

Nepal Experience on Broadband Future

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Country Profile: Nepal

- ▶ Capital: Kathmandu
- ▶ Area: 1,47,181 Sq. Km.
- ▶ Population: 2,64,95,504
- ▶ Urban Population: 8.8%
- ▶ Rural Population: 91.2%
- ▶ Currency: Nepalese Rupee



Status of Nepal

Voice Subscriber

Services Operators	Fixed		Mobile		Others		Total
	PSTN	WLL	GSM	CDMA	LMS	GMPCS	
NDCL	6,65,366	123,000	1,07,80,654	1,257,770	-	-	12,826,790
UTL	-	49,812	-	-	474,655	-	5,24,467
NCell	-	-	12,727,071	-	-	-	12,727,071
STM*	**2,832	-	-	-	155	-	2,987
NSTPL		2,984	-	-	3,34,218	-	3,37,202
STPL	**598	-	13,12,545	-	-	-	13,13,143
Others	-	-	-	-	-	1,742	1,742
Total	668,796	175,796	24,820,270	1,257,770	8,09,028	1,742	27,733,402
	844,592		26,078,040		8,10,770		
Services					Subscription (%)		
Fixed					3.19		
Mobile					98.43		
Others (LMS, GMPCS)					3.06		
Total					104.68		

Population of Nepal 26,494,504 (Source: cbs.gov.np)

Status of Nepal

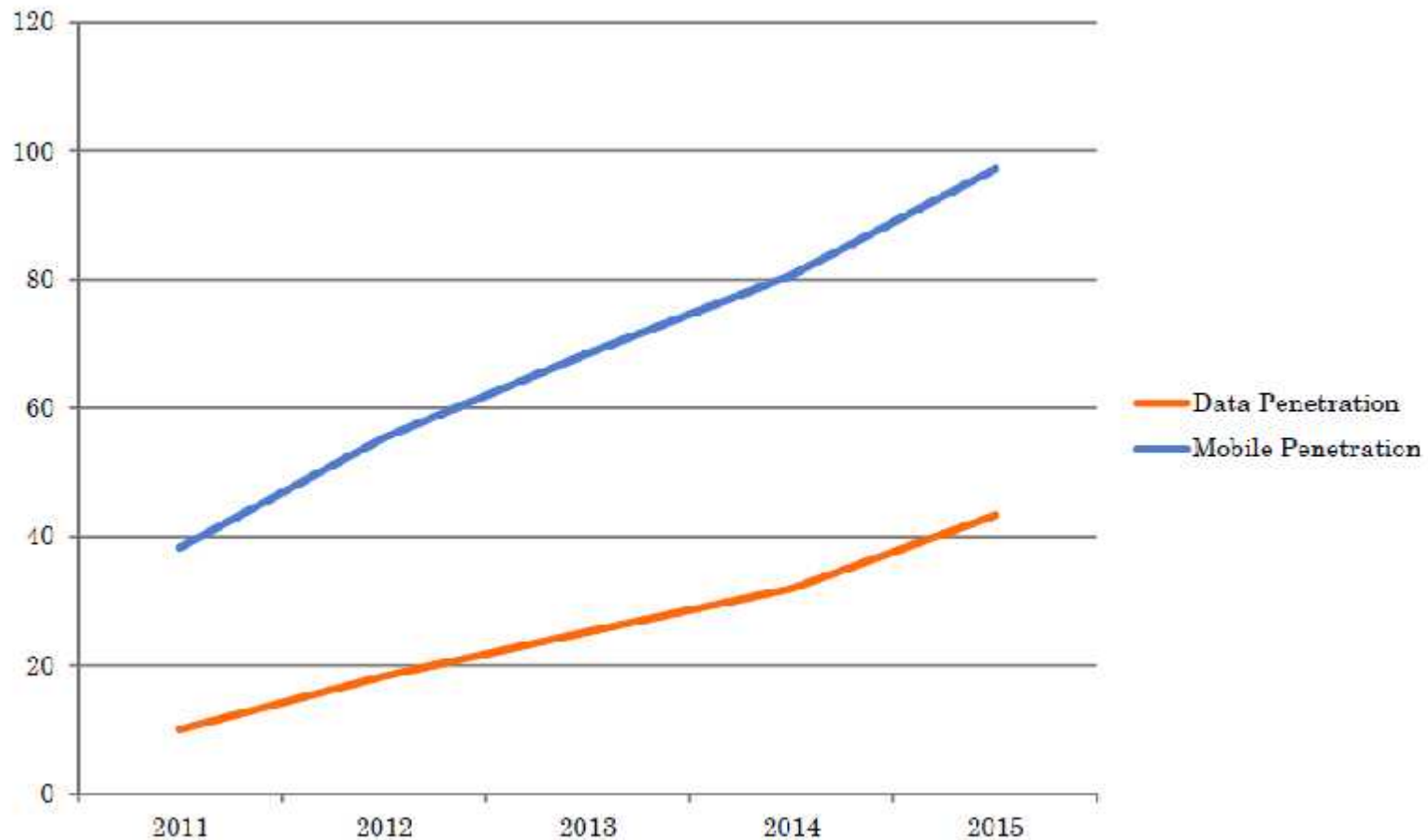
(Internet Data user)

