

Japan International Cooperation Agency (JICA)

Ministry of Infrastructure (MOI)

Post and Telecommunication Authority (PTA)

THE MASTER PLAN STUDY
FOR
DEVELOPMENT OF RURAL TELECOMMUNICATION
SYSTEM
IN
MONGOLIA
FINAL REPORT
VOLUME V
DATA BOOK

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FEBRUARY 2003

Japan Telecommunications Engineering and Consulting Service (JTEC)

and

Pacific Consultants International (PCI)

TOKYO, JAPAN

SSS

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CURRENCY AND EQUIVALENT UNITS

(As of July, 2002)

Currency Unit = Mongolian Tugrik (Tg)

US\$ 1.00 = Tg 1,099.47

Tg 1,000 = US\$ 0.9095

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JPY 1,000 = US\$ 8.361

US\$ 1.00 = JPY 119.60

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2. Law on Communications (Renewed Version 2001)

3. Mongolian Telecommunications Sector Policy Statement (Dec. 28, 2001: No. 372)

4. Report on E-readiness Assessment of Mongolia (Mongolia Development Gateway: 2002)

5. Concept of Information and Communication Technology Development of Mongolia by Year 2010 (ICT Vision up to 2010)

6. Action Programme (2000 – 2004) (Government of Mongolia: Jan. 2001)

7. Policy Document (The Government of Mongolia : Good Governance for Human Security Programme: Jan. 2001)

1. SITE SURVEY RECORD

**1.1 MICROSCOPIC DEMAND FORECAST SITE SURVEY
RECORD**

1.2 SWITCHING FACILITIES SITE SURVEY RECORD

**1.3 OPTICAL FIBER TRANSMISSION SYSTEM SITE
SURVEY RECORD**

**1.4 WIRED ACCESS NETWORK SYSTEM SITE SURVEY
RECORD**

**1.5 SUM CENTRE TELEPHONE OFFICE SITE SURVEY
RECORD**

**1.1 MICROSCOPIC DEMAND FORECAST SITE SURVEY
RECORD**

1.1 MICROSCOPIC DEMAND FORECAST SITE SURVEY RECORD

1.1.1 Objective of Survey

Micro demand forecast should consider the detail condition related to telephone demand in each Sum centre and the site survey for the micro demand forecast was executed to collect the following Data from the sampled Sum centres.

- (1) MT Company
 - Number of Existing Subscriber classified by Service categories (Public, Business and Private) for year of 1997-2002.
 - Number of Waiter for year of 1997-2002.
 - Yearly Revenue and Operation Maintenance cost for 1999-2001.
 - Monthly Telephone Income for 2001 January – 2002 June.

- (2) Mobile and Railway Company
 - Number of Existing Subscriber and Waiter for year 1999-2002 in the service areas.
 - Service commencement plan for New service areas.

- (3) Municipality (Aimag Center or Sum Center)
 - Population (1997-2002)
 - Number of Household classified by occupation (1997-2002)
 - Number of Household classified by Income Bracket in each occupation categories (2001)
 - Average Household Income (1997-2002)
 - Number of Public Organization and Business Company classified by Sector (1997-2002)
 - Number of Employee classified in the categories (Large, Medium, Small) in each sector (2001)
 - GRDP (1997-2002)
 - Budget and Expenditure of municipality (1997-2001)
 - Planed Development Project

- (4) Questionnaire to Household
 - Fixed Telephone related Data
 - Existing Subscriber, Application issued, Willing to be Subscriber with timing

- Mobile Telephone related Data
 - Existing Subscriber, Application issued, Willing to be Subscriber with timing
 - Intention to be Fixed Telephone Subscriber in the period of unavailable Mobile Service.
 - Population and Economic related Data
 - Number of Family (2002)
 - Occupation (2002)
 - Average Household Income (2002)
 - Affordable Telephone charge (Fixed and Mobile)
- (5) Questionnaire for Public and Business User
- Fixed Telephone related Data
 - Existing Subscriber, Application issued, Willing to be Subscriber with timing
 - Mobile Telephone related Data
 - Existing Subscriber, Application issued, Willing to be Subscriber with timing
 - Intention to be Fixed Telephone Subscriber in the period of unavailable Mobile Service.
 - Population and Economic related Data
 - Sector (2002)
 - Number of Employee (2002)

1.1.2 Duration

- Uvurkhangai Area: From September 11 to September 17, 2002.
- Selenge and Darkhan-Uul Area: From September 19 to September 25, 2002.

1.1.3 Srveyer

JICA study Team: Iwao Maruyama

Local Employee Surveyors: Yavuukhuu

Namsrajav

Amarsanaa

1.1.4 Survey Site

Site Survey to Uvurkhangai

				Wed 2002/9/11	Thu 2002/9/12	Fri 2002/9/13	Sat 2002/9/14	Sun 2002/9/15	Mon 2002/9/16	Tue 2002/9/17
				→						
	Trip to Aimag									
10	19	Kharkhorin	P-1	#####						
10	16	Yanga	P-1	320			=====		=====	
10	8	Zyil	P-1	177				=====		
10	6	Bayangol	P-1	123						
10	13	Sant	P-1	94	=====	=====				
	Trip to UB									→
	Hotel			Arvayheer	Arvayheer	Arvayheer	Arvayheer	Kharkhorin	Kharkhorin	UB

Site Survey in Selenge

				Wed 2002/9/19	Thu 2002/9/20	Fri 2002/9/21	Sat 2002/9/22	Sun 2002/9/23	Mon 2002/9/24	Tue 2002/9/25
				→						
	Trip to Aimag									
13	19	Zuunkharaa	P-1	#####					=====	
19	3	Khongor	P-2	329				=====		
13	2	Altanbulag	P-1	274	=====					
13	3	Eruu	P-1	221			=====			
13	4	Zuunburen	P-1	114		=====				
	Trip to UB									→
	Hotel			Suhbaatar	Suhbaatar	Suhbaatar	Darhan	Darhan	Darhan	UB

1.1.5 Officials with whom held meeting

Uvurkhangai aimag

9/11 Arvaikheer sum

Chief engineer of communication centre

Purev

9/12 Bayangol sum

Governor of Bayangol sum

Tsolmon

Chairman of sum's people's khural

Erdene – Ochir

9/13 Sant sum

Governor of Sant sum

Natsagdorj

Charman of sum's people's khural

Ganbaatar

Governor of bag

Dashdondog

Administration officer

Buyantogtokh

Director of communication centre

Samdantsoodol

9/14 Uyanga sum

Governer of sum

Olziimaa

Director of communication centre

Ishdorj

9/15 Yeson zuil sum

Governor of sum

Adiyatogtokh

Chairman of the sum's people's khural

Nyam

General financial expert

Dunjmaa

Director of communication centre

Purev

9/16 Kharkhorin sum

Head of local government office	Tumenjargal
Director of communication centre	Oyungerel
Chief engineer of communication centre	Bolormaa

Selenge aimag

9/19 Chief engineer of the aimag’s communication centre	Tsend – Ayush
General finance expert of aimag’s communication centre	Gotov

9/20 Altanbulag sum	
Head of communication centre	Tsogzolmaa

9/21 Zuunburen sum	
Governor of sum	Batjargal
General finance expert	Tselmeg
Deputy	Baaya
Director of communication centre	Gereltuya

9/22 Yeroo sum	
Governor of Yeroo sum	Sharaa
Director of communication centre	Altantsetseg

9/23 Khongor sum	
Governor of Khongor sum	Lkhgvasuren
Head of local government office	Davaajav

9/24 Zuunkharaa city – Mandal sum	
Governor of Mandal sum (Mayor of Zuunkharaa city)	Dungee
Director of communication centre	Altantsetseg
Chief engineer of communication centre	Erdenechuluun

1.1.6 Collected Data: Attached

1. MT
 1. Number of Existing Subscriber classified by Service categories (Public, Business and Private) and Waiter for year of 1997-2002. 1.1 - 6

2. Mobile and Railway Company
 1. Number of Existing Subscriber classified by Service categories (Public, Business and Private) and Waiter for year of 1997-2002.
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Inquiry Sheet (MT-1)
 MT
 1.Number of Existing Subscriber classified by Service categories (Public, Business and Private) and Water for year of 1997-2002.

Amag/Sun Center	1,997				1,998				1,999				2,000				2,001				
	Existing Subscriber		Water		Existing Subscriber		Water		Existing Subscriber		Water		Existing Subscriber		Water		Existing Subscriber		Water		
	Public	Business	Private	Total	Public	Business	Private	Total	Public	Business	Private	Total	Public	Business	Private	Total	Public	Business	Private	Total	
10 UVURKHANGAI Amag Total																					
10 2 Bayan-Undir	6	3	3		1	1															
10 3 Burd	19	2	2	15	12	2	1	9	2	1	9	2	12	2	1	9					9
10 4 Bak-Ula	41	4	2	35	10	7	2	1	5	1	5	1	12	6	1	5					12
10 5 BB-Ulaan	5	3	2		14	3	1	10					0								
10 6 Bayanngal				49								49									
10 7 Guchin-Uj	46	3	3	40	44	3	1	40	4	46	3	1	42	4	46	3	1	42	4	46	20
10 8 Zpil	69	9	8	52	69	9	9	52	37	69	9	8	52	51	60	8	2	50	65	60	100
10 9 Ulaat	36	3	3	30	34	3	1	30				4	2	4	10	4	2	4			3
10 10 ZB Ulaan	8	3	2	3	15	3	2	10	28	2	2	24	5	27	1	4	22	29	4	1	24
10 11 Bogd	50	3	3	47	3	36	3	1	32	1	46	3	1	42	46	3	1	42			
10 12 Nemeeel	5	3	2		0																
10 13 Saat	20	5	5	15	27			5	22	42	7	13	22		50	9	13	28			45
10 14 Taragt	34	3	2	29	10	44	3	4	4	34	3	1	30	10	0						26
10 15 Tugug	17	3	2	12	5	2	3			12	2	3	7	2	17	2	3	12			1
10 16 Yangs	88	11	9	68	13	88	11	9	68	16	92	12	10	70	40	112	12	8	92	31	100
10 17 Kharshandulaan	5	3	2		0										8	1	2	5			0
10 18 Khuzrt	174	9	17	148	20	154	7	15	132	19	150	4	12	134	20	0					139
10 19 Kharshorin	450	28	29	391	51	571	32	35	503	23	595	36	47	512	52	644	39	53	572	7	616
10 20 Bayandeg	3	1	2		2	1	1			1	1	1			1	1	1	1			1
13 SELENGE Amag Total	906	52	70	784		932	52	74	806		1,054	68	71	915		1,114	68	53	993	317	1,131
13 Total of Sun Centres																					
13 7 Alhanbag	60	14	24	22		60	14	24	22		59	8	6	45		60	8	6	46	25	72
13 3 Erus	58	6	6	46		58	6	6	46		58	6	6	46		63	5	12	46	10	63
13 4 Zamburen	12	4	2	6		12	4	2	6		6	4	2	6		5	3	2	2	5	3
13 5 Khushaat	4	4				4	4				6	5	1	6		6	5	1	6	5	10
13 6 Orlhon	9	2	5	2		9	2	5	2		9	2	5	2		18	9	5	4	0	11
13 7 Saat	19	3	5	11		19	3	5	11		19	3	5	11		19	3	5	11	2	5
13 8 Khuder	12	4	8			12	4	8			12	4	8		12	4	8				8
13 9 Tsagaanur	12	5	7			12	5	7			32	5	27		32	5	27				21
13 10 Buganz	15	5	3	7		15	5	3	7		13	5	3	5		13	5	3	5		13
13 11 Orkhonbul	16	4	7	5		16	4	7	5		25	11	7	7		27	4	4	19	20	21
13 12 Barunburen	26	6	3	17		27	6	3	18		31	9	3	19		27	4	4	19	36	3
13 13 Dolanbagan	14	7	4	3		16	7	4	5		9	5	1	3		7	3	1	3	7	3
13 14 Javkhant	23	7	4	12		23	7	4	12		21	7	2	12		14	2	2	10	14	2
13 15 Sharnar	58	8	2	48		58	8	2	48		62	8	2	52		64	5	5	54	5	54
13 16 Tuding	9	6	3			9	6	3			9	6	3			9	6	3			5
13 17 Sabhan	13	4	9			1	11	4	7		10	11	4	7		11	3	8			8
13 18 Khutul	359	16	14	329		354	13	14	307		379	13	9	378		418	15	13	410	19	462
13 19 Bayankharaa	308	21	89	268		379	23	17	339		431	22	21	388		50	478	22	21	435	105
13 20 Bayanzog (Bayankharaa)	52	5	27	20		52	6	26	20		5	6	26	29		5	8	18	34	20	177
13 21 Tundrel	30	5	10	15		32	5	9	18		28	3	7	18		16	5	11			5
19 DARRKHAN-UUL Amag Total	3,060	145	312	2,603		3,827	154	318	3,555		4,811	129	311	4,371		5,465	133	256	5,076	1,797	6,464
19 Total of Sun Centres	985	74	112	799		958	1,144	74	1,011		1,234	68	98	1,068		304	1,373	75	88	1,210	208
19 2 Shvuu gol	143	14	18	111		141	184	12	15		160	12	14	190		105	284	14	13	277	53
19 3 Khingon	35	3	8	24		28	49	4	10		47	4	10	33		15	58	3	12	43	2
19 4 Orkhon	45	6	7	32		32	9	43	33		40	4	4	32		9	28	5	6	20	9

Inquiry Sheet (MB-1)
Mobile Company: Skytel

1. Number of Existing Subscriber classified by Service categories (Public, Business and Private) and Waiver for year of 1997-2002.

Amag/Sun Center	Service Commencement date	Estimated commencement year*	1997			1998			1999			2000			2001		
			Existing Subscriber		Waiver	Existing Subscriber		Waiver	Existing Subscriber		Waiver	Existing Subscriber		Waiver	Existing Subscriber		Waiver
			Total	Public	Business/Private	Total	Public	Business/Private	Total	Public	Business/Private	Total	Public	Business/Private	Total	Public	Business/Private
10 UVURKHANGAI Amag Total																	
10 Total of Sun Centres																	
10 2 Bayan-Undur																	
10 3 Burd																	
10 4 Bat-Uzin																	
10 5 BB-Ulaan																	
10 6 Bayangel																	
10 7 Cuchin-Uls																	
10 8 Zyl																	
10 9 Ulni																	
10 10 ZB Ulaan																	
10 11 Bogd																	
10 12 Narintei																	
10 13 Sant																	
10 14 Taragt																	
10 15 Tugug																	
10 16 Yangs																	
10 17 Kharkhandulaan																	
10 18 Khuzart																	
10 19 Kharkhorin																	
10 20 Bayantreg																	
13 SELENGE Amag Total																	
13 Total of Sun Centres																	
13 2 Abantbrug																	
13 3 Eruu																	
13 4 Zombuuren		2,000															
13 5 Khushaat																	
13 6 Orkhon																	
13 7 Seit																	
13 8 Khuder																	
13 9 Tsagaanuur																	
13 10 Bugant																	
13 11 Ordhonbul																	
13 12 Barvuburen																	
13 13 Dulzaribhaan																	
13 14 Jaokhlant																	
13 15 Shaenar		2,000															
13 16 Tushag																	
13 17 Saichan																	
13 18 Khurul																	
13 19 Zuukharya																	
13 20 Bayangel (Barvucharaa)																	
13 21 Tunkiel																	
19 DARKHAN-UUL Amag		36,416															
19 Total of Sun Centres																	
19 2 Sharin goi																	
19 3 Khongor																	
19 4 Orkhon																	

Inventory Sheet (RW-1)
Railway Conn

1. Number of Existing Subscriber classified by Service categories (Public, Business and Private) and Waiver for year of 1997-2002.

Amaq/Sun Center	Service Commence ment date	Estimated commencement date	1997			1998			1999			2000			2001		
			Existing Subscriber Total	Business/Private Total	Waiver Total	Existing Subscriber Total	Business/Private Total	Waiver Total	Existing Subscriber Total	Business/Private Total	Waiver Total	Existing Subscriber Total	Business/Private Total	Waiver Total	Existing Subscriber Total	Business/Private Total	Waiver Total
10	UVURKHANGAI Amaq Total																
10	Total of Sum Centres																
10	2	Bayan-Undur															
10	3	Burd															
10	4	Bas-Ulin															
10	5	BB-Ulaan															
10	6	Bayangol															
10	7	Gochin-Uz															
10	8	Zyl															
10	9	Ulaat															
10	10	ZB Ulaan															
10	11	Bogd															
10	12	Narantsei															
10	13	Sant															
10	14	Teragt															
10	15	Tugrug															
10	16	Yanga															
10	17	Khadhandulaan															
10	18	Khurt															
10	19	Kharkhorin															
10	20	Boysateeg															
13	SELENGE Amaq Total																
13	Total of Sum Centres																
13	2	Albanbulag															
13	3	Eruu															
13	4	Zuunburan															
13	5	Khusaat															
13	6	Orkhon															
13	7	Sant															
13	8	Khuder															
13	9	Tsagaanmur															
13	10	Bugant															
13	11	Orkhonbul															
13	12	Baunburan															
13	13	Dulaandhaan															
13	14	Javkhiant															
13	15	Shaerur															
13	16	Tushig															
13	17	Saichan															
13	18	Khutul															
13	19	Zaunakharas															
13	20	Bayangol(Bauntharas)															
13	21	Tunkhei															
19	DARKHAN-UUL Amaq Total																
19	Total of Sum Centres																
19	2	Sharan gol															
19	3	Khonger															
19	4	Orkhon															

1. Transition of Population (Number of People)

Population(Sum Centre)

Aimag ID	Sum ID	Aimag/Sum Name	1,997	1,998	1,999	2,000	2,001	Population (2000) (Except Rural)
10	2	Bayan-Undur	540	439	445	448	541	515
10	3	Burd	604	607	610	620	607	528
10	4	Bat-Ulzu	1,838	1,930	1,935	1,940	1,837	1,880
10	5	BB-Ulaan	495	501	508	514	496	489
10	6	Bayangol	875	869	851	879	896	684
10	7	Guchin-Uс	471	488	483	500	472	639
10	8	Zyil	688	713	713	981	1,003	946
10	9	Ulzit	587	589	600	620	588	690
10	10	ZB Ulaan	668	667	670	671	669	842
10	11	Bogd	964	965	973	978	965	1,176
10	12	Naninteel	1,385	1,387	1,390	1,394	1,386	1,213
10	13	Sant	810	815	720	859	730	859
10	14	Taragt	612	617	620	650	612	676
10	15	Tugrug	621	630	635	636	623	509
10	16	Yanga	1,189	1,204	1,035	1,354	1,343	1,354
10	17	Kharkhandulaan	589	590	690	692	590	615
10	18	Khuzirt	245	272	250	3,949	3,949	3,949
10	19	Kharkhorin	9,126	8,784	8,876	8,718	8,523	8,689
10	20	Bayanteeg	0	0	0	200	200	200
13	2	Altanbulag	2,544	2,637	2,931	2,870	3,206	2,870
13	3	Eruu	2,220	2,311	2,365	2,441	2,475	2,365
13	4	Zuunburen	1,985	2,171	2,193	2,094	1,998	1,950
13	5	Khushaat	896	850	860	1,014	940	898
13	6	Orkhon	1,539	1,573	1,581	1,676	1,234	1,497
13	7	Sant	1,761	1,681	1,675	1,608	1,601	1,590
13	8	Khuder	1,802	1,840	1,715	1,520	1,484	1,221
13	9	Tsagaannuur	2,830	2,960	2,970	2,948	3,073	3,107
13	10	Bugant	0	0	0	2,000	2,000	2,000
13	11	Orkhontuul	1,832	1,453	1,970	3,286	3,500	2,743
13	12	Baruunburen	2,140	1,721	1,732	1,558	1,568	2,174
13	13	Dulaankhaan	0	0	0	1,000	1,000	1,000
13	14	Javkhiant	976	1,056	1,065	961	902	930
13	15	Shaamar	4,415	2,947	2,829	3,735	3,426	3,789
13	16	Tushig	1,410	1,446	1,450	1,456	1,318	1,339
13	17	Saikhan	0	0	0	0	0	6,436
13	18	Khutul	9,718	9,818	10,052	2,954	2,954	2,954
13	19	Zuunkharaa	16,044	15,260	15,459	15,155	15,461	22,043
13	20	Bayangol (Baruunharaa)	3,518	3,220	3,095	3,666	3,580	3,755
13	21	Tunkhel	3,163	3,110	3,236	200	200	200
19	2	Sharin gol	7,898	7,879	7,594	8,289	7,722	7,790
19	3	Khongor	2,158	2,287	2,497	2,598	2,573	2,596
19	4	Orkhon	2,052	1,762	1,645	1,650	2,900	1,980

Inquiry Sheet (Municipality-1)

Municipality: _____

2. Transition of Population (Number of People)

Population(total Sum)

Aimag ID	Sum ID	Aimag/Sum Name	1,997	1,998	1,999	2,000	2,001
10	2	Bayan-Undur	4,935	4,940	4,946	4,949	4,936
10	3	Burd	3,893	3,895	3,898	3,908	3,896
10	4	Bat-Ulzii	5,751	5,843	5,848	5,853	5,750
10	5	BB-Ulaan	2,975	2,981	2,988	2,994	2,976
10	6	Bayangol	4,572	4,682	4,759	4,775	4,747
10	7	Guchin-Us	2,408	2,425	2,430	2,447	2,409
10	8	Zyil	3,786	3,689	3,793	3,839	3,820
10	9	Ulziit	3,317	3,319	3,330	3,350	3,318
10	10	ZB Ulaan	5,105	5,106	5,109	5,110	5,106
10	11	Bogd	6,002	6,003	6,011	6,016	6,003
10	12	Nariinteel	4,178	4,419	4,283	4,287	4,279
10	13	Sant	4,286	3,883	4,374	4,328	3,878
10	14	Taragt	4,313	4,318	4,321	4,351	4,313
10	15	Tugrug	2,899	2,908	2,913	2,914	2,901
10	16	Yanga	7,100	7,162	7,340	7,567	7,824
10	17	Kharkhandulaan	3,853	3,854	3,954	3,956	3,854
10	18	Khuzirt	0	0	0	0	0
10	19	Kharkhorin	12,999	13,415	13,830	13,915	13,444
10	20	Bayanteeg	0	0	0	0	0
13	2	Altanbulag	3,092	3,175	3,371	3,512	3,812
13	3	Eruu	2,060	2,080	2,095	3,100	3,130
13	4	Zuunburen	2,484	2,658	2,678	2,524	2,245
13	5	Khushaat	1,193	1,267	1,308	1,406	1,303
13	6	Orkhon	2,621	2,707	2,727	2,817	2,076
13	7	Sant	2,071	2,033	2,114	2,062	2,053
13	8	Khuder	2,078	2,053	1,813	1,729	1,751
13	9	Tsagaannuur	3,696	3,876	4,033	4,153	4,326
13	10	Bugant	0	0	0	0	0
13	11	Orkhontuul	3,701	3,725	3,784	3,760	4,002
13	12	Baruunburen	2,730	2,973	2,993	2,939	2,953
13	13	Dulaankhaan	0	0	0	0	0
13	14	Javkhlant	1,644	1,665	1,676	1,767	1,657
13	15	Shaamar	4,710	4,972	4,774	4,809	4,409
13	16	Tushig	1,795	1,828	1,821	1,899	1,718
13	17	Saikhan	0	0	0	0	0
13	18	Khutul	9,718	9,818	10,052	8,737	8,755
13	19	Zuunkharaa	22,658	21,691	21,990	22,043	22,304
13	20	Bayangol□(Baruunharaa	5,334	5,351	5,074	5,391	5,261
13	21	Tunkhel	3,163	3,110	3,236	3,494	3,526
19	2	Shariin gol	9,031	9,012	8,727	8,987	8,619
19	3	Khongor	5,348	5,410	5,478	5,579	5,543
19	4	Orkhon	3,102	3,003	3,000	3,000	3,400

Inquiry Sheet (Municipality-2)

Municipality: _____

3. Number of Household

Aimag ID	Sum ID	Aimag/Sum Name	1,997	1,998	1,999	2,000	2,001
10		UVURKHANGAI Aimag Total	0	0	0	0	0
10		Total of Sum Centres	0	0	0	0	0
10	2	Bayan-Undur	446	457	468	465	455
10	3	Burd	0	0	0	0	0
10	4	Bat-Ulzii	743	532	540	656	649
10	5	BB-Ulaan	0	0	0	0	0
10	6	Bayangol	146	157	169	180	173
10	7	Guchin-Us	168	171	185	153	145
10	8	Zyil	174	167	172	242	244
10	9	Ulziit	95	181	180	165	150
10	10	ZB Ulaan	238	234	233	253	253
10	11	Bogd	453	488	505	524	500
10	12	Nariinteel	359	348	373	347	339
10	13	Sant	200	196	210	186	170
10	14	Taragt	333	289	263	214	189
10	15	Tugrug	222	243	240	244	240
10	16	Yanga	301	312	331	437	394
10	17	Kharkhandulaan	259	233	229	249	212
10	18	Khuzirt	2,099	2,193	2,170	2,228	2,193
10	19	Kharkhorin	3,326	3,541	3,488	3,472	3,454
10	20	Bayanteeg	0	0	0	0	0
13		SELENGE Aimag Total	0	0	0	0	0
13		Total of Sum Centres	0	0	0	0	0
13	2	Altanbulag	568	632	750	664	710
13	3	Eruu	624	631	644	654	681
13	4	Zuunburen	503	457	4,194	498	396
13	5	Khushaat	269	293	312	313	331
13	6	Orkhon	597	588	689	671	534
13	7	Sant	515	507	505	530	532
13	8	Khuder	434	439	317	403	381
13	9	Tsagaannuur	818	848	925	925	976
13	10	Bugant	0	0	0	0	0
13	11	Orkhontuul	772	776	842	793	878
13	12	Baruunburen	557	648	643	660	672
13	13	Dulaankhaan	0	0	0	0	0
13	14	Javkhiant	351	344	382	383	337
13	15	Shaamar	1,035	1,102	1,090	1,096	1,030
13	16	Tushig	440	435	415	445	405
13	17	Saikhan	0	0	0	0	0
13	18	Khutul	2,210	2,231	2,051	2,088	2,068
13	19	Zuunkharaa	3,651	3,516	3,496	3,502	3,597
13	20	Bayangol □(Baruunharaa)	1,223	1,209	1,279	1,280	1,182
13	21	Tunkhel	658	711	720	780	710
19		DARKHAN-UUL Aimag Total	11,469	11,046	7,990	9,291	10,365
19		Total of Sum Centres	3,764	3,883	4,006	4,202	4,248
19	2	Shariin gol	1,975	1,983	2,006	2,198	2,131
19	3	Khongor	510	548	598	626	611
19	4	Orkhon	681	717	832	775	820

