

I Year

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Nepal Telecommunications Authority



Quarterly Performance Indicator of Telecom Services/Sector

(Magh 2064 - Chaitra 2064)
(15 January 2008 – 12 April 2008)

Bhadra 2065 (August 2008)

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Table of Contents

S. No.		Page No.
	Table of Contents	2
	Preface	3
1.	Functions and Duties of the Authority	4
2.	Telecom Statistics at a glance	4
3.	Comparison between adjacent quarters	5
4.	Basic Core ICT Indicators	6
5.	Performance of Service Providers	7
	5.1 Performance of Fixed service	7
	5.2 Performance of Cellular Mobile service	9
	5.3 Performance of Rural Telecom service	10
	5.4 Performance of Internet service	11
	5.5 Performance of GMPCS service	13
6.	Telecom Network of the Country	14
7.	Committee Members	14
Annexes		
	A. Details of performance of Internet Service Providers	15
	B. Details of performance of Internet Service Providers	16
	C. Details of performance of Internet Service Providers	17
	D. Details of performance of GMPCS service Providers	18
	E. Details of performance of Cellular Mobile service Providers	19
	F. Details of performance of Fixed service Providers	20
	G. Details of performance of Rural Telecom service Providers	22
	H. Details of performance of VSAT NSP	24

Preface

This quarter also marked a steady growth following the trend of previous quarter. The penetration rate for Fixed, Mobile and Internet have reached 3.00, 11.11 and 0.30 with 8,05,061, 29,96,297 and 79,503 number of subscribers respectively. The projected population for this year available from Central Bureau of Statistics is 2,69,66,581. This has also altered the actual penetration rate in comparison to last year as the new population projection is used in this quarter every year. The overall telephone penetration rate is nearing 15% and the subscriber base has crossed 3.5 million mark, which is still quite low even in comparison to the neighboring South Asian countries.

There seems to be a significant amount of investment in telecommunication sector but the real amount can not be calculated due to the unavailability of data from all the operators. The direct employment generated from this sector currently stands at 7024 and indirect employment is expected to outnumber direct employment. Hence the direct contribution of telecommunication sector in the national economy is much higher and the efficiency brought about by the use of telecommunication facilities can not be measured in terms of monetary value. Hence, it is really important to work more seriously to help this sector grow rapidly and contribute in the making of new Nepal by attracting more foreign investment and encouraging the existing operators to reach every parts of the country.

This Quarterly Performance Indicator of Telecom Sector/Services is published every three months and is available in the website http://www.nta.gov.np/Quarterly_Performance_of_Telecom_Operators.html. It is to be noted that all the analysis presented in this report is based on the data provided by the operators themselves and no survey or cross check being carried out by NTA.

Please feel free to send any comments, suggestions, modifications, improvements, additions etc. addressed to MIS committee, NTA. Tel: +977-1-4101030-38 Fax: +977-1-4101034 Email: mis@nta.gov.np; info@nta.gov.np; ntra@nta.gov.np P.O. Box No. 9754 Bluestar Office Complex, Tripureshwor, Kathmandu, Nepal.

1. Functions and Duties of the Authority:

As per the section 13 of the Telecommunications Act 2053 B.S. (1997 A.D.) the functions and duties of the Authority are as follows:

- (a) To provide suggestions to Government of Nepal on the policy, plan and program to be adopted by Government of Nepal for the development of the Telecommunications Service.
- (b) To make the Telecommunications Service reliable and easily available to the public.
- (c) To make necessary arrangement to avail basic Telecommunications Service and facilities in all rural and urban areas throughout Nepal.
- (d) To involve the national and foreign private sector investors in the operation of the Telecommunications Service.
- (e) To make arrangement for the coordination and healthy competition among the persons providing Telecommunications Service and facilities, so as to provide such service and facilities to all public in general.
- (f) To prescribe, fix and approve the standard and quality standard of the plant and equipment relating to the Telecommunications and the Telecommunications Service.
- (g) To regularize and systematize Telecommunications Service
- (h) To grant License to operate the Telecommunications service.
- (i) To approve and regularize the fees to be collected by a person having obtained License for providing the Telecommunications Service.
- (j) To perform the functions relating to the frequency in accordance with the policy determined by the Radio Frequency Policy Determination Committee.
- (k) To carry out or cause to carry out the research about the development and use of new technology in the field of Telecommunications.
- (l) To cause to develop the skilled manpower for the Telecommunications Sector.
- (m) To develop and extend or cause to develop and extended the Telecommunications Service in such a way that it protects the rights and interests of the consumers.
- (n) To develop or cause to develops Nepal as an International Transit for Telecommunications.
- (o) To carry out necessary and appropriate functions for the development and promotion of the Telecommunications Service.

2. Telecom Statistics at a glance (as of 12 April, 2008): (Details in Annex)

2.1. Subscriber base:

Service	Subscribers
Fixed line telephone (PSTN+VSAT+MARTS+VHF)	5,29,564
Mobile Telephone (NDCL + SNPL)	17,51,715 + 12,44,582 = 29,96,297
Post-paid mobile (NDCL + SNPL)	1,06,546 + 7,196 = 1,13,742
Pre-paid mobile (NDCL + SNPL) including GSM, CDMA and WCDMA	16,45,169 + 12,37,386 = 28,82,555
Wireless in Local Loop (NDCL + UTL)	164696 + 1,10,801 = 2,75,497 (including Limited Mobility)
Limited Mobility (UTL only)	50,579

Internet (with E-mail)	79,503
GMPCS (Constellation + AVCO + I4 Tech.)	1076 + 280 + 96 = 1,452
VSAT user	96

NDCL: Nepal Doorsanchar Company Limited; SNPL: Spice Nepal Private Limited, UTL: United Telecom Limited

2.2. Average Revenue Per User (ARPU):

Service	ARPU / Month (in Rs.)
Fixed Telephone (Wireline + WLL + Limited Mobility)	855.69
Cellular Service (Prepaid + Postpaid)	374.12
Internet	2136.12
GMPCS	6344.62
Rural Telecom Service	1200.88 (STM only) per PCO

2.3. Service Penetration (1 in 100 population):

Service	Penetration Rate (in %) *
Fixed + Mobile	14.11
Fixed Telephone	3.00
Mobile Service	11.11
Internet (subscribers only)	0.30

* Population is expected to be 2,69,66,581 (source: Central Bureau of Statistics, www.cbs.gov.np)

3. Comparison between adjacent quarters

	QE Ashwin '64 (Oct '07)	QE Poush '64 (Jan '08)	QE Chaitra '64 (Apr '08)	% change over Asadh '64 (July '07) (6 months)	% change over Ashwin '64 (Oct '07) (3 months)
1) Subscriber's Base					
i) Fixed Line (including WiLL, Limited Mobility)	7,66,425	7,88,989	8,05,061	5.04%	2.04%
ii) Mobile (GSM+CDMA+WCDMA)	19,10,834	25,00,124	29,96,297	56.81%	19.85%
iii) Internet	67,419	75,004	79,503	17.92%	6.00%
2) Average Revenue Per User (ARPU)					
i) Fixed Line	963.51	854.74	855.69		
ii) Mobile (GSM+CDMA+WCDMA)	350.15	346.62	374.12		
iii) Internet	3423.66	1979.98	2136.12		
3) Teledensity					
i) Fixed Line	2.90	2.99	3.00	3.45%	0.33%
ii) Mobile (GSM+CDMA+WCDMA)	7.23	9.46	11.11	53.67%	17.44%
iii) Internet	0.26	0.28	0.30	15.39%	7.14%
Total (Fixed + Mobile)	10.13	12.45	14.11	39.29%	13.33%

