

13-8 Required Space (6/8)

Required Space of the each Exchange Office in the BMA (Area - 4 2/2)

Unit Name	Opening Year	Line Capacity	1992 year Subscriber	Demand 1,997	Expansion Capacity	Space		Shortage Space	Demand 2,002	Expansion Capacity 2,007	Required Space	Shortage Space	Demand 2002+2007	Expansion Capacity 2002+2007	Required Space	Shortage Space
						Required	Remained									
CWT	1984	16,192	16,259	40,719					13,393	8,207			21,600			
	total	20,288											0			
	TOTAL	20,288			42,047	186	108	78		8,207	94	94	85	19,526	119	119
NTB-1	1979	3,300	12,187	34,125					51,334	65,398			116,732			
NTB-2	1992	16,384											0			
	TOTAL	19,684			47,162	201	129	78	26,432	18,574	231	68	45,006	122,358	186	113
NWW-1	1989	5,300	29,165	38,752									0			
NWW-2	1990	26,591											0			
	total	31,891											0			
	TOTAL	31,891			46,599	200	144	56	23,615	18,574	130	278	38,264	41,863	186	222
PKK	1987	16,288	15,896	40,571					23,615	14,649			0			
	total												0			
	TOTAL	18,336			47,577	203	112	98	20,029	8,120	120	130	23,579	34,578	164	164
PJT	1990	8,192	7,146	29,090					15,459				0			
	total												0			
	TOTAL	12,288			30,132	150	140	10	12,523	8,120	98	98	0	20,643	122	122
FST	1990	8,192	5,615	8,086					4,586	3,835			8,421			
	total												0			
	TOTAL	15,360			175	61	126	65	4,286	3,835	73	73	0	8,121	84	84
TYB	1990	5,120	2,489	26,089					37,207	24,478			61,685			
	total												0			
	TOTAL	6,400			37,061	171	174	3	32,115	24,478	156	156	0	56,593	230	230
NWN		5,000	3,197	9,768					5,262	4,053			9,315			
	total												0			
	TOTAL	5,000			10,070	90	140	50	4,778	4,053	74	74	0	8,831	86	86
BAN	1992	5,120	2,700	4,132					4,313	3,651			7,964			
	total												0			
	TOTAL	5,120			3,437	70	70	7	4,048	3,651	72	72	0	7,699	83	83
Area total		426,426	319,144	701,780	769,221				443,803	384,759	2,234	-826	745,005	683,954	2,112	-902
	total												0			
	TOTAL	1,536,456	1,212,241	2,355,551	2,600,497				1,480,453	1,305,420	7,396	-2,553	2,498,928	2,319,881	7,020	-3,551

Note: This mark is shown shortage space (square mark) in the switching room

13-8 Required Space(7/8)

Required Space of each Exchange Office in the Surrounding Area (Provincial 6)

EXCHANGE	HOS	SYSTEM	Open Year	Line capacity	NO of Sub 1997 Year	Demand 1997 Year	Expansion Lines	Required Space	Remain Space	Shortage Space	Demand 2002 Year	Expansion Lines	Required Space	Shortage Space	Demand 2007 Year	Expansion Lines	Required Space	Shortage Space	Demand 2007 Year
NAKHON PATHOM		PC-100C	1979	3000															
		MSU NEAX 61	1984	8816															
		MSU NEAX 61		1024															
	TOTAL L.U.			12840	11,413	43,153	50,454	211	108	303	21,820	22,754	128	328	24,156	24,156	201	301	64,973
SAM PHRAN		ARF-102	1975	1000															
		MOBILE NEAX 6	1985	0															
		MSU NEAX LSI		4096															
	TOTAL L.U.			5096	2,990	16,729	16,886	111	0	411	7,158	6,528	80	30	5,583	5,583	96	96	23,887
NAKHON CHAI SI		7201 RSU NEAX 61	1983	1000															
		7201 RSU NEAX 61		1000															
		TOTAL L.U.		2000	1,137	13,510	17,150	111	0	337	11,258	11,772	95	95	12,544	12,544	133	333	24,768
KAMPHAENG SA E		7201 RSU NEAX 61	1985	1000	618	5,445	7,653	23	0	28	6,474	8,182	25	25	10,745	10,745	57	57	11,919
		7201 RSU NEAX 61		1024	49	4,080	4,921	15	0	15	4,539	5,599	17	17	7,188	7,188	38	38	8,619
		7201 RSU NEAX 61		1000	23	1,952	1,880	6	0	6	2,263	2,826	8	8	3,671	3,671	19	19	4,215
PHRONG MADUA		7201 RLU NEAX 61		256															
		HUAI PHLU		512															
		7201 RSU NEAX 61		512															
BANG LUANG		7201 RSU NEAX 61		512															
		THAMMASALA		512															
		7201 RSU NEAX 61		512															
KHONG CHINDA		7201 RSU NEAX 61		512															
		TOTAL		25264	15,630	84,869	98,944	477		-369	53,512	57,662	353	-353	63,887	63,887	545	-545	138,381
		SAMUT SAKHON																	
SAMUT SAKHON		ARF-102	1960	2000															
		MSU AXE-10	1985	5120															
		MSU AXE-10		1024															
	TOTAL L.U.		8144	7,601	57,411	65,707	257	192	63	22,098	22,349	127	-237	22,726	22,726	195	-395	79,509	
KRATHUM BAEN		MOBILE NEAX 6	1983	1000															
		7301 RSU AXE-10		2048															
		TOTAL L.U.		3048	1,188	18,201	18,738	116	0	316	5,993	5,823	17	17	5,569	5,569	34	34	24,194
BAN PHASEO		MOBILE NEAX 6	1984	0	1,387	12,567	16,174	109	0	308	5,551	5,689	17	17	5,897	5,897	35	35	18,118
		7301 RSU AXE-10		2048															
		7301 RSU AXE-10		14264	10,176	88,179	100,620	482		-290	33,642	33,862	162	-162	34,192	34,192	264	-264	121,821
	TOTAL			39528	25,806	173,048	199,564	959	0	-659	87,154	91,524	515	-515	98,079	98,079	809	-809	260,202
	TOTAL L.U.																		