Inquiry Sheet (Municipality-4)

Municipality: _____

4. Number of Household classified by Income Bracket in each occupation categories(2001)

Number of Household

Total

Aimag ID	Sum ID	Aimag/Sum Name	Total	Herdsm an	Farmer	Worker	Teacher	Doctor	Engineer	Clerk	Unempl oyed	Other
10		UVURKHANGAI Aimag Total	0	0	0	0	0	0	0	0	0	0
10		Total of Sum Centres	0	0	0	0	0	0	0	0	0	0
10	2	Bayan-Undur	455	325	0	16	27	4	2	73	8	0
10	3	Burd	0	0	0	0	0	0	0	0	0	0
10	4	Bat-Ulzii	665	315	0	13	25	6	0	62	244	0
10	5	BB-Ulaan	191	80	0	11	22	3	0	26	49	0
10	6	Bayangol	173	9	0	53	18	3	0	30	41	19
10	7	Guchin-Uls	145	15	0	50	19	2	0	17	42	0
10	8	Zyil	244	43	5	39	10	5	0	83	24	35
10	9	Ulziit	146	61	0	25	16	3	0	21	20	0
10	10	ZB Ulaan	253	102	0	23	23	6	0	42	57	0
10	11	Bogd	500	331	0	28	25	4	0	59	53	0
10	12	Nariinteel	339	73	24	46	20	9	6	73	88	0
10	13	Sant	186	6	10	46	34	6	0	64	20	0
10	14	Taragt	189	50	7	35	10	2	3	20	50	12
10	15	Tugrug	240	54	0	68	27	3	0	29	39	20
10	16	Yanga	394	41	52	29	24	9	1	32	45	161
10	17	Kharkhandulaan	212	97	0	43	19	2	0	17	34	0
10	18	Khuzirt	359	0	0	0	0	11	12	48	288	0
10	19	Kharkhorin	3,454	322	110	53	36	7	27	37	39	2,823
10	20	Bayanteeg	207	50	0	108	0	1	4	22	22	0
13		SELENGE Aimag Total	0	0	0	0	0	0	0	0	0	0
13		Total of Sum Centres	0	0	0	0	0	0	0	0	0	0
13	2	Altanbulag	709	0	0	405	57	16	18	146	67	0
13	3	Eruu	681	393	3	79	41	5	6	76	78	0
13	4	Zuunburen	396	36	0	167	28	6	0	28	31	100
13	5	Khushaat	331	232	0	21	12	1	0	44	21	0
13	6	Orkhon	671	313	0	238	27	2	0	53	38	0
13	7	Sant	532	186	0	118	20	1	0	65	142	0
13	8	Khuder	384	164	0	102	28	2	0	59	29	0
13	9	Tsagaannuur	976	272	0	503	36	3	0	79	83	0
13	10	Bugant	0	0	0	0	0	0	0	0	0	0
13	11	Orkhontuul	798	538	0	22	50	2	0	67	119	0
13	12	Baruunburen	643	442	0	52	23	1	0	59	66	0
13	13	Dulaankhaan	0	0	0	0	0	0	0	0	0	0
13	14	Javkhlant	341	219	0	31	18	2	0	35	36	0
13	15	Shaamar	1,030	210	0	356	54	3	0	93	314	0
13	16	Tushig	405	190	0	44	24	2	0	52	93	0
13	17	Saikhhan	0	0	0	0	0	0	0	0	0	0
13	18	Khutul	2,068	684	0	442	90	14	0	310	528	0
13	19	Zuunkharaa	5,110	0	0	0	0	0	0	0	0	0
13	20	Bayangol (Baruunharaa)	1,182	397	0	589	45	5	0	95	51	0
13	21	Tunkhel	5,003	1,549	0	2,500	226	55	0	218	455	0
19		DARKHAN-UUL Aimag Total	0	0	0	0	0	0	0	0	0	0
19		Total of Sum Centres	0	0	0	0	0	0	0	0	0	0
19	2	Sharin gol	1,872	0	0	0	0	0	0	0	0	0
19	3	Khongor	427	23	44	62	57	11	57	89	0	84
19	4	Orkhon	216	0	0	0	0	0	0	0	0	0

Inquiry Sheet (Municipality-4)

Municipality: _____

5. Number of Household classified by Income Bracket in each occupation categories(2001)

Aimag ID	Sum ID	Aimag/Sum Name	Total				
			Total	18,999 and Under	19,000 - 40,999	41,000 - 100,999	101,000 and above
10		UVURKHANGAI Aimag Total	0	0	0	0	0
10		Total of Sum Centres	0	0	0	0	0
10	2	Bayan-Undur	455	86	205	114	50
10	3	Burd	0	0	0	0	0
10	4	Bat-Ulzii	665	422	165	58	20
10	5	BB-Ulaan	191	63	92	36	0
10	6	Bayangol	173	62	66	45	0
10	7	Guchin-Us	145	47	27	71	0
10	8	Zyil	244	132	96	16	0
10	9	Ulziit	146	83	46	15	2
10	10	ZB Ulaan	253	97	28	111	17
10	11	Bogd	500	30	59	140	271
10	12	Nariinteel	339	129	90	98	22
10	13	Sant	186	23	63	94	6
10	14	Taragt	189	90	76	23	0
10	15	Tugrug	240	41	79	115	5
10	16	Yanga	394	45	116	225	8
10	17	Kharkhandulaan	212	35	164	13	0
10	18	Khuzirt	359	248	88	23	0
10	19	Kharkhorin	3454	39	375	3040	0
10	20	Bayanteeg	207	86	114	7	0
13		SELENGE Aimag Total	0	0	0	0	0
13		Total of Sum Centres	0	0	0	0	0
13	2	Altanbulag	709	177	253	268	11
13	3	Eruu	681	67	89	241	284
13	4	Zuunburen	396	148	192	56	0
13	5	Khushaat	331	8	10	313	0
13	6	Orkhon	671	9	23	639	0
13	7	Sant	532	43	78	411	0
13	8	Khuder	384	10	17	357	0
13	9	Tsagaannuur	976	16	45	915	0
13	10	Bugant	0	0	0	0	0
13	11	Orkhontuul	798	38	64	696	0
13	12	Baruunburen	643	17	41	585	0
13	13	Dulaankhaan	0	0	0	0	0
13	14	Javkhiant	341	7	26	308	0
13	15	Shaamar	1030	67	223	740	0
13	16	Tushig	405	21	65	319	0
13	17	Saikhan	0	0	0	0	0
13	18	Khutul	2068	43	416	1609	0
13	19	Zuunkharaa	5110	38	214	4858	0
13	20	Bayangol (Baruunharaa)	1182	11	34	1137	0
13	21	Tunkhel	5003	48	313	4642	0
19		DARKHAN-UUL Aimag Total	0	0	0	0	0
19		Total of Sum Centres	0	0	0	0	0
19	2	Shariin got	1872	85	636	744	407
19	3	Khongor	427	13	104	283	27
19	4	Orkhon	216	102	89	25	0

Inquiry Sheet (Municipality-5)

Municipality: _____

6. Average Household Income (1997-2002)

Aimag	Sum ID	Aimag/Sum Name	1997	1998	1999	2000	2001
10		UVURKHANGAI Aimag Total	0	0	0	0	0
10		Total of Sum Centres	0	0	0	0	0
10	2	Bayan-Undur	15,800	16,000	16,300	15,900	16,700
10	3	Burd	0	0	0	0	0
10	4	Bat-Ulzii	19,000	20,000	36,000	38,000	40,000
10	5	BB-Ulaan	24,000	25,400	27,000	27,000	29,000
10	6	Bayangol	21,200	21,400	20,700	20,100	21,900
10	7	Guchin-Uls	15,800	16,000	16,500	17,000	17,500
10	8	Zyil	26,889	27,350	28,530	28,870	30,811
10	9	Ulziit	16,200	16,700	16,900	15,840	16,750
10	10	ZB Ulaan	16,000	13,200	13,400	16,900	18,300
10	11	Bogd	15,200	15,800	15,300	15,300	15,800
10	12	Nariinteel	4,236	4,754	5,246	5,354	4,352
10	13	Sant	9,700	10,100	10,400	13,800	14,700
10	14	Taragt	15,000	16,000	17,000	20,000	21,000
10	15	Tugrug	8,100	8,300	7,986	7,500	7,035
10	16	Yanga	24,200	26,200	29,100	32,400	33,100
10	17	Kharkhandulaan	17,000	17,500	18,000	18,700	18,650
10	18	Khuzirt	29,000	29,800	32,000	34,500	36,700
10	19	Kharkhorin	18,300	26,500	29,150	36,400	39,000
10	20	Bayanteeg	16,860	18,900	18,964	22,435	28,664
13		SELENGE Aimag Total	0	0	0	0	0
13		Total of Sum Centres	0	0	0	0	0
13	2	Altanbulag	59,400	61,400	62,800	63,700	64,000
13	3	Eruu	28,300	59,100	90,200	111,200	115,600
13	4	Zuunburen	9,500	11,500	11,500	16,500	16,500
13	5	Khushaat	50,400	53,100	52,800	51,900	53,200
13	6	Orkhon	46,300	46,200	46,800	47,200	48,300
13	7	Sant	48,200	47,600	47,800	48,300	48,500
13	8	Khuder	44,500	45,400	46,200	49,400	49,200
13	9	Tsagaannuur	56,200	55,900	56,300	56,700	56,900
13	10	Bugant	52,300	52,400	52,100	52,800	53,000
13	11	Orkhontuul	47,400	49,900	47,000	47,300	47,500
13	12	Baruunburen	46,300	46,600	46,900	47,200	47,300
13	13	Dulaankhaan	49,300	50,100	50,300	50,600	51,600
13	14	Javkhlant	48,300	48,600	49,500	50,900	51,200
13	15	Shaamar	49,300	48,900	49,500	49,900	50,300
13	16	Tushig	44,600	45,200	46,700	45,800	48,900
13	17	Saikhan	50,200	50,500	50,800	51,700	52,400
13	18	Khutul	55,300	56,100	56,300	56,500	57,000
13	19	Zuunkharaa	59,100	59,300	62,400	65,300	69,100
13	20	Bayangol □ (Baruunharaa)	54,600	54,900	55,200	55,100	56,100
13	21	Tunkhel	50,200	50,100	51,300	51,200	50,400
19		DARKHAN-UUL Aimag Total	0	0	0	0	0
19		Total of Sum Centres	0	0	0	0	0
19	2	Shariin gol	45,000	55,600	55,600	20,000	30,000
19	3	Khongor	45,000	48,000	50,000	52,000	54,000
19	4	Orkhon	5,200	5,200	10,650	9,500	11,900

Inquiry Sheet (Municipality-6)

Municipality: _____

7. Number of Public Organization classified by Sector (1997-2002)

Total

Aimag ID	Sum ID	Aimag/Sum Name	1997	1998	1999	2000	2001
10		UVURKHANGAI Aimag Total	0	0	0	0	0
10		Total of Sum Centres	288	288	288	288	288
10	2	Bayan-Undur	13	13	13	13	13
10	3	Burd	17	17	17	17	17
10	4	Bat-Ulzii	13	13	13	13	13
10	5	BB-Ulaan	9	9	9	9	9
10	6	Bayangol	13	13	13	16	16
10	7	Guchin-Us	8	8	8	8	8
10	8	Zyil	11	11	11	11	11
10	9	Ulziit	10	10	10	10	10
10	10	ZB Ulaan	16	16	16	16	16
10	11	Bogd	16	16	16	16	16
10	12	Nariinteel	15	15	15	15	15
10	13	Sant	11	11	11	11	11
10	14	Taragt	13	13	13	13	13
10	15	Tugrug	9	9	9	9	9
10	16	Yanga	29	31	32	32	34
10	17	Kharkhandulaan	12	12	12	12	12
10	18	Khuzirt	12	11	11	11	12
10	19	Kharkhorin	15	13	12	12	12
10	20	Bayanteeg	5	5	5	5	5
13		SELENGE Aimag Total	0	0	0	0	0
13		Total of Sum Centres	0	0	0	0	0
13	2	Altanbulag	5	5	4	4	4
13	3	Eruu	4	4	4	4	4
13	4	Zuunburen	5	5	5	5	5
13	5	Khushaat	4	4	4	4	4
13	6	Orkhon	4	4	4	4	4
13	7	Sant	5	5	5	5	5
13	8	Khuder	5	5	5	5	5
13	9	Tsagaannuur	6	6	6	6	6
13	10	Bugant	6	6	6	6	6
13	11	Orkhontuul	5	5	5	5	5
13	12	Baruunburen	4	5	5	5	4
13	13	Dulaankhaan	5	5	5	5	5
13	14	Javkhiant	4	4	4	4	4
13	15	Shaamar	4	4	4	4	4
13	16	Tushig	4	4	4	4	4
13	17	Saikhan	0	0	0	0	0
13	18	Khutul	10	10	5	5	9
13	19	Zuunkharaa	29	29	28	27	22
13	20	Bayangol (Baruunharaa)	6	6	6	6	6
13	21	Tunkhel	5	4	4	4	4
19		DARKHAN-UUL Aimag Total	0	0	0	0	0
19		Total of Sum Centres	0	0	0	0	0
19	2	Shariin gol	9	8	8	8	11
19	3	Khongor	41	45	43	52	48
19	4	Orkhon	6	6	6	6	8

Inquiry Sheet (Municipality-7)

Municipality: _____

8. Number of the public organization and its Average Staff classified in the categories (Large, Medium, Small) in each sector (2001)

Large: more than 15 staff

Medium: 6-15 staff

Small: less than 6 staff

Total

Aimag ID	Sum ID	Aimag/Sum Name	Total	Government Office	School	Hospital	other
10		UVURKHANGAI Aimag Tot	0	0	0	0	0
10		Total of Sum Centres	1,075	76	26	19	172
10	2	Bayan-Undur	13	4	1	1	7
10	3	Burd	17	4	1	1	11
10	4	Bat-Ulzii	13	4	2	1	6
10	5	BB-Ulaan	9	4	1	1	3
10	6	Bayangol	16	1	1	1	13
10	7	Guchin-Us	8	4	1	1	2
10	8	Zyil	11	2	1	1	7
10	9	Ulziit	10	4	1	1	4
10	10	ZB Ulaan	16	4	3	1	8
10	11	Bogd	16	4	1	1	10
10	12	Nariinteel	15	4	1	1	9
10	13	Sant	11	1	1	1	8
10	14	Taragt	13	4	2	1	6
10	15	Tugrug	9	4	1	1	3
10	16	Yanga	34	10	3	2	19
10	17	Kharkhandulaan	12	4	1	1	6
10	18	Khuzirt	7	5	1	1	0
10	19	Kharkhorin	12	3	3	1	5
10	20	Bayanteeg	5	3	1	1	0
13		SELENGE Aimag Total	0	0	0	0	0
13		Total of Sum Centres	0	0	0	0	0
13	2	Altanbulag	4	1	1	1	1
13	3	Eruu	4	1	1	1	1
13	4	Zuunburen	5	1	1	1	2
13	5	Khushaat	4	1	1	1	1
13	6	Orkhon	4	1	1	1	1
13	7	Sant	5	1	1	1	2
13	8	Khuder	5	1	1	1	2
13	9	Tsagaannuur	6	1	1	1	3
13	10	Bugant	6	1	1	1	3
13	11	Orkhontuul	5	1	1	1	2
13	12	Baruunburen	4	1	1	1	1
13	13	Dulaankhaan	5	1	1	1	2
13	14	Javkhiant	4	1	1	1	1
13	15	Shaamar	4	1	1	1	1
13	16	Tushig	4	1	1	1	1
13	17	Saikhan	0	0	0	0	0
13	18	Khutul	9	2	2	1	4
13	19	Zuunkharaa	22	2	5	1	14
13	20	Bayangol □ (Baruunharaa)	6	1	1	1	3
13	21	Tunkhel	3	1	1	0	1
19		DARKHAN-UUL Aimag Tot	0	0	0	0	0
19		Total of Sum Centres	0	0	0	0	0
19	2	Shariin gol	9	1	1	1	6
19	3	Khongor	46	1	1	1	41
19	4	Orkhon	8	1	1	1	5

Inquiry Sheet (Municipality-8)

Municipality: _____

9. Number of Business Company classified by Sector (1997-2002)

Total							
Aimag ID	Sum ID	Aimag/Sum Name	1,997	1,998	1,999	2,000	2,001
10		UVURKHANGAI Aimag Total	0	0	0	0	0
10		Total of Sum Centres	0	78	97	90	66
10	2	Bayan-Undur	0	3	2	1	1
10	3	Burd	0	5	3	3	3
10	4	Bat-Ulzii	0	3	2	2	2
10	5	BB-Ulaan	0	3	2	2	1
10	6	Bayangol	0	3	3	5	5
10	7	Guchin-Us	0	3	1	1	1
10	8	Zyil	0	3	3	3	5
10	9	Ulziit	0	1	2	2	3
10	10	ZB Ulaan	0	6	7	7	3
10	11	Bogd	0	4	4	4	3
10	12	Nariinteel	0	3	3	4	2
10	13	Sant	0	2	2	1	1
10	14	Taragt	0	5	4	4	2
10	15	Tugrug	0	3	2	2	5
10	16	Yanga	0	14	16	17	19
10	17	Kharkhandulaan	0	3	2	2	2
10	18	Khuzirt	0	11	13	13	14
10	19	Kharkhorin	0	57	57	57	55
10	20	Bayanteeg	0	1	1	1	1
13		SELENGE Aimag Total	0	0	0	0	0
13		Total of Sum Centres	0	0	0	0	0
13	2	Altanbulag	11	11	12	11	11
13	3	Eruu	4	4	4	14	14
13	4	Zuunburen	9	9	17	20	25
13	5	Khushaat	0	32	34	35	36
13	6	Orkhon	0	22	29	31	33
13	7	Sant	0	11	13	14	18
13	8	Khuder	0	12	12	15	17
13	9	Tsagaannuur	0	31	35	28	31
13	10	Bugant	0	0	0	0	0
13	11	Orkhontuul	0	28	31	33	35
13	12	Baruunburen	0	15	18	18	20
13	13	Dulaankhaan	0	0	0	0	0
13	14	Javkhlant	0	18	20	22	24
13	15	Shaamar	0	6	9	9	10
13	16	Tushig	0	7	8	9	10
13	17	Saikhan	0	0	0	0	0
13	18	Khutul	0	21	23	19	30
13	19	Zuunkharaa	98	105	147	183	172
13	20	Bayangol (Baruunharaa)	0	32	36	39	42
13	21	Tunkhel	0	10	15	24	23
19		DARKHAN-UUL Aimag Total	10	0	0	0	0
19		Total of Sum Centres	0	0	0	0	0
19	2	Shariin gol	0	64	67	46	84
19	3	Khongor	39	40	58	62	65
19	4	Orkhon	0	7	0	6	60

Inquiry Sheet (Municipality 9)
Municipality:

10. Number of Company and its average Employees classified in the categories (Large, Medium, Small) in each sector (2001).

Large: More than 15 Employees

Medium: 6-15 Employees

Small: less than 6 Employees

	Agriculture and Stock-breeding			Fabric			Trade and Sells			Other		
	Total	Large	Medium	Small	Total	Large	Medium	Small	Total	Large	Medium	Small
10. Amag/Sun Name												
10.1 UYURKANGAI Amag	0	0	0	0	0	0	0	0	0	0	0	0
10.2 Total of Sum Centres	2	0	0	0	2	0	0	0	0	0	0	0
10.3 Bayan-Undur	0	0	0	0	0	0	0	0	0	0	0	0
10.4 Bat-Ulzii	1	0	0	0	1	0	0	0	0	0	0	0
10.5 BB-Ulan	0	0	0	0	0	0	0	0	0	0	0	0
10.6 Bayangol	0	0	0	0	0	0	0	0	0	0	0	0
10.7 Guchin-Uu	0	0	0	0	0	0	0	0	0	0	0	0
10.8 Zyl	1	0	0	0	1	0	0	0	0	0	0	0
10.9 Ulzii	0	0	0	0	0	0	0	0	0	0	0	0
10.10 ZB-Ulan	0	0	0	0	0	0	0	0	0	0	0	0
10.11 Bogd	0	0	0	0	0	0	0	0	0	0	0	0
10.12 Nairintel	0	0	0	0	0	0	0	0	0	0	0	0
10.13 Sant	0	0	0	0	0	0	0	0	0	0	0	0
10.14 Taragi	0	0	0	0	0	0	0	0	0	0	0	0
10.15 Tuguy	1	0	0	0	1	0	0	0	0	0	0	0
10.16 Yanga	0	0	0	0	0	0	0	0	0	0	0	0
10.17 Kharkhanulaan	0	0	0	0	0	0	0	0	0	0	0	0
10.18 Khuzir	0	0	0	0	0	0	0	0	0	0	0	0
10.19 Kharkharin	3	1	0	0	2	0	0	0	1	0	0	0
10.20 Bayanleeg	0	0	0	0	0	0	0	0	0	0	0	0
10.21 SELENGE Amag Total	0	0	0	0	0	0	0	0	0	0	0	0
10.22 Total of Sum Centres	7	2	3	2	1	0	0	0	1	0	0	0
10.23 Altanbulag	14	2	7	5	0	0	0	0	0	0	0	0
10.24 Erva	3	0	0	0	0	0	0	0	0	0	0	0
10.25 Zambhara	15	2	13	0	0	0	0	0	0	0	0	0
10.26 Khukhtas	33	7	15	11	0	0	0	0	0	0	0	0
10.27 Oldhon	30	2	19	9	0	0	0	0	0	0	0	0
10.28 7-Sent	11	1	6	4	0	0	0	0	0	0	0	0
10.29 Khuder	11	3	3	5	2	0	0	0	2	0	0	0
10.30 Tugayantuur	25	4	15	6	0	0	0	0	0	0	0	0
10.31 Bugent	0	0	0	0	0	0	0	0	0	0	0	0
10.32 Odkhontul	28	3	20	5	2	1	0	0	2	2	1	0
10.33 Baranburen	17	3	12	2	0	0	0	0	0	0	0	0
10.34 Dulanbhan	0	0	0	0	0	0	0	0	0	0	0	0
10.35 Juytshant	21	2	17	2	0	0	0	0	0	0	0	0
10.36 Shaganar	4	2	2	0	0	0	0	0	0	0	0	0
10.37 Tushig	4	2	2	0	0	0	0	0	0	0	0	0
10.38 Khudal	13	3	4	6	4	3	1	0	8	1	0	0
10.39 Zambhara	62	9	8	45	20	8	5	7	55	21	18	16
10.40 Bayangol	19	5	5	9	9	0	0	0	7	1	0	0
10.41 Zambhara	0	0	0	0	0	0	0	0	0	0	0	0
10.42 Tundul	0	0	0	0	0	0	0	0	0	0	0	0
10.43 DAKHAN-JUL Amag Total	0	0	0	0	0	0	0	0	0	0	0	0
10.44 Total of Sum Centres	0	0	0	0	0	0	0	0	0	0	0	0
10.45 Shaganar	5	0	0	0	0	0	0	0	0	0	0	0
10.46 Khongor	19	3	11	5	18	3	2	13	41	1	3	37
10.47 Odkhon	52	1	4	47	6	1	1	4	0	0	0	0

Inquiry Sheet (Municipality-10)