QE - Quarter Ending

4. Basic Core ICT Indicators

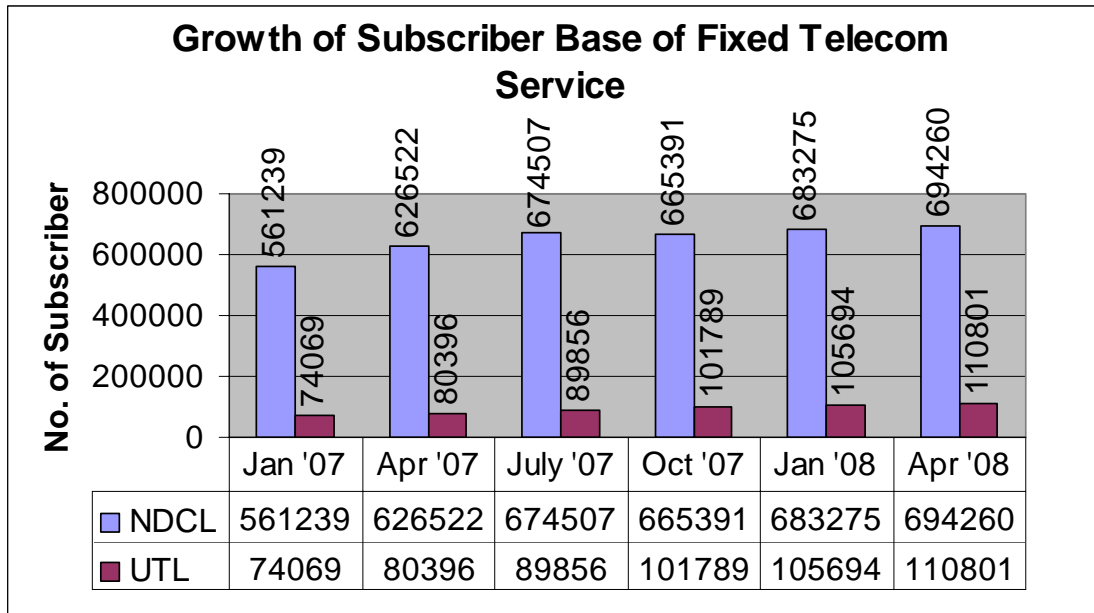
Core Indicators	Definition	
Fixed Telephone lines per 100 inhabitants	<i>Fixed telephone lines</i> refer to telephone lines connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the public switched telephone network (PSTN) and which have a dedicated port on a telephone exchange. <i>Fixed telephone lines per 100 inhabitants</i> is obtained by dividing the number of fixed telephone lines by the population and multiplying by 100.	3.00
Mobile Cellular Subscribers per 100 inhabitants	<i>Mobile cellular subscribers</i> refer to users of portable telephones subscribing to an automatic public mobile telephone service using cellular technology, which provides access to the PSTN. Users of both post-paid subscriptions and pre-paid accounts are included. <i>Mobile cellular subscribers per 100 inhabitants</i> is obtained by dividing the number of mobile cellular subscribers by the population and multiplying by 100.	11.11
Computers per 100 inhabitants	<i>Computers</i> measures the number of computers installed in a country. The statistic includes PCs, laptops, notebooks etc, but excludes terminals connected to mainframe and mini-computers that are primarily intended for shared use, and devices such as smart-phones and personal digital assistants (PDAs) that have only some, but not all, of the components of a PC (e.g. they may lack a full-sized keyboard, a large screen, an Internet connection, drives etc.). <i>Computers per 100 inhabitants</i> is obtained by dividing the estimated number computers in use by the population and multiplying by 100.	Not Available
Internet subscribers per 100 inhabitants	An <i>Internet subscriber</i> is someone who pays for access to the public internet (a TCP/IP connection). The statistic is measured irrespective of the type or speed of access, the type of device used to access the Internet, or the method of payment. <i>Internet subscribers per 100 inhabitants</i> is obtained by dividing the number of Internet subscribers by the population and multiplying by 100.	
Broadband Internet subscribers per 100 inhabitants	A <i>Broadband Internet subscriber</i> is someone who pays for high-speed access to the public Internet (a TCP/IP connection). High speed access is defined as being equal to or greater than 256 kbit/s, as the sum of the capacity in both directions. The statistic is measured irrespective of the type of access, or the type of device used to access the Internet, or the method of payment. <i>Broadband Internet subscribers per 100 inhabitants</i> is obtained by dividing the number of Broadband Internet subscribers by the population and multiplying by 100.	Not yet defined in case of Nepal
International Internet Bandwidth per inhabitant	<i>International Internet bandwidth</i> refers to the capacity which backbone operators provision to carry Internet traffic measured in bits per second. <i>International Internet bandwidth per inhabitant</i> is obtained by dividing the amount of bandwidth by the population.	4.9
Percentage of population covered by mobile cellular Telephony	<i>Percentage of population covered by mobile cellular telephony</i> refers to the percentage of a country's inhabitants that live within areas served by a mobile cellular signal, irrespective of whether or not they choose to use it. This should not be confused with the percentage of the land area covered by a mobile cellular signal or the percentage of the population that subscribe to mobile cellular service. Note that this measures the theoretical ability to use mobile cellular services if one has a cellular telephone and a subscription.	Data not available

<p>Internet access tariff (20 hours per month), in US\$, and as a percentage of per capita income</p>	<p>The Internet access tariff includes the tariff components of monthly line rental, line usage charge and Internet access charge, plus any tax that may be levied (as this is a service used by both residential and business consumers). The tariff chosen for a particular country would be the package for 20 hours per month that is the cheapest, that is widely available (or, in the case of regional service providers, is available in the capital city) and is available to the general public without restriction (e.g. excluding in-company or limited time offers, and excluding offers that are bundled with some other service). The price comparison is expressed in a commonly used currency (such as US\$), which could be converted either at the average exchange rate, or at purchasing power parity (PPP) rates. The indicator should be compared, as far as possible, for the same date between countries. As a percentage of per capita income involves dividing the Internet access tariff by the average monthly gross national income <i>per capita</i> of the country.</p>	<p>US\$10.57, 3.92% (previous data included only Internet access charge, so it was revised this time) per capita income is taken as US\$270</p>
<p>Mobile cellular tariffs (100 minutes of use per month), in US\$, and as a percentage of per capita income</p>	<p>The Mobile cellular tariff includes the tariff components of monthly service rental (if relevant), 50 minutes of local peak time calling and 50 minutes of local off-peak calling, plus tax. Differences in the distance of calls, which may be applicable in some countries, are not taken into account, nor are international calls or SMS messages. The possible one-time charge for connection is not taken into account, except where this is bundled into the costs of a pre-paid account. Countries should calculate the tariff either on a post-paid or a prepaid service, whichever one is more popularly used. If more than 50% of the mobile cellular subscribers use pre-paid, then the tariff should also be based on the pre-paid service, and <i>vice versa</i>. The price comparison is expressed in a commonly used currency (such as US\$), which could be converted either at the average an exchange rate, or at purchasing power parity (PPP) rates. The indicator should be compared, as far as possible, for the same date between countries. As a percentage of per capita income involves dividing the mobile cellular tariff by the average monthly gross national income <i>per capita</i> of the country.</p>	<p>US\$4.7, 1.23%</p>
<p>Percentage of localities with public Internet access centers (PIACs) by number of inhabitants (rural/urban)</p>	<p>A public Internet access centre (PIAC) is a site, location, or centre of instruction at which Internet access is made available to the public, on a full-time or part-time basis. This may include digital community centers, Internet cafés, libraries, education centers and other similar establishments, whenever they offer Internet access to the general public. All such centers should have at least one public computer for Internet access. Localities refer to a country's villages, towns and cities. The percentage of localities with public Internet access centers (PIACs) is computed by dividing the number of localities with at least one PIAC by the total number of the country's localities and multiplying by 100. The indicator should be broken down by range of inhabitants.</p>	<p>Not available</p>