Note : This mark is shown shortage space (square meter) in the switching room

13-8 Required Space(8/8)

Required Space of each Exchange Office in the Surrounding Area (Provincial 9)

EXCHANGE	HOST	SYSTEM	Operate Year	Line Capacity	NO of Sub 1992 Year	Demand 1997 Year	Expansion Lines	Required Space	Remain Space	Shorage Space	Demand 2002 Year	Expansion Lines	Required Space	Shorage Space	Demand 2007 Year	Expansion Lines	Expansion Lines 2002-2007	Required Space	Shorage Space
AYUTHAYA 1		PC-1000C	1960	1,426	1,344	4,915	5,081	75	0	73	620	797	691	2	797	797	1,488	4	4
AYUTHAYA 2		MSU AXE-10	1985	5,120	3,761	14,772	15,044	105	144	39	4,078	3,915	4,013	12	3,915	3,915	7,928	24	24
BANG PA-IN		ARF-102	1979	1,000	1,045	5,914	6,741	80	0	36	1,955	2,125	2,023	6	2,125	2,125	4,148	12	12
WANG NOI		ARF-102	1979	1,000	1,148	7,007	7,939	84	0	34	1,959	1,802	1,896	6	1,802	1,802	3,698	11	11
PHACHI		ARF-102	1979	1,000	532	2,818	2,768	68	0	58	1,044	1,281	1,139	3	1,281	1,281	2,420	7	7
THA RUA		MOBILE NEAX 6	1979	1,000	937	5,233	5,845	78	0	78	1,688	1,683	1,686	5	1,683	1,683	3,369	10	10
SENA	6802	RSU AXE-10	1985	1,024	774	3,855	4,294	13	0	13	1,723	2,307	1,957	6	2,307	2,307	4,264	13	13
PHRA INTHARACHA	6802	RSU AXE-10	1986	1,024															
BANG SAI	6802	RSU AXE-10		256	246	985	1,169	4	0	4	485	764	597	2	764	764	1,361	4	4
PHAK HAI	6802	RSU AXE-10		1,024	529	2,069	1,943	6	0	3	944	1,293	1,084	3	1,293	1,293	2,377	7	7
BANG BAN	6802	RSU AXE-10		512	377	1,619	1,849	6	0	6	912	1,475	1,137	3	1,475	1,475	2,612	8	8
LAT BUA LUANG	6802	RSU AXE-10		512	206	850	734	2	0	2	475	838	620	2	838	838	1,458	4	4
MAHA RAT	6802	RSU AXE-10		256	152	587	597	2	0	2	284	442	347	1	442	442	789	2	2
NAKHON LUANG	6802	RSU AXE-10		1,024	552	2,298	2,297	7	0	7	1,177	1,735	1,400	4	1,735	1,735	3,135	9	9
BAN PHRAEK	6802	RLU AXE-10		128	115	796	988	3	0	3	513	927	679	2	927	927	1,606	5	5
BANG SYE	6802	RLU AXE-10		128	115	691	850	3	0	3	431	793	576	2	793	793	1,369	4	4
UTHAI	6802	RSU AXE-10		256	234	1,153	1,443	4	0	4	781	1,333	1,002	3	1,333	1,333	2,335	7	7
BANG PAHAN	6802	RSU AXE-10		512	444	1,570	1,669	5	0	5	417	382	403	1	382	382	785	2	2
HUA WIANG	6802	RLU AXE-10		128															
SUN SINLAPACHIP BAN	6802	RSU AXE-10		256															
ROTCHANA INDUSTRIA	6802	RSU AXE-10		1,024															
KRUNG SI VILLA	6802	RSU AXE-10		2,048															
BAN LEN	6802	RSU AXE-10		1,024															
ANG THONG	6802	RSU AXE-10	1972	0															
		MSU AXE-10		2,048															
TOTAL LU.				23,730	12,502	57,132	61,250	544	144	-400	19,486	23,892	21,248	64	23,892	23,892	45,140	135	-135

Note: This mark is shown shortage space (square meter) in the switching room

ANNEX

CHAPTER 14 OPERATION AND MAINTENANCE PLAN

14-1 Manpower Policy Guideline

ITEMS	1992	1993	1994	1995	1996	1997
The Number of Subscribers	1,250,551	1,747,551	2,244,551	2,741,551	3,238,551	3,736,431
The Annual Increase Number of Subscribers		497,000	497,000	497,000	497,000	497,880
Manpower Policy Guideline	10,190	12,714	14,580	15,901	16,771	17,276
Subscribers per Manpower (Efficiency)	123	137	154	172	193	216
MEI Increase Rate		1.12	1.12	1.12	1.12	1.12

ITEMS	1998	1999	2000	2001	2002
The Number of Subscribers	4,064,431	4,392,431	4,720,431	5,048,431	5,377,065
The Annual Increase Number of Subscribers	328,000	328,000	328,000	328,000	328,634
Manpower Policy Guideline	17,400	17,412	17,326	17,157	16,920
Subscribers per Manpower (Efficiency)	234	252	272	294	318
MEI Increase Rate	1.08	1.08	1.08	1.08	1.08

ITEMS	2003	2004	2005	2006	2007	'07 / '92
The Number of Subscribers	5,604,065	5,831,065	6,058,065	6,285,065	6,513,494	5.21
The Annual Increase Number of Subscribers	227,000	227,000	227,000	227,000	228,429	
Manpower Policy Guideline	16,179	15,444	14,720	14,011	13,321	1.31
Subscribers per Manpower (Efficiency)	346	378	412	449	489	3.98
MEI Increase Rate	1.09	1.09	1.09	1.09	1.09	