Municipality: _____

11. GRDP (1997-2002)

Aimag ID	Sum ID	Aimag/Sum Name	1,997	1,998	1,999	2,000	2,001
10	2	Bayan-Undur	0	0	0	0	0
10	3	Burd	0	0	0	0	0
10	4	Bat-Ulzii	0	0	0	0	0
10	5	BB-Ulaan	0	0	0	0	0
10	6	Bayangol	52,032	54,450	75,082	90,301	98,305
10	7	Guchin-Uс	0	0	0	0	0
10	8	Zyil	815,463	895,594	863,387	858,762	898,370
10	9	Ulziit	0	0	0	0	0
10	10	ZB Ulaan	0	0	0	0	0
10	11	Bogd	0	0	0	0	0
10	12	Nariinteel	4,376	4,800	5,249	5,479	6,127
10	13	Sant	6,709	7,566	4,035	4,993	8,855
10	14	Taragt	0	0	0	0	0
10	15	Tugrug	0	0	0	0	0
10	16	Yanga	5,586,200	5,959,400	6,100,300	6,486,400	6,792,000
10	17	Kharkhandulaan	0	0	0	0	0
10	18	Khuzirt	82,800	90,400	117,300	139,200	151,700
10	19	Kharkhorin	292,759	358,493	307,716	116,444	69,920
10	20	Bayanteeg	0	0	0	0	0
13	2	Altanbulag	238,300	405,700	486,500	315,200	327,800
13	3	Eruu	1,800,000	1,700,000	1,100,000	1,100,000	1,200,000
13	4	Zuunburen	51,640	28,362	31,630	139,530	161,310
13	5	Khushaat	14,136	15,275	13,712	38,143	11,596
13	6	Orkhon	74,236	81,432	107,310	44,400	9,688
13	7	Sant	47,119	58,373	55,794	73,304	62,453
13	8	Khuder	884,214	986,330	1,033,014	1,083,538	593,233
13	9	Tsagaannuur	54,217	58,417	53,011	57,829	110,587
13	10	Bugant	0	0	0	0	0
13	11	Orkhontuul	216,114	245,243	279,835	387,877	385,615
13	12	Baruunburen	29,375	32,348	30,775	29,426	11,150
13	13	Dulaankhaan	0	0	0	0	0
13	14	Javkhlant	18,249	19,384	17,818	25,425	26,800
13	15	Shaamar	38,244	40,131	42,550	52,660	144,230
13	16	Tushig	75,237	79,437	86,162	87,530	44,484
13	17	Saikhan	2,136,247	2,436,247	26,353,341	2,483,484	3,662,015
13	18	Khutul					
13	19	Zuunkharaa	9,945,400	12,321,200	15,597,200	16,699,500	14,035,700
13	20	Bayangol (Baruur)	2,134,214	2,314,625	2,614,882	2,536,137	2,440,446
13	21	Tunkhel	0	0	0	0	0
19	2	Shariin gol	8,149,530	8,990,730	10,117,620	8,792,580	9,777,750
19	3	Khongor	103,542	113,542	134,364	238,858	283,858
19	4	Orkhon	1,086,600	1,198,760	1,349,000	879,350	977,780

Inquiry Sheet (Municipality-11)

Municipality: _____

12. Budget and Expenditure of municipality (1997-2001)

Income							
Aimags ID	Sum ID	Aimags/Sum Name	1997	1998	1999	2000	2001
10	2	Bayan-Undur	11,190	14,455	15,717	10,291	20,012
10	3	Burd	13,774	18,225	14,539	11,144	13,316
10	4	Bat-Ulzii	11,269	15,224	17,468	11,504	36,916
10	5	BB-Ulaan	14,989	38,673	31,315	42,147	50,887
10	6	Bayangol	98,142	107,892	107,204	131,404	129,699
10	7	Guchin-Us	75,624	9,470	1,416,115	13,923	22,128
10	8	Zyil	65,527	70,304	70,732	97,049	110,456
10	9	Ulziit	6,477	8,917	9,125	6,159	18,129
10	10	ZB Ulaan	11,575	11,436	11,201	10,436	15,534
10	11	Bogd	29,125	33,105	32,037	24,473	10,547
10	12	Nariinteel	13,644	23,222	32,927	21,492	65,160
10	13	Sant	110,000	115,834	101,600	123,569	139,360
10	14	Taragt	9,097	13,791	12,652	6,417	19,563
10	15	Tugrug	8,636	10,289	14,972	12,288	14,756
10	16	Yanga	108,031	119,260	176,406	184,457	217,558
10	17	Kharkhandulaan	10,021	11,791	12,845	9,908	19,803
10	18	Khuzirt	178,968	157,312	171,062	197,463	235,071
10	19	Kharkhorin	358,172	353,031	340,999	447,301	510,008
10	20	Bayanteeg	0	0	0	0	0
13	2	Altanbulag	121,200	135,800	143,830	152,900	173,809
13	3	Eruu	127,000	158,000	197,000	210,000	247,000
13	4	Zuunburen	30,056	155,860	98,000	115,546	158,929
13	5	Khushaat	10,844	18,824	42,201	14,263	16,078
13	6	Orkhon	21,395	26,367	21,028	20,322	20,634
13	7	Sant	15,108	22,697	95,173	28,253	19,019
13	8	Khuder	13,975	31,851	27,299	19,509	22,526
13	9	Tsagaannuur	28,308	36,817	60,690	27,641	41,598
13	10	Bugant	0	0	17,196	16,779	16,722
13	11	Orkhontuul	17,910	32,628	36,170	24,837	26,101
13	12	Baruunburen	16,239	17,686	28,677	20,359	21,391
13	13	Dulaankhaan	9,000	9,628	10,997	10,001	10,844
13	14	Javkhiant	9,997	22,603	19,663	17,569	29,320
13	15	Shaamar	18,680	23,082	33,240	26,036	27,235
13	16	Tushig	11,774	20,417	21,240	20,617	18,903
13	17	Saikhan	20,114	36,712	40,409	23,750	28,019
13	18	Khutul	0	0	22,721	13,297	15,696
13	19	Zuunkharaa	0	647,402	572,375	709,014	916,052
13	20	Bayangol (Baruunharaa)	10,753	20,986	33,768	30,543	25,985
13	21	Tunkhel	11,505	17,806	15,909	12,747	15,771
19	2	Shariin gol	248,866	275,718	365,537	492,342	441,228
19	3	Khongor	0	0	0	195,156	194,359
19	4	Orkhon	109,709	104,562	120,501	137,345	137,199

Inquiry Sheet (Municipality-11)

Municipality: _____

13. Budget and Expenditure of municipality (1997-2001)

Expenditure							
Aimag ID	Sum ID	Aimag/Sum Name	1,997	1,998	1,999	2,000	2,001
10	2	Bayan-Undur	0	92,106	94,929	119,409	38,921
10	3	Burd	0	113,981	93,854	111,732	24,441
10	4	Bat-Ulzii	0	91,001	75,509	121,865	23,093
10	5	BB-Ulaan	0	93,312	86,756	125,173	18,371
10	6	Bayangol	96,340	118,226	108,650	139,240	144,870
10	7	Guchin-Uс	0	81,928	85,505	147,848	31,893
10	8	Zyil	76,726	82,178	80,087	109,826	128,584
10	9	Ulziit	0	74,399	85,913	103,443	22,978
10	10	ZB Ulaan	0	113,918	113,153	119,178	39,071
10	11	Bogd	0	151,679	140,692	170,668	34,031
10	12	Nariinteel	0	117,370	119,424	193,245	24,239
10	13	Sant	110,000	115,834	101,600	123,569	139,360
10	14	Taragt	0	91,462	90,284	108,031	26,468
10	15	Tugrug	0	102,922	96,823	166,355	34,441
10	16	Yanga	108,031	114,260	177,895	186,359	217,541
10	17	Kharkhandulaan	0	78,999	102,204	135,141	20,975
10	18	Khuzirt	178,039	150,215	172,922	202,642	271,099
10	19	Kharkhorin	365,337	395,462	402,877	549,350	590,967
10	20	Bayanteeg	0	0	0	0	0
13	2	Altanbulag	173,000	145,000	182,000	193,800	231,500
13	3	Eruu	127,000	158,000	197,000	210,000	247,000
13	4	Zuunburen	34,475	155,800	117,933	129,284	166,764
13	5	Khushaat	14,770	26,523	31,550	22,926	15,015
13	6	Orkhon	22,272	37,687	23,400	34,561	28,788
13	7	Sant	15,612	21,877	52,078	56,345	18,446
13	8	Khuder	28,446	37,396	36,515	44,576	40,634
13	9	Tsagaannuur	419,672	42,526	56,020	533,957	33,190
13	10	Bugant	0	0	22,305	18,885	17,896
13	11	Orkhontuul	23,542	33,520	32,355	41,601	23,953
13	12	Baruunburen	39,339	26,632	29,615	28,540	35,789
13	13	Dulaankhaan	8,724	9,489	9,830	14,756	20,666
13	14	Javkhlant	10,696	303,133	38,748	23,956	18,472
13	15	Shaamar	24,584	21,838	30,036	32,606	54,735
13	16	Tushig	24,730	23,060	29,759	35,987	30,233
13	17	Saikhan	40,279	45,300	29,564	28,941	71,004
13	18	Khutul	0	0	21,961	16,302	14,255
13	19	Zuunkharaa	0	579,453	609,321	1,001,447	1,084,211
13	20	Bayangol (Baruunhar)	11,112	33,032	21,559	31,273	49,265
13	21	Tunkhel	28,417	15,865	11,806	15,938	13,969
19	2	Shariin gol	259,115	287,073	366,219	469,092	500,909
19	3	Khongor	0	0	0	0	0
19	4	Orkhon	90,373	86,134	89,135	168,747	14,448

HH ID	Area ID	Sum ID	HH No	Interviewer Age	Interviewer Sex	Professional Hlus	Professional Wft	Husband	Wife	Child (<12)	Child (13-20)	Child (21-50)	Child (50)	Fix Sub Status	Existing Sub	Waiter	Necessity Line 200	Necessity Line 125	Necessity Line 70	Existing Mob	Waiter Mob	Necessity M Line 70	Selection of Telephone	Fixed inspire of Mobile	Income (Tg)	Affordable Payment (Tg)	
1	Uvurkhangai		126-40	Female	Unemployed	Unemployed	1	1	2	0	0	0	0	Subscriber	Not	Not	2004	2004	2002	2001	Not	2004	Both	TRUE	41000	10000	
2	Uvurkhangai	Bayangol	126-40	Male	Unemployed	Other	1	1	0	3	1	0	0	Others	Not	Not	2007	2004	2002	2002	Not	2004	Both	TRUE	19000	5000	
3	Uvurkhangai	Bayangol	241-60	Male	Clerk	Clerk	1	1	0	1	0	0	0	Subscriber	Not	Not	2002	2002	2002	2002	Not	2004	Both	TRUE	101000	20000	
4	Uvurkhangai	Bayangol	341-60	Female	Clerk	Clerk	1	1	1	1	0	0	0	Subscriber	Not	Not	2002	2002	2002	2002	Not	2002	Both	TRUE	101000	20000	
5	Uvurkhangai	Bayangol	426-40	Female	Other	Clerk	1	1	2	0	0	0	0	Subscriber	Not	Not	No	2002	2002	2002	Not	2002	Both	TRUE	41000	10000	
6	Uvurkhangai	Bayangol	526-40	Male	Other	Unclear	0	0	0	0	2	0	0	Waiter	Not	Not	2004	2004	2002	2002	Not	2004	Both	TRUE	18999	10000	
7	Uvurkhangai	Bayangol	617-25	Female	Other	Other	0	0	1	0	1	2	0	Others	Not	2002	2007	2004	2002	2002	Not	2001	Both	FALSE	19000	5000	
8	Uvurkhangai	Bayangol	726-40	Female	Other	Other	1	1	2	0	0	0	0	Subscriber	Not	Not	2004	2004	2002	2001	Not	2004	Both	TRUE	41000	10000	
9	Uvurkhangai	Bayangol	817-25	Female	Unemployed	Unclear	0	0	0	0	3	1	0	Waiter	Not	2001	2007	2007	2004	2002	2001	Not	2002	Both	TRUE	19000	5000
10	Uvurkhangai	Bayangol	941-60	Female	Worker	Teacher	1	1	0	1	0	1	0	Subscriber	Not	Not	2004	2004	2002	2002	Not	2002	Both	TRUE	41000	5000	
11	Uvurkhangai	Bayangol	1041-60	Female	Other	Teacher	1	1	0	2	1	0	0	Subscriber	Not	Not	2004	2002	2002	2002	Not	2001	Both	TRUE	41000	15000	
12	Uvurkhangai	Bayangol	1141-60	Male	Clerk	Engineer	1	1	1	3	0	0	0	Waiter	Not	2001	2004	2002	2002	2002	Not	2002	Both	TRUE	41000	10000	
13	Uvurkhangai	Bayangol	1226-40	Male	Other	Unemployed	1	1	2	0	0	0	0	Waiter	Not	2001	2004	2004	2002	2002	Not	2002	Mobile	TRUE	41000	5000	
14	Uvurkhangai	Bayangol	1317-25	Male	Herdsman	Herdsman	0	0	4	0	2	0	0	Others	Not	2001	2007	2007	2002	2002	Not	2002	Mobile	TRUE	41000	7000	
15	Uvurkhangai	Bayangol	1441-60	Female	Other	Other	1	1	0	0	2	0	0	Waiter	Not	2001	2004	2004	2002	2002	Not	2002	Fixed	TRUE	41000	7000	
16	Uvurkhangai	Bayangol	1541-60	Male	Teacher	Worker	1	1	0	1	2	0	0	Waiter	Not	2000	2004	2002	No	No	Not	2002	Both	TRUE	41000	5000	
17	Uvurkhangai	Bayangol	1641-60	Female	Worker	Unclear	0	1	0	1	0	0	0	Subscriber	Not	Not	2007	2007	2004	No	Not	2002	Both	TRUE	41000	12500	
18	Uvurkhangai	Bayangol	1741-60	Female	Other	Unclear	0	1	0	1	0	0	0	Others	Not	Not	2004	2004	2002	2004	Not	2004	Mobile	TRUE	19000	10000	
19	Uvurkhangai	Bayangol	1826-40	Male	Clerk	Worker	1	1	2	2	0	0	0	Others	Not	Not	No	No	2004	2004	Not	2004	Mobile	TRUE	19000	7000	
20	Uvurkhangai	Bayangol	1941-60	Male	Worker	Other	1	1	1	2	0	0	0	Others	Not	Not	No	No	2004	2004	Not	2004	Fixed	TRUE	41000	7000	
21	Uvurkhangai	Bayangol	2026-40	Female	Worker	Worker	1	1	2	0	0	0	0	Others	Not	Not	2004	2002	2002	2004	Not	2004	Both	TRUE	41000	12000	
22	Uvurkhangai	Bayangol	2126-40	Male	Herdsman	Herdsman	1	1	2	1	0	0	0	Others	Not	Not	2007	2007	2004	2004	Not	2004	Mobile	FALSE	19000	5000	
23	Uvurkhangai	Bayangol	2226-40	Male	Worker	Other	1	1	3	0	0	0	0	Others	Not	Not	2007	2004	No	Not	Not	2004	Mobile	FALSE	19000	12500	
24	Uvurkhangai	Bayangol	2326-40	Male	Other	Teacher	1	1	1	2	0	0	0	Others	Not	Not	2007	2004	No	Not	Not	2002	Fixed	TRUE	41000	5000	
25	Uvurkhangai	Bayangol	2441-60	Female	Unclear	Worker	0	1	1	1	1	0	0	Others	Not	Not	2007	2004	No	Not	Not	2004	Mobile	TRUE	19000	8500	
26	Uvurkhangai	Bayangol	2626-40	Female	Herdsman	Herdsman	1	1	2	0	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	2004	Both	TRUE	19000	8000	
27	Uvurkhangai	Bayangol	2726-40	Male	Worker	Herdsman	1	1	2	0	0	0	0	Others	Not	Not	2004	2004	2002	2002	Not	2004	Mobile	FALSE	19000	10000	
28	Uvurkhangai	Bayangol	2826-40	Female	Worker	Other	1	1	1	1	1	0	0	Others	Not	2002	2004	2002	2002	2002	Not	2004	Fixed	TRUE	41000	7000	
29	Uvurkhangai	Bayangol	2926-40	Male	Unemployed	Worker	1	1	2	0	0	0	0	Others	Not	Not	2004	2004	2002	2002	Not	2004	Mobile	TRUE	19000	10000	
30	Uvurkhangai	Bayangol	3026-40	Male	Unemployed	Unclear	1	0	0	0	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	2000	Both	TRUE	41000	7000	
31	Uvurkhangai	Bayangol	3126-40	Male	Unemployed	Unclear	1	1	0	2	0	0	0	Waiter	Not	Not	2004	2004	2002	2002	Not	2004	Both	FALSE	41000	15000	
32	Uvurkhangai	Zyil	41-60	Female	Teacher	Other	1	1	0	1	0	0	0	Others	Not	Not	2004	2004	2002	2002	Not	2004	Both	TRUE	41000	15000	
33	Uvurkhangai	Zyil	41-60	Male	Clerk	Clerk	1	1	3	0	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	2004	Both	FALSE	41000	15000	
34	Uvurkhangai	Zyil	41-60	Male	Clerk	Teacher	1	1	1	3	0	0	0	Subscriber	Not	Not	2004	2004	2002	2002	Not	2004	Both	FALSE	101000	7000	
35	Uvurkhangai	Zyil	41-60	Male	Teacher	Teacher	1	0	0	2	1	0	0	Others	Not	Not	2004	2004	2002	2002	Not	2004	Both	FALSE	101000	12000	
36	Uvurkhangai	Zyil	41-60	Female	Herdsman	Herdsman	1	1	1	3	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	2004	Both	FALSE	41000	7000	
37	Uvurkhangai	Zyil	26-40	Female	Unemployed	Worker	1	1	2	0	0	0	0	Subscriber	Not	Not	2007	2007	2007	2007	Not	No	Fixed	FALSE	18999	1500	
38	Uvurkhangai	Zyil	41-60	Male	Clerk	Other	1	1	3	1	0	0	0	Subscriber	Not	Not	2007	2004	2002	2002	Not	No	Fixed	FALSE	19000	2000	
39	Uvurkhangai	Zyil	41-60	Female	Other	Clerk	1	1	1	3	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	2004	Both	FALSE	41000	7000	
40	Uvurkhangai	Zyil	41-60	Male	Worker	Clerk	1	1	1	0	0	0	0	Subscriber	Not	Not	2004	2004	2004	2004	Not	No	Fixed	FALSE	41000	5000	
41	Uvurkhangai	Zyil	0>60	Male	Clerk	Other	1	1	0	0	0	0	0	Others	Not	2000	2002	2002	2002	2002	Not	2002	Mobile	FALSE	41000	10000	
42	Uvurkhangai	Zyil	041-60	Male	Herdsman	Clerk	1	1	1	2	1	0	0	Others	Not	Not	2004	2004	2002	2002	Not	2004	Fixed	FALSE	41000	8000	
43	Uvurkhangai	Zyil	026-40	Male	Worker	Worker	1	1	0	2	0	0	0	Waiter	Not	2000	2007	2004	2002	2002	Not	2004	Both	FALSE	19000	7000	
44	Uvurkhangai	Zyil	026-40	Male	Worker	Worker	1	1	2	1	0	0	0	Others	Not	Not	2007	2007	2007	2007	Not	No	Fixed	FALSE	41000	2000	
45	Uvurkhangai	Zyil	026-40	Male	Worker	Unemployed	1	1	2	0	0	0	0	Others	Not	Not	2004	2004	2004	2004	Not	No	Fixed	FALSE	41000	3000	
46	Uvurkhangai	Zyil	026-40	Male	Teacher	Unemployed	1	1	0	3	0	0	0	Waiter	Not	2000	2007	2007	2004	2004	Not	No	Fixed	FALSE	41000	4000	

4. Household Survey

HH ID	Aimae ID	Sum ID	HH No	Interviewer Age	Interviewer Sex	Professiona Hus	Professiona Wif	Husband	Wife	Child (<=12)	Child (13-20)	Child (21-50)	Child (50-)	Fix Sub Status	Existime Sub	Water	Necessity Line 200	Necessity Line 125	Necessity Line 70	Existime Mob	Water Mob	Necessity M Line 70	Selection of Telephone	Fixed inspite of Mobile	Income (TG)	Affordable Payment (TG)
47	Uvurkhangai	Zvil	0	26-40	Male	Unemployed	Other	1	1	0	0	0	0	0	Others	Not	2004	2004	2002	Not	Not	2002	Mobile	FALSE	19000	3000
48	Uvurkhangai	Zvil	0	41-60	Male	Teacher	Doctor	1	1	0	1	0	0	0	Others	Not	2004	2004	2002	Not	Not	2004	Both	FALSE	101000	7000
49	Uvurkhangai	Zvil	0	26-40	Male	Clerk	Clerk	1	1	2	2	0	0	0	Subscriber	Not	2007	2004	2002	Not	Not	2002	Both	FALSE	101000	12500
50	Uvurkhangai	Zvil	0	41-60	Male	Clerk	Engineer	1	1	0	2	1	0	0	Subscriber	Not	2004	2002	2002	Not	Not	2002	Both	FALSE	101000	12500
51	Uvurkhangai	Zvil	0	26-40	Male	Worker	Clerk	1	1	0	2	0	0	0	Others	Not	2007	2004	2002	Not	Not	2002	Both	FALSE	41000	10000
52	Uvurkhangai	Zvil	0	41-60	Female	Unclear	Clerk	0	1	0	2	0	0	0	Others	Not	2004	2004	2002	Not	Not	2004	Mobile	FALSE	41000	8000
53	Uvurkhangai	Zvil	0	17-25	Female	Worker	Unemployed	1	1	0	0	1	0	0	Others	Not	2004	2002	2002	Not	Not	No	Fixed	FALSE	41000	10000
54	Uvurkhangai	Zvil	0	41-60	Female	Unclear	Unemployed	0	1	0	3	1	0	0	Others	Not	2007	2007	2002	Not	Not	2007	Both	FALSE	18999	2000
55	Uvurkhangai	Zvil	0	>60	Male	Doctor	Unclear	1	0	0	2	0	0	0	Subscriber	Not	2004	2002	2002	Not	Not	2004	Both	FALSE	101000	12000
56	Uvurkhangai	Zvil	0	26-40	Female	Other	Doctor	1	1	1	4	0	0	0	Others	Not	2007	2004	2002	Not	Not	2002	Both	FALSE	41000	10000
57	Uvurkhangai	Zvil	0	26-40	Male	Clerk	Other	1	1	3	0	0	0	0	Others	Not	2002	2002	2002	Not	Not	2004	Both	FALSE	41000	7000
58	Uvurkhangai	Zvil	0	26-40	Male	Clerk	Teacher	1	1	3	0	0	0	0	Others	Not	2002	2002	2002	Not	Not	2002	Both	FALSE	41000	10000
59	Uvurkhangai	Zvil	0	26-40	Male	Other	Teacher	1	1	3	0	0	0	0	Others	Not	2004	2004	2002	Not	Not	2002	Both	FALSE	41000	8000
60	Uvurkhangai	Zvil	0	26-40	Male	Clerk	Other	1	1	2	0	0	0	0	Subscriber	Not	2004	2002	2002	Not	Not	2002	Both	FALSE	41000	10000
61	Uvurkhangai	Zvil	0	41-60	Female	Unemployed	Doctor	1	1	0	1	1	0	0	Others	Not	2004	2004	2002	Not	Not	2002	Both	FALSE	41000	10000
62	Uvurkhangai	Sant	1	26-40	Female	Engineer	Other	1	1	2	0	0	0	0	Subscriber	Not	2002	2002	2002	Not	Not	2002	Both	TRUE	101000	15000
63	Uvurkhangai	Sant	2	26-40	Female	Doctor	Other	1	1	2	0	0	0	0	Waiter	Not	2004	2004	2002	Not	Not	2002	Both	TRUE	41000	10000
64	Uvurkhangai	Sant	3	26-40	Male	Other	Teacher	1	1	0	0	0	0	0	Waiter	Not	1999	2004	2004	2001	Not	2002	Both	TRUE	101000	10000
65	Uvurkhangai	Sant	4	26-40	Female	Clerk	Clerk	0	0	1	0	2	0	0	Others	Not	2002	2002	2002	Not	Not	2002	Mobile	TRUE	101000	15000
66	Uvurkhangai	Sant	5	41-60	Male	Clerk	Teacher	1	1	1	2	0	0	0	Waiter	Not	1999	2002	2002	Not	Not	2002	Both	TRUE	101000	15000
67	Uvurkhangai	Sant	6	26-40	Female	Teacher	Doctor	1	1	3	0	0	0	0	Waiter	Not	2001	2004	2002	Not	Not	2002	Both	TRUE	101000	8000
68	Uvurkhangai	Sant	7	41-60	Female	Other	Other	1	1	3	0	0	0	0	Others	Not	2007	2004	2002	Not	Not	2002	Both	TRUE	41000	8000
69	Uvurkhangai	Sant	8	17-25	Female	Teacher	Unclear	0	0	0	1	5	0	0	Others	Not	2007	2004	2002	Not	Not	2004	Both	TRUE	101000	8000
70	Uvurkhangai	Sant	9	41-60	Female	Other	Teacher	1	1	0	2	2	0	0	Others	Not	2007	2004	2002	Not	Not	2004	Mobile	TRUE	41000	6000
71	Uvurkhangai	Sant	10	26-40	Female	Other	Worker	1	1	1	0	2	0	0	Waiter	Not	2001	2004	2002	Not	Not	2002	Both	TRUE	41000	10000
72	Uvurkhangai	Sant	11	41-60	Female	Clerk	Teacher	1	1	0	2	1	0	0	Others	Not	1999	2004	2004	Not	Not	2002	Both	TRUE	101000	10000
73	Uvurkhangai	Sant	12	26-40	Female	Other	Clerk	1	1	2	0	0	0	0	Waiter	Not	2001	2007	2004	Not	Not	2002	Both	TRUE	19000	5000
74	Uvurkhangai	Sant	13	26-40	Male	Other	Other	1	1	2	0	0	0	0	Others	Not	2001	2007	2004	Not	Not	2002	Mobile	TRUE	41000	7000
75	Uvurkhangai	Sant	14	26-40	Female	Other	Unemployed	1	1	2	0	0	0	0	Others	Not	2007	2004	2002	Not	Not	2002	Mobile	TRUE	41000	7000
76	Uvurkhangai	Sant	15	41-60	Male	Herdsman	Unemployed	1	1	3	1	0	0	0	Others	Not	2007	2004	2002	Not	Not	2002	Mobile	FALSE	41000	5000
77	Uvurkhangai	Sant	16	41-60	Male	Teacher	Other	1	1	0	2	2	0	0	Others	Not	2004	2004	2002	Not	Not	2004	Mobile	TRUE	101000	12500
78	Uvurkhangai	Sant	17	41-60	Male	Worker	Other	1	1	1	0	2	0	0	Waiter	Not	2000	2004	2002	Not	Not	2002	Both	TRUE	41000	12500
79	Uvurkhangai	Sant	18	26-40	Female	Other	Unemployed	1	1	2	1	0	0	0	Others	Not	2007	2004	2002	Not	Not	2002	Mobile	TRUE	41000	7000
80	Uvurkhangai	Sant	19	26-40	Male	Unemployed	Other	1	1	3	0	0	0	0	Others	Not	2002	2002	2002	Not	Not	2002	Both	TRUE	41000	12500
81	Uvurkhangai	Sant	20	26-40	Female	Herdsman	Herdsman	1	1	0	3	0	0	0	Others	Not	2004	2004	2004	Not	Not	2002	Both	TRUE	19000	7000
82	Uvurkhangai	Sant	21	41-60	Female	Unclear	Worker	0	1	0	4	0	0	0	Waiter	Not	2004	2002	2002	Not	Not	2004	Mobile	TRUE	41000	7000
83	Uvurkhangai	Sant	22	41-60	Female	Teacher	Worker	1	1	0	2	0	0	0	Others	Not	2007	2004	2002	Not	Not	2004	Fixed	TRUE	41000	7000
84	Uvurkhangai	Sant	23	26-40	Female	Other	Unclear	1	1	3	1	0	0	0	Others	Not	2004	2002	2002	Not	Not	2002	Mobile	TRUE	19000	12500
85	Uvurkhangai	Sant	24	41-60	Female	Other	Teacher	1	1	1	1	5	0	0	Others	Not	No	No	No	Not	Not	2004	Mobile	TRUE	41000	7000
86	Uvurkhangai	Sant	25	26-40	Female	Unemployed	Other	1	1	2	1	1	0	0	Others	Not	2007	2004	2004	Not	Not	2004	Mobile	TRUE	18999	2000
87	Uvurkhangai	Sant	26	41-60	Female	Unemployed	Other	1	1	0	1	0	0	0	Others	Not	2004	2004	2002	Not	Not	2004	Fixed	TRUE	41000	7000
88	Uvurkhangai	Sant	27	41-60	Female	Teacher	Teacher	1	1	0	2	0	0	0	Others	Not	2007	2004	2002	Not	Not	2002	Both	TRUE	101000	10000
89	Uvurkhangai	Sant	28	26-40	Female	Herdsman	Herdsman	1	1	2	0	0	0	0	Others	Not	2007	2004	2002	Not	Not	2007	Mobile	FALSE	41000	15000
90	Uvurkhangai	Sant	29	41-60	Female	Other	Doctor	1	1	0	2	0	0	0	Waiter	Not	2000	2004	2002	Not	Not	2002	Both	TRUE	41000	10000
91	Uvurkhangai	Sant	30	26-40	Male	Worker	Doctor	1	1	3	0	0	0	0	Others	Not	No	2007	2004	Not	Not	2004	Mobile	FALSE	41000	7000
92	Uvurkhangai	Yanga		26-40	Female	Worker	Other	1	1	2	0	0	0	0	Waiter	Not	2001	2007	2004	Not	Not	2002	Both	TRUE	101000	12500