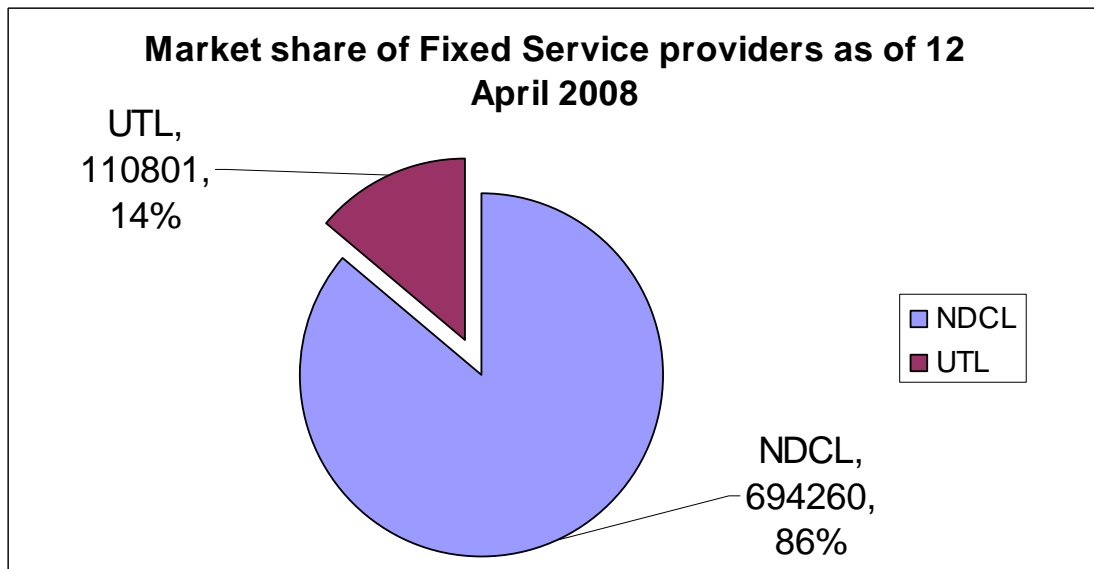
5. Performance of Service Providers:

5.1. Performance of Fixed Service:

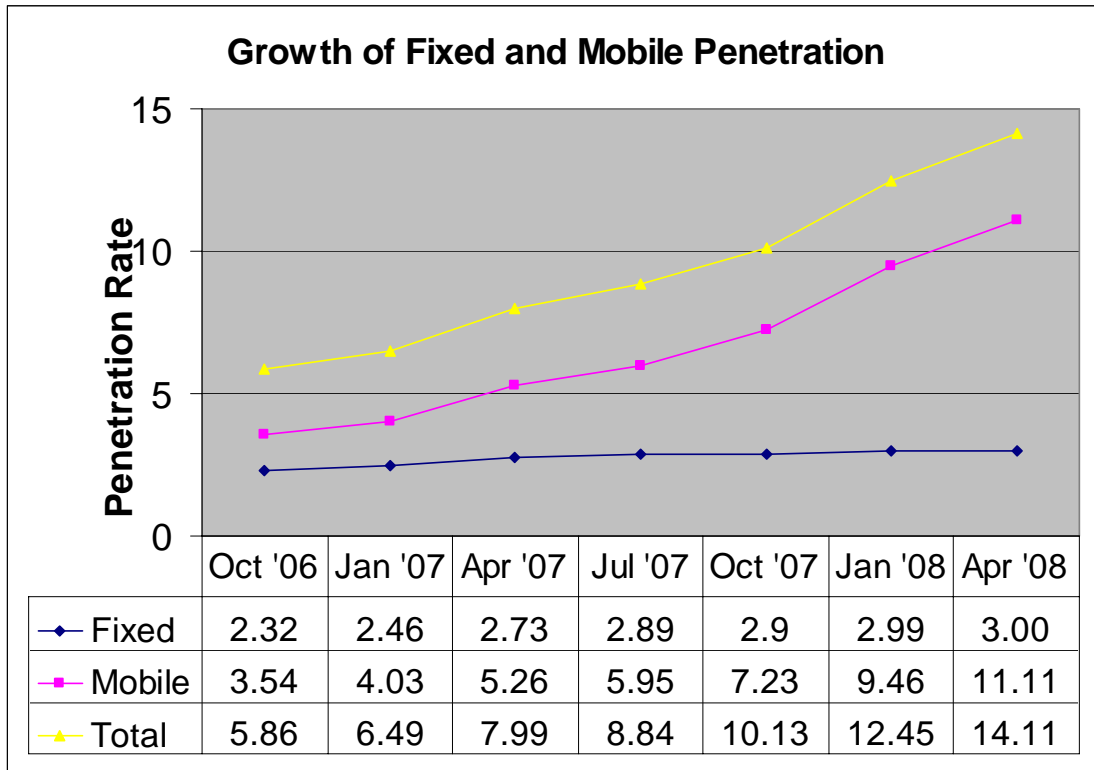
The fixed line penetration has reached exactly 3.00%, just an increase of 0.01 from the last quarter. The Average Revenue per User (ARPU) has remained stable at 855.68. The market share of NDCL and UTL has changed slightly to remain 86% and 14% respectively. NDCL is providing service in all the districts of Nepal through wire-line as well as wireless technology whereas UTL is providing service through wireless technology in nine districts.



The total capacity of Local public switching exchange of NDCL is 677172. Altogether 5,680 person are being employed in Fixed Telecommunication sector.

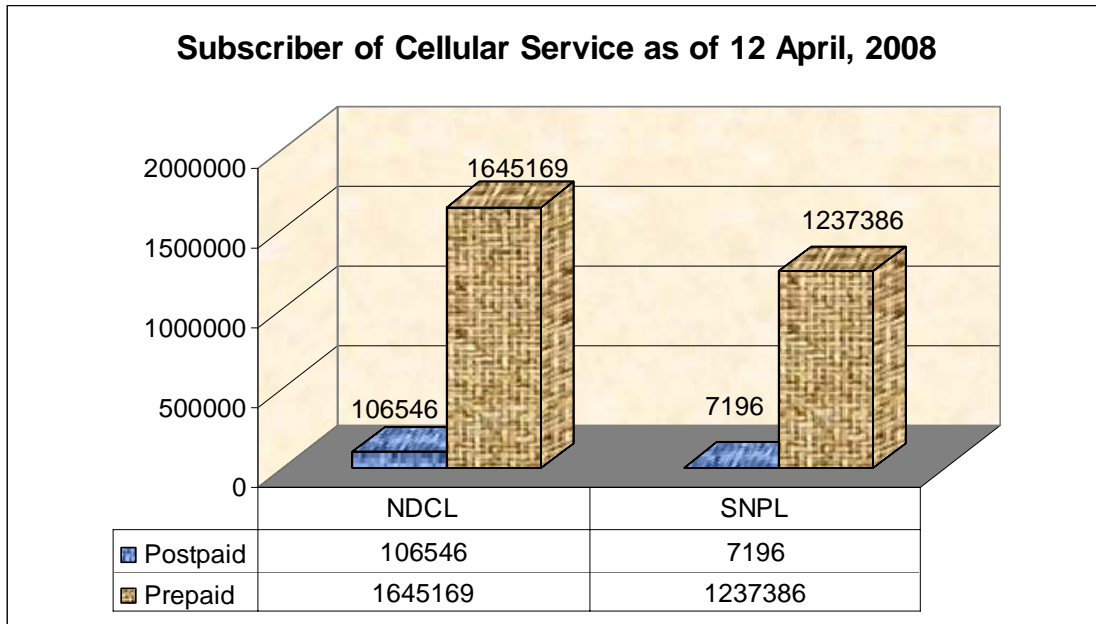


Both operators have obtained license to operate limited mobility service in addition to their fixed service license. Even if NDCL has obtained license to operate Limited Mobility service in Kathmandu Valley, it has not taken license in other service areas after its Cellular Mobile license was made technology neutral. Subscriber base of UTL is 50,579 in Limited Mobility Service. The detailed performance of fixed service providers is shown in Annex F.