14-2 Comparison of the Rates between the Whole Countries and Metropolitan Areas

Thailand Year	(Study Area)				(Thailand)				(Tokyo Area)				(Japan)				JAN Year
	(1) Sub. (2) Inc. (3) Emp. (4) Eff. (5) Ratio	(6) Sub. (7) Inc. (8) Emp. (9) Eff. (10) Ratio	(11) Sub. (12) Inc. (13) Emp. (14) Eff. (15) Ratio	(16) Sub. (17) Inc. (18) Emp. (19) Eff. (20) Ratio	(1) Sub. (2) Inc. (3) Emp. (4) Eff. (5) Ratio	(6) Sub. (7) Inc. (8) Emp. (9) Eff. (10) Ratio	(11) Sub. (12) Inc. (13) Emp. (14) Eff. (15) Ratio	(16) Sub. (17) Inc. (18) Emp. (19) Eff. (20) Ratio	(1) Sub. (2) Inc. (3) Emp. (4) Eff. (5) Ratio	(6) Sub. (7) Inc. (8) Emp. (9) Eff. (10) Ratio	(11) Sub. (12) Inc. (13) Emp. (14) Eff. (15) Ratio	(16) Sub. (17) Inc. (18) Emp. (19) Eff. (20) Ratio	(1) Sub. (2) Inc. (3) Emp. (4) Eff. (5) Ratio	(6) Sub. (7) Inc. (8) Emp. (9) Eff. (10) Ratio	(11) Sub. (12) Inc. (13) Emp. (14) Eff. (15) Ratio	(16) Sub. (17) Inc. (18) Emp. (19) Eff. (20) Ratio	
1982	-15	304	5.73	53	1.00	434	11.23	39	0.99	987	25.40	39	4.781	210	23	1962	
1983	-14	331	6.81	53	1.00	463	12.12	38	0.99	1,133	26.70	42	5,477	218	25	1963	
1984	-13	353	7.91	49	0.92	519	13.26	39	1.02	1,327	27.40	48	6,335	226	28	1964	
1985	-12	422	8.69	45	0.92	626	15.42	41	1.04	1,520	28.20	54	7,395	234	32	1965	
1986	-11	535	8.93	49	1.09	799	16.93	47	1.16	1,712	28.90	59	8,707	242	36	1966	
1987	-10	600	9.11	60	1.23	902	17.40	52	1.10	1,905	29.25	65	10,314	250	41	1967	
1988	-9	672	9.22	74	1.23	1,006	17.75	57	1.09	2,100	29.40	71	12,044	260	46	1968	
1989	-8	778	9.37	84	1.14	1,158	17.96	64	1.14	2,275	29.73	77	14,000	270	52	1969	
1990	-7	886	9.65	95	1.12	1,325	18.24	73	1.13	2,993	35.22	85	16,403	280	59	1970	
1991	-6	1,021	9.70	106	1.12	1,459	18.79	78	1.07	3,250	36.01	90	19,228	290	66	1971	
1992	-5	1,459	13.00	112	1.06					3,525	36.73	96	22,472	300	75	1972	
1993	-4	1,924	465							3,800	36.94	103	25,633	305	84	1973	
1994	-3	2,384	460							4,037	37.48	108	28,868	310	93	1974	
1995	-2	2,844	460							4,262	37.83	113	31,702	316	100	1975	
1996	-1	3,304	460							4,463	37.98	118	33,721	323	104	1976	
1997	0	3,764	460							4,599	37.89	121	35,066	328	107	1977	
1998	1	4,093	329							4,752	37.92	125	36,403	332	110	1978	
1999	2	4,403	310							4,918	37.89	130	37,761	334	113	1979	
2000	3	4,713	310							5,088	37.90	134	39,052	335	117	1980	
2001	4	5,023	310							5,260	37.76	139	40,276	333	121	1981	
2002	5	5,333	310							5,455	37.25	146	41,501	333	125	1982	
2003	6	5,583	250							5,702	37.00	154	42,429	330	129	1983	
2004	7	5,803	220							5,990	36.71	163	42,879	324	132	1984	
2005	8	6,023	220							6,150	32.21	191	44,435	321	138	1985	
2006	9	6,242	219							6,434	28.4	205	45,300	311	146	1986	
2007	10	6,463	221							6,723	28.9	220	46,722	305	153	1987	
Average									1.08							1.08	

14-3 The Actual Number of Transmission Employees (FY1991)

Area	Work	Location	Employee	
BMA	O & M	Krungkasem	21	
		Pirakhanong	14	
		Lat ya	16	
		Lak si	17	
		Phahoyothin	11	
	Outside Plant Leased Circuit Administration Management & Planning			20
				8
				8
				16
		Sub Total (BMA)		131
		Ayutthaya	8	
		Nakhon Pathom	8	
		Samut Sakhon	7	
Study Area Total			154	
Headquarters			10	
Other Area	O & M		125	
	Management & Planning		16	
Other Area Total			151	
TOT Total			305	