HH ID	Aimae ID	Sum ID	HH No	Interviewer Age	Interviewer Sex	Professionals Hhus	Professional Wif	Husband	Wife	Child (<=12)	Child (13-20)	Child (21-50)	Child (>50)	Fix Sub Status	Existing Sub	Water	Necessity Line 200	Necessity Line 125	Necessity Line 70	Existing Mob	Water Mob	Necessity M Line 70	Selection of Telephone	Fixed inspite of Mobile	Income (TG)	Affordable Payment (TG)
93	Uvurkhangai	Yanga	41-60	Male	Teacher	Other	Unemployed	1	1	0	2	0	0	Subscriber	Not	Not	2007	2004	2004	Not	Not	2004	Both	TRUE	19000	3000
94	Uvurkhangai	Yanga	26-40	Male	Clerk	Unemployed	Unemployed	1	1	2	0	0	0	Subscriber	Not	Not	2007	2004	2002	Not	Not	2004	Mobile	TRUE	41000	10000
95	Uvurkhangai	Yanga	126-40	Male	Clerk	Unemployed	Unemployed	1	1	2	0	0	0	Subscriber	Not	Not	2007	2007	2004	Not	Not	2004	Mobile	TRUE	41000	10000
96	Uvurkhangai	Yanga	226-40	Female	Unemployed	Other	Other	1	1	2	0	0	0	Others	Not	Not	2007	2007	2004	Not	Not	No	Fixed	TRUE	18999	3000
97	Uvurkhangai	Yanga	326-40	Female	Other	Clerk	Clerk	1	1	1	1	0	0	Subscriber	Not	Not	2002	2002	2002	Not	Not	2002	Both	TRUE	101000	20000
98	Uvurkhangai	Yanga	411-60	Male	Clerk	Unemployed	Unemployed	1	1	1	2	0	0	Subscriber	Not	Not	2004	2004	2004	Not	Not	2004	Mobile	TRUE	41000	10000
99	Uvurkhangai	Yanga	526-40	Male	Clerk	Unclear	Unclear	1	1	2	0	0	0	Subscriber	Not	Not	2004	2004	2002	Not	Not	2004	Mobile	TRUE	41000	7000
100	Uvurkhangai	Yanga	617-25	Female	Other	Unclear	Unclear	0	0	0	2	2	0	Others	Not	Not	2007	2004	2002	Not	Not	2004	Both	TRUE	41000	8000
101	Uvurkhangai	Yanga	741-60	Female	Clerk	Unemployed	Unemployed	1	1	0	1	3	0	Subscriber	Not	Not	2007	2007	2004	Not	Not	2004	Mobile	TRUE	101000	10000
102	Uvurkhangai	Yanga	826-40	Female	Clerk	Unemployed	Unemployed	1	1	3	0	0	0	Others	Not	Not	2002	2007	2004	Not	Not	2004	Fixed	TRUE	19000	5000
103	Uvurkhangai	Yanga	941-60	Male	Clerk	Unemployed	Unemployed	1	1	1	1	0	0	Subscriber	Not	Not	2007	2007	2002	Not	Not	2002	Mobile	TRUE	41000	2000
104	Uvurkhangai	Yanga	1141-60	Female	Clerk	Unclear	Unclear	1	1	1	1	0	0	Subscriber	Not	Not	No	2002	2002	Not	Not	2004	Mobile	FALSE	41000	10000
105	Uvurkhangai	Yanga	1241-60	Male	Other	Unemployed	Unemployed	1	1	1	2	0	2	Subscriber	Not	Not	2007	2007	2004	Not	Not	2007	Fixed	FALSE	19000	5000
106	Uvurkhangai	Yanga	1326-40	Male	Clerk	Other	Other	1	1	3	1	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2004	Both	TRUE	41000	8000
107	Uvurkhangai	Yanga	1426-40	Female	Unemployed	Unemployed	Unemployed	1	1	1	0	0	0	Others	Not	Not	2007	2004	2004	Not	Not	No	Fixed	TRUE	41000	7000
108	Uvurkhangai	Yanga	15117-25	Female	Unemployed	Unclear	Unclear	0	0	1	3	1	0	Others	Not	Not	2007	2004	2004	Not	Not	No	Fixed	TRUE	41000	3500
109	Uvurkhangai	Yanga	1617-25	Female	Unemployed	Other	Other	1	1	1	0	0	0	Subscriber	Not	Not	2004	2004	2002	Not	Not	2002	Both	TRUE	41000	8000
110	Uvurkhangai	Yanga	1726-40	Female	Other	Unclear	Unclear	1	1	3	1	0	0	Subscriber	Not	Not	2004	2002	2002	Not	Not	2004	Both	TRUE	41000	10000
111	Uvurkhangai	Yanga	1826-40	Female	Other	Unclear	Unclear	1	1	1	2	0	0	Others	Not	Not	2004	2002	2002	Not	Not	2002	Both	TRUE	41000	15000
112	Uvurkhangai	Yanga	1926-40	Female	Unclear	Unclear	Unemployed	0	1	3	2	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2004	Mobile	FALSE	19000	2000
113	Uvurkhangai	Yanga	2017-25	Female	Other	Other	Unclear	0	0	2	3	0	0	Subscriber	Not	Not	2007	2004	2002	Not	Not	2004	Mobile	TRUE	41000	5000
114	Uvurkhangai	Yanga	2141-60	Female	Unclear	Teacher	Teacher	0	1	0	3	1	0	Subscriber	Not	Not	2004	2002	2002	Not	Not	2002	Mobile	TRUE	101000	12000
115	Uvurkhangai	Yanga	2226-40	Female	Unclear	Other	Other	0	1	1	3	1	0	Subscriber	Not	Not	2004	2002	2002	Not	Not	2002	Both	TRUE	41000	20000
116	Uvurkhangai	Yanga	2326-40	Female	Clerk	Unclear	Unemployed	1	1	2	0	0	0	Subscriber	Not	Not	2004	2004	2002	Not	Not	2004	Both	TRUE	41000	8000
117	Uvurkhangai	Yanga	2441-60	Female	Other	Other	Doctor	1	1	0	2	1	0	Subscriber	Not	Not	2007	2002	2002	Not	Not	2004	Both	TRUE	101000	20000
118	Uvurkhangai	Yanga	2517-25	Female	Teacher	Unemployed	Unemployed	1	1	0	0	0	0	Others	Not	Not	2002	2002	2002	Not	Not	2004	Both	TRUE	41000	15000
119	Uvurkhangai	Yanga	2626-40	Female	Other	Other	Other	1	1	1	0	0	0	Subscriber	Not	Not	2007	2004	2004	Not	Not	2004	Mobile	FALSE	101000	20000
120	Uvurkhangai	Yanga	2726-40	Female	Other	Other	Unemployed	1	1	1	2	0	0	Others	Not	Not	No	No	No	Not	Not	2007	Both	TRUE	41000	0
121	Uvurkhangai	Yanga	2826-40	Female	Unemployed	Unclear	Unclear	1	1	2	0	0	0	Subscriber	Not	Not	2004	2002	2002	Not	Not	2004	Mobile	TRUE	101000	20000
122	Uvurkhangai	Yanga	2926-40	Male	Unemployed	Other	Other	1	1	0	0	0	0	Others	Not	Not	2004	2002	2002	Not	Not	2004	Mobile	TRUE	41000	20000
123	Uvurkhangai	Yanga	3026-40	Female	Worker	Other	Other	1	1	2	0	0	0	Waiter	Not	Not	2001	2007	2004	Not	Not	2002	Both	TRUE	101000	12500
124	Uvurkhangai	Kharkhorin	041-60	Female	Unclear	Unclear	Unclear	0	0	1	2	1	0	Subscriber	Not	Not	2007	2007	2004	Not	Not	No	Fixed	FALSE	18999	1500
125	Uvurkhangai	Kharkhorin	041-60	Female	Clerk	Unclear	Unclear	1	1	0	1	0	0	Subscriber	Not	Not	2007	2004	2002	Not	Not	2002	Both	FALSE	41000	7000
126	Uvurkhangai	Kharkhorin	026-40	Male	Clerk	Clerk	Clerk	1	1	1	0	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2004	Both	FALSE	41000	0
127	Uvurkhangai	Kharkhorin	026-40	Male	Other	Other	Doctor	1	1	2	1	0	0	Subscriber	Not	Not	2007	2007	2004	Not	Not	2004	Mobile	FALSE	41000	0
128	Uvurkhangai	Kharkhorin	041-60	Male	Teacher	Teacher	Teacher	1	1	0	0	2	0	Others	Not	Not	2002	2002	2002	Not	Not	No	Both	FALSE	101000	50000
129	Uvurkhangai	Kharkhorin	041-60	Female	Unemployed	Clerk	Clerk	1	1	0	2	2	0	Subscriber	Not	Not	2007	2007	2004	Not	Not	No	Fixed	FALSE	41000	5000
130	Uvurkhangai	Kharkhorin	026-40	Female	Other	Other	Unemployed	1	1	1	0	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2004	Fixed	FALSE	41000	8000
131	Uvurkhangai	Kharkhorin	026-40	Female	Other	Other	Other	1	1	0	2	0	0	Others	Not	Not	2007	2004	2002	Not	Not	2002	Mobile	FALSE	41000	12000
132	Uvurkhangai	Kharkhorin	017-25	Female	Unemployed	Other	Other	0	0	0	0	0	0	Others	Not	Not	2007	2004	2002	Not	Not	No	Both	FALSE	41000	10000
133	Uvurkhangai	Kharkhorin	026-40	Female	Teacher	Teacher	Other	1	1	2	1	0	0	Subscriber	Not	Not	2007	2004	2002	Not	Not	2000	Both	FALSE	101000	10000
134	Uvurkhangai	Kharkhorin	026-40	Male	Unemployed	Unemployed	Unemployed	1	1	2	1	0	0	Others	Not	Not	2004	2004	2004	Not	Not	2004	Mobile	FALSE	19000	5000
135	Uvurkhangai	Kharkhorin	026-40	Female	Other	Other	Unemployed	1	1	2	0	0	0	Others	Not	Not	2007	2004	2004	Not	Not	No	Fixed	FALSE	18999	5000
136	Uvurkhangai	Kharkhorin	017-25	Male	Clerk	Unclear	Unclear	0	0	0	2	0	2	Subscriber	Not	Not	2004	2002	2002	Not	Not	No	Fixed	FALSE	19000	10000
137	Uvurkhangai	Kharkhorin	026-40	Female	Unclear	Worker	Worker	0	1	1	0	0	0	Others	Not	Not	2007	2004	2002	Not	Not	No	Mobile	FALSE	41000	7000
138	Uvurkhangai	Kharkhorin	041-60	Female	Other	Other	Unemployed	1	1	1	3	0	0	Others	Not	Not	2007	2007	2004	Not	Not	No	Both	FALSE	18999	3000

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HH ID	Aimae ID	Sum ID	HH No	Interviewer Age	Interviewer Sex	Professiona lhus	Professiona l Wif	Husband	Wife	Child (<=2)	Child (3-20)	Child (21-50)	Child (50)	Fix Sub Status	Existime Sub	Walter	Necessity Line 200	Necessity Line 125	Necessity Line 70	Existime Mob	Walter Mob	Necessity M Line 70	Selection of Telephone	Fixed inspite of Mobile	Income (TG)	Attordable Payment (TG)	
139	Uvurkhangai	Kharkhorin	0 41-60	Male	Teacher	Teacher	Clerk	1	1	1	1	3	0	Subscriber	Not	Not	2007	2004	2004	2000	Not	No	Both	FALSE	41000	5000	
141	Uvurkhangai	Kharkhorin	0 41-60	Female	Worker	Worker	Clerk	1	1	0	2	0	0	Subscriber	Not	Not	2007	2004	2002	2002	Not	No	Both	FALSE	41000	7000	
142	Uvurkhangai	Kharkhorin	0 26-40	Female	Unemployed	Unemployed	Other	1	1	2	0	0	0	Others	Not	Not	2004	2004	2002	2002	Not	No	Fixed	FALSE	41000	7000	
143	Uvurkhangai	Kharkhorin	0 41-60	Female	Worker	Worker	Other	1	1	0	1	0	1	0	Others	Not	Not	2007	2004	2004	2002	Not	No	Mobile	FALSE	19000	5000
144	Uvurkhangai	Kharkhorin	0 41-60	Female	Unclear	Unclear	Other	0	1	0	0	6	0	Subscriber	Not	Not	2007	2004	2002	2002	Not	No	Mobile	FALSE	41000	8000	
145	Uvurkhangai	Kharkhorin	0 41-60	Female	Teacher	Teacher	Clerk	1	1	0	2	1	0	Subscriber	Not	Not	2004	2002	2002	2002	Not	No	Both	FALSE	101000	10000	
146	Uvurkhangai	Kharkhorin	0 26-40	Male	Worker	Worker	Teacher	1	1	3	0	0	0	Subscriber	Not	Not	2007	2004	2002	2002	Not	No	Mobile	FALSE	41000	7000	
147	Uvurkhangai	Kharkhorin	0 26-40	Male	Unemployed	Unemployed	Unemployed	1	1	0	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	No	Mobile	FALSE	19000	6000	
148	Uvurkhangai	Kharkhorin	0 26-40	Female	Unemployed	Unemployed	Other	1	1	1	3	0	0	Others	Not	Not	2007	2007	2004	2002	Not	No	Both	FALSE	18999	3000	
149	Uvurkhangai	Kharkhorin	0 26-40	Female	Worker	Worker	Other	1	1	1	0	0	0	Others	Not	Not	2004	2004	2002	2002	Not	No	Both	FALSE	41000	8000	
150	Uvurkhangai	Kharkhorin	0 26-40	Male	Other	Other	Unemployed	1	1	0	0	0	0	Others	Not	Not	2004	2004	2002	2001	Not	No	Both	FALSE	41000	10000	
151	Uvurkhangai	Kharkhorin	0 26-40	Female	Unemployed	Unemployed	Teacher	1	1	2	0	0	0	Subscriber	Not	Not	2004	2004	2002	2002	Not	No	Both	FALSE	41000	15000	
152	Uvurkhangai	Kharkhorin	0 26-40	Female	Other	Other	Clerk	1	1	0	0	0	0	Subscriber	Not	Not	2004	2004	2002	2001	Not	No	Both	FALSE	41000	15000	
153	Uvurkhangai	Kharkhorin	0 26-40	Female	Teacher	Teacher	Other	1	1	1	1	0	0	Subscriber	Not	Not	2007	2004	2002	2002	Not	No	Both	FALSE	41000	8000	
154	Selenge	Aitambula g	1 26-40	Female	Other	Unemployed	Other	1	1	0	2	0	0	Others	Not	Not	2004	2002	2002	2002	Not	No	Both	FALSE	41000	8000	
155	Selenge	Aitambula g	2 26-40	Female	Worker	Worker	Doctor	0	0	0	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	No	Fixed	FALSE	19000	8000	
156	Selenge	Aitambula g	4 26-40	Female	Unemployed	Unemployed	Other	1	1	1	1	0	2	0	Others	Not	Not	2007	2004	2002	2001	Not	No	Mobile	TRUE	101000	7000
157	Selenge	Aitambula g	4 26-40	Female	Unemployed	Unemployed	Other	1	1	1	0	2	0	Others	Not	Not	2007	2004	2002	2002	Not	No	Fixed	TRUE	19000	10000	
158	Selenge	Aitambula g	5 41-60	Female	Unemployed	Unemployed	Worker	0	1	1	1	0	0	Subscriber	2000	Not	2007	2004	2002	2002	Not	No	Both	FALSE	19000	7000	
159	Selenge	Aitambula g	6 26-40	Female	Unemployed	Unemployed	Teacher	1	1	2	0	0	0	Subscriber	2000	Not	2007	2004	2002	2002	Not	No	Both	FALSE	41000	7000	
160	Selenge	Aitambula g	7 26-40	Male	Farmer	Farmer	Clerk	1	1	1	1	0	0	Others	Not	Not	2007	2004	2002	2002	Not	No	Both	FALSE	41000	8000	
161	Selenge	Aitambula g	8 17-25	Female	Worker	Worker	Engineer	1	1	1	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	No	Both	FALSE	41000	8000	
162	Selenge	Aitambula g	9 26-40	Female	Worker	Worker	Unemployed	1	1	1	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	No	Both	FALSE	41000	10000	
163	Selenge	Aitambula g	10 41-60	Male	Clerk	Clerk	Teacher	1	1	2	1	0	0	Subscriber	Not	Not	2007	2004	2002	2001	Not	No	Both	FALSE	41000	8000	
164	Selenge	Aitambula g	11 41-60	Male	Teacher	Teacher	Teacher	1	1	1	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	No	Both	TRUE	101000	9000	
165	Selenge	Aitambula g	12 41-60	Male	Unemployed	Unemployed	Other	1	1	3	3	1	2	0	Others	Not	Not	2007	2004	2002	2002	Not	No	Fixed	TRUE	19000	5000
166	Selenge	Aitambula g	13 41-60	Male	Teacher	Teacher	Clerk	1	1	0	1	3	0	Others	Not	Not	2004	2002	2002	2002	Not	No	Both	TRUE	101000	12500	
167	Selenge	Aitambula g	14 26-40	Female	Worker	Worker	Teacher	1	1	2	0	0	0	Others	Not	Not	2004	2002	2002	2002	Not	No	Both	FALSE	41000	10000	
168	Selenge	Aitambula g	15 26-40	Female	Unemployed	Unemployed	Teacher	1	1	1	2	0	0	Others	Not	Not	2004	2004	2002	2002	Not	No	Both	FALSE	41000	10000	
169	Selenge	Aitambula g	16 26-40	Female	Worker	Worker	Other	1	1	4	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	No	Mobile	FALSE	41000	7000	
170	Selenge	Aitambula g	17 26-40	Female	Unemployed	Unemployed	Other	1	1	1	1	0	0	Others	Not	Not	2004	2004	2002	2001	Not	No	Both	FALSE	41000	7000	
171	Selenge	Aitambula g	18 41-60	Female	Unemployed	Unemployed	Other	1	1	1	1	0	0	Others	Not	Not	2004	2002	2002	2002	Not	No	Both	TRUE	41000	8000	
172	Selenge	Aitambula g	19 26-40	Male	Doctor	Doctor	Unemployed	1	1	2	1	0	0	Others	Not	Not	2007	2004	2002	2002	Not	No	Mobile	FALSE	41000	8000	
173	Selenge	Aitambula g	20 26-40	Male	Worker	Worker	Unclear	1	0	0	0	0	0	Subscriber	1996	Not	2007	2002	2002	2002	Not	No	Mobile	FALSE	41000	20000	
174	Selenge	Aitambula g	21 26-40	Female	Unemployed	Unemployed	Unemployed	1	1	2	0	0	0	Others	Not	Not	2007	2004	2004	2002	Not	No	Both	FALSE	19000	5000	
175	Selenge	Aitambula g	22 26-40	Female	Unemployed	Unemployed	Unemployed	1	1	2	0	0	0	Others	Not	Not	2004	2002	2002	2002	Not	No	Both	TRUE	41000	10000	
176	Selenge	Aitambula g	23 17-25	Male	Other	Other	Unclear	0	0	0	2	1	0	Subscriber	1999	Not	2004	2002	2002	2002	Not	No	Mobile	FALSE	101000	15000	
177	Selenge	Aitambula g	24 26-40	Male	Worker	Worker	Unemployed	1	1	0	3	0	0	Others	Not	Not	2007	2004	2004	2002	Not	No	Fixed	FALSE	19000	5000	
178	Selenge	Aitambula g	25 41-60	Female	Engineer	Engineer	Engineer	1	1	0	2	0	0	Subscriber	1996	Not	2002	2002	2002	2002	2001	Not	No	Both	FALSE	101000	20000
179	Selenge	Aitambula g	26 26-40	Female	Worker	Worker	Doctor	1	1	1	0	0	0	Others	Not	Not	1998	No	No	2002	2002	Not	No	Both	FALSE	41000	0
180	Selenge	Aitambula g	27 26-40	Male	Clerk	Clerk	Unemployed	1	1	2	1	0	0	Waiter	Not	Not	2007	2004	2002	2002	Not	No	Both	FALSE	19000	8000	
181	Selenge	Aitambula g	28 41-60	Female	Other	Other	Unclear	0	0	1	1	0	0	Others	Not	Not	Not	No	No	2002	2001	Not	No	Both	FALSE	18999	1500
182	Selenge	Aitambula g	29 26-40	Male	Other	Other	Unclear	1	1	1	1	0	0	Others	Not	Not	2004	2004	2002	2002	Not	No	Both	FALSE	19000	7000	
183	Selenge	Aitambula g	30 17-25	Male	Unemployed	Unemployed	Unclear	0	0	3	4	0	2	Others	Not	Not	No	No	No	2007	2001	Not	No	Mobile	FALSE	41000	0
184	Selenge	Eruu	1 26-40	Female	Clerk	Clerk	Worker	1	1	1	0	0	0	Subscriber	1998	Not	2002	2002	2002	2002	Not	No	Mobile	FALSE	101000	20000	
185	Selenge	Eruu	2 26-40	Male	Worker	Worker	Doctor	1	1	1	1	0	0	Others	Not	Not	2007	2004	2002	2002	Not	No	Fixed	TRUE	41000	8000	