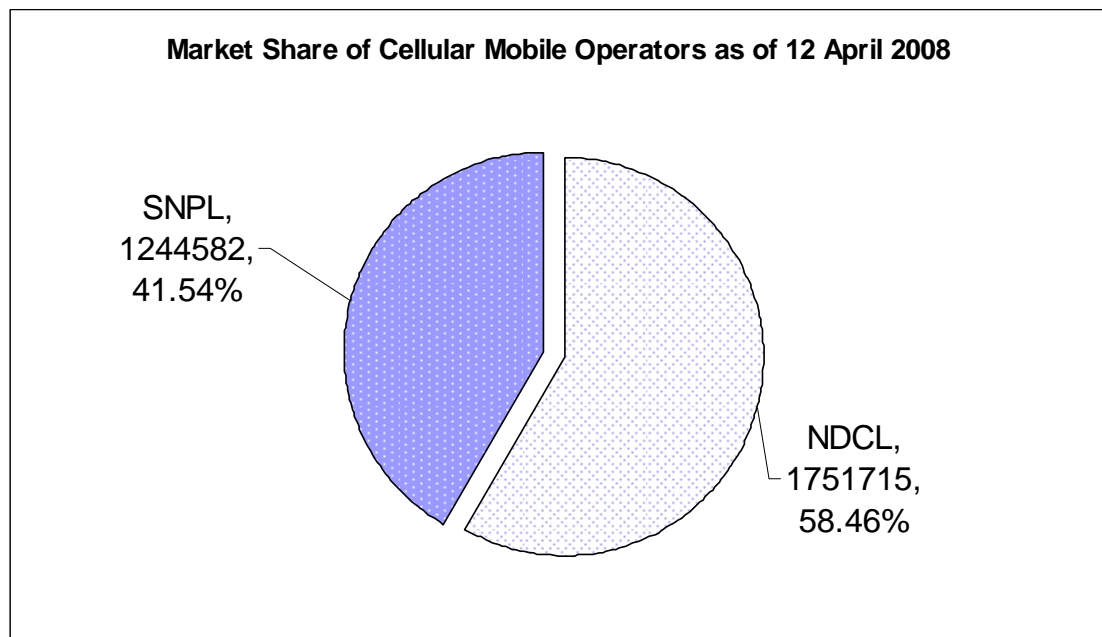


5.2. Performance of Cellular Mobile Service:

The subscriber base of incumbent NDCL has reached 17,51,715 including GSM, CDMA and WCDMA mobiles whereas that of Spice Nepal is 12,44,582 GSM mobiles, hence a total of 29,96,297 mobile subscribers. This quarter has also registered a significant growth in mobile subscriber base as NDCL distributed 2,58,446 new lines whereas SNPL distributed 2,37,727 lines in the same period, almost equal in number. Even though the postpaid subscribers of SNPL added 1144 postpaid subscribers, the number of postpaid subscribers for NDCL has gone down to 1,06,546, less by 3189 from previous quarter. SNPL now holds 41.54% of the market share, slightly more than the previous quarter whereas that of NDCL has decreased to 58.46%. The mobile customer base has still continued to grow and it is about to cross 3 million mark. Apart from Kathmandu Valley, NDCL is providing mobile service in 43 districts (old data) and Spice Nepal Pvt. Ltd. too has extended its service in 39 districts, five more than the previous quarter. The mobile penetration has been increasing steadily and it has reached 11.11 in this quarter. Subscriber base of NDCL and SNPL is shown as below.



Market share of SNPL and NDCL as of 12 April, 2008 is as shown below and detailed performance of operators is shown in Annex E.



5.3. Performance of Rural Telecom Service:

NDCL:

Rural service was expanded in Nepal under the Fifth Phase Telecom Project, through Japanese (JICA) and IDA (World Bank) fund. Country's 75 district centres have automatic telecommunications service, including STD and ISD. This access is usually provided by NDCL or a privately operated public call office (PCO) or a phone shop. Sixty-eight district centers have communications services to some neighbouring VDCs by means

of 2 Mbps microwave links, MARTS, single channel VHF/UHF or Very Small Aperture Terminal (VSAT) services. The following table summarizes the types of technology used to provide telecommunications services to the VDCs of Nepal as of 12 April, 2008 (30 Chaitra, 2064).

Technology used by NDCL to serve VDCs	
Digital C-DOT (wire line) exchanges	21/3,676 (Exchange/Capacity)
MARTS	158/1,086 (Marts Terminals/ Telephone Subscribers)
VHF/UHF radio	484 (Telephone Subscribers)
Digital microwave (JICA project)	4/56 (Rural Station/Subscriber)
HF radio	4
VSAT	449/714 (Terminals/Telephone lines)
VDCs served with at least one PCO	2990
Telex Service	256/70 (Capacity/Distribution)

STM:

STM has now installed a total of 2638 PCOs in 636 VDCs of Nepal as of 12 April, 2008 through 871 VSAT terminals.

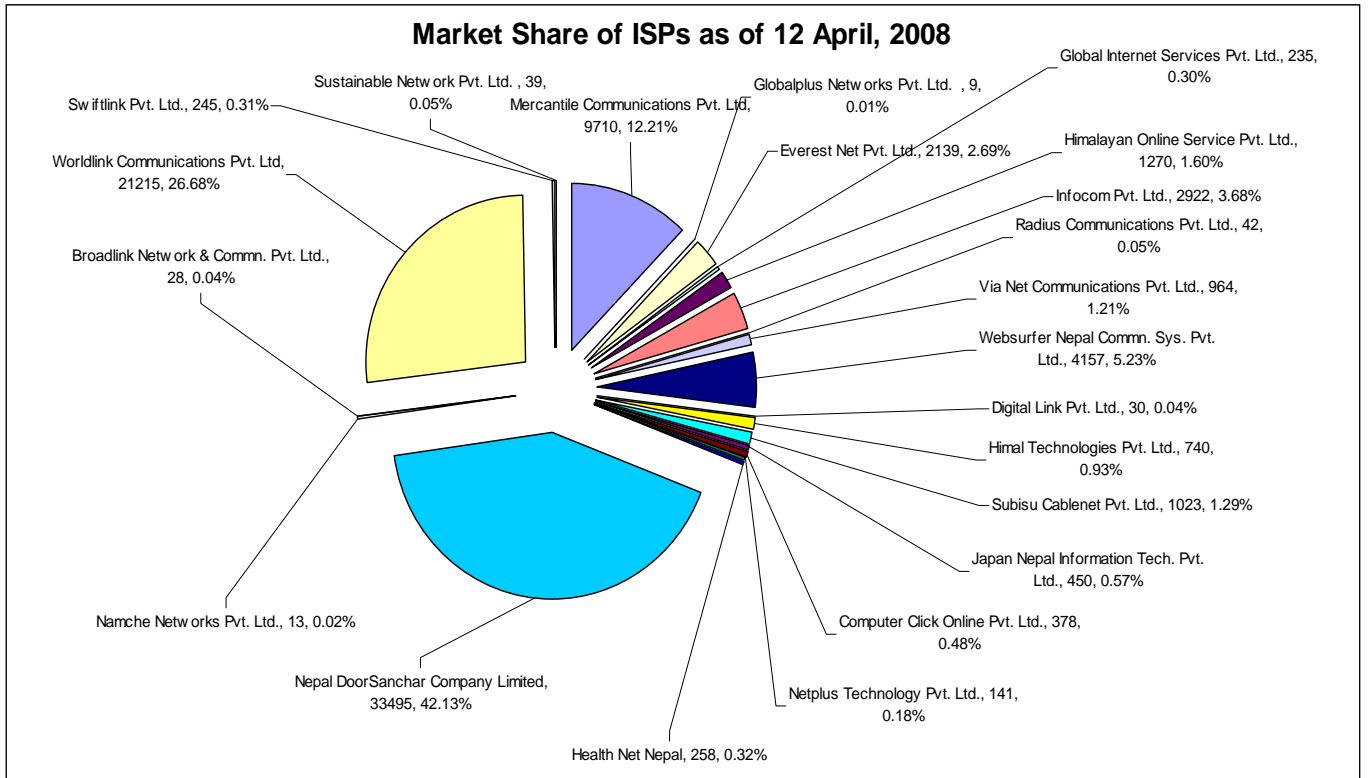
NDCL and STM have achieved the following rural service penetration levels as of 12 January, 2008 (30 Chaitra, 2064). Percentages identified in the table refer to the percentage of VDCs with at least one PCO in the specified region.