14.4 The Actual Number of Employees and the First Standard Number in Switching Maintenance Area I (1/5)

No.	Type	Area Exchange Name	1990										1991										1992										
			The Line Capacity			The Actual			The Standard				The Line Capacity			The Standard			The Line Capacity				The Standard										
			1)Caps.	RSU	2)Caps.	3)Test.	4)Others	5)Total	6)Main.	7)Test.	8)Others	9)Total	10)7+4+5+6	11)Caps.	RSU	2)Caps.	3)Test.	4)Others	5)Total	6)Main.	7)Test.	8)Others	9)Total	10)1)Caps.	RSU	2)Caps.	3)Test.	4)Others	5)Total	6)Main.	7)Test.	8)Others	9)Total
1	SPC	1	ASOK DIN DAENG	28480			3	7	10	3.62	3.96	7.57	28480			28480			7.57	9.62	3.96	7.57	28480			28480			7.57	9.62	3.96	7.57	
1	XB	1	ASOX DIN DAENG	10000			6	5	11	6.24	3.72	9.96	10000			10000			9.96	6.24	3.72	9.96	10000			10000			9.96	6.24	3.72	9.96	
2	CAMA	1	KRUNG KASEM	0			2	2	4	4.00		4.00	0			0			4.00	4.00		4.00	0			0		4.00			4.00		
2	MTX	1	KRUNG KASEM	44000			10		10	10.00		10.00	44000			44000			10.00	10.00		10.00	44000			44000			10.00			10.00	
2	SPC	1	KRUNG KASEM	16384			3		3	2.92	2.86	5.78	16384			16384			5.78	2.92	2.86	5.78	16384			16384			5.78	2.92	2.86	5.78	
2	SPCTI	1	KRUNG KASEM	0			3		3	6.00		6.00	0			0			6.00	6.00		6.00	0			0		6.00			6.00		
2	TC	1	KRUNG KASEM	10000			2	2	1	5	6.00	1	7.00	0		0			7.00	6.00	1	7.00	10000			10000			7.00	6.00	1	7.00	
2	XB	1	KRUNG KASEM	10000			7	1	8	6.24	3.72	10.96	10000			10000			10.96	6.24	3.72	10.96	10000			10000			10.96	6.24	3.72	10.96	
2	XB7I	1	KRUNG KASEM	0			5		5	6.00		6.00	0			0			6.00	6.00		6.00	0			0		6.00			6.00		
3	SPC	1	PATRUM WAN	20240			3	4	7	3.20	3.31	6.51	20240			20240			6.51	3.20	3.31	6.51	20240			20240			6.51	3.20	3.31	6.51	
3	XB	1	PATRUM WAN	5384			4	4	8	4.32	2.81	7.13	5384			5384			7.13	4.32	2.81	7.13	5384			5384			7.13	4.32	2.81	7.13	
4	SPC	1	PHILON CHIT	30480			3	4	7	4.06	4.66	8.72	30480			30480			8.72	4.06	4.66	8.72	30480			30480			8.72	4.06	4.66	8.72	
4	XB	1	PHILON CHIT	12000			7		7	6.93	4.10	11.03	12000			12000			11.03	6.93	4.10	11.03	12000			12000			11.03	6.93	4.10	11.03	
4	XB	1	PHILON CHIT	10000			7	9	16	6.24	3.72	9.96	10000			10000			9.96	6.24	3.72	9.96	10000			10000			9.96	6.24	3.72	9.96	
5	SPC	1	SAMRAN RAT	26640			4	4	8	3.51	3.79	7.31	26640			26640			7.31	3.51	3.79	7.31	26640			26640			7.31	3.51	3.79	7.31	
5	XB	1	SAMRAN RAT	10000			7		7	6.24	3.72	10.96	10000			10000			10.96	6.24	3.72	10.96	10000			10000			10.96	6.24	3.72	10.96	
5	XB	1	SAMRAN RAT	10000			5	6	16	6.24	3.72	14.96	10000			10000			14.96	6.24	3.72	14.96	10000			10000			14.96	6.24	3.72	14.96	
5	XB	1	SAMRAN RAT	10000			6	2	8	6.24	3.72	11.96	10000			10000			11.96	6.24	3.72	11.96	10000			10000			11.96	6.24	3.72	11.96	
6	SPC	1	SAMSEN	6242			2	2	6	2.31	1.92	4.23	6242			6242			4.23	2.31	1.92	4.23	6242			6242			4.23	2.31	1.92	4.23	
6	XB	1	SAMSEN	5800			5	4	9	4.51	2.89	7.40	5800			5800			7.40	4.51	2.89	7.40	5800			5800			7.40	4.51	2.89	7.40	
7	SPC	1	SUKHUNWIT	41760			3	6	9	4.35	5.13	9.48	41760			41760			9.48	4.35	5.13	9.48	41760			41760			9.48	4.35	5.13	9.48	
8	CP3	1	SURAWONG	0			4		4	4.00		4.00	0			0			4.00	4.00		4.00	0			0		4.00			4.00		
8	SPC	1	SURAWONG	25360			3	4	7	3.79	4.23	8.01	25360			25360			8.01	3.79	4.23	8.01	25360			25360			8.01	3.79	4.23	8.01	
8	XB	1	SURAWONG	10000			6		6	6.24	3.72	9.96	10000			10000			9.96	6.24	3.72	9.96	10000			10000			9.96	6.24	3.72	9.96	
8	XB	1	SURAWONG	10000			4	5	12	6.24	3.72	12.96	10000			10000			12.96	6.24	3.72	12.96	10000			10000			12.96	6.24	3.72	12.96	
8	XB	1	SURAWONG	10000			7		7	6.24	3.72	9.96	10000			10000			9.96	6.24	3.72	9.96	10000			10000			9.96	6.24	3.72	9.96	
8	XB77	1	SURAWONG	0			5		5	6.00		6.00	0			0			6.00	6.00		6.00	0			0		6.00			6.00		
			Planning & Administrator	352770			123	68	15	206	141.66	73.14	229.80	352770			352770			229.80	141.66	73.14	229.80	352770			352770			229.80	141.66	73.14	229.80
			Total	7	13064	365834	123	68	15	206	141.66	73.14	229.80	7	13064	365834	141.66	73.14	229.80	141.66	73.14	229.80	7	13064	365834	8	14088	366858	143.72	73.23	49	285.95	