Services	Subscribers						Total
	NDCL	UTL	NCell	STPL	STM	ISPs	
Dialup (PSTN +ISDN)	4,597	-	-	-	-	5,759	10,356
Wireless Modem	-	-	-	-	-	47379	47,379
Optical Fibre Ethernet	-	-	-	-	-	67,058	67,058
Cable Modem	-	-	-	-	-	-	1,32,768
ADSL	1,32,768	-	-	-	-	-	1,09,70,429
GPRS,EDGE,WCDMA	61,19,133	-	4,761,439	89,857	-	-	1,98,430
CDMA 1X, EVDO	136,573	61,857	-	-	-	-	12,816
WiMAX	12,816	-	-	-	-	-	13
VSAT based Internet	-	-	-	-	13	-	13
Total	6,405,887	61,857	4,761,439	89,857	13	120,196	1,14,39,249
Internet Penetration (%)							43.17

Growth Trend of Mobile Voice and Data Services

Year	Data Penetration (%)	Mobile Penetration (%)
2011	10.03	38.31
2012	18.28	55.40
2013	25.23	68.45
2014	31.88	80.62
2015	43.36	97.18

Growth Trend of Mobile Voice and Data Services



Broad Band Initiatives

- ▶ Government of Nepal National Broadband Policy 2015.
- ▶ Spectrum Policy is reframed in 2012 to obtain Wireless Broadband through 3G and IMT Advance technology.
- ▶ Consultation on utilization of Satellite Orbital Slot which is assigned by ITU (50E and 123.3 E)



Targets of Broadband Policy

- Broadband Internet user penetration rate of 30% at a minimum of 512kbps and making available at least 10 Mbps download speed on demand in urban areas by 2018.
 - ▶ 45% of households will have broadband Internet coverage by 2018.
- Broadband connection will be expanded to 70% of the Village Development Committees by 2018.
- IMT advanced technologies will be assigned wireless broadband technologies and services by 2018.



Targets of Broadband Policy

- ▶ 20% of public secondary schools will have at least 1Mbps broadband by 2018.
- ▶ All government hospitals and at least 15% of health posts will have a broadband connection by 2018.
- ▶ All government agencies up to the district level will have a broadband connection, an informative web site, responsive email access and will offer basic citizen facing on-line services by 2018.



Rural Services

- ▶ The reach of broadband network and services will be expanded to rural and remote areas through effective mobilization of Rural Telecommunications Development Fund (RTDF).
- ▶ Competitive supply of services beyond district headquarters and urban centers will be encouraged through a modicum of fiscal, policy and regulatory incentive schemes on RTDF related subsidy arrangements.
- ▶ Periodic surveys will be conducted to identify areas that are likely to remain unserved.
- ▶ A wireless broadband master plan will be developed as a basis for commercial development and also for application for subsidies from Rural Telecommunication Development Fund.
- ▶ Nepal Telecommunications Authority (NTA) started to develop business model for Rural Area with Possible Technology.



Challenges



INTERNATIONAL BANDWIDTH USAGE IN NEPAL – USING OPTICAL FIBER CABLE

S.N.	Category	Capacity in STM1	RMC(US\$)/Mbps in Average
1	Voice Operators	137 (21,235 Mbps)	36
2	Network Service Providers (Data)	77 (11,935 Mbps)	44
	Total :	214 (33,170 Mbps)	

INTERNATIONAL BANDWIDTH USAGE IN NEPAL – USING SATELLITE

S.N.	Category	Capacity in MHz	RMC (in US \$) Per MHz in Average
1	Voice Operators	30	3,000
2	Network Service Provider	3	2,900
	Total :	33	

SOME OPPORTUNITIES

- ▶ SASEC Information Superhighway Project
- ▶ United Nation Economic and Social Commission for Asia and Pacific (UNESCAP) study on Problems and Challenges in Transit Connectivity Routes and International Gateways in Asia



Thank You!!