Region	Total VDCs	VDCs Served with at least one PCO	
		By STM*	By NDCL*
Nepal	3,915	636	2990
Eastern Development Region	893	532	
Central Development Region	1199	4	
Western Development Region	865	79	
Mid-Western Development Region	575	21	
Far-Western Development Region	383	-	

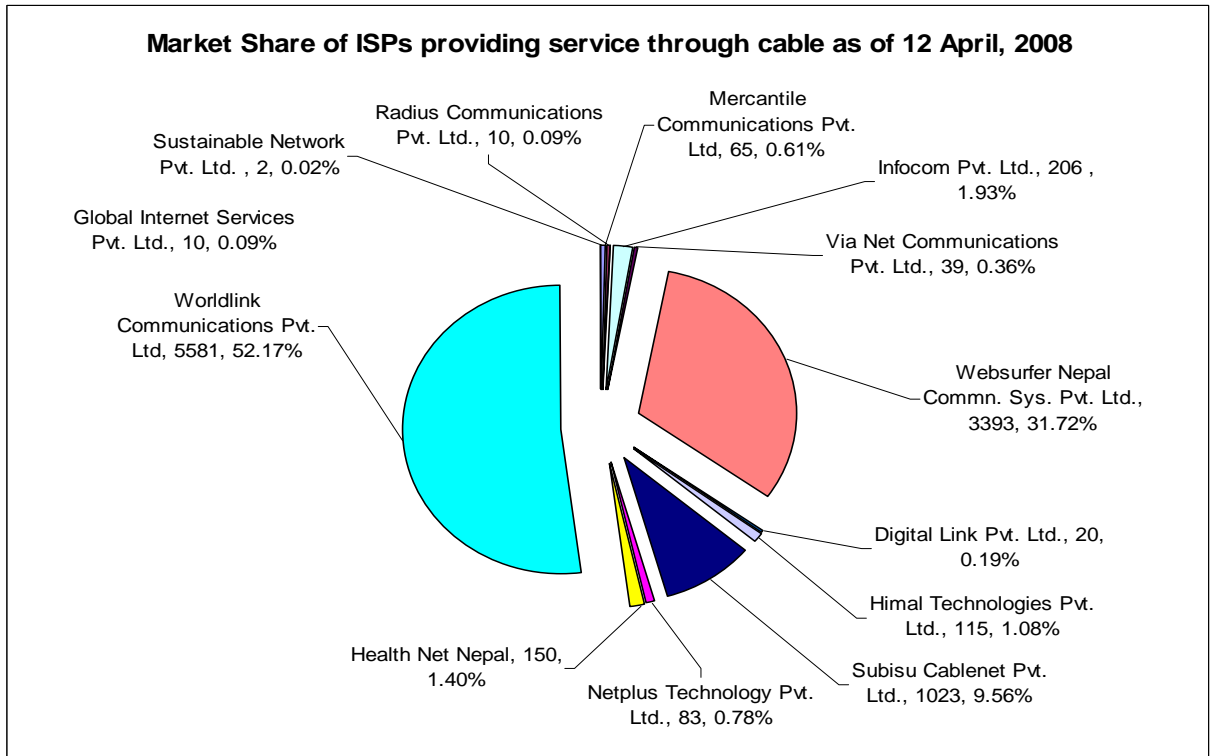
* - some of the VDCs are overlapped

5.4. Performance of Internet Service:

There are currently 33 ISPs holding valid license in Nepalese market. The penetration rate has increased by 0.02% in this quarter to reach 0.30%. 4,499 internet subscribers were added in the last quarter. Total International Bandwidth used is in the ratio of 1:2.21 with 52.10 and 115.21 Mbps for uplink and downlink respectively; hence a total of 167.31 Mbps, less than the previous quarter. Number of E1 links and telephone lines used for dialup internet is 115 and 591 respectively. The number of websites hosted stands at 759. Only 243 subscribers have subscribed from ISPs as cybercafés.



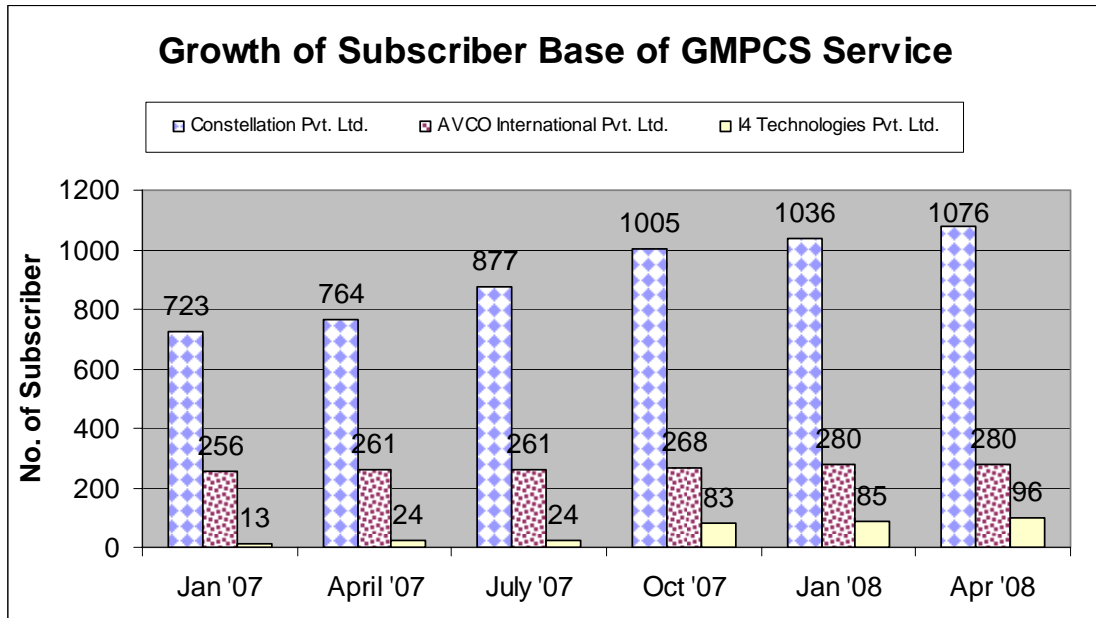
Average Revenue per User (ARPU) has increased to 2136.12 in comparison to the last quarter. A total of 823 personnel are engaged in this sector.



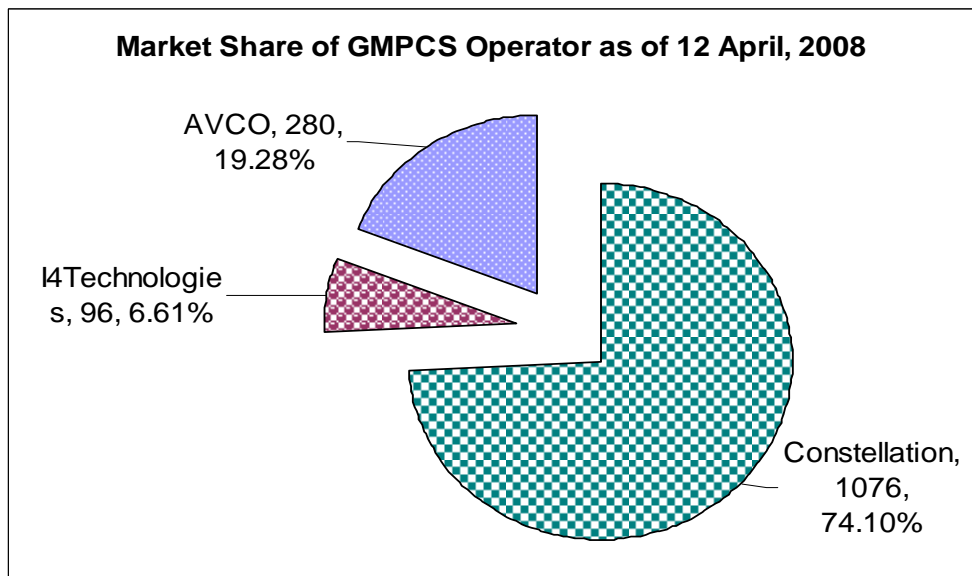
Details are elaborated in Annex A, B and C.

5.5. Performance of GMPCS Service:

The total subscriber base of GMPCS service has now reached 1452. M/s The subscriber base of Constellation Pvt. Ltd., AVCO International Pvt. Ltd, and I4 Technologies Pvt. Ltd is 1076, 280 and 96, hence a market share of 74.10%, 19.28% and 6.61% respectively. Average Revenue per user for this service is Rs. 6344.92 currently.