14.4 The Actual Number of Employees and the First Standard Number in Switching Maintenance Area 2 (2/5)

No.	Type	Area Exchange Name	1990			1991			1992			The Standard						
			The Actual			The Standard			The Line Capacity			The Standard						
			Mainte.	Others	Total	Mainte.	Others	Total	1)Capa.	2)Capa.	3)Capa.	1)Capa.	2)Capa.	3)Capa.	Mainte.	Test	Other Total	
9	SPC	2 CHAIYAPHRUK	6	3	1	10	3,16	3,24	1	7,59	20480	20480	20480	3,16	3,24	1	7,59	
9	XB	2 CHAIYAPHRUK	6	5	4	15	7,25	4,28	4	15,53	13000	13000	13000	7,25	4,28	4	15,53	
10	SPC	2 BANG CHAN	2	4	6	6	2,97	2,95	5,91	13192	13192	13192	3,03	3,04	5	6,07		
11	SPC	2 BANG NA	5	1	6	6	2,85	2,76	5,61	15240	15240	15240	2,85	2,76	5	5,61		
11	SPC	2 BANG NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	XB	2 BANG NA	7	4	11	11	6,73	4,10	11,03	12000	12000	12000	6,93	4,10	7	9,216		
12	SPC	2 BANG PHLI	7	1	1	9	3,42	3,65	1	8,81	12192	12192	12192	3,70	4,10	1	8,81	
13	SPC	2 HUA MAK	2	5	7	7	3,14	3,21	6,36	20384	20384	20384	3,62	3,97	4	7,59		
13	XB	2 HUA MAK	4	3	7	7	5,46	3,33	8,79	8000	8000	8000	5,46	3,33	7	8,79		
14	SPC	2 KHLONG TOEI	2	5	7	7	2,54	2,27	4,81	14096	14096	14096	2,78	2,65	5	5,43		
15	SPC	2 KHLONG CHAN	3	5	2	10	3,55	3,86	2	9,41	19240	19240	19240	3,61	3,95	2	9,55	
15	SPC	2 KHLONG CHAN	0	0	0	0	0	0	0	11776	11776	11776	2,64	2,44	5	5,08		
16	SPC	2 LAT KRABANG	6	4	4	14	7,25	4,28	4	15,53	13000	13000	13000	7,25	4,28	4	15,53	
17	SPC	2 OR NUT	4	5	9	9	2,19	1,74	3,93	3820	3820	3820	2,22	1,79	4	4,01		
18	SPC	2 PHRAKHANONG	6	2	8	8	3,21	3,32	6,52	21360	21360	21360	3,32	3,50	2	6,82		
18	TC	2 PHRAKHANONG	0	0	0	0	6,00	6,00	6,00	0	0	0	6,00	6,00	0	6,00		
18	XB	2 PHRAKHANONG	4	4	4	8	5,46	3,33	8,79	8000	8000	8000	5,46	3,33	7	8,79		
19	SPC	2 PUCHAO SAMENGPHERA	2	2	1	5	3,03	3,04	1	7,08	8120	8120	8120	3,03	3,04	1	7,08	
19	XB	2 PUCHAO SAMENGPHERA	4	4	8	8	5,04	3,13	8,18	7000	7000	7000	5,04	3,13	8	8,18		
20	SPC	2 SUMUT PRAKAN	3	3	3	3	2,10	1,60	3,70	2870	2870	2870	2,10	1,60	3	3,70		
20	SPC	2 SUMUT PRAKAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20	XB	2 SUMUT PRAKAN	6	2	4	12	4,14	2,73	4	10,87	5000	5000	5000	4,14	2,73	4	10,87	
21	SPC	2 SATHUPRADIT	3	2	1	6	2,83	2,72	1	6,55	14862	14862	14862	2,83	2,72	1	6,55	
21	XB	2 SATHUPRADIT	3	2	4	9	3,28	2,37	4	9,65	3250	3250	3250	3,28	2,37	4	9,65	
22	SPC	2 THANONTOK	6	4	1	11	2,73	2,58	5,31	13312	13312	13312	2,73	2,58	5	5,31		
22	XB	2 THANONTOK	6	4	1	11	4,26	2,78	1	8,04	5250	5250	5250	4,26	2,78	1	8,04	
23	SPC	2 THUNG MAHAMEK	10	5	4	19	2,24	1,81	4	13,96	5120	5120	5120	2,24	1,81	4	13,96	
23	XB	2 THUNG MAHAMEK	4	1	5	5	2,73	2,57	5,29	13192	13192	13192	2,85	2,76	5	5,61		
24	SPC	2 TROK CHAN	6	5	11	11	6,24	3,72	9,96	10000	10000	10000	6,24	3,72	10	10,000		
24	XB	2 TROK CHAN	3	3	3	3	2,30	1,91	4,21	6144	6144	6144	2,30	1,91	4	4,21		
50	SPC	2 BANG PU	2624	2624	2624	2624	2,09	1,58	3,66	2624	2624	2624	2,09	1,58	25	25,000		
51	SPC	2 BANG PHLI BANG BO	114	78	27	219	117,82	85,89	27	280,71	131812	50	57640	398452	121,86	90,52	52	264,39
		Planning & Administrator	315250	36	39296	353546					347172	69	83288	432463	128,25	97,14	52	277,39

14.4 The Actual Number of Employees and the First Standard Number in Switching Maintenance Area 3 (3/5)

No.	Type	Area Exchange Name	1990			1991			1992						
			The Actual			The Line Capacity			The Standard						
			Maint. Test	Obst.	Total	1) Capa. RSU	2) Capa. 3) (1+2)	4) Maint. Test	Obst.	Total	1) Capa. RSU	2) Capa. 3) (1+2)	4) Maint. Test	Obst.	Total
25	SPC	3 THON BURI	0	0	0.00	8192	8192	2.43	2.10	4.53	8192	8192	2.43	2.10	4.53
25	XB	3 THON BURI	9	5	14.37	20000	20000	8.86	5.50	14.37	20000	20000	8.86	5.50	14.37
25	XBTS	3 THON BURI	0	5	6.00	0	0	6.00	6.00	6.00	0	0	6.00	6.00	6.00
26	SPC	3 BANG KHAE	3	1	5.14	12192	12192	2.67	2.48	5.14	12192	12192	2.67	2.48	5.14
26	XB	3 BANG KHAE	4	5	7.53	6000	6000	4.60	2.93	7.53	6000	6000	4.60	2.93	7.53
27	SPC	3 BANG PHLAT	3	6	9.03	29540	29540	4.19	4.87	9.03	29540	29540	4.19	4.87	9.03
27	XB	3 BANG PHLAT	7	4	10.51	11000	11000	6.60	3.91	10.51	11000	11000	6.60	3.91	10.51
28	SPC	3 CHARAN SANITWONG	3	2	5.60	15192	15192	2.85	2.75	5.60	15192	15192	2.85	2.75	5.60
28	XB	3 CHARAN SANITWONG	4	2	6.94	5100	5100	4.19	2.75	6.94	5100	5100	4.19	2.75	6.94
29	SPC	3 DAO KHANONG	13312	0	13312	13312	2.73	2.58	5.31	13312	13312	2.73	2.58	5.31	
29	XB	3 DAO KHANONG	12000	1	12.03	12000	12000	6.93	4.10	12.03	12000	12000	6.93	4.10	12.03
30	SPC	3 EKKACHAI	19970	1	4	6.32	19970	3.13	3.19	6.32	19970	19970	3.13	3.19	6.32
31	SPC	3 LAT YA	25360	5	3	7.12	25360	3.44	3.68	7.12	25360	25360	3.44	3.68	7.12
31	TC	3 LAT YA	0	0	6.00	0	0	6.00	6.00	6.00	0	0	6.00	6.00	6.00
32	SPC	3 NONG KHANONG	17384	0	6.68	5000	17384	3.27	3.41	6.68	5000	17384	3.27	3.41	6.68
33	SPC	3 PHASI CHAROEN	2870	2	2	3.70	20480	2.10	1.60	3.70	20480	20480	3.16	3.24	6.39
33	XB	3 PHASI CHAROEN	5000	3	4	6.87	5000	4.14	2.73	6.87	5000	5000	4.14	2.73	6.87
34	SPC	3 PERA PRADAENG	14144	1	6	5.44	14144	2.78	2.66	5.44	14144	14144	2.90	2.84	5.75
34	XB	3 PERA PRADAENG	3310	3	1	4	3310	3.31	2.38	4	3310	3310	3.31	2.38	4
35	SPC	3 RAT BURANA	17984	3	4	6.02	17984	3.01	3.01	6.02	17984	17984	3.25	3.38	6.63
53	SPC	3 BANG BUA THONG	0	0	0	5120	5120	2.83	2.72	5.55	5120	5120	2.83	2.72	5.55
54	SPC	3 MUBAN SETTEAKIT	14336	2	3	5.47	14336	3.04	3.05	6.09	14336	14336	3.04	3.05	6.09
		Planning & Administrator	66	59	5	130	263232	83.59	57.20	145.79	263232	263232	91.36	66.00	187.49
		Total	232310	9	26680	258910	232310	26680	258910	232310	26680	258910	92.32	67.83	30