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HH ID	Aimae ID	Sum ID	HH No	Interviewer Age	Interviewer Sex	Professiona/Hus	Professional Wif	Husband	Wife	Child (<=12)	Child (13-20)	Child (21-60)	Child (>60)	Fix Sub Status	Existing Sub	Waiter	Necessity Line 200	Necessity Line 125	Necessity Line 70	Existing Mob	Waiter Mob	Necessity M Line 70	Selection of Telephone	Fixed inspite of Mobile	Income (TG)	Affordable Payment (TG)	
186	Selenge	Eruu	3	26-40	Male	Other	Unemployed	1	1	4	0	0	0	0	Others	Not	2002	2002	2002	2002	Not	2004	Both	TRUE	19000	15000	
187	Selenge	Eruu	4	17-25	Male	Unemployed	Unclear	0	0	0	0	3	0	0	Others	Not	2002	2002	2002	2002	Not	2004	Mobile	FALSE	41000	18000	
188	Selenge	Eruu	5	41-60	Male	Teacher	Teacher	1	1	0	1	0	0	0	Subscriber	1999	2002	2002	2002	2002	Not	2004	Both	FALSE	101000	20000	
189	Selenge	Eruu	6	41-60	Male	Teacher	Unclear	1	0	0	1	0	0	0	Others	Not	2004	2002	2002	2002	Not	2007	Both	FALSE	41000	10000	
190	Selenge	Eruu	7	26-40	Female	Unclear	Doctor	0	1	0	5	0	0	0	Others	Not	2004	2002	2002	2002	Not	2004	Both	FALSE	41000	10000	
191	Selenge	Eruu	8	41-60	Female	Doctor	Unemployed	1	1	1	2	1	2	1	2	Others	Not	2007	2004	2004	2004	Not	2007	Mobile	TRUE	19000	5000
192	Selenge	Eruu	9	26-40	Male	Other	Other	1	1	3	0	0	0	0	Subscriber	1996	2007	2007	2004	Not	2004	Mobile	FALSE	41000	5000		
193	Selenge	Eruu	10	41-60	Male	Other	Other	1	1	1	2	0	0	0	Others	Not	2007	2004	2004	2004	Not	2004	Fixed	TRUE	41000	5000	
194	Selenge	Eruu	11	26-40	Female	Worker	Worker	1	1	2	0	0	0	0	Others	Not	2004	2004	2004	2002	Not	2004	Both	TRUE	41000	7000	
195	Selenge	Eruu	12	26-40	Female	Unclear	Other	0	1	0	2	0	2	0	0	Others	Not	2007	2007	2007	2007	Not	2004	FALSE	19000	2000	
196	Selenge	Eruu	13	26-40	Male	Doctor	Doctor	1	1	2	0	0	0	0	Subscriber	1996	2002	2002	2002	Not	2002	Mobile	FALSE	101000	20000		
197	Selenge	Eruu	14	26-40	Female	Unemployed	Other	1	1	1	3	0	0	1	Others	Not	2007	2004	2002	2002	Not	2007	Both	TRUE	41000	2000	
198	Selenge	Eruu	15	41-60	Male	Clerk	Unemployed	1	1	2	0	0	0	0	Others	Not	2007	2004	2002	2002	Not	2004	Both	FALSE	41000	7000	
199	Selenge	Eruu	16	26-40	Female	Unemployed	Other	1	1	4	2	0	0	0	Others	Not	2007	2002	2002	2002	Not	2004	Both	FALSE	41000	2000	
200	Selenge	Eruu	17	41-60	Female	Unemployed	Other	1	1	2	3	1	2	0	Others	Not	2007	2007	2004	2004	Not	2004	No	FALSE	19000	3000	
201	Selenge	Eruu	18	41-60	Female	Worker	Teacher	1	1	3	0	0	0	0	Others	Not	2004	2002	2002	2002	Not	2004	Both	TRUE	101000	13000	
202	Selenge	Eruu	19	26-40	Female	Worker	Unemployed	1	1	2	0	0	0	0	Others	Not	2002	2002	2002	2002	Not	No	No	Fixed	TRUE	41000	20000
203	Selenge	Eruu	20	41-60	Female	Unemployed	Teacher	1	1	1	2	0	0	0	Others	Not	2007	2004	2002	2002	Not	No	No	Fixed	TRUE	41000	10000
204	Selenge	Eruu	21	26-40	Female	Unemployed	Worker	1	1	1	0	0	0	0	Others	Not	2007	2007	2004	2004	Not	No	No	Fixed	FALSE	19000	3000
205	Selenge	Eruu	22	41-60	Male	Clerk	Teacher	1	1	0	2	1	0	0	Subscriber	1996	2007	2004	2002	2002	Not	2004	Mobile	FALSE	101000	10000	
206	Selenge	Eruu	23	41-60	Female	Unemployed	Unemployed	1	1	0	3	1	0	0	Others	Not	2007	2007	2004	2004	Not	No	No	Fixed	FALSE	18999	2000
207	Selenge	Eruu	24	26-40	Female	Worker	Unemployed	1	1	2	0	0	0	0	Others	Not	2004	2004	2004	2002	Not	2004	Both	TRUE	41000	7000	
208	Selenge	Eruu	25	41-60	Female	Worker	Worker	1	1	1	2	0	0	0	Others	Not	2007	2007	2007	2007	Not	No	No	Fixed	FALSE	19000	3000
209	Selenge	Eruu	26	26-40	Male	Worker	Worker	1	1	2	0	0	0	0	Others	Not	2004	2004	2002	2002	Not	No	No	Fixed	FALSE	41000	7000
210	Selenge	Eruu	27	41-60	Female	Other	Teacher	0	0	0	0	0	0	0	Subscriber	1996	2004	2002	2002	2002	Not	2004	Both	TRUE	41000	7000	
211	Selenge	Eruu	28	41-60	Male	Unemployed	Worker	1	1	2	0	0	0	0	Others	Not	2004	2004	2002	2002	Not	2002	Mobile	TRUE	19000	5000	
212	Selenge	Eruu	29	41-60	Female	Clerk	Farmer	1	1	0	2	1	0	0	Subscriber	1996	2002	2002	2002	2002	Not	2002	Both	FALSE	101000	20000	
213	Selenge	Eruu	30	41-60	Female	Clerk	Clerk	1	1	2	1	0	0	0	Others	Not	2004	2004	2004	2002	Not	2002	Both	FALSE	101000	12500	
214	Selenge	Zuunburen	1	41-60	Male	Clerk	Unclear	1	0	0	0	0	0	0	Others	Not	2004	2002	2002	2002	Not	2004	Both	TRUE	41000	10000	
215	Selenge	Zuunburen	2	26-40	Male	Clerk	Teacher	1	1	1	1	1	0	0	Others	Not	2004	2002	2002	2002	Not	2002	Both	TRUE	41000	10000	
216	Selenge	Zuunburen	3	41-60	Female	Worker	Other	1	1	0	1	0	0	0	Others	Not	2007	2007	2004	2004	Not	2007	Both	TRUE	19000	4000	
217	Selenge	Zuunburen	4	26-40	Female	Farmer	Farmer	1	1	3	0	0	0	0	Others	Not	2002	2002	2002	2002	Not	2004	Mobile	FALSE	101000	15000	
218	Selenge	Zuunburen	5	41-60	Female	Unclear	Farmer	0	1	2	0	0	0	0	Waiter	Not	1996	2002	2002	2002	2000	Not	No	Both	TRUE	101000	15000
219	Selenge	Zuunburen	6	26-40	Female	Worker	Worker	1	1	2	0	0	0	0	Others	Not	2004	2004	2004	2002	2002	Not	No	Both	TRUE	101000	7000
220	Selenge	Zuunburen	7	41-60	Female	Unemployed	Clerk	1	1	0	0	0	0	0	Others	Not	2007	2004	2002	2002	Not	No	No	Fixed	FALSE	19000	7000
221	Selenge	Zuunburen	8	26-40	Male	Unemployed	Other	1	1	2	0	0	0	0	Others	Not	2007	2004	2002	2002	Not	No	No	Fixed	TRUE	19000	7000
222	Selenge	Zuunburen	9	26-40	Male	Unemployed	Other	1	1	1	0	0	0	0	Others	Not	2002	2002	2002	2002	2000	Not	No	Fixed	FALSE	19000	15000
223	Selenge	Zuunburen	10	26-40	Male	Worker	Teacher	1	1	1	2	0	0	0	Others	Not	2004	2004	2002	2002	Not	No	No	Fixed	TRUE	41000	9000
224	Selenge	Zuunburen	11	26-40	Female	Other	Unemployed	1	1	2	0	0	0	0	Others	Not	2004	2002	2002	2002	Not	2004	Fixed	TRUE	41000	10000	
225	Selenge	Zuunburen	12	41-60	Female	Worker	Other	1	1	0	2	3	0	0	Others	Not	2004	2004	2004	2002	Not	2002	Fixed	TRUE	41000	7000	
226	Selenge	Zuunburen	13	26-40	Female	Worker	Doctor	1	1	2	0	0	0	0	Others	Not	2004	2004	2002	2002	Not	2004	Mobile	TRUE	19000	9000	
227	Selenge	Zuunburen	14	41-60	Male	Farmer	Farmer	1	1	1	2	0	0	0	Others	Not	2004	2002	2002	2002	Not	No	No	Both	FALSE	101000	15000
228	Selenge	Zuunburen	15	41-60	Female	Teacher	Teacher	1	1	2	2	0	0	0	Waiter	Not	2000	2002	2002	2002	2002	Not	2002	Both	TRUE	101000	20000
229	Selenge	Zuunburen	16	26-40	Male	Worker	Unemployed	1	1	3	1	0	0	0	Others	Not	2004	2004	2004	2004	Not	No	No	Fixed	TRUE	19000	3500
230	Selenge	Zuunburen	17	26-40	Male	Other	Worker	1	1	1	0	0	0	0	Others	Not	2004	2004	2004	2002	2000	Not	No	Mobile	FALSE	41000	10000
231	Selenge	Zuunburen	18	26-40	Male	Unclear	Unclear	1	1	2	0	0	0	0	Others	Not	2004	2004	2002	2002	2002	Not	No	Both	FALSE	41000	10000

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HH ID	Almae ID	Sum ID	HH No	Interviewer Age	Interviewer Sex	Professiona Hlus	Professional Wif	Husband	Wife	Child (<=12)	Child (13-20)	Child (21-50)	Child (50)	Fix Sub Status	Existing Sub	Waiter	Necessity Line 200	Necessity Line 125	Necessity Line 70	Existing Mob	Waiter Mob	Necessity M Line 70	Selection of Telephone	Fixed inspite of Mobile	Income (TG)	Affordable Payment (TG)	
232	Selenge	Zuunburen	19	41-60	Male	Clerk	Worker	1	1	1	2	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2004	Both	FALSE	41000	10000	
233	Selenge	Zuunburen	20	17-25	Female	Other	Unclear	0	0	3	2	0	0	Others	Not	Not	2007	2004	2002	Not	Not	2002	Both	FALSE	41000	8000	
234	Selenge	Zuunburen	21	26-40	Female	Unemployed	Worker	1	1	2	2	0	0	Others	Not	Not	2007	2007	2004	Not	Not	2007	Mobile	FALSE	19000	3000	
235	Selenge	Zuunburen	22	26-40	Female	Unemployed	Unemployed	1	1	0	0	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2004	Both	TRUE	19000	10000	
236	Selenge	Zuunburen	23	26-40	Male	Other	Unemployed	1	1	6	0	0	0	Others	Not	Not	2004	2004	2002	Not	Not	No	Both	TRUE	101000	7000	
237	Selenge	Zuunburen	24	26-40	Female	Teacher	Clerk	1	1	0	0	0	0	Others	Not	Not	2002	2002	2002	Not	Not	2004	Both	TRUE	101000	20000	
238	Selenge	Zuunburen	25	26-40	Female	Unemployed	Other	1	1	1	0	0	0	Others	Not	Not	2007	2004	2002	Not	Not	2004	Both	TRUE	19000	7500	
239	Selenge	Zuunburen	26	26-40	Female	Unemployed	Other	1	1	2	0	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2002	Both	TRUE	41000	8000	
240	Selenge	Zuunburen	27	26-40	Female	Clerk	Worker	1	1	1	2	0	0	Waiter	Not	1999	2002	2002	2002	1999	Not	Not	2002	Both	FALSE	101000	9000
241	Selenge	Zuunburen	28	26-40	Female	Unemployed	Clerk	1	1	0	0	0	0	Others	Not	Not	2007	2004	2002	2002	Not	Not	2004	Both	FALSE	41000	10000
242	Selenge	Zuunburen	29	26-40	Female	Unemployed	Clerk	1	1	1	0	0	0	Others	Not	Not	2007	2007	2004	Not	Not	2004	Both	FALSE	41000	5000	
243	Selenge	Zuunburen	30	26-40	Female	Engineer	Unemployed	1	1	2	0	0	0	Others	Not	Not	No	No	No	2002	Not	Not	No	Mobile	FALSE	41000	9000
244	Selenge	Zuunkharaa	1	26-40	Female	Clerk	Clerk	1	1	0	2	0	0	Subscriber	2001	Not	2007	2004	2002	2002	Not	Not	2004	Both	FALSE	101000	7000
245	Selenge	Zuunkharaa	2	26-40	Female	Unemployed	Clerk	1	1	1	1	0	0	Subscriber	2002	Not	2004	2002	2002	2002	Not	Not	2004	Both	FALSE	41000	12500
246	Selenge	Zuunkharaa	3	17-25	Male	Other	Other	1	1	0	3	2	0	Subscriber	1996	Not	2007	2004	2002	1999	Not	Not	2002	Mobile	FALSE	41000	20000
247	Selenge	Zuunkharaa	4	26-40	Female	Unemployed	Worker	1	1	2	0	0	0	Others	Not	Not	2002	2002	2002	2001	Not	Not	No	Both	TRUE	41000	20000
248	Selenge	Zuunkharaa	5	26-40	Male	Clerk	Worker	1	1	0	0	0	0	Subscriber	1999	Not	2002	2002	2002	2001	Not	Not	2007	Both	FALSE	41000	20000
249	Selenge	Zuunkharaa	6	26-40	Female	Unclear	Clerk	0	1	0	3	0	0	Subscriber	Not	Not	2007	2004	2002	Not	Not	2004	Mobile	FALSE	41000	7000	
250	Selenge	Zuunkharaa	7	17-25	Female	Worker	Unemployed	1	1	0	0	0	0	Others	Not	Not	2004	2002	2002	Not	Not	2004	Both	TRUE	41000	12500	
251	Selenge	Zuunkharaa	8	26-40	Female	Unclear	Teacher	1	1	0	0	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2004	Mobile	TRUE	41000	7000	
252	Selenge	Zuunkharaa	9	41-60	Female	Teacher	Unclear	0	0	1	0	0	0	Subscriber	2000	Not	2007	2004	2002	Not	Not	2004	Mobile	FALSE	101000	7000	
253	Selenge	Zuunkharaa	10	26-40	Male	Unemployed	Other	1	1	1	2	0	0	Others	Not	Not	2004	2002	2002	Not	Not	2004	Fixed	TRUE	41000	10000	
254	Selenge	Zuunkharaa	11	26-40	Female	Worker	Clerk	1	1	2	1	0	0	Others	Not	Not	2002	2002	2002	2000	Not	Not	2002	Both	TRUE	101000	20000
255	Selenge	Zuunkharaa	12	41-60	Male	Other	Unemployed	1	1	0	3	0	0	Others	Not	Not	2007	2007	2004	Not	Not	2004	Mobile	FALSE	19000	5000	
256	Selenge	Zuunkharaa	13	26-40	Male	Unemployed	Other	1	1	3	0	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2007	Both	FALSE	19000	7000	
257	Selenge	Zuunkharaa	14	26-40	Female	Other	Clerk	1	1	0	0	0	0	Subscriber	2000	Not	2004	2004	2004	2001	Not	Not	No	Both	FALSE	101000	5000
258	Selenge	Zuunkharaa	15	26-40	Female	Worker	Worker	1	1	3	1	0	0	Subscriber	1996	Not	2004	2007	2002	Not	Not	2002	Both	FALSE	41000	7000	
259	Selenge	Zuunkharaa	16	26-40	Male	Unemployed	Worker	1	1	0	0	0	0	Subscriber	2000	Not	2007	2004	2002	Not	Not	2004	Mobile	FALSE	41000	10000	
260	Selenge	Zuunkharaa	17	26-40	Female	Worker	Unemployed	1	1	2	0	0	0	Others	Not	Not	2007	2007	2004	Not	Not	No	Fixed	FALSE	19000	3000	
261	Selenge	Zuunkharaa	18	26-40	Female	Unemployed	Unclear	0	0	2	1	1	0	Others	Not	Not	2007	2007	2004	Not	Not	No	Fixed	FALSE	18999	3000	
262	Selenge	Zuunkharaa	19	41-60	Male	Other	Worker	1	1	0	2	0	0	Others	Not	Not	2004	2002	2002	2001	Not	Not	No	Both	FALSE	41000	15000
263	Selenge	Zuunkharaa	20	26-40	Female	Other	Other	1	1	2	1	0	0	Others	Not	Not	2004	2004	2002	2001	Not	Not	No	Both	TRUE	41000	10000
264	Selenge	Zuunkharaa	21	17-25	Female	Worker	Other	1	1	0	0	0	0	Others	Not	Not	2007	2004	2002	2001	Not	Not	2004	Mobile	FALSE	101000	10000
265	Selenge	Zuunkharaa	22	26-40	Male	Other	Worker	1	1	3	0	0	0	Others	Not	Not	2004	2002	2002	Not	Not	2004	Mobile	FALSE	41000	13000	
266	Selenge	Zuunkharaa	24	41-60	Male	Other	Other	1	1	0	2	6	0	Others	Not	Not	2004	2004	2002	2001	Not	Not	No	Both	FALSE	101000	8000
267	Selenge	Zuunkharaa	25	26-40	Female	Unclear	Clerk	0	0	3	1	0	0	Subscriber	2002	Not	2004	2004	2002	2002	Not	Not	No	Both	FALSE	41000	25000
268	Selenge	Zuunkharaa	26	41-60	Female	Other	Clerk	1	1	0	2	2	0	Subscriber	1996	Not	2004	2004	2002	2001	Not	Not	No	Both	FALSE	101000	30000
269	Selenge	Zuunkharaa	27	26-40	Female	Unclear	Clerk	0	0	0	2	1	0	Subscriber	1999	Not	2004	2002	2002	2002	Not	Not	No	Both	FALSE	41000	15000
270	Selenge	Zuunkharaa	28	26-40	Female	Worker	Other	1	1	1	0	0	0	Others	Not	Not	2007	2004	2002	Not	Not	No	Fixed	FALSE	41000	7000	
271	Selenge	Zuunkharaa	29	26-40	Female	Unclear	Clerk	0	0	0	0	0	0	Others	Not	Not	2004	2004	2002	2001	Not	Not	No	Mobile	FALSE	101000	15000
272	Selenge	Zuunkharaa	30	26-40	Female	Unemployed	Worker	1	1	1	2	0	0	Waiter	Not	1998	2007	2004	2002	Not	Not	2002	Both	FALSE	19000	7000	
273	Darkhan	Khongor	1	26-40	Female	Unemployed	Doctor	1	1	2	2	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2007	Fixed	TRUE	41000	7000	
274	Darkhan	Khongor	2	26-40	Female	Unemployed	Doctor	1	1	0	1	2	0	Others	Not	Not	2004	2002	2002	Not	Not	2004	Both	FALSE	19000	10000	
275	Darkhan	Khongor	3	26-40	Female	Unclear	Doctor	1	1	0	2	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2002	Mobile	FALSE	19000	7000	
276	Darkhan	Khongor	4	41-60	Male	Teacher	Teacher	1	1	1	3	0	0	Others	Not	Not	2004	2002	2002	Not	Not	2002	Mobile	TRUE	101000	12500	
277	Darkhan	Khongor	5	41-60	Female	Worker	Other	1	1	0	1	0	0	Others	Not	Not	2002	2002	2002	Not	Not	2002	Both	FALSE	101000	20000	

4. Household Survey

HH ID	Almae ID	Sum ID	HH No	Interviewer Age	Interviewer Sex	Professiona lhus	Professiona lWf	Husband	Wife	Child (<=12)	Child (13-20)	Child (21-50)	Child (50)	Fix Sub Status	Existing Sub	Waiter	Necessity Line 200	Necessity Line 125	Necessity Line 70	Existing Mob	Waiter Mob	Necessity M Line 70	Selection of Telephone	Fixed inspite of Mobile	Income (TG)	Affordable Payment (TG)
278	Darkhan	Khongor	641-60	Male	Worker	Worker	Worker	1	1	0	1	0	0	Others	Not	Not	2007	2004	2004	Not	Not	2004	Mobile	FALSE	41000	5000
279	Darkhan	Khongor	726-40	Male	Worker	Engineer	Engineer	1	1	3	1	0	0	Others	Not	Not	2004	2002	2002	Not	Not	2004	Mobile	FALSE	41000	10000
280	Darkhan	Khongor	841-60	Female	Worker	Unemployed	Unemployed	1	1	0	2	0	0	Others	Not	Not	2002	2002	2002	Not	Not	2002	Both	TRUE	41000	20000
281	Darkhan	Khongor	941-60	Female	Worker	Other	Other	1	1	0	1	3	0	Subscriber	Not	Not	2004	2002	2002	Not	Not	2004	Both	FALSE	19000	12500
282	Darkhan	Khongor	1017-25	Female	Unemployed	Other	Other	1	1	1	0	0	0	Others	Not	Not	2004	2002	2002	Not	Not	2002	Both	TRUE	19000	10000
283	Darkhan	Khongor	1141-60	Female	Unclear	Clerk	Clerk	0	1	0	2	1	1	Others	Not	Not	2004	2002	2002	Not	Not	2002	Both	FALSE	41000	10000
284	Darkhan	Khongor	1226-40	Female	Unemployed	Unemployed	Unemployed	1	1	2	0	0	0	Others	Not	Not	2007	2004	2004	Not	Not	2007	Mobile	FALSE	18999	3000
285	Darkhan	Khongor	1341-60	Female	Worker	Worker	Other	1	1	1	4	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2004	Mobile	TRUE	101000	10000
286	Darkhan	Khongor	1441-60	Female	Worker	Worker	Unclear	0	0	1	3	1	0	Others	Not	Not	2007	2007	2007	Not	Not	2004	Mobile	FALSE	18999	3000
287	Darkhan	Khongor	1541-60	Male	Doctor	Doctor	Worker	1	1	0	3	2	0	Subscriber	Not	Not	2004	2004	2002	Not	Not	2002	Both	FALSE	41000	8000
288	Darkhan	Khongor	1626-40	Female	Worker	Teacher	Teacher	1	1	2	0	0	0	Others	Not	Not	2007	2004	2002	Not	Not	2002	Mobile	TRUE	41000	10000
289	Darkhan	Khongor	1726-40	Female	Worker	Teacher	Teacher	1	1	0	2	0	0	Others	Not	Not	2004	2002	2002	Not	Not	2004	Fixed	FALSE	41000	15000
290	Darkhan	Khongor	1817-25	Female	Unemployed	Other	Other	1	1	2	0	0	0	Others	Not	Not	2004	2004	2004	Not	Not	2004	Mobile	FALSE	19000	5000
291	Darkhan	Khongor	1917-25	Female	Clerk	Clerk	Other	1	1	2	0	1	2	Others	Not	Not	2002	2002	2002	Not	Not	2002	Both	TRUE	101000	20000
292	Darkhan	Khongor	2041-60	Female	Farmer	Farmer	Other	1	1	0	1	2	0	Others	Not	Not	2004	2002	2002	Not	Not	2002	Mobile	TRUE	101000	8000
293	Darkhan	Khongor	2117-25	Female	Unclear	Clerk	Clerk	0	0	1	1	3	0	Others	Not	Not	2004	2004	2002	Not	Not	2002	Both	TRUE	19000	8000
294	Darkhan	Khongor	2241-60	Male	Teacher	Other	Unemployed	1	1	0	0	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2004	Both	FALSE	41000	8000
295	Darkhan	Khongor	2441-60	Female	Other	Unemployed	Unemployed	1	1	0	1	0	0	Others	Not	Not	2004	2004	2002	Not	Not	2004	Mobile	TRUE	41000	7000
296	Darkhan	Khongor	2441-60	Female	Unclear	Clerk	Clerk	0	0	0	2	1	1	Others	Not	Not	2007	2004	2002	Not	Not	2002	Both	FALSE	41000	8000
297	Darkhan	Khongor	2541-60	Female	Worker	Worker	Worker	1	1	0	0	2	0	Others	Not	Not	2007	2004	2002	Not	Not	2004	Both	FALSE	41000	7000
298	Darkhan	Khongor	2641-60	Female	Clerk	Clerk	Other	1	1	0	2	0	0	Others	Not	Not	2007	2004	2002	Not	Not	2002	Both	FALSE	41000	8000
299	Darkhan	Khongor	2826-40	Female	Unclear	Unclear	Teacher	0	0	0	0	2	2	Others	Not	Not	2007	2007	2002	Not	Not	2002	Both	FALSE	41000	9000
300	Darkhan	Khongor	2941-60	Female	Worker	Worker	Worker	1	1	0	4	0	0	Others	Not	Not	2002	2002	2002	Not	Not	2002	Both	FALSE	41000	10000
301	Darkhan	Khongor	3041-60	Male	Engineer	Worker	Worker	1	1	1	1	0	0	Others	Not	Not	2004	2002	2002	Not	Not	No	Both	FALSE	101000	13000
302	Darkhan	Khongor	23226-40	Male	Unemployed	Herdsman	Herdsman	1	1	1	0	0	0	Others	Not	Not	2007	2007	2004	Not	Not	No	Fixed	FALSE	19000	3000