There are a total of 34 man powers working to provide GMPCS service. The total revenue for Constellation Pvt. Ltd is Rs. 22,191,653.28 whereas that of AVCO International Pvt. Ltd. is Rs. 69,55,783.73. The comparative chart is shown below. The detailed performance of GMPCS operators is illustrated in Annex D.



6. Telecom Network of the Country:

- 6.1.** The Nepal Doorsanchar Company Limited (NDCL), Nepal's incumbent telecommunications operator, has made significant progress in the growth and development of the national public switched telecommunications network (PSTN) in the last decade, particularly during Nepal's Fifth Phase Telecom Project (1992-97).
- 6.2.** With the introduction of new Telecom Operators, the same tempo of growth continues with the number of distributed lines increasing from approximately 65,000 in 1992 to over 8,05,061 (PSTN + WLL), Post-paid Mobile Subscribers 1,13,742 and Pre-paid Mobile Subscribers 28,82,555 till 12 April, 2008 (30 Chaitra, 2064). The fully digital network offers full national and international direct dialing services.
- 6.3.** The national trunk network is equipped with 9202 Mbps, out of which 8434 Mbps link is being used to link Kathmandu with the rest of the country whereas 768 Mbps link is used within Kathmandu Valley. (based on NDCL MIS)
- 6.4.** Nepal Doorsanchar Company Limited, the only wireline operator in Nepal has 233 Telephone exchanges in operation at 224 different locations in 72 districts of Nepal. (based on NDCL MIS)
- 6.5.** There are a total of 4575 International telephone circuits in operation including Microwave circuits. (based on NDCL MIS)
- 6.6.** Total capacity of E1 links installed is 4,601 out of which 3,994 are equipped, 2,273 are currently used and 1,721 is spare. (based on NDCL MIS)
- 6.7.** UTL has installed a total of 657 International Telephone circuits and 4012 Domestic Telephone circuits.

7. Committee Members

- 7.1.** Mr. Ananda Raj Khanal, Coordinator.
- 7.2.** Mr. Arjun Ghimire, Member.
- 7.3.** Mr. Udaya Raj Regmi, Member, urregmi@nta.gov.np

Annex A - Details of performance of Internet Service Providers

	No. of Subscriber (Total)	No. of Subscriber (Dialup)	No. of Subscriber (Wireless)	No. of Subscriber (Cable)	No. of Subscriber (CAT 5)	No. of Subscriber (Coaxial)	No. of Subscriber (Fiber)	No. of Nodes (Point of Presence)	No. of Cybercafes
Mercantile Communications Pvt. Ltd	9710	9500	145	65	-	-	-	2	7
Worldlink Communications Pvt. Ltd	21215	14401	1193	5581	1200	None	40	9	None
Everest Net Pvt. Ltd.	2139	2136			3			1- Ekantakun a	
Global Internet Services Pvt. Ltd.	235	210	15	10	-	-		1	20
Himalayan Online Service Pvt. Ltd.	1270	800	70	400	400	No	No	2	55
Infocom Pvt. Ltd.	2922	2707	9	206	200	6	-	-	-
Nepal DoorSanchar Company Limited	33495	10899	18162	-	-	-	-	19	-
Via Net Communications Pvt. Ltd.	964	800	125	39	39	0	0	6	20
Websurfer Nepal Commn. Sys. Pvt. Ltd.	4157	0	428	3393	0	0	256	110	55
Digital Link Pvt. Ltd.	30	N/A	10	20	20	N/A	N/A	1	8
Himal Technologies Pvt. Ltd.	740	600	25	115	-	-	-	3	15
Subisu Cablenet Pvt. Ltd.	1023	-		1023	N/A	903	120	10	4
Japan Nepal Information Tech. Pvt. Ltd.	450	450	-	-	-	-	-	1	-
Computer Click Online Pvt. Ltd.	378	378	-	-	-	-	-	1	-
Netplus Technology Pvt. Ltd.	141	-	53	88	-	-	-	3	27
Health Net Nepal	258	108	N/A	150	137	9	4	1	N/A
Globalplus Networks Pvt. Ltd.	9		8				1	1	1
Namche Networks Pvt. Ltd.	13	-	13	-	-	-	-	5	7
Broadlink Network & Commn. Pvt. Ltd.	28	-	28	-	-	-	-	1	12
Radius Communications Pvt. Ltd.	42	-	32	10	-	-	-	1	9
Swiftlink Pvt. Ltd.	245	243	-	-	-	-	2	3	3
Sustainable Network Pvt. Ltd.	39	0	37	2				2	0

Annex B - Details of performance of Internet Service Providers

	Number of E1 Links (for dialup only)	Number of Telephone lines (for dialup only)	Number of websites hosted:	Average Revenue Per User (ARPU)	Minutes of Use Per subscriber per month (for dialup only)	Service Activation Time (for dialup only)	Time to Access (for dialup only)	Mean Time to Restore	NpIX Connection (Directly or Indirectly)
Mercantile Communications Pvt. Ltd	18	251	262	800	4200	Immediate	<1min	<1hr	Directly
Worldlink Communications Pvt. Ltd	29	200	1	4068	180 mins	24 hours	24 hrs	< 24 hours	Yes
Everest Net Pvt. Ltd.	8	8 E1	180	175	800	1 day max	24 hrs		Yes
Global Internet Services Pvt. Ltd.	1	-	1	-	-	245hrs	-	-	Directly
Himalayan Online Service Pvt. Ltd.	5	No	No	5596		Instant	40-50s	2hrs Max	Indirectly
Infocom Pvt. Ltd.	2	55	-	-	-	24hrs	24hrs	-	Directly
Nepal DoorSanchar Company Limited	41	-	4	400	1,300.00	<2mins	<1mins	<10mins	Directly
Via Net Communications Pvt. Ltd.	4	0	19	1500		Instantly	<1min	-	Directly
Websurfer Nepal Commn. Sys. Pvt. Ltd.	1	0	25	11300	0	0	0	5mins	Directly
Digital Link Pvt. Ltd.	N/A	N/A	3	1713	N/A	N/A	N/A		NO
Himal Technologies Pvt. Ltd.	1	-	10	550	-	1hr	6hrs	3hrs	Indirectly
Subisu Cablenet Pvt. Ltd.	N/A	N/A	25	5000	N/A	N/A	N/A	<1hr	Directly
Japan Nepal Information Tech. Pvt. Ltd.	1	50	50	-	-	24hrs	< 30s	4hrs	-
Computer Click Online Pvt. Ltd.	3	30	1	270	800	10mins	< 30s	<1hr	Directly
Netplus Technology Pvt. Ltd.	-	-	1	2266	-	-	-	< 6 hrs.	yes
Health Net Nepal	1	5	36		900	10		1 hour	yes
Globalplus Networks Pvt. Ltd.				6000				1hr	Indirectly
Namche Networks Pvt. Ltd.	-	-	10	-	-	-	-	-	Directly
Broadlink Network & Commn. Pvt. Ltd.	-	-	1	4000	-	-	-	30mins	Indirectly
Radius Communications Pvt. Ltd.	-	-	120	2500	-	2hrs	-	1hr	Directly
Swiftlink Pvt. Ltd.	-	-	10	300	-	-	-	30 mins	Indirectly
Sustainable Network Pvt. Ltd.	0	0	1	3038	0			3	