14.4 The Actual Number of Employees and the First Standard Number in Switching Maintenance Area 4 (4/5)

No.	Type	Area Exchange Name	1990				1991				1992																			
			The Actual				The Line Capacity				The Standard																			
			Maint.	Test	Others	Total	1)Capa.	RSU	2)Capa.	3)Capa.	4)Capa.	Maint.	Test	Others	Total	1)Capa.	RSU	2)Capa.	3)Capa.	4)Capa.	Maint.	Test	Others	Total						
36	CB2	4 PERHONYOTRIN	0	3	1	4	0.00								0	0.00									0.00					
36	CB2	4 PERHONYOTRIN	13372	5	2	8	2.74	2.58						5000	12	12264	17264				2.97	2.94			2.94					
36	XB	4 PERHONYOTRIN	12000	9	1	10	6.93	4.10					12000	12000		12000				6.93	4.10			12.03						
36	XB	4 PERHONYOTRIN	5800	5	5	11	4.51	2.89					5800	5800		5800				4.51	2.89			8.40						
36	XB12	4 PERHONYOTRIN-XB	0	5	1	6	6.00									7.00				6.00				7.00						
37	SPC	4 BANG KHEN	20480				3.16	3.24					5120	11	15360	20480				3.16	3.24			6.39						
37	XB	4 BANG KHEN	10000	10	5	4	6.24	3.72					10000	10000		10000				6.24	3.72			9.96						
38	SPC	4 BANG SU	13192	3	2	5	2.73	2.57					13192			2.52				2.73	2.57			5.29						
38	XB	4 BANG SU	10000	8	3	11	6.24	3.72					10000			9.96				6.24	3.72			10.66						
39	SPC	4 CHANG WATTHANA	16192	2	4	6	3.15	3.22					16192	4	4096	20288				3.14	3.21			6.35						
40	SPC	4 DON MUANG	14240	7	1	4	12	3.70	4.09				14240	14	15680	20228				3.70	4.09			7.79						
40	XB	4 DON MUANG	3480	5	3	8	3.40	2.42					3480			5.81				3.40	2.42			5.81						
41	SPC	4 INTAMARA	30720				3.74	4.16					30720			7.90				3.74	4.16			8.90						
41	XB	4 INTAMARA	10000	9	4	4	6.24	3.72					10000			13.96				6.24	3.72			13.96						
42	SPC	4 LAK SI	11264	7	1	4	12	3.86	4.34				11264	SC:TD	21504	32768				3.86	4.34			12.20						
42	TC	4 LAK SI	0				6.00									6.00				6.00				6.00						
42	XB	4 LAK SI	6000	5	1	6	4.60	2.93					6000			7.51				4.60	2.93			7.51						
43	SPC	4 LAT PHRAO-1	15960	4	1	5	3.01	3.01					15960	6	9216	25176				3.01	3.01			6.02						
43	XB	4 LAT PHRAO-1	5200	4	2	6	4.23	2.77					5200			7.06				4.23	2.77			7.06						
44	SPC	4 LAT PHRAO-2	25100	3	4	7	3.54	3.84					25100	2	2000	27110				3.54	3.84			7.37						
44	XB	4 LAT PHRAO-2	3200	3	4	7	3.26	2.36					3200			5.61				3.26	2.36			5.61						
45	SPC	4 NAWA NAKHON	5000	2	2	4	2.23	1.80					5000			4.03				2.23	1.80			4.03						
46	SPC	4 NGAN WONG WAN	26591	4	4	8	3.51	3.79					26591			7.30				3.51	3.79			7.30						
46	XB	4 NGAN WONG WAN	5300	4	3	5	4.28	2.79					5300			12.07				4.28	2.79			12.07						
47	SPC	4 NONTABURI	0													5								5						
47	XB	4 NONTABURI	3300	3	3	1	3.31	2.38					3300			6.69				3.31	2.38			6.69						
48	SPC	4 PAK KRET	16288	2	3	3	3.03	3.04					16288	2	2048	18336				3.03	3.04			6.07						
49	SPC	4 RAM ENTHRA	15925	2	2	4	3.01	3.01					15925	2	2048	17975				3.01	3.01			6.02						
49	SPC	4 RAM ENTHRA	0													4								4						
55	SPC	4 BANG PHUN	0													0								0						
56	SPC	4 PATHUM THANI	8192	2	1	1	5	2.55	2.29					8192	5	4096	12288				2.67	2.48			6.16					
57	SPC	4 RANG SIT	8192				2.43	2.10					8192			4.53				2.43	2.10			4.53						
59	SPC	4 THANYA BURI	5120				2.24	1.81					5120			4.05				2.24	1.81			4.05						
		Planning & Administrator																												
		Total	298376	59	75204	371580	120	60	32	212	113.85	82.69	31	227.54	296386	59	89336	399806	115.15	84.73	62	261.88	332.034	75	102392	426426	121.90	51.77	62	276.68

14.5 The Actual Number of Maintenance Employees (FY1991)

Ordinary Telephone Maintenance	The Number of Subscribers 1992	The Number of Fault (1990.6 - 1991.6)	The Actual Number of Employees		
			Work-Site Operations	Planning, Manage, Admi.	Total
Maintenance Division Area 1	290976	71062	343	171	514
Maintenance Division Area 2	340844	109686	317	139	456
Maintenance Division Area 3	261277	80036	277	155	432
Maintenance Division Area 4	319144	130976	295	168	463
Sub Total	1212241	391760	1232	633	1865
Nakhon Pathom	15630		24		24
Sumut Sakhon	10176		12		12
Ayuthaya	12502		29		29
Headquarters				41	41
Total	1250549	391760	1297	674	1971