5. Questionnaire for Public and Business User

PIBD	Aim/d	Sum/d	PB No	Company Name	Interviewer Age	PB	Public Sector	Company Sector	Company Details	Details of Sector	Total Number of Employee	Fix statuses	Number of Exist Fix Lines	Fix Waiter	Number of Fix Waiter	Necessity of Fix Line	Number of Fix Lines	Mobile subscriber	Number of Exist Mob Lines	Mobile Waiter	Number of Mob Waiter	Necessity of Mobile Line	Number of Mobile Line	Section of Telephone	Fix inspite of Mobile
1	Dourkhangai		1	Telecom	26-40	Public	Municipality			Communication	2	Subscriber	1996	1	Not	0	2004	2	Not	0	2002	1	Not	2	TRUE
2	Dourkhangai	Boysangol	15	Power supply section	26-40	Public	Other			Power supply	11	Subscriber	2001	1	2002	2	2004	2	Not	0	2002	2	2004	2	FALSE
3	Dourkhangai	Boysangol	5	Blaid-kharthin Co.Ltd	41-60	Business	Business	Agriculture/Stoc	Food/industry	Bakery,	10	Waiter	Not	0	2000	1	2002	2	Not	0	2000	2	2004	2	TRUE
4	Dourkhangai	Boysangol	4	Sum's government office	41-60	Public	Municipality				22	Subscriber	2000	10	0	2004	4	Not	0	2002	15	2004	15	TRUE	
5	Dourkhangai	Boysangol	3	Hospital	41-60	Public	Hospital			Treatment	23	Subscriber	2001	1	Not	0	2002	2	Not	0	2000	1	2004	2	TRUE
6	Dourkhangai	Boysangol	2	Ekh-Ongol	26-40	Business	Business	Agriculture/Stoc	Veterinary	treatment of	5	Waiter	1996	1	2000	1	2002	1	Not	0	2001	1	2004	2	FALSE
7	Dourkhangai	Boysangol	20	Tax office	41-60	Public	Municipality				1	Subscriber	1996	1	Not	0	2001	1	Not	0	2001	1	2004	1	FALSE
8	Dourkhangai	Boysangol	19	Citizen's meeting in Sum	41-60	Public	Municipality				2	Subscriber	1996	1	Not	0	2002	2	Not	0	2002	2	2002	2	FALSE
9	Dourkhangai	Boysangol	18	Statistical section	41-60	Public	Other	Trade/Sells	Shop	trade, pub	12	Subscriber	1996	1	Not	0	2004	1	Not	0	2002	1	2004	1	FALSE
10	Dourkhangai	Boysangol	6	Borjil Co.Ltd	26-40	Business	Business				2	Subscriber	1996	1	Not	0	2004	2	Not	0	2002	2	2004	2	FALSE
11	Dourkhangai	Boysangol	16	Social insurance section	26-40	Public	Other				2	Subscriber	1996	1	Not	0	2004	2	Not	0	2002	2	2004	2	FALSE
12	Dourkhangai	Boysangol	14	Police section	26-40	Public	Municipality				2	Subscriber	1998	1	Not	0	2004	1	Not	0	2002	1	2004	1	FALSE
13	Dourkhangai	Boysangol	41-60	Pharmacy fund	41-60	Public	Other			provider of	3	Subscriber	2000	1	Not	0	2004	1	Not	0	2002	1	2004	1	FALSE
14	Dourkhangai	Boysangol	12	Weather section	41-60	Public	Other				1	Waiter	Not	0	1999	1	2004	1	Not	0	2003	1	2002	1	FALSE
15	Dourkhangai	Boysangol	11	Local people's development center	41-60	Public	Other			Culture	6	Waiter	Not	0	2002	1	2004	1	Not	0	2003	1	2002	1	FALSE
16	Dourkhangai	Boysangol	10	Kendergatan	41-60	Public	Other			Education of pre	10	Subscriber	2000	1	Not	0	2004	3	Not	0	2002	3	2002	3	FALSE
17	Dourkhangai	Boysangol	9	Ten-year middle school	41-60	Public	School				43	Subscriber	1996	1	2001	4	2002	4	Not	0	2002	23	2002	23	FALSE
18	Dourkhangai	Boysangol	7	Bayanulbish Co.Ltd	26-40	Business	Business	Fabric	Industry	Manufacture of	9	Waiter	Not	0	2002	1	2002	1	Not	0	2002	1	2002	1	FALSE
19	Dourkhangai	Boysangol	8	Section of agricultural bank	17-25	Public	Other	Trade/Sells	Bank	Bank service	2	Waiter	Not	0	2002	2	2004	1	Not	0	2002	2	2004	2	FALSE
20	Dourkhangai	Boysangol	17	Environment section	41-60	Public	Other				10	Subscriber	1996	1	Not	0	2004	1	Not	0	2002	1	2004	1	FALSE
21	Dourkhangai	Boysangol	8	Kundergatan	41-60	Public	Other			Communication	2	Subscriber	1996	2	Not	0	2004	4	Not	0	2001	0	2004	1	FALSE
22	Dourkhangai	Zyil	1	Telecom	560	Public	Hospital				25	Subscriber	1996	1	Not	0	2004	1	Not	0	2001	0	2004	3	FALSE
23	Dourkhangai	Zyil	2	Hospital	560	Public	Other				18	Subscriber	1996	2	Not	0	2002	1	Not	0	2001	0	2004	3	FALSE
24	Dourkhangai	Zyil	3	Local government office	26-40	Public	Municipality				51	Subscriber	1996	2	Not	0	2002	1	Not	0	2001	0	2004	3	FALSE
25	Dourkhangai	Zyil	4	Ten-year school	560	Public	School				1	Subscriber	1996	1	Not	0	2002	1	Not	0	2001	0	2004	3	FALSE
26	Dourkhangai	Zyil	5	Meeting of citizen representatives	41-60	Public	Municipality				10	Others	Not	0	Not	0	2002	1	Not	0	2001	0	2004	1	FALSE
27	Dourkhangai	Zyil	7	Local people's development center	41-60	Public	Other			Collection of tax	2	Waiter	Not	0	2000	1	2007	1	Not	0	2001	0	2004	1	FALSE
28	Dourkhangai	Zyil	9	Environment section	41-60	Public	Other			Veterinary and	9	Subscriber	1996	1	Not	0	2002	1	Not	0	2001	0	2002	2	FALSE
29	Dourkhangai	Zyil	11	Bann ulist Co.Ltd	26-40	Business	Business	Agriculture/Stoc	Veterinary	trading	2	Subscriber	2001	1	Not	0	2002	0	Not	0	2001	0	2002	1	FALSE
30	Dourkhangai	Zyil	12	Buten zaya Co.Ltd	26-40	Business	Business	Trade/Sells	Shop		2	Subscriber	1996	1	Not	0	2004	0	Not	0	2001	0	2004	2	FALSE
31	Dourkhangai	Zyil	13	Power supply section	41-60	Public	Other				3	Subscriber	1996	1	Not	0	2004	0	Not	0	2001	0	2004	2	FALSE
32	Dourkhangai	Zyil	19	Uxamal Narza Co.Ltd	41-60	Business	Business	Trade/Sells	Shop		5	Others	Not	0	Not	0	2004	1	Not	0	2001	0	2004	2	FALSE
33	Dourkhangai	Zyil	6	Police section	41-60	Public	Other				3	Others	Not	0	Not	0	2004	0	Not	0	2001	0	2004	2	FALSE
34	Dourkhangai	Zyil	20	Section of crude oil import company	41-60	Public	Other	Trade/Sells	Gasoline station	Fuel service	3	Subscriber	1996	1	Not	0	2004	0	Not	0	2001	0	2004	1	FALSE
35	Dourkhangai	Zyil	14	Section of agriculture bank	41-60	Public	Other	Trade/Sells	Company	Bank	2	Others	Not	0	Not	0	2004	0	Not	0	2001	0	2004	1	FALSE
36	Dourkhangai	Zyil	15	Section of insurance bank	41-60	Public	Other				2	Others	Not	0	Not	0	2004	1	Not	0	2001	0	2007	0	FALSE
37	Dourkhangai	Zyil	16	Pharmacy fund	26-40	Public	Other				1	Others	Not	0	Not	0	2004	1	Not	0	2001	0	2007	0	FALSE
38	Dourkhangai	Zyil	16	Statistical section	41-60	Public	Municipality				2	Others	Not	0	Not	0	2004	0	Not	0	2001	0	2007	0	FALSE
39	Dourkhangai	Zyil	18	Telecom	41-60	Public	Other			Communication	2	Waiter	Not	0	Not	0	2004	1	Not	0	2001	0	2007	1	FALSE
40	Dourkhangai	Sant	19	Power supply section	26-40	Public	Other				2	Waiter	Not	0	2002	1	2004	1	Not	0	2002	1	2004	1	FALSE
41	Dourkhangai	Sant	17	Section of Mongolian Post Office	26-40	Public	Other				3	Subscriber	1996	1	Not	0	2004	1	Not	0	2002	1	2004	1	FALSE
42	Dourkhangai	Sant	15	Sector of agricultural bank	26-40	Public	Other			bank service	3	Subscriber	1996	1	Not	0	2004	1	Not	0	2002	1	2004	1	FALSE
43	Dourkhangai	Sant	14	Pharmacy	26-40	Public	Other			shop, dealer of raw	20	Subscriber	1996	1	Not	0	2004	1	Not	0	2002	2	2004	2	FALSE
44	Dourkhangai	Sant	13	Sant, Mandakh, co-operative	41-60	Business	Business	Trade/Sells	Shop, other	Feed distribution	4	Waiter	Not	0	2001	1	2002	1	Not	0	2002	2	2002	2	FALSE
45	Dourkhangai	Sant	12	0021th sector of State reserves	41-60	Public	Other			shop, gasoline	2	Waiter	Not	0	2001	1	2004	1	Not	0	2002	1	2004	1	FALSE
46	Dourkhangai	Sant	11	Khankhatinus	41-60	Public	Business	Trade/Sells	Shop		9	Waiter	Not	0	2002	1	2004	1	Not	0	2002	1	2004	1	FALSE
47	Dourkhangai	Sant	10	Knder garden	41-60	Public	School				57	Subscriber	1996	2	Not	0	2002	10	Not	0	2002	10	2004	10	FALSE
48	Dourkhangai	Sant	9	Ten-year middle school	41-60	Public	School				2	Waiter	Not	0	2001	1	2002	1	Not	0	2002	1	2004	2	FALSE
49	Dourkhangai	Sant	6	Police section	17-25	Public	Municipality																		FALSE
50	Dourkhangai	Sant	6	Police section	17-25	Public	Municipality																		FALSE

PBD	Aim#ID	SumID	PB No.	Company Name	Interviewer Age	PB	Public Sector	Company Sector	Company Details	Details of Sector	Total Number of Employee	Fix status	Fix Subscriber	Number of Exist Fix Lines	Fix Water	Number of Fix Water	Necessity of Fix Line	Number of Fix Lines	Number of Exist Fix Lines	Fix Water	Number of Mob Water	Necessity of Mobile Line	Number of Mobile Line	Selection of Telephone	Fix respite of Mobile			
51	Uurkhangai Sant		7	Meeting of citizen representative	41-60	Public	Municipality			communication	1	Subscriber	Not	0	Not	0	0	0	0	0	0	0	0	0	0	FALSE		
52	Uurkhangai Sant		1	Telecom	41-60	Public	Other				2	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	FALSE		
53	Uurkhangai Sant		2	Government office	41-60	Public	Municipality				14	Subscriber	1996	5	Not	0	0	0	0	0	0	0	0	0	0	FALSE		
54	Uurkhangai Sant		3	social insurance sector	26-40	Public	Municipality				1	Water	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE		
55	Uurkhangai Sant		20	Cheese	41-60	Public	Other				4	Water	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE		
56	Uurkhangai Sant		4	Weather sector	41-60	Public	Other				1	Water	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE		
57	Uurkhangai Sant		18	Local people's development center	41-60	Public	Other				10	Water	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE		
58	Uurkhangai Sant		5	tax office	41-60	Public	Municipality				23	Subscriber	2002	1	Not	0	0	0	0	0	0	0	0	0	0	FALSE		
59	Uurkhangai Sant		8	Hospital	26-40	Public	Hospital				1	Water	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE		
60	Uurkhangai Yanga		14	Weather section	41-60	Public	Other				2	Others	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE		
61	Uurkhangai Yanga		7	Police section	26-40	Public	Other				5	Subscriber	1996	2	Not	0	0	0	0	0	0	0	0	0	0	FALSE		
62	Uurkhangai Yanga		20	Tax office	26-40	Public	Other				1	Others	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE		
63	Uurkhangai Yanga		19	Post office section	41-60	Business	Other				1	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	FALSE		
64	Uurkhangai Yanga		18	Urban isokho co.ltd	41-60	Public	Other				1	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	FALSE		
65	Uurkhangai Yanga		17	Section of post bank	26-40	Business	Other				1	Subscriber	1999	1	Not	0	0	0	0	0	0	0	0	0	0	FALSE		
66	Uurkhangai Yanga		15	Nalgin Bujan Ltd Community	26-40	Business	Other				5	Subscriber	1999	3	Not	0	0	0	0	0	0	0	0	0	0	FALSE		
67	Uurkhangai Yanga		13	10-year middle school	41-60	Public	School				68	Subscriber	1996	2	Not	0	0	0	0	0	0	0	0	0	0	FALSE		
68	Uurkhangai Yanga		12	Hospital	41-60	Public	Hospital				38	Subscriber	1996	5	Not	0	0	0	0	0	0	0	0	0	0	FALSE		
69	Uurkhangai Yanga		11	Local people's development center	41-60	Public	Other				7	Others	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE		
70	Uurkhangai Yanga		3	Local people's development center	26-40	Public	Other				5	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
71	Uurkhangai Yanga		6	Pharmacy fund	41-60	Public	Other				3	Subscriber	2000	1	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
72	Uurkhangai Yanga		5	Power supply section	41-60	Public	Other				3	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
73	Uurkhangai Yanga		16	Section of agriculture bank	26-40	Public	Other				3	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
74	Uurkhangai Yanga		2	Statistical section	41-60	Public	Other				14	Subscriber	1996	9	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
75	Uurkhangai Yanga		4	Local government office	41-60	Public	Municipality				3	Subscriber	1996	2	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
76	Uurkhangai Yanga		1	Telecom	26-40	Public	Other				7	Subscriber	2000	1	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
77	Uurkhangai Yanga		8	Kendergeren	41-60	Public	Other				6	Subscriber	1990	1	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
78	Uurkhangai Yanga		9	Dulangeralen Co.Ltd	26-40	Business	Other				2	Subscriber	1990	1	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
79	Uurkhangai Yanga		10	Social insurance section	26-40	Public	Other				2	Water	Not	0	0	0	0	0	0	0	0	0	0	0	0	0	FALSE	
80	Uurkhangai Khekheri		12	Just Gasoline station	26-40	Business	Other				6	Subscriber	1999	2	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
81	Uurkhangai Khekheri		20	Mingun kharikan co.ltd	41-60	Business	Other				18	Subscriber	1999	3	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
82	Uurkhangai Khekheri		8	10-year middle school	26-40	Public	School				63	Subscriber	1996	2	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
83	Uurkhangai Khekheri		18	Sector of KHAS bank	26-40	Business	Other				2	Subscriber	2002	2	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
84	Uurkhangai Khekheri		0	Sector of mongol post bank	41-60	Business	Other				8	Subscriber	1999	1	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
85	Uurkhangai Khekheri		16	Zendan shoo co.ltd	26-40	Business	Other				26	Subscriber	1999	6	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
86	Uurkhangai Khekheri		15	Police section	41-60	Public	Municipality				20	Subscriber	1996	4	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
87	Uurkhangai Khekheri		14	Government office	41-60	Public	Municipality				98	Subscriber	1996	4	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
88	Uurkhangai Khekheri		13	Agriculture bank	41-60	Public	Other				7	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	0	FALSE	
89	Uurkhangai Khekheri		13	Hospital	41-60	Public	Hospital				2	Water	Not	0	0	0	0	0	0	0	0	0	0	0	0	0	FALSE	
90	Uurkhangai Khekheri		19	Ch Naran co.ltd	26-40	Business	Other				10	Subscriber	1998	1	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
91	Uurkhangai Khekheri		9	Acia Khekheri co.ltd	26-40	Business	Other				53	Subscriber	1996	3	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
92	Uurkhangai Khekheri		2	Shikig co.ltd	41-60	Business	Other				70	Subscriber	1996	5	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
93	Uurkhangai Khekheri		2	Khan Bagan co.ltd	26-40	Business	Other				5	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
94	Uurkhangai Khekheri		3	Wentai tou co.ltd	26-40	Business	Other				12	Subscriber	1998	1	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
95	Uurkhangai Khekheri		4	Center of public service	26-40	Business	Other				16	Subscriber	1998	1	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
96	Uurkhangai Khekheri		0	Munhun mod co.ltd	26-40	Business	Other				10	Subscriber	1996	2	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
97	Uurkhangai Khekheri		0	Ugan teerem co.ltd	41-60	Business	Other				54	Subscriber	1996	3	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
98	Uurkhangai Khekheri		0	Arval trade co.ltd	26-40	Business	Other				9	Subscriber	1999	1	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
99	Uurkhangai Khekheri		10	Khar-khorum university	41-60	Public	School				59	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
100	Uurkhangai Khekheri		11	Khar-khorum university	41-60	Public	School				59	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	0	0	FALSE

5. Questionnaire for Public and Business User

PBD	AimID	SumID	PB No	Company Name	Interviewer Age	PB	Public Sector	Company Sector	Company Details	Details of Sector	Total Number of Employee	Fix status	Fix Subscriber	Number of Exist Fix Lines	Fix Water	Number of Fix Water	Necessity of Fix Line	Number of Fix Lines	Mobile subscriber	Number of Exist Mobiles	Mobile Water	Number of Mob Water	Necessity of Mobile Line	Number of Mobile Line	Selection of Telephone	Fix respire of Mobile
101	Senenge	Altanbulag	1	Boyan Underga Co.Ltd	41-60	Business	Trade/Sells	Hotel		Bank service	48	Subscriber	1998	1	Not	0	2004	1	Not	0	Not	0	0	0	Both	FALSE
102	Senenge	Altanbulag	2	Branch of Post bank	26-40	Public	Other				4	Subscriber	1999	1	Not	0	0	0	Not	0	Not	0	0	0	Both	FALSE
103	Senenge	Altanbulag	3	Kindergarten	41-60	Public	Other				10	Subscriber	2001	1	Not	0	2002	1	Not	0	Not	0	0	0	Fixed	FALSE
104	Senenge	Altanbulag	4	Checking point of Frontier crossing	26-40	Public	Other				45	Others	Not	0	Not	0	2002	1	Not	0	Not	0	0	0	Fixed	FALSE
105	Senenge	Altanbulag	5	Branch of customs office	26-40	Public	Other				35	Subscriber	1996	1	Not	0	2002	20	Not	0	Not	0	0	0	Both	FALSE
106	Senenge	Altanbulag	6	Branch of Ulsanbaatar bank	26-40	Public	Other				4	Water	Not	0	Not	0	2002	1	Not	0	Not	0	0	0	Both	FALSE
107	Senenge	Altanbulag	7	Branch of Trade and Development	26-40	Business	Trade/Sells	Bank		Bank service	2	Others	Not	0	Not	0	2002	1	Not	0	Not	0	0	0	Fixed	FALSE
108	Senenge	Altanbulag	8	Munkh Ord Co.Ltd	26-40	Business	Trade/Sells	Hotel			18	Water	2002	1	Not	0	2002	1	Not	0	Not	0	0	Both	FALSE	
109	Senenge	Altanbulag	9	Hospital	41-60	Public	Hospital				16	Subscriber	1996	1	Not	0	2002	2	Not	0	Not	0	0	Fixed	FALSE	
110	Senenge	Altanbulag	10	TEM'S Ltd. Co - operative	26-40	Public	Other				5	Subscriber	Not	0	Not	0	2002	1	Not	0	Not	0	0	Both	FALSE	
111	Senenge	Altanbulag	11	Ten - year school	26-40	Public	School			Trading and timber	51	Subscriber	2000	1	Not	0	2002	1	Not	0	Not	0	0	Both	FALSE	
112	Senenge	Altanbulag	12	Uykhust Co.Ltd	41-60	Business	Trade/Sells	Shop			10	Others	Not	0	Not	0	2004	1	Not	0	Not	0	0	Fixed	FALSE	
113	Senenge	Altanbulag	13	Local government office	41-60	Public	Municipality			Bank service	15	Subscriber	1996	5	Not	0	2004	1	Not	0	Not	0	0	Both	FALSE	
114	Senenge	Altanbulag	14	Branch of agricultural bank	41-60	Public	Trade/Sells	Company			4	Subscriber	2002	1	Not	0	2004	1	Not	0	Not	0	0	Fixed	FALSE	
115	Senenge	Altanbulag	15	Police section	26-40	Public	Municipality			Gasoline station	68	Subscriber	Not	0	2001	1	2002	1	Not	0	Not	0	0	Both	FALSE	
116	Senenge	Altanbulag	16	Gasoline station of MIE company	41-60	Public	Other				5	Others	Not	0	Not	0	2002	2	Not	0	Not	0	0	Both	FALSE	
117	Senenge	Altanbulag	17	Chagdas Co.Ltd	41-60	Business	Other				2	Subscriber	1999	1	Not	0	2002	1	Not	0	Not	0	0	Fixed	FALSE	
118	Senenge	Altanbulag	18	Environment protection section	41-60	Public	Municipality				15	Water	Not	0	1999	1	2002	1	Not	0	Not	0	0	Fixed	FALSE	
119	Senenge	Altanbulag	19	Environment protection section	41-60	Public	Municipality				7	Subscriber	2000	1	Not	0	2002	1	Not	0	Not	0	0	Fixed	FALSE	
120	Senenge	Altanbulag	20	Khokh Chom Co.Ltd	26-40	Business	Other				22	Subscriber	1996	1	Not	0	2002	1	Not	0	Not	0	0	Fixed	FALSE	
121	Senenge	Eruu	1	Weather station	41-60	Public	Other				15	Water	Not	0	Not	0	2002	1	Not	0	Not	0	0	Fixed	FALSE	
122	Senenge	Eruu	2	Sum s hospital	26-40	Public	Hospital				7	Subscriber	Not	0	Not	0	2002	1	Not	0	Not	0	0	Fixed	FALSE	
123	Senenge	Eruu	3	Acht Orgil Co.Ltd	26-40	Business	Other				25	Subscriber	2001	1	Not	0	2002	1	Not	0	Not	0	0	Fixed	FALSE	
124	Senenge	Eruu	4	Itegit Khorsheed	26-40	Business	Trade/Sells			Agriculture and Trading	2	Others	Not	0	Not	0	2002	1	Not	0	Not	0	0	Both	FALSE	
125	Senenge	Eruu	5	Shim sureg co - operative	41-60	Business	Trade/Sells			Veterinary	9	Others	Not	0	Not	0	2004	1	Not	0	Not	0	0	Fixed	FALSE	
126	Senenge	Eruu	6		41-60	Business	Trade/Sells				65	Subscriber	1997	1	Not	0	2004	1	Not	0	Not	0	0	Both	FALSE	
127	Senenge	Eruu	7	Kindergarten	41-60	Public	Other				11	Others	Not	0	Not	0	2002	1	Not	0	Not	0	0	Fixed	FALSE	
128	Senenge	Eruu	8	Ten - year school	41-60	Public	School				10	Subscriber	2000	1	Not	0	2004	1	Not	0	Not	0	0	Fixed	FALSE	
129	Senenge	Eruu	9	Gasoline station of cruel oil import	41-60	Public	Other				54	Subscriber	Not	0	Not	0	2004	1	Not	0	Not	0	0	Fixed	FALSE	
130	Senenge	Eruu	10	AASHB Co.Ltd	41-60	Business	Trade/Sells				18	Subscriber	2002	1	Not	0	2004	1	Not	0	Not	0	0	Fixed	FALSE	
131	Senenge	Eruu	11		41-60	Business	Trade/Sells				9	Subscriber	1996	1	Not	0	2004	1	Not	0	Not	0	0	Fixed	FALSE	
132	Senenge	Eruu	12	Power supply section	41-60	Public	Other				18	Subscriber	1996	1	Not	0	2004	1	Not	0	Not	0	0	Fixed	FALSE	
133	Senenge	Eruu	13	Local government office	41-60	Public	Municipality				4	Subscriber	1996	1	Not	0	2004	1	Not	0	Not	0	0	Fixed	FALSE	
134	Senenge	Eruu	14	Local government office	41-60	Business	Municipality				24	Subscriber	1996	5	Not	0	2002	1	Not	0	Not	0	0	Both	FALSE	
135	Senenge	Eruu	15	Local government office	41-60	Public	Municipality				5	Subscriber	1997	1	Not	0	2002	2	Not	0	Not	0	0	Both	FALSE	
136	Senenge	Eruu	16	Orlit Od Co.Ltd	41-60	Business	Municipality				12	Subscriber	1996	2	Not	0	2002	2	Not	0	Not	0	0	Both	FALSE	
137	Senenge	Eruu	17	Police section	41-60	Public	Municipality				2	Subscriber	1996	1	Not	0	2002	2	Not	0	Not	0	0	Both	FALSE	
138	Senenge	Eruu	18	Social insurance section	41-60	Public	Municipality				5	Subscriber	1996	1	Not	0	2002	2	Not	0	Not	0	0	Both	FALSE	
139	Senenge	Eruu	19	Teats uran Co.Ltd	26-40	Business	Other				6	Subscriber	1996	1	Not	0	2004	1	Not	0	Not	0	0	Both	FALSE	
140	Senenge	Eruu	20	Branch of agricultural bank	26-40	Public	Municipality				8	Subscriber	1996	4	Not	0	2004	1	Not	0	Not	0	0	Both	FALSE	
141	Senenge	Zuunbure	1	Local government office	26-40	Public	Municipality				3	Subscriber	1996	1	Not	0	2004	1	Not	0	Not	0	0	Both	FALSE	
142	Senenge	Zuunbure	2	The meeting of citizen	26-40	Business	Municipality				12	Subscriber	1996	2	Not	0	2002	2	Not	0	Not	0	0	Both	FALSE	
143	Senenge	Zuunbure	3	IEGS veterinary medicine	26-40	Business	Municipality				2	Subscriber	1996	1	Not	0	2002	2	Not	0	Not	0	0	Both	FALSE	
144	Senenge	Zuunbure	4	Weather section	26-40	Public	Other				2	Subscriber	1996	1	Not	0	2004	1	Not	0	Not	0	0	Both	FALSE	
145	Senenge	Zuunbure	5	Environment protection section	41-60	Public	Other				2	Subscriber	2002	1	Not	0	2002	1	Not	0	Not	0	0	Both	FALSE	
146	Senenge	Zuunbure	6	Buren Ial Co.Ltd	41-60	Public	Other				4	Subscriber	1996	1	Not	0	2004	1	Not	0	Not	0	0	Both	FALSE	
147	Senenge	Zuunbure	7	Police section	26-40	Business	Other				11	Others	Not	0	Not	0	2004	1	Not	0	Not	0	0	Fixed	FALSE	
148	Senenge	Zuunbure	8	Ten - year school	41-60	Public	School				42	Others	Not	0	Not	0	2004	1	Not	0	Not	0	0	Both	FALSE	
149	Senenge	Zuunbure	9	Tsolmon shop	41-60	Business	Trade/Sells				2	Subscriber	2002	1	Not	0	2004	1	Not	0	Not	0	0	Both	FALSE	
150	Senenge	Zuunbure	10	Marat Co.Ltd	26-40	Business	Trade/Sells				4	Others	Not	0	Not	0	2004	1	Not	0	Not	0	0	Both	FALSE	