Annex C - Details of performance of Internet Service Providers

	If Indirectly, via	International Band width	Uplink (kbps)	Downlink (kbps)	Provision of Redundancy or not	Total working Manpower	Technical	Administrative	Female	Number of bills issued per month	Number of complaints on billing per month	Number of cleared billing complaints per month	Total Revenue	Total Annual Investment (Rs.)
Mercantile Communications Pvt. Ltd	-	20480	5120	15360	YES	135	102	33	-	600	8	6	-	-
Worldlink Communications Pvt. Ltd			11264	30720	YES	208	90	118	57		4600	40	25	6,461,753.57
Everest Net Pvt. Ltd.			256	1024	yes		15	50	7	380	0	all		
Global Internet Services Pvt. Ltd.	-	768	256	512	-	22	-	22	-	30	-	-	-	-
Himalayan Online Service Pvt. Ltd.	W'link	3072	1536	1536	Yes	26	9	17	8	555	None	None	7108128	
Infocom Pvt. Ltd.	-	3840	2048	1792	-	28	11	3	-	-	-	-	-	-
Nepal DoorSanchar Company Limited	-	53248	18432	34816	YES	30	14	16	-	-	-	-	-	-
Via Net Communications Pvt. Ltd.	-	5120	1408	3712	-	15	6	6	3	110	5	4.50%		
Websurfer Nepal Commn. Sys. Pvt. Ltd.	-	14336	4096	10240	YES	77	50	27	8	548	0	0	-	-
Digital Link Pvt. Ltd.		608	288	320	YES	5	2	3	N/A	15	0	ALL		
Himal Technologies Pvt. Ltd.	Wsurfer	768	256	512	YES	12	6	6	3	300	5%	>80%	-	-
Subisu Cablenet Pvt. Ltd.	N/A	14519	3896	10623	Yes	163	135	28	11	700	1%	100%		
Japan Nepal Information Tech. Pvt. Ltd.	-	384	128	256	YES	15	5	10	-	-	-	-	-	-
Computer Click Online Pvt. Ltd.	-	384	128	256	-	7	3	4	-	335	5%	100%	-	-
Netplus Technology Pvt. Ltd.	Wsurfer	1022	256	768	yes	11	6	3	2	141	-	-	3,19,530.00	
Health Net Nepal	NDCL	1704	820	884	yes	8	6	2	2	N/A	N/A	N/A	206,476.14	N/A
Globalplus Networks Pvt. Ltd.	NT	1024	512	512	YES	7	3	4	2				70000	800000
Namche Networks Pvt. Ltd.	-	-	-	-	NO	8	5	3	-	13	No	-	10 lakhs	5 lakhs
Broadlink Network & Commn. Pvt. Ltd.	W'surfer	1280	256	1024	NO	11	5	6	2	30	-	-	404275	934000
Radius Communications Pvt. Ltd.	-	2800	1228	1572	YES	18	12	6	-	-	-	-	-	-
Swiftlink Pvt. Ltd.	NDCL	2048	1024	1024	NO	14	9	3	1	100	-	-	-	-
Sustainable Network Pvt. Ltd.		656	144	512	NO	3	1	2	1	39	0	0	419750	700000

Annex D - Details of performance of GMPCS Service Providers

				Constellation	I4Technologies	AVCO
1.	Number of Subscribers			1076	96	280
2.	Average Revenue Per User (ARPU) in Rs.			2000	70108.18	1178.57
3	Traffic (Minutes of Use)/line/month			8.2	173.21 MB (DATA) + 7.88 Min Voice	0.744
4.	Quality of Service					
4.1	GMPCS/GMPCS call completion ratio			100%	100%	100%
4.2	GMPCS/Other Network call completion ratio			100%	98%	99%
4.3	Call Drop rate			NO	0%	1%
4.4	Customer reported service complaints/subscriber/month			0.15	0	1%
4.5	Faults/100subscribers/month			0.1	0	0.5%
5.	Billing			135		
5.1	Bills issued/Month			NO	25	15
5.2	Complaints on Billing/Month			NO	0	0
5.3	Clearance on billing complaints/Month			NO	N/A	0
5.4	% customer reported service complaints/100 DEL/month			NO	0.01%	2%
5.5	Faults per 1000 DELs/Month			NO	0.001	10%
6.	Total Revenue			22,191,653.28	NRs.69,55,783.73	
7.	Total Investment in Fixed Telecom			1400000	NRs. 52,25,127.25	
8.	Number of Currently Working Staffs			20	10	4
8.1.	Technical			15	4	1
8.2.	Other than Technical			5	4	3
8.3.	Female			7	2	
9.	Name of the Organisation:			Constellation Pvt.Ltd.	I4 Technologies Pvt. Ltd.	AVCO International Pvt. Ltd.
10.	Name of the Contact Person:			Sanatan Gajurel	Er. Anil Piya	Prabin Acharya
10.1.	Phone No.			00977-1-5548836,5549252	4223282 / 4221993	4229886 / 9841217684
10.2.	E-mail Address			admin@constellation.com.np	info@satelliteinnepal.com	prabinacharya@soi.com.np
10.3.	Fax No:			00977-1-5548879	4238377	4229882
11.	Web Address:			www.constellation.com.np	www.satelliteinnepal.com	

Annex E - Details of performance of Cellular Mobile Service Providers

Name of the Cellular Operator	NDCL	SNPL
1. Number of Subscribers (Postpaid)	106546	7196
2. Number of Subscribers (Prepaid) including CDMA and WCDMA mobile	1645169	1237386
3. Service areas in terms of district (No. of district):	43	39
4. Average Revenue per user (ARPU in Rs.)	975.00 Post Paid	378.07
5. Traffic Mou (Minutes of Use/Subscriber/Month)	506.6 Post Paid	114.64
7. Traffic (in Minutes)		
7.1. Local		71.87
7.1. Domestic Long Distance (To PSTN or WiLL)		41.27
7.2. International Long Distance		1.5
8. Quality of Service		
8.1 Cellular to Cellular Call Completion Ratio	65%	99.95%
8.2 PSTN to Cellular Call Completion Ratio	71%	23.69%
8.3 Cellular to PSTN Call Completion Ratio	68%	64.52%
8.4 Call Drop Rate	0.23	SDCCH Drop Rate:0.43%/ TCH Drop rate: 0.40%
8.5 % of Telephone Faults cleared by next working day		
8.6 End to End delivery time for Short Message Service:	3-4 Sec	
8.7. Completion Rate for SMS:	90%	<10s
9. Total Capacity of Mobile Exchange		97.27%
10. Number of Local Telephone Calls (within network)		
11. Local Telephone call in minutes (within network)		
12. Total Annual Investment in Mobile Telephony (063/064)		576742333
13. Billing		
13.1. No. of bills issued per month (postpaid)	116824	5240
13.2. No. of complaints on billing per month (postpaid)	0	0
13.3. % of clearance on billing complaints per month (postpaid)	100	
13.4. No. of complaints on billing per month (prepaid)	0	0
13.5. % of clearance on billing complaints per month(prepaid)	100	
14. Total Revenue of the Fiscal Year 063/064 (06/07)		1058516891
14.1. Local (Within own Mobile Network)		
14.2. National Long Distance (another mobile network + PSTN)		
14.3. International Long Distance		
15. Number of Base Transceiver Station (BTS):	395	256 Sites(215-Dual Band/ 41-Single Band)
16. Number of currently working staffs		343
16.1. Technical		152
16.2. Administrative		191
16.3. Female		79
17. Name of the Organisation:	Nepal Telecom	Spice Nepal Pvt. Ltd.
18. Name of the Contact Person:		Soma Thapa
18.1. Phone No.		9805554444
18.2. E-mail Address		soma.thapa@spicenepal.com
18.3. Fax No:		9805554488
19. Web Address:	www.ntc.net.np	www.spicenepal.com
20. Web Content in Nepali Language available or not	No	no