14.6 The Actual Number of Install Employees (FY1991)

Ordinary Telephone Installation	The Number of Install (FY1991)	The Actual Employees		
		Work-Site Operations	Planning, Manage, Adm	Total
Installation Division 1	24959	73	26	99
Installation Division 2	29593	71	26	97
Installation Division 3	21675	63	23	86
Installation Division 4	28067	72	22	94
Sub Total	104294	279	97	376
Nakhon Pathom				
Sumut Pathon				
Ayuthaya				
Headquarters				
Total	104294	279	97	376

14.7 The Actual Number of Public Telephone Install Employees (FY1991) (1/3)

Public Telephone Installation	The Number of Install	The Actual Number of Employees		
		Work-Site Operations	Planning, Manage, Admi.	Total
Installation Division 1		9		9
Installation Division 2		10		10
Installation Division 3		10		10
Installation Division 4		10		10
Sub Total		39		39
Nakhon Pathom				
Sumut Pathon				
Ayuthaya				
Headquarters				
Total		39		39

14.7 The Actual Number of Public Telephone Maintenance Employees [FY1991] (2/3)

Public Telephone Maintenance	Number of Public Phone	Number of Fault	Actual Employee				Total
			Work-Site Operations		Revenue Collect	Planning, Manage, Admi.	
			Maintenance	Booth Mainte.			
Maintenance 1	3929	26713	46	939	2630	7	89.19
Maintenance 2	4807	19077	58	1149	3279	8	110.28
Maintenance 3	3576	14711	53	855	2439	7	92.94
Maintenance 4	4841	6928	62	1157	3302	8	114.59
Public Telephone Division Center of Terminal Equipment Installation							
Sub Total	17153	67429	219	41.00	117.00	13	13.00
Nakhon Pathom	303					53	53.00
Samut Sakhon	165					96	473.00
Ayuthaya	349						0.00
Headquarters							0.00
Total	17970	67429	219	41.00	117.00	112	112.00
						208	585.00

14.7 The Actual Number of PABX Employees [FY1991] (3/3)

PABX Maintenance	Number of Fault	Actual Employee				Total
		Work-Site Operations		Planning, Manage, Admi.	Total	
		Maintenance	Booth Mainte.			
Maintenance 1	30347	40	4	44		
Maintenance 2	13044	36	4	40		
Maintenance 3	4609	20	3	23		
Maintenance 4	5610	23	3	26		
PABX Division Center of Terminal Equipment Installation						
Sub Total	53610	119	19	138		
Nakhon Pathom						
Samut Sakhon						
Ayuthaya						
Headquarters						
Total		119	19	138		

20	XB	2 SUMUT PRAKAN	5000	5900	0	0	414	273	4	1087	383	359	339	450	339	339	0.00
21	SFC	2 SUMUT PRAKAN - CP	44620	44620	44620	414	404	404	1	606	302	257	257	302	257	257	339
21	SFC	2 SATUPRADIT	14862	14862	18112	285	272	272	1	8271	220	024	024	243	009	033	0.31
21	XB	2 SATUPRADIT	3230	3230	0	328	237	4	965	309	227	227	227	245	227	227	0.00
21	SFC	2 SATUPRADIT - CP	8656	8656	8656	273	230	531	4	494	304	238	238	304	238	238	238
22	SFC	2 THANON TOK	13312	13312	18562	273	230	531	4	494	265	064	064	326	024	090	0.90
22	XB	2 THANON TOK	8250	8250	11957	426	278	1	804	395	284	284	284	284	284	284	0.00
22	SFC	2 THANON TOK - CP	16797	16797	16797	224	181	405	4	432	287	086	086	294	284	284	232
23	SFC	2 THUNG MAHAMEK	5120	5120	15120	224	208	405	4	432	284	1635	1635	284	284	284	232
23	XB	2 THUNG MAHAMEK	10000	10000	15542	624	372	4	1396	564	287	086	086	351	351	351	1217
23	SFC	2 THUNG MAHAMEK - CP	36600	36600	36600	407	163	576	4	386	349	314	314	407	314	314	0.00
24	SFC	2 TROK CHAN	16264	16264	26264	291	285	576	4	516	283	076	076	349	282	282	282
24	XB	2 TROK CHAN	10000	10000	0	624	372	996	4	996	566	076	076	349	054	123	123
24	SFC	2 TROK CHAN - CP	14616	14616	14616	281	112	996	4	269	230	246	246	281	246	246	0.00
50	SFC	2 BANG PU	6144	6144	6144	230	191	421	4	440	230	019	019	230	019	019	219
50	SFC	2 BANG PU - CP	10846	10846	10846	259	101	421	4	252	208	082	082	230	033	111	111
51	SFC	2 BANG PHU BANG RO	5696	5696	5696	227	187	414	4	436	227	218	218	227	218	218	219
51	SFC	2 BANG PHU BANG RO - CP	4439	4439	3709	255	101	3709	4	250	220	024	024	215	019	019	019
51	SFC	2 BANG PHU BANG RO - CP	9889	9889	9889	255	101	3709	4	250	220	024	024	215	019	019	019
Planning and Administration			432460	1113941	1448990	1714006	12825	9715	3100	34729	5613	15587	3466	13721	11843	2800	28364
AREA TOTAL			0	627694	371462	265314	16557	14672	3100	34729	5613	15587	3466	13721	11843	2800	28364
			0.00	7333	2820	16557	14672	3100	34729	5613	15587	3466	13721	11843	2800	28364	0.00
			0.00	25070	519	17227	13676	2300	37604	2300	28364	519	17227	13676	2300	37604	2300

14-8 The Necessary Number of Employees in Switching Maintenance Area 3 (3/5)