5. Questionnaire for Public and Business User

PBD	Aim#ID	SumID	PG No	Company Name	Interview Age	PB	Public Sector	Company Sector	Company Details	Details of Sector	Total Number of Employee	Fix values	Fix Subscriber	Number of Exist Fix Lines	Fix Water	Number of FixWater	Necessity of Fix Line	Number of Fix Lines	Mobile subscriber	Number of Exist Moblines	Mobile Water	Number of Mob Water	Necessity of Mobile Line	Number of Mobile Line	Selection of Telephone	Fix respite of Mobile			
151	Seiange	Zuunbure	11	Social insurance section	28-40	Public	Other	Trade/Sells	Shop		1 Subscriber 2001	Subscriber	2001	1	Not	0	0	0	0	0	0	0	0	0	2004	1	Both	FALSE	
152	Seiange	Zuunbure	12	Budal you community	41-60	Business	Other	Trade/Sells	Shop		5 Water 1996	Water	1996	1	Not	0	0	0	0	0	0	0	0	0	2000	1	Both	FALSE	
153	Seiange	Zuunbure	13	Juuren Co.Ltd	28-40	Business	Business	Trade/Sells	Shop		16 Others Not	Others	Not	0	Not	0	0	0	0	0	0	0	0	0	2000	2	Both	FALSE	
154	Seiange	Zuunbure	14	Enkhil Ltd. Community	28-40	Business	Business	Trade/Sells	Gasoline station		3 Water 1996	Water	1996	1	Not	0	0	0	0	0	0	0	0	0	2000	1	Both	FALSE	
155	Seiange	Zuunbure	15	Gasoline station of crude oil import	28-40	Public	Other	Trade/Sells	Gasoline station		3 Water 1996	Water	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
156	Seiange	Zuunbure	16	Branch of Electricity network	28-40	Public	Other	Trade/Sells	Gasoline station		3 Others Not	Others	Not	0	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
157	Seiange	Zuunbure	17	Hospital	41-60	Public	Hospital	Trade/Sells	Shop		16 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE	
158	Seiange	Zuunbure	18	Ar bulag Ltd. Community	28-40	Business	Other	Trade/Sells	Shop		3 Others Not	Others	Not	0	Not	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE	
159	Seiange	Zuunbure	19	Branch of agricultural bank	26-40	Public	Other	Trade/Sells	Shop		2 Subscriber 2001	Subscriber	2001	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
160	Seiange	Zuunbure	20	Branch of Mongol post bank	26-40	Public	Other	Trade/Sells	Shop		2 Subscriber 1999	Subscriber	1999	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
161	Seiange	Zuunkhara	1	Branch of Mongol Post bank	41-60	Public	Other	Trade/Sells	Shop		6 Subscriber 1999	Subscriber	1999	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
162	Seiange	Zuunkhara	2	General hospital	28-40	Public	Hospital	Trade/Sells	Shop		6 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
163	Seiange	Zuunkhara	3	Inter - sum court	41-60	Public	Municipality	Trade/Sells	Shop		13 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
164	Seiange	Zuunkhara	4	Fire fighting 19th unit	41-60	Public	Other	Trade/Sells	Shop		40 Subscriber 2001	Subscriber	2001	2	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
165	Seiange	Zuunkhara	5	khaza center Co.Ltd	41-60	Business	Other	Trade/Sells	Market		9 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE	
166	Seiange	Zuunkhara	6	Agro sashar Co.Ltd	28-40	Business	Business	Trade/Sells	Market		28 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE	
167	Seiange	Zuunkhara	7	Khaza TV Co.Ltd	17-25	Business	Other	Trade/Sells	TV broadcasting		3 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
168	Seiange	Zuunkhara	8	Cristal warehouse	41-60	Public	Other	Trade/Sells	Market		9 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
169	Seiange	Zuunkhara	9	Spirit, tobacco factory joint stock	26-40	Business	Business	Trade/Sells	Food industry		60 Subscriber 1996	Subscriber	1996	8	Not	0	0	0	0	0	0	0	0	0	2000	3	Both	FALSE	
170	Seiange	Zuunkhara	10	Ugumgor margal Co.Ltd	41-60	Business	Business	Trade/Sells	Food industry		5 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE	
171	Seiange	Zuunkhara	11	5th Branch of Trade and	41-60	Business	Other	Trade/Sells	Bank service		3 Subscriber 2000	Subscriber	2000	3	Not	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE	
172	Seiange	Zuunkhara	12	1st. Orkhon State owned	41-60	Public	Other	Trade/Sells	Bank service		5 Subscriber 2001	Subscriber	2001	3	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
173	Seiange	Zuunkhara	13	1st. Ten - years school	41-60	Public	School	Trade/Sells	Bank service		4 Subscriber 1996	Subscriber	1996	2	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
174	Seiange	Zuunkhara	14	Tavan suvarga Co.Ltd	26-40	Business	Other	Trade/Sells	Bank service		8 Subscriber 1996	Subscriber	1996	2	Not	0	0	0	0	0	0	0	0	0	2004	1	Fixed	FALSE	
175	Seiange	Zuunkhara	15	Inter - sum police section	26-40	Public	Other	Trade/Sells	Bank service		7 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
176	Seiange	Zuunkhara	16	Sum's procurator	26-40	Public	Municipality	Trade/Sells	Bank service		10 Subscriber 1996	Subscriber	1996	5	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
177	Seiange	Zuunkhara	17	Tax office	41-60	Public	Other	Trade/Sells	Bank service		5 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	1	Fixed	FALSE	
178	Seiange	Zuunkhara	18	Social insurance office	41-60	Public	Other	Trade/Sells	Bank service		19 Subscriber 1996	Subscriber	1996	14	Not	0	0	0	0	0	0	0	0	0	2004	1	Fixed	FALSE	
179	Seiange	Zuunkhara	19	Local government office	41-60	Public	Municipality	Trade/Sells	Bank service		22 Subscriber 1996	Subscriber	1996	5	Not	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE	
180	Seiange	Zuunkhara	20	41st unit of zuunkhara prison	41-60	Public	Other	Trade/Sells	Bank service		70 Subscriber 2002	Subscriber	2002	1	Not	0	0	0	0	0	0	0	0	0	2004	1	Both	FALSE	
181	Darkhan	Khonor	1	Hospital	28-40	Public	Hospital	Trade/Sells	Shop		51 Subscriber 2000	Subscriber	2000	1	Not	0	0	0	0	0	0	0	0	0	2002	2	Both	FALSE	
182	Darkhan	Khonor	2	Ten year school	28-40	Business	School	Trade/Sells	Shop		3 Subscriber 2000	Subscriber	2000	1	Not	0	0	0	0	0	0	0	0	0	2002	2	Both	FALSE	
183	Darkhan	Khonor	3	Bohot Co.Ltd	41-60	Business	Other	Trade/Sells	Shop		10 Others Not	Others	Not	0	Not	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE	
184	Darkhan	Khonor	4	Baylag Co.Ltd	28-40	Public	Other	Trade/Sells	Shop		5 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2004	2	Both	FALSE	
185	Darkhan	Khonor	5	Police	28-40	Public	Other	Trade/Sells	Shop		2 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	2002	2	Both	FALSE	
186	Darkhan	Khonor	6	Tax office	28-40	Public	Other	Trade/Sells	Shop		5 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	2004	2	Both	FALSE
187	Darkhan	Khonor	7	Master of citizen representatives	28-40	Public	Other	Trade/Sells	Shop		2 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	2004	2	Both	FALSE
188	Darkhan	Khonor	8	Local government office	41-60	Public	Municipality	Trade/Sells	Shop		24 Subscriber 1996	Subscriber	1996	4	Not	0	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE
189	Darkhan	Khonor	9	Local government office	17-25	Public	Municipality	Trade/Sells	Shop		2 Subscriber 2002	Subscriber	2002	1	Not	0	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE
190	Darkhan	Khonor	10	Branch of agricultural bank	41-60	Public	Other	Trade/Sells	Shop		1 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE
191	Darkhan	Khonor	11	Kinder garden	41-60	Public	Other	Trade/Sells	Shop		60 Subscriber 1996	Subscriber	1996	3	Not	0	0	0	0	0	0	0	0	0	0	2002	4	Both	FALSE
192	Darkhan	Khonor	12	Mongolian industrial chemical	28-40	Business	Other	Trade/Sells	Shop		110 Subscriber 1996	Subscriber	1996	3	Not	0	0	0	0	0	0	0	0	0	0	2002	10	Both	FALSE
193	Darkhan	Khonor	13	Ujum khangaal Coop	28-40	Public	Other	Trade/Sells	Shop		4 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE
194	Darkhan	Khonor	14	Cassioine station of Crude oil import	28-40	Public	Other	Trade/Sells	Shop		1 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE
195	Darkhan	Khonor	15	Weather section	28-40	Public	Other	Trade/Sells	Shop		6 Subscriber 2000	Subscriber	2000	1	Not	0	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE
196	Darkhan	Khonor	16	Branch of seeds reservation fund	41-60	Public	Other	Trade/Sells	Shop		3 Others Not	Others	Not	0	Not	0	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE
197	Darkhan	Khonor	17	Branch of Electric power network	41-60	Public	Other	Trade/Sells	Shop		25 Subscriber 1996	Subscriber	1996	1	Not	0	0	0	0	0	0	0	0	0	0	2002	1	Both	FALSE
198	Darkhan	Khonor	18	Khonor eib. state owned	26-40	Business	Other	Trade/Sells	Shop		5 Subscriber Not	Subscriber	Not	0	Not	0	0	0	0	0	0	0	0	0	0	2002	3	Both	FALSE
199	Darkhan	Khonor	19	B. Burd Co.Ltd	26-40	Business	Other	Trade/Sells	Shop		5 Subscriber Not	Subscriber	Not	0	Not	0	0	0	0	0	0	0	0	0	0	2002	2	Both	FALSE
200	Darkhan	Khonor	20	Unkrahin Co.Ltd	26-40	Business	Business	Trade/Sells	Shop		5 Subscriber 1999	Subscriber	1999	1	Not	0	0	0	0	0	0	0	0	0	0	2002	2	Both	FALSE
201	Darkhan	Khonor	20	Khalku, Co.Ltd																									

1.2 SWITCHING FACILITIES SITE SURVEY RECORD

1.2 SWITCHING FACILITIES SITE SURVEY RECORD

1.2.1 Title: **Switching Facilities Site Survey Record**

1.2.2 Objective:

Collection of supplementary data and information essential for the primary design of switching network and switching facilities in the Feasibility Study

1.2.3 Duration:

16th September, 2002 to 26th September, 2002

1.2.4 Survey Sites:

Uvurkhangai:

Uvukhangai Aimag Centre,
Khujirt and Kharkhorin Sum centres in Uvukhangai Aimag.

Selenge and Darkhaan-Uul Aimag:

Darkhan-Uul and Selenge Aimag Centre,
Altanblag and Dulaankhaan, and Zuunkharaa Sum centres in Selenge Aimag.

1.2.5 Surveyed by:

Mr. Yasuo ISHIHARA, JICA Study Team,
in cooperation with PTA/MT counterparts:
Mr. Yadamjav (General Manager, Uvurkhangai)
Mr. Dorjpalam (Chief Engineer, Uvurkhangai)
Mr. Bayarkhuu (Switching Engineer, Uvurkhangai)
Mr. Jargal (Technical, Khujirt)
Ms. Oyungerel (Director, Kharkhorin)
Ms. D. Bolormaa (Switching Engineer, Kharkhorin)

Mr. Altankhuyag (General Manager, Darkhan-Uul)

Ms. Battsetseg (Chief Engineer, Darkhan-Uul)

Ms. Sarangerel (Switching Engineer, Darkhan-Uul)

Mr. Dagvadorj (General Manager, Sukhbaatar)

Ms. Tsend-Ayush (Chief Engineer, Sukhbaatar)

Ms. Sarantuya (Switching Engineer, Sukhbaatar)

1.2.6 Collected Data:

Existing switching systems, space availability for replacement by new switch, switching network, etc. See Attachment.

Attachment SW-01

Existing Switching Systems and Space Availability
(Field_Survey-2.XLS)

Uvurkhangai Aimag

No.	Aimag/Sum	Switching Facilities				MDF	Working Conditions		Detail Bill Function		
		Model	Type	Manuf'd	Capacity		Status	Power	Facilities	ON/OFF	
1	Aimag center	---	SDE	D	1997	1,760	A	Working	Central Grid	Yes	Full
2	Bayan-Undur	P-2	Not exist	---	---	0	B	No Hardware	---	No	---
3	Burd	P-1	C-12/48	D	1991	48	B	Working	Central Grid	No	---
4	Bat-Ulzii	P-1	C-12/48	D	1991	48	B	Working	Central Grid	No	---
5	BB-Ulaan	P-4	ATC-50/200	A	Bfr. 1980	50	B	Seasonal	Sum Diesel	No	---
6	Bayangol	P-1	C-12/48	D	1990	48	B	Working	Central Grid	No	---
7	Guchin-Us	P-2	KXTD-500	D	2000	100	C	Working	Solar	Yes	Within Sum
8	Esonzuun-Zyil	P-1	ATC-50	A	Bfr. 1980	100	B	Working	Central Grid	No	---
9	Ulziit	P-2	ATC-40/80	A	Bfr. 1980	40	B	Working	Central Grid	No	---
10	ZB Ulaan	P-1	ATC-50	A	Bfr. 1980	50	B	Working	Central Grid	No	---
11	Bogd	P-2	C-12/48	D	1990	48	B	Working	Solar	No	---
12	Nariinteel	P-1	ATC-50/200	A	Bfr. 1980	50	C	Seasonal	Sum Diesel	No	---
13	Sant	P-1	ATC-50/200	A	Bfr. 1980	50	C	Working	Central Grid	No	---
14	Taragt	P-2	ATC-50/200	A	Bfr. 1980	50	B	Working	Central Grid	No	---
15	Tugrug	P-2	EM-48	D	N.K.	48	B	Working	Central Grid	No	---
16	Uyanga	P-1	ATC-50/202	A	Bfr. 1980	200	B	Working	Central Grid	No	---
17	Kharkhandulaan	P-4	ATC-50/203	A	Bfr. 1980	50	B	Seasonal	Sum Diesel	No	---
18	Khujirt	P-1	KXT-336	D	1996	262	C	Working	Central Grid	Yes	Within Sum
19	Kharkhorin	P-1	ATC-100/2000	A	Bfr. 1980	1,000	B	Working	Central Grid	No	---
20	Uurkhai in Baynteeг	P-4	National Product	A	N.K.	6	B	Paused	Solar	No	---
	Total		---	---	---	4,008	---	---	---	---	

Type D = Digital, A = Analogue, M = Manual. Abbr. Bfr = Before, N.K. = Not Known, Thru = Through
Note:

1. KXTD and KXT are products of Panasonic, Japan.
2. "Sum Diesel" means that the switch power is supplied from Sum centre diesel engine which runs from November to April, with interruption of 1 to 2 hours per day, and doesn't run during summer (May to October).
3. Uurkhai in Baynteeг switch paused for voltage unmatching; it needs 220V, but the Solar power feeds 24V.

No.	Aimag/Sum	No. of circuits to/from Aimag	Telephone Number	Trunk Call Service		Subscriber				Switch Equipment Room	
				O/G	I/C	Total	Public	Business	Private	Space	Condition
1	Aimag center	---	---	Yes	Yes	1,644	171	162	1,311	---	---
2	Bayan-Undur	1	2-6511	Thru operator	Thru operator	1	1	0	0	Available	Normal
3	Burd	1	2-6533	Thru operator	Thru operator	22	9	4	9	Available	Normal
4	Bat-Ulzii	1	2-6532	Thru operator	Thru operator	23	9	2	12	Available	Normal
5	BB-Ulaan	1	2-6534	Thru operator	Thru operator	0	0	0	0	Available	Normal
6	Bayangol	1	2-6510	Thru operator	Thru operator	40	14	0	26	Available	Normal
7	Guchin-Us	1	2-6512	Dialling "9"	Thru operator	38	6	1	31	Available	Normal
8	Esonzuun-Zyil	O/G=1, I/C=1	2-7508	Thru operator	Thru operator	60	8	2	50	Available	Normal
9	Ulziit	1	2-6509	Thru operator	Thru operator	4	4	0	0	Available	Normal
10	ZB Ulaan	1	2-6503	Thru operator	Thru operator	31	6	5	20	Available	Normal
11	Bogd	1	2-6513	Thru operator	Thru operator	17	9	0	8	Available	Normal
12	Nariinteel	O/G=1, I/C=1	2-6536	Thru operator	Thru operator	0	0	0	0	Available	Normal
13	Sant	1	2-6506	Thru operator	Thru operator	10	8	2	0	Available	Normal
14	Taragt	1	2-6502	Thru operator	Thru operator	21	7	0	14	Available	Normal
15	Tugrug	1	2-6505	Thru operator	Thru operator	21	6	4	11	Available	Normal
16	Uyanga	O/G=3, I/C=1	2-6501	Thru operator	Thru operator	130	13	4	113	Available	Normal
17	Kharkhandulaan	1	2-6500	Thru operator	Thru operator	0	0	0	0	Available	Normal
18	Khujirt	O/G=3, I/C=2	Note	Dialling "9"	Thru operator	218	30	11	177	Available	Normal
19	Kharkhorin	15	Note	Thru operator	Thru operator	720	39	67	614	Available	Normal
20	Uurkhai in Baynteeг	1	2-6531	Thru operator	Thru operator	0	0	0	0	Available	Normal
	Total	---	---	---	---	3,000	340	264	2,396	---	---

4. ATC battery is old and worn-out and long time support is not possible.
5. Khujirt Telephone numbers: 2-6526 (O/G), 2-6538 (O/G), 2-6537 (Fax), 2-6507 (I/C), 2-6535 (I/C)

Selenge and Darkhan-Uul Aimag

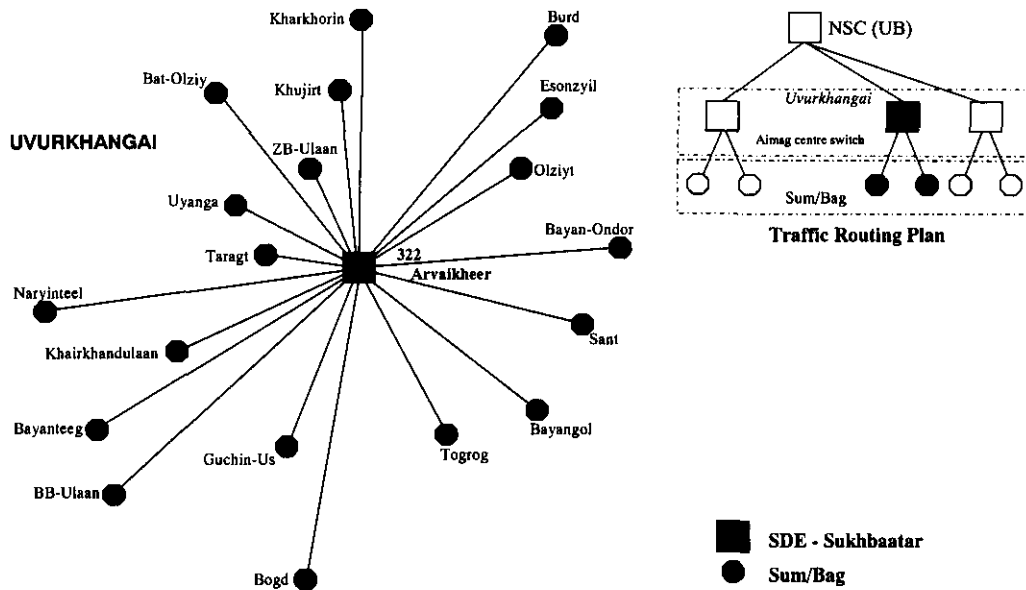
No.	Aimag/Sum	Switching Facilities				MDF	Working Conditions		Detail Bill Function		
		Model	Type	Manufd	Capacity		Status	Power	Facilities	ON/OFF	
11	Selenge Aimag	---	SDE	D	1997	1,888	Working	Central Grid	Yes	Full	
12	Altanbulag	P-1	HICOM	D	2001	200	Working	Central Grid	No	---	
13	Eruu	P-1	ATCK-100/200	A	1979	100	Working	Central Grid	No	---	
14	Zuunburen	P-1	Panasonic	D	1997	32	Working	Central Grid	No	---	
15	Khushaat	P-4	ATCK-50/200	A	In 1980's	50	Working	Central Grid	No	---	
16	Orkhon	P-3	C-12/48	D	1991	48	Working	Central Grid	No	---	
17	Sant	P-1	ATCK-50/200	A	In 1980's	50	Working	Central Grid	No	---	
18	Khuder	P-4	ATCK-50/200	A	In 1980's	50	Working	Central Grid	No	---	
19	Tsagaannuur	P-1	ATCK-50/200	A	In 1980's	100	Working	Central Grid	No	---	
20	Bugant	P-3	ATCK-50/200	A	In 1980's	100	Working	Central Grid	No	---	
21	Orkhontuul	P-1	ATCK-50/200	A	In 1980's	50	Working	Central Grid	No	---	
22	Baruunburen (Bayangol)	P-2	ATCK-50/200	A	In 1980's	100	Working	Central Grid	No	---	
23	Dulaankhaan	P-4	ATCK-50/200	A	In 1980's	100	Working	Central Grid	No	---	
24	Javkhant	P-4	ATCK-50/200	A	In 1980's	50	Working	Central Grid	No	---	
25	Shaamar	P-1	ATCK-50/200	A	In 1980's	100	Working	Central Grid	No	---	
26	Tushig	P-4	ATCK-50/200	A	1979	50	Working	Central Grid	No	---	
Homing To Darkhan-Uul EWSD											
27	Saikhan (Nomgon)	P-2	ATCK-50/200	A	In 1980's	100	Working	Central Grid	No	---	
28	Khutul	P-1	ATCK-100/200	A	In 1980's	600	Working	Central Grid	No	---	
29	Zuunkharaa	P-1	HICOM	D		700	Working	Central Grid	Yes	Full	
30	Bayangol	P-1	Panasonic-330	D	1996	228	Working	Central Grid	Yes	No	
31	Tunkhel	P-2	ATCK-50/200	A	In 1980's	100	MT has withdrawn in 2002		---	---	
	Sub-total	---	---	---	---	4,796	---	---	---	---	
51	Darkhan-Uul		EWSD	D	1997	6,384	A	Working	Central Grid	Yes	Full
52	Shariin gol	P-2	ATCK-100/200	A	In 1980's	500	Working	Central Grid	No	---	
53	Khongor	P-2	ATCK-50/200	A	In 1980's	150	Working	Central Grid	No	---	
54	Orkhon	P-2	ATCK-50/200	A	In 1980's	150	Working	Sum Engine	No	---	
55	Salkhit (R/D of Khongor)		---	---	---	---	MT has withdrawn in 2001		---	---	
	Sub-total	---	---	---	---	7,184	---	---	---	---	

Type D = Digital, A = Analogue, M = Manual.