Annex F - Details of Performance of Fixed Telephone Service Providers

							NDCL	UTL
1.	Number of Subscribers						694260	110801
1.1.	Number of subscribers (Districtwise) (Attach extra sheet)							
2.	Service areas in terms of district (No. of district)						72	9
3.	Average Revenue per user (ARPU in Rs.)						910	515.38
4.	Traffic MoU (Minutes of Use/Subscriber/Month)							217.32
5.	Total Traffic (in Minutes)							
5.1.	Local							20186673.91
5.2.	Domestic Long Distance							3219282.19
5.3.	International Long Distance							236400.33
6.	Quality of Service							
6.1.	Call Completion Ratio (%)							
6.1.1.	Local							> 99%
6.1.2.	Domestic							> 99%
6.1.3.	International							100%
6.2.	PSTN to Cellular Call Completion Ratio							NA
6.3.	Cellular to PSTN Call Completion Ratio							NA
6.4.	% call to operator answered in less than 30 seconds							100%
6.5.	% call attempts not receiving connection							< 1%
6.6.	Call Drop Rate (%)							< 1%
6.7.	% customer reported service complaints/100 DEL/month						7.68%	1.33%
6.8.	Faults per 1000 DELs/Month							0.35%
6.9.	% of Telephone Faults cleared by next working day						55.00%	99%
7.	Total Capacity of Local Public Switching exchanges						677172	NA
8.	Telephone circuits available							
8.1.	Total National Circuits Available							4012
8.2.	Total International Circuits Available						4575	657
9.	Number of Local Telephone Calls							27582852
10.	Local Telephone call in minutes							60901779
11.	No. of National Long Distance Telephone calls (including to Mobile)							3055148
12.	National Long Distance Telephone in minutes (including to Mobile)							9657847
13.	Total International Incoming Telephone Calls							4782731
14.	Total International Incoming Telephone minutes							15725061
15.	Total International Outgoing Telephone Calls							263141
16.	Total International Outgoing Telephone Minutes							709201
17.	Total Revenue							
17.1.	Local							63013853.00
17.2.	National Long Distance							31680598.00
17.3.	International Long Distance							12120534.00
18.	Total Annual Investment in Fixed Telecom (FY06/065)							NRs. 198.45 Mn
19.	Billing							
19.1.	Bills issued/month (Nos)							109406
19.2.	Complaints on billing/Month							NA
19.3.	Clearance on billing complaints/Month							NA
20.	Number of Subscribers(Limited Mobility)							50579
21.	Service areas in terms of district (LM) (No. of district)						N/A	9
22.	Number of Currently Working Staffs						5625	55

22.1.	Administrative					N/A	24
22.2.	Technical					N/A	31
22.3.	Female					N/A	16
23.	Name of the Organisation:					Nepal Doorsanchar Company Limited	United Telecom Limited (UTL)
24.	Name of the Contact Person:						Mr. Pavithra Kumar
24.1.	Phone No.					4243444	977-1-230024
24.2.	E-mail Address						pavithra@utlnepal.com
24.3.	Fax No:						
25.	Web Address:					www.ntc.net.np	www.utlnepal.com
26.	Web Content in Nepali Language (if not any Plan?)					N/A	Under Development

Annex G - Details of Performance of Rural Telecom Service Providers

1	Number of Terminals (Total):				871
2	Number of Terminals (Districtwise)				
3	Number of Telephone Lines (Total):				2638
4	Number of VDCs Covered (Attach extra sheet for VDC list)				636
5	Number of Telephone Lines (Districtwise):				
5.1.	Bhojpur	76	5.19.	Lamjung	62
5.2.	Dhankutta	123	5.20.	Manang	55
5.3.	Ilam	116	5.21.	Mustang	60
5.4.	Jhapa	58	5.22.	Myagdi	57
5.5.	Khotang	167	5.23.	Gorkha	48
5.6.	Morang	87	5.24.	Baglung	234
5.7.	Okhaldhunga	108	5.25.	Surkhet	4
5.8.	Panchthar	88	5.26.	Ramechhap	4
5.9.	Saptari	189	5.27.	Jajarkot	2
5.10.	Sankhuwasava	105	5.28.	Rolpa	72
5.11.	Siraha	235	5.29.	Dolkha	54
5.12.	Solukhumbu	73	5.30.	Gulmi	23
5.13.	Sunsari	62	5.31.	Parbat	22
5.14.	Taplejung	141	5.32.	Rukum	123
5.15.	Terhathum	29	5.33.	Kaski	4
5.16.	Udayapur	99	5.34.	Achham	19
5.17.	Sindhupalchwok	30	5.35.	Palpa	1
5.18.	Tanahu	8			
6	Average Revenue Per User (ARPU): (Rs.)				1,200.88
7	Traffic MoU (Minutes of Use/Subscriber/month):				264.88
8	Quality of Service:				
8.1.	Call Completion Ratio:				
8.1.1	Local (STM's Network)				96%
8.1.2.	Local (Other Licensee's Network)				92%
8.1.3.	Domestic (STM's Network)				98%
8.1.4	Domestic (Other Licensee's Network)				93%
8.1.5	International				96%
8.2.	Call Setup Time:				2-3 sec.
8.3.	Maximum all-inclusive transmission delay for a single hop				
	satellite call (in each direction):				270 ms to 290 ms in one direction
8.4.	Call Drop Rate:				0.50%
8.5.	Percentage customer reported service complaints (per 100 RTS Lines) per month:				3%
8.6.	Faults per 100 RTS lines per month:				30
8.7.	Fault Clearance Rate (in days)				3
8.8.	% of Telephone Faults cleared by next working day				
9	Total Capacity of Local Public Switching exchanges				
10	Telephone circuits available				
11	Number of Local Telephone Calls (FY064/065)				269297
12	Local Telephone call in minutes (FY064/065)				565768.62
13	No. of National Long Distance Telephone calls (including to Mobile) (FY064/065)				676666
14	National Long Distance Telephone in minutes (including to Mobile) (FY064/065)				1813173.28
15	Total Revenue (FY064/065)				
15.1.	Local				691649.86
15.2.	National Long Distance				6622967.50
15.3.	International Long Distance				4108862.50
16	Total Annual Investment (FY064/065)				

17	Billing	
17.1.	No. of bills issued per month:	655
17.2.	No. of complaints on billing per month:	0
17.3.	No of clearance on billing complaints per month:	0
18	Total Traffic (in minutes)	
18.1.	Local	565768.62
18.2.	Domestic Long Distance	1813173.28
18.3.	International Long Distance	156187.41
19	Number of Currently Working Staffs	144
19.1.	Administrative	42
19.2.	Technical	97
19.3.	Female	5
20	Name of the Organisation:	STM Telecom Sanchar P. Ltd.
21	Name of the Contact Person:	Sisir Pradhan
21.1.	Phone No.	4445981
21.2.	E-mail Address	spradhan@stmnetworks.com
21.3.	Fax No:	4419366
22	Web Address:	www.stmtelecom.com
23	Web Content in Nepali Language	under construction

Annex H - Details of Performance of VSAT Network Service Providers

1. Name of the Licensee		Websurfer Communications Pvt. Ltd.	Infocom Pvt. Ltd.	Worldlink Communications Fractal Communications Llc, Usa
1.	Name of VSAT Bandwidth Provider	BtN Access HK Ltd	Loral Skynet Network svcs.	
2.	Number of VSAT Users subscribed (Total)	16	1	5
3.	Average Revenue Per User (ARPU)	Rs. 50,000.00	N/A	Rs.3600+ VAT (3 months)
4.	International Bandwidth used by VSAT Users			
4.1.	Uplink	4 Mbps	2048 kbps	11MB
4.2.	Downlink	10 Mbps	1792 kbps	30MB
5.	Provision of Redundancy or not	Yes		NOT
6.	Total working Manpower	77	28	208
6.1.	Technical	50	11	90
6.2.	Other than Technical	27	3	118
6.3.	Female	8	5	57
7.	Billing	16	3	
7.1.	Number of bills issued per month	12	N/A	4600 per month
7.2.	Number of complaints on billing per month	0	N/A	46 per month
7.3.	Number of cleared billing complaints per month	0	N/A	25 per month
8.	Total Revenue			Rs. 6,461,753.57
9.	Total Investment			Rs.8,877,747.04
10.	Name of the Organisation:	Websurfer Nepal Communication System Pvt. Ltd.	Infocom Pvt. Ltd.	Worldlink Communications Pvt. Ltd.
10.	Name of the Contact Person:	Suman Chhetri	Sanam Maskay	Mr. Pavan S. Shakya
10.1.	Phone No.	4440093	4436458	5523050
10.2.	E-mail Address	info@websurfer.com.np	sanam.maskay@info.com.np	pavan@wlink.com.np
10.3.	Fax No:	4428976	4435826	5529403
11.	Web Address:	www.websurfer.com.np	www.info.com.np	www.worldlink.com.np
12.	Web Content in Nepali Language (if not any Plan?)		N/A	None