mobility service
- 2007
 - CDMA launched with full mobility service
- 2010
 - EVDO (Evolutionary Data Optimized) launched

Nepal Telecom CDMA (Contd..)

- Types of CDMA services:
 - C-phone Post Paid
 - C-phone Pre paid
 - SKY phone prepaid- Mobile service
 - SKY Data Prepaid- only Data service
 - EVDO Data service

CDMA Data Service

- CDMA Data Service:
 - SKY DATA
 - High speed internet connection via PDSN (Packet data service switching network)
 - max data rate 153.6 kbps
 - EVDO (CDMA2000 1XEVDO)
 - EVDO features of CDMA2000 NETWORKS provide access mobile device with downlink speed 2.4 Mbps and uplink 153 kbps with Rel 0
 - downlink and uplink speed in Rel A 3.1 Mbps and 1.8 Mbps respectively

GSM and CDMA Subscribers Trend in NT

Technology	Customer 062/63	Customer 063/64	Customer 064/65	Customer 065/66	Customer 066/67	Customer 067/68
GSM	6,22,737	9,09,483	17,17,230	30,09,962	39,60,293	51,29,446
CDMA	23,579	1,61,155	4,80,016	7,21,318	9,20,257	10,14,963

Ongoing Projects

- Nepal Telecom already floated tender for 10M GSM/UMTS lines project to expand capacity of 2G and 3G subscriber all over Nepal
- Nepal Telecom is planning to bring following new technologies in GSM:
 - EDGE
 - LTE
 - Femto
 - HSPA

Ongoing Projects (Contd.)

- Nepal Telecom already in the process of deploying IP-based CDMA of capacity total 2 million subscribers
- Will serve subscribers all over Nepal
- Will have EVDO Rev.A supporting up to 3.1 Mbps for all major urban areas, tourist destinations and other areas of the country

Ongoing Projects (Contd.)

- WiMAX also being deployed
- Total capacity 2 lakh subscribers
- Will cover all VDCs of Nepal and major urban areas
- Mixture of 802.16d and 802.16e technologies
- Major urban areas will have mobile WiMAX and all VDCs will have 16d

Thank You