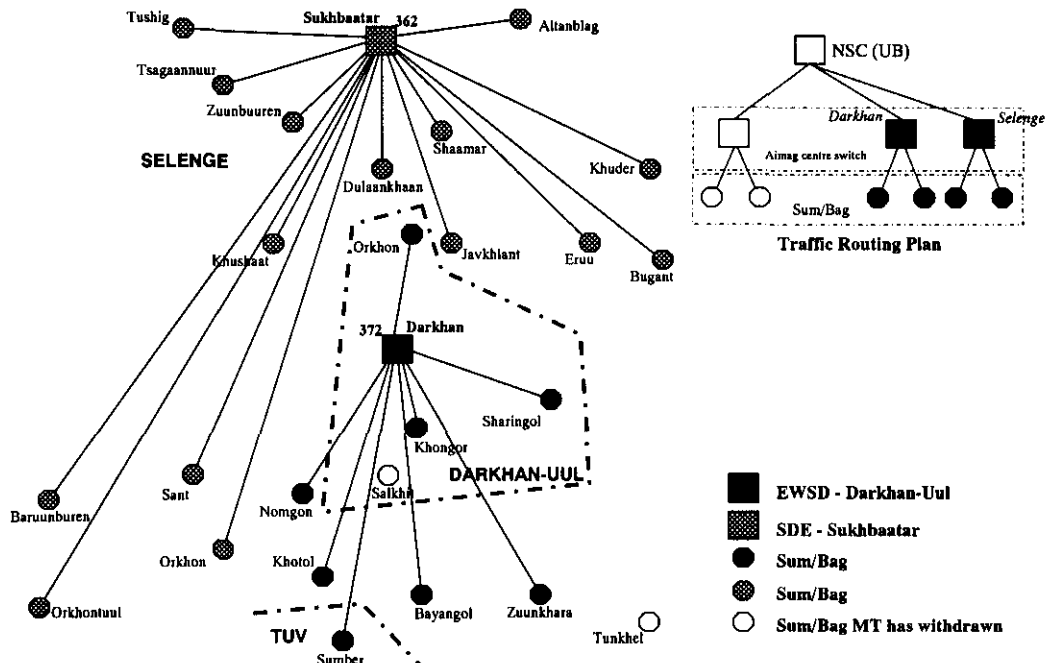
No.	Aimag/Sum	No. of circuits to/from Aimag	Telephone Number	Trunk Call Service		Subscriber				Switch Equipment Room	
				O/G	I/C	Total	Public	Business	Private	Space	Condition
11	Selenge Aimag	---	---	Yes	Yes	1,376	191	158	1,027	---	---
12	Altanbulag	2	2-6501	Thru operator	Thru operator	89	12	7	70	Available	Normal
13	Eruu	2	2-6504	Thru operator	Thru operator	70	10	14	46	Available	Normal
14	Zuunburen	1	2-6506	Thru operator	Thru operator	14	10	3	1	Available	Normal
15	Khushaat	R/D	---	Thru operator	Thru operator	10	8	2	0	Available	Normal
16	Orkhon	1 + R/D	2-6513	Thru operator	Thru operator	13	4	4	5	Available	Normal
17	Sant	1	2-6511	Thru operator	Thru operator	33	14	8	11	Available	Normal
18	Khuder	R/D	---	Thru operator	Thru operator	9	4	5	0	Available	Normal
19	Tsagaannuur	2	2-6507	Thru operator	Thru operator	45	15	30	0	Available	Normal
20	Bugant	R/D	---	Thru operator	Thru operator	44	22	17	5	Available	Normal
21	Orkhontuul	1	206518	Thru operator	Thru operator	31	17	8	6	Available	Normal
22	Baruunburen (Bayangol)	R/D	---	Thru operator	Thru operator	49	16	3	30	Available	Normal
23	Dulaankhaan	1	206503	Thru operator	Thru operator	5	4	1	0	Available	Normal
24	Javkhant	1	206502	Thru operator	Thru operator	18	6	2	10	Available	Normal
25	Shaamar	2	2-6505	Thru operator	Thru operator	72	13	5	54	Available	Normal
26	Tushig	R/D	---	Thru operator	Thru operator	10	5	5	0	Available	Normal
Homing To Darkhan-Uul EWSD											
27	Saikhan (Nomgon)	1	2-6580	Thru operator	Thru operator	25	10	15	0	Available	Normal
28	Khutul	7 + R/D	2-6520	Thru operator	Thru operator	540	31	54	455	Available	Normal
29	Zuunkharaa	2 + R/D	2-6541	STD with "9"	DID	709	69	50	590	Available	Normal
30	Bayangol	2 + R/D	2-6530	Thru operator	Thru operator	167	16	25	126	Available	Normal
31	Tunkhel	MT has withdrawn in 2002		Via MRC	Via MRC	0	0	0	0	Available	Normal
	Sub-total	---	---	---	---	3,329	477	416	2,436	---	---
51	Darkhan-Uul	---	---	---	---	5,417	262	481	4,674	---	---
52	Shariin gol	10 + R/D	2-6510	Thru operator	Thru operator	361	38	27	296	Available	Normal
53	Khongor	2	2-6570	Thru operator	Thru operator	65	13	11	41	Available	Normal
54	Orkhon	2	2-6560	Thru operator	Thru operator	28	6	4	18	Available	Normal
55	Salkhit (R/D of Khongor)	MT has withdrawn in 2001		Via MRC	Via MRC	0	0	0	0	Available	Normal
	Sub-total	---	---	---	---	5,871	319	523	5,029	---	---

Attachment SW-02

Switching Network Plan (Existing, Uvukhangai)

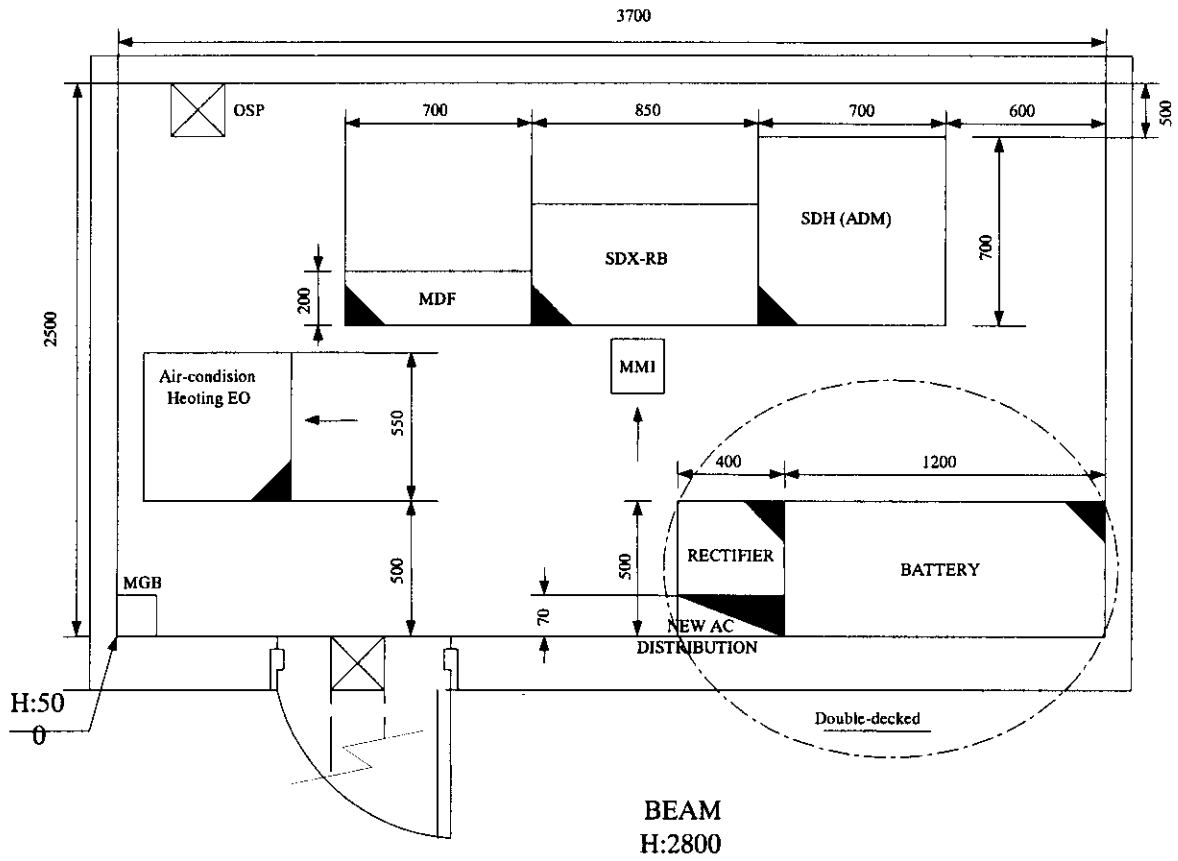


Switching Network Plan (Existing, Selenge and Darkhan-Uul)



Attachment SW-03

An Example of Equipment Room Layout



Annex SW-04**Findings of Existing Switching System****1. Khujirt exchange (Uvurkhangai Aimag):**

Khujirt is a Sum centre with around 8,000 inhabitants including those in Bugs. The capacity of the switching system is 262 line units and 218 subscriber lines are in operation as of 18th September, 2002. The switching system is running normally, but the components, especially those facing to outside line, are damaged lot seasonally in summer by lightning. The power supply is stable, as it comes from the Central Grid.

- (1) Seasonally concentrated faults have come out. 80 subscriber line circuits were damaged in July, 104 circuits in August, and another 20 circuits in August again. The switch capacity was only 262 lines.
- (2) Return of repair components is slow in comparison with the frequency and number of the faults. Some small components like resister were purchased locally, which were not pure-defined.
- (3) The faults were caused by lightning in the season.
- (4) The KXT-336 was a switch developed originally for in-house use, but that of relevant exchange system connected subscriber lines spread outside of the Telecom centre building. Subscriber line protection device for running outdoor was not built-in the switching system and a protection device was composed locally at the exchange.
- (5) One (1) of three (3) power units has been faulty not repaired because it could not be obtained, and locally made battery supply device was connected in place of the power unit.

BB-Ulaan exchange

Spare parts purchase has been stopped and not be able to repair as it is a products of Bulgaria. For that, subscriber line are all defanct.

Kharkhandulaan exchange

Spare parts of power supply could not be purchased, and all the subscriber lines were defunct.

2. Kharkhorin exchange (Uvurkhangai Aimag):

Kharkhorin is a Sum centre with around 14,000 inhabitants including those in Bugs. The capacity of the switching system is 1,000 line units and 720 subscriber lines are in operation as of 20th September, 2002. The switching system is running normally. Power supply is stable as it comes from the Central Grid.

Complaints of subscribers are a) delay in dialling, b) wrong connection, c) noise while communication, etc. All such problems are proper to the conventional crossbar switch and not avoidable. The spare parts production has been stopped but available, for those replaced with new switches are disassembled and the components are supplied as spare parts.

3. Darkhan-Uul exchange (Darkhan Aimag):**3.1 Inter-exchange Links**

Darkhan-Uul exchange network is composed of two (2) switching units: the EWSD host and its remote switch unit. The EWSD host has links to/from:

EWSD switch in Ulaanbaatar:	2 x 2Mbps
E-10B switch in Ulaanbaatar:	2 x 2Mbps
MT switch in Zuunkhara:	1 x 2Mbps
Selenge Aimag centre switch:	1 x 2Mbps
MICOM Internet servier in Ulaanbaatar:	2 x 2Mbps
MRA switch in Darkhan-Uul:	2 x 2Mbps
Total:	10 x 2Mbps

In addition to the above, the EWSD switch has one (1) link of 2Mbps connecting with its RSU in old Darkhan.

3.2 Detail Billing

Detail billing function is equipped to EWSD switch of Darkhan-Uul, HICOM switch in Zuunkhara, and Panasonic switch in Bayangol.

EWSD switch transfers the call records (charge information) to Ulaanbaatar Operation and Maintenance Centre (OMC) via x.25 protocol link. It is transferred monthly and no copy is kept at Darkhan-Uul. The transferred call records are processed at the OMC and bills are sent back to Darkhan-Uul.

HICOM switch can take out all detail information of call records and Zuunkhara Telecom Centre issues bills to subscribers locally. Trunk and international calls which are routed through EWSD switch of Darkhan-Uul are monitored by EWSD switch of Darkhan-Uul and the call records for charging are recorded by EWSD.

Panasonic's detail bill function is not used yet and trunk and international calls are allowed only through operator's intervention.

3.3 Power Equipment

The switching system is supported by 2 x 420 AH battery banks and a 100 KW (400V, 180A) diesel engine made in Russia in 1965. In addition to this, there are two (2) sets of battery banks; one for NERA transmission equipment and the other for a 12-channel transmission system to Sum centres.

3.4 Trunk and International Calls

The trunk and international calls to/from Sum centre exchanges are routed through operator, except the case of Zuunkhara. Zuunkhara telephone users are provided with complete DDD (Distant Direct Dialling) and IDD (International Direct Dialling) service.

The long distant subscriber lines from EWSD switch to Sum centres are all terminated with telephone set, not being connected to Sum centre switching system. In other words, each of the Sum centre switch have no "Trunk" to/from the EWSD switch in Aimag centre.

4. Sukhbaatar Exchange (Selenge Aimag):

4.1 Inter-exchange Links

Sukhbaatar exchange has links to/from:

EWSD switch in Ulaanbaatar:	1 x 2Mbps
E-10B switch in Ulaanbaatar:	1 x 2Mbps
Darkhan-Uul Aimag centre switch:	1 x 2Mbps
MRA switch in Sukhbaatar:	1 x 2Mbps
Total:	4 x 2Mbps

4.2 Links to Sum Centres

Fifteen (15) Sum/Bag centres are homed to the SDE switch of Sukhbaatar. Among them, six (6) Sum/Bag centres are linked with Ring-Down (R/D) circuits because dial pulses cannot be transmitted received correctly. They are Khushaat, Orkhon, Khuder, Bugant, Baruunburen (Bayangol), and Tushig.

4.3 SDE Switch Network for R/D Circuits

The SDE of Sukhbaatar is functioned to deal with R/D circuits through its switch network. That is, a telephone terminal (of operator) accommodated to the SDE switch can catch an R/D circuit which leads to one of the R/D destinations. Each R/D destination is assigned a special directory number of three-digits, for instance, "298" of Khushaat Sum centre. When the R/D circuit is caught by the operator's telephone apparatus, R/D signal is sent to the magneto apparatus at Sum centre. When the magneto apparatus of Sum centre sends R/D signal to the SDE, the operator's telephone sets is called through the switch network. SDE devotes one (1) DTI for such six (6) R/D circuits.

The operator's telephone set has a function to transfer the call to other telephone. This function is used as a "switch" between magneto apparatus in Sum centre and SDE switch.

4.4 Detail Billing

Detail billing function is equipped to SDE switch of Darkhan-Uul and HICOM switch in Altanbulag.

SDE switch transfers the call records (charge information) to Ulaanbaatar Operation and Maintenance Centre (OMC) via x.25 protocol link. It is transferred monthly and no copy is kept at Sukhbaatar. The transferred call records are processed at the OMC and bills are sent back to Sukhbaatar.

HICOM switch of Altanblag can take out all detail information of call records but it is not functioned.

Panasonic of Zuunburen is a model "Eatherphone" and not functioned with the detail billing.

4.5 Power Equipment

The switching system is supported by 2 x 180 AH battery banks and a 75 KWdiesel engine made in Russia in 1989. In addition to this, there is a set of battery banks for NERA transmission equipment. The SDE battery banks can support the normal operation for around three (3) hours after Central Grid power cut, in case that the diesel engine does not started.

4.6 Trunk and International Calls

The trunk and international calls to/from Sum centre exchanges are routed through operator. The long distant subscriber lines from SDE switch to Sum centres are all terminated with telephone set, not being connected to Sum centre switching system. In other words, each of the Sum centre switch have no "Trunk" to/from the EWSD switch in Aimag centre.

5 Altanbulag Exchange

A HICOM switching system is working normally. This is switch was formerly used in Sukhbaatar and transferred to Altanbulag in 2001. The switching system will stop working if the commercial power is cut, for it is not equipped with battery like other Sum centre switches.

6. Dulaankhaan Exchange

An ATCK-50/200 switch is working normally. The capacity is 100 line units, but only five (5) subscriber lines are in use. The Bag, which was a relatively big settlement of timber product, lost subscriber lines gradually as population decreased by fading out of the timber production. The switching system is not supported by battery nor diesel engine: it will stop working if power supply is cut.

7. Numbering Plan of Sum Centres

The numbering plan stipulated by MOI has not been materialised yet, as far as the PABX Sum centre switches are concerned. Those Sum centre switches are running independent from Aimag centre switch and trunk/international calls are connected through the distant subscriber lines of Aimag centre directory number. For instance, Bayangol Sum centre has a unit of PABX of Panasonic, but it is not connected to Aimag centre EWSD, being isolated in numbering. The Sum users are routed out of the Sum centre via distant subscriber line "2-6530" of EWSD directory number. The PABX extension and the distant subscriber line are connected manually by operator at Sum centre.

(End of Attachment)

**1.3 OPTICAL FIBER TRANSMISSION SYSTEM SITE
SURVEY RECORD**

1.3 OPTICAL FIBRE CABLE TRANSMISSION SYSTEM SITE SURVEY RECORD

1.3.1 Title: Site Survey Record

1.3.2 Objective of Survey: Facilities on Optical Fibre Cable Transmission Systems

1.3.3 Duration: Oct 8th to Oct 10th, 2002

1.3.4 Survey Site:

Khongol, Orkhon Sums in Dalkhan-Uul Aimag

Saikhan, Khutul, Zuunkharaa, Bayangol, Orkhon, Orhontuul, Shaamar,

Dulaankhaan in Selenge Aimag

1.3.5 Surveyor: Tomio Hosoda, Mr. Boldbaatar (MRC), Ms. N. Oyunsuren (MRC)

1.3.6 Collected Data: Attached

Attached Data

1. Schedule

8th October 2002 (Tuesday) Weather: fine

8:00 Departure from UB
Dalkhan (Meet Mr. Sharavdorj of MRC)
Orhon
Dulaankhaan
Shaamar

9th October 2002 (Wednesday) Weather: rain and cloud in the morning,
and fine in the afternoon

8:00 Departure from Dalkhan
Nomgon/Saihkhan
Hotol
Orhon
Orhontuul

10th October 2002 (Thursday) Weather: rain with snow in the morning,
and fine in the afternoon

8:00 Departure from Dalkhan
Khongor
Bayangol
Zuunharaa

2. Participants

- (1) Tomio Hosoda
- (2) Lkhagva, Interpreter
- (3) Engineers from MRC
 - 8th October 2002: Mr. Boldbaatar
 - 9th October 2002: Ms. N. Oyunsuren
 - 10th October 2002: Ms. N. Oyunsuren
- (4) Myakhlai, Driver

3. Survey Items

- (1) Branching Points on MRC optic fiber route
- (2) Distance of branching routes from the Branching Points to MTC telephone office
- (3) Road conditions on the branching routes
- (4) Existing poles on the branching routes
- (5) Which is better, buried cable or aerial cable?
- (6) Space for equipment in MRC buildings and MTC buildings
- (7) Power Facility in MRC buildings and MTC buildings
- (8) Which location is better for new switch, in MRC building or MTC building?

4. Meeting with Mr. Sharavdorj, head of MRC Dalkhan

Mr. Sharavdorj strongly suggested that Thukhel should be included in the Project, Thukhel is a town for lumber and people there seriously want telephone service. MTC has no significant facilities in the town. MRC has a building with a room which has a jointing point of the railway optical fiber cable. The room size is as same as one in MRC Orhon.

5. Railcom (by the information from Ms. N. Oyunsuren)

Railcom was made as a subsidiary of MRC (Mongolian Railway Company) in Ulaanbaatar this spring. Railcom owns the railway fiber optic transmission systems and is responsible for plan for their usage. Railcom has the workstation through which they watch the whole systems, but since they have no organizations outside of UB, actual maintenance work is conducted by MRC Dalkhan, which has measuring equipment and spare parts. Railcom has no responsibility for switching systems.

Contents

8th October 2002 (Tuesday)

Orhon(P-2, 2009)-----1.3-5
Dulaankhaan(P-4, 2016)-----1.3-7
Shaamar(P-1, 2004)-----1.3-9

9th October 2002 (Wednesday)

Nomgon/Saikhan (P-2, 2007)-----1.3-10
Hotol (Khutul)(P-1, 2004) -----1.3-11
Orhon(P-3, 2013)-----1.3-12
Orhontuul (P-1, 2005) -----1.3-13

10th October 2002 (Thursday)

Hongor(P-2, 2008) -----1.3-14
Bayangol (P-1, 2004) -----1.3-16
Zuunharaa(P-1, 2004)-----1.3-18

Name of Sum: Orhon (P-2, 2009)

Date:8th October 2002 (Tuesday)

Time: 14:00

(1) Branching Points on MRC optic fiber route

There is only a mechanical closure in a room.

A stand-by engine is installed in another stand-alone building. Batteries are installed in concrete boxes outside the buildings. Batteries are Russian products and have unfrozen solution.

(2) Distance of branching routes from the Branching Points to MTC telephone office

1.0 km

(3) Road conditions on the branching routes

~~paved~~

unpaved

road width: more than 5 meters

road side

used space (house etc.)

~~open space~~

(4) Existing poles on the branching routes

~~0%~~

~~25%~~

50%

~~75%~~

~~100%~~

~~problems of conditions if any~~

(5) Which is better, buried cable or aerial cable?

No opinion

(6) Space for equipment in MRC buildings and MTC buildings

MRC

A little bit small, but cannot say it is too small.

MTC

enough

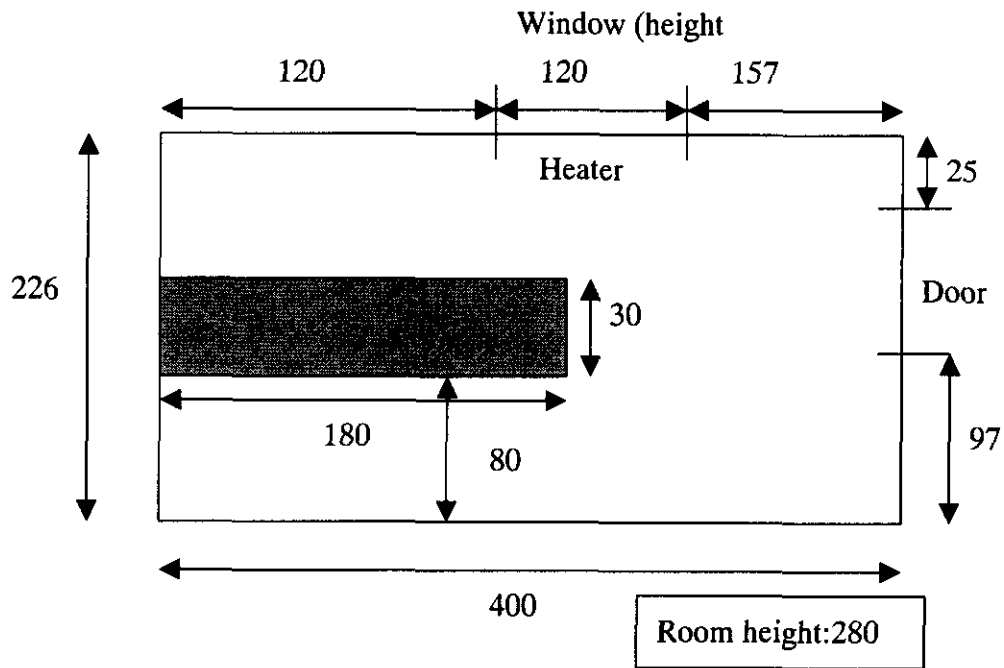
(7) Power Facility in MRC buildings and MTC buildings

MRC: AC supply Emergency Engine (25KVA) Battery

MTC: AC supply ~~Emergency Engine~~

(8) Which location is better for new switch, in MRC building or MTC building?

MRC building is near to bigger demand.



MRC room which has a mechanical closure

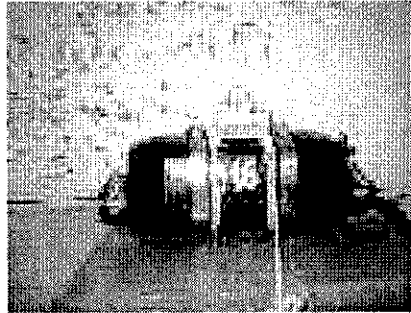
Name of Sum: Dulaankhaan (P-4, 2016)

Date: 8th October 2002 (Tuesday)

Time: 15:30

(1) Branching Points on MRC optic fiber route

There is a mechanical closure.



(2) Distance of branching routes from the Branching Points to MTC telephone office

2.6 km

(3) Road conditions on the branching routes

paved

unpaved

road width: 3 m

road side

~~used space (house etc.)~~

open space

(4) Existing poles on the branching routes

0%

~~25%~~

50%

75%

100%

~~problems of conditions if any~~

(5) Which is better, buried cable or aerial cable?

no opinion

(6) Space for equipment in MRC buildings and MTC buildings

MRC

enough

MTC

enough

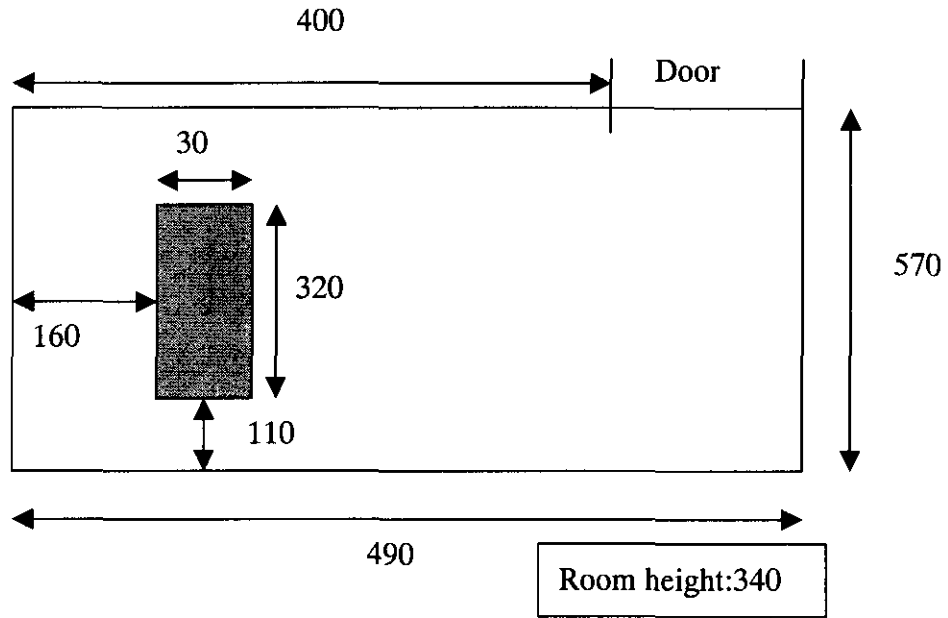
(7) Power Facility in MRC buildings and MTC buildings

MRC: AC supply Emergency Engine (25KVA)

MTC: AC supply ~~Emergency Engine~~ no battery

(8) Which location is better for new switch, in MRC building or MTC building?

MTC building is near to bigger demand.



MRC room which has a mechanical closure