No.	Type	Area	Exchange Name	Number of Capacity				Quantitative Note				1992 (2335)				1997 (2540)				2002 (2545)				2007 (2550)			
				1992	1997	2002	2007	1992	1997	2002	2007	Maint.	Test	Obsem	Total	Maint.	Test	Obsem	Total	Maint.	Test	Obsem	Total	Maint.	Test	Obsem	Total
23	XBT		3 THON BURI	8192	8192	28192	28192			6.00	2.43	2.10	6.00	6.00	2.43	2.13	6.00	6.00	2.43	2.13	6.00	6.00	2.43	2.13	6.00	6.00	
25	SFC		3 THON BURI			18162	18225	18120	18225	4.55	3.02	0.00	6.00	4.55	3.02	0.00	6.00	4.55	3.02	0.00	6.00	4.55	3.02	0.00	6.00	4.55	
25	XB		3 THON BURI	20000	20000	0	0	18976	18976	8.86	5.50	5.50	14.37	8.86	5.50	5.50	14.37	8.86	5.50	5.50	14.37	8.86	5.50	5.50	14.37	8.86	
26	SFC		3 BANG KHAE	12192	12192	18743	18743			3.05	2.97	2.97	5.97	3.05	2.97	2.97	5.97	3.05	2.97	2.97	5.97	3.05	2.97	2.97	5.97	3.05	
26	XB		3 BANG KHAE	6000	6000	0	0			4.60	2.93	2.93	7.53	4.60	2.93	2.93	7.53	4.60	2.93	2.93	7.53	4.60	2.93	2.93	7.53	4.60	
27	SFC		3 BANG PHLAT	58140	58140	21896	21896	18279	18279	5.21	6.53	6.53	11.77	5.21	6.53	6.53	11.77	5.21	6.53	6.53	11.77	5.21	6.53	6.53	11.77	5.21	
27	XB		3 BANG PHLAT	11000	11000	0	0			6.60	3.91	3.91	10.51	6.60	3.91	3.91	10.51	6.60	3.91	3.91	10.51	6.60	3.91	3.91	10.51	6.60	
27	SFC		3 BANG PHLAT - CP	15192	15192	56835	56835			2.85	2.75	2.75	5.60	2.85	2.75	2.75	5.60	2.85	2.75	2.75	5.60	2.85	2.75	2.75	5.60	2.85	
28	SFC		3 CHARAN SANTWONG	3100	3100	18604	32812	22001	14008	4.19	2.75	2.75	6.94	4.19	2.75	2.75	6.94	4.19	2.75	2.75	6.94	4.19	2.75	2.75	6.94	4.19	
28	XB		3 CHARAN SANTWONG	47660	47660	0	0			2.86	2.77	2.77	5.63	2.86	2.77	2.77	5.63	2.86	2.77	2.77	5.63	2.86	2.77	2.77	5.63	2.86	
29	SFC		3 DAO KHANONG	12000	12000	0	0			6.95	4.10	4.10	12.05	6.95	4.10	4.10	12.05	6.95	4.10	4.10	12.05	6.95	4.10	4.10	12.05	6.95	
29	XB		3 DAO KHANONG	32238	32238	1466	20935	19799	6469	3.83	4.30	4.30	8.12	3.83	4.30	4.30	8.12	3.83	4.30	4.30	8.12	3.83	4.30	4.30	8.12	3.83	
30	SFC		3 EKACHAI	25560	25560	23360	23360			3.44	3.68	3.68	7.12	3.44	3.68	3.68	7.12	3.44	3.68	3.68	7.12	3.44	3.68	3.68	7.12	3.44	
30	XB		3 EKACHAI	30682	30682	30562	30562	25867	2480	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
31	TC		3 LAT YA	22184	22184	22384	22384			3.27	3.41	3.41	6.68	3.27	3.41	3.41	6.68	3.27	3.41	3.41	6.68	3.27	3.41	3.41	6.68	3.27	
31	SFC		3 LAT YA	5000	5000	0	0			3.16	3.24	3.24	6.39	3.16	3.24	3.24	6.39	3.16	3.24	3.24	6.39	3.16	3.24	3.24	6.39	3.16	
31	XB		3 LAT YA - CP	19216	19216	22526	22526			4.14	2.73	2.73	6.87	4.14	2.73	2.73	6.87	4.14	2.73	2.73	6.87	4.14	2.73	2.73	6.87	4.14	
32	SFC		3 NONG KHANONG	20480	20480	24480	24480			3.08	3.12	3.12	6.20	3.08	3.12	3.12	6.20	3.08	3.12	3.12	6.20	3.08	3.12	3.12	6.20	3.08	
32	XB		3 NONG KHANONG	7819	7819	67839	67839	68897	982	5.76	2.30	2.30	6.00	5.76	2.30	2.30	6.00	5.76	2.30	2.30	6.00	5.76	2.30	2.30	6.00	5.76	
33	SFC		3 PHASI CHAOEN	5000	5000	0	0			2.25	0.90	0.90	3.85	2.25	0.90	0.90	3.85	2.25	0.90	0.90	3.85	2.25	0.90	0.90	3.85	2.25	
33	XB		3 PHASI CHAOEN	31163	31163	59122	59122	12092	3348	4.14	2.73	2.73	6.87	4.14	2.73	2.73	6.87	4.14	2.73	2.73	6.87	4.14	2.73	2.73	6.87	4.14	
34	SFC		3 PHA PRADANG	3310	3310	0	0			3.31	2.38	2.38	4	3.31	2.38	2.38	4	3.31	2.38	2.38	4	3.31	2.38	2.38	4	3.31	
34	XB		3 PHA PRADANG	22080	22080	22080	22080	33305	27949	3.25	3.38	3.38	6.63	3.25	3.38	3.38	6.63	3.25	3.38	3.38	6.63	3.25	3.38	3.38	6.63	3.25	
35	SFC		3 RAT BURANA	41664	41664	41664	41664			2.83	2.72	2.72	5.55	2.83	2.72	2.72	5.55	2.83	2.72	2.72	5.55	2.83	2.72	2.72	5.55	2.83	
35	XB		3 RAT BURANA	14848	14848	14848	14848	34439	34439	4.57	1.87	1.87	0.00	4.57	1.87	1.87	0.00	4.57	1.87	1.87	0.00	4.57	1.87	1.87	0.00	4.57	1.87
35	SFC		3 BANG BUA THONG	47706	47706	84999	84999	54667	37284	3.28	2.38	2.38	2.38	3.28	2.38	2.38	2.38	3.28	2.38	2.38	2.38	3.28	2.38	2.38	2.38	3.28	2.38

53	SFC	3 RANG BUA THONG - CP	64637	64637	64637	51722			5.53	2.21		5.05	5.05	5.05				4.02	4.02	5.53	4.02	4.02															
54	SFC	3 MURAN SEITHAKIT	18432	18432	18432				3.04	3.05	6.09		3.04	2.29	5.32	3.04	1.21	2.58	2.58	3.04	2.58	2.58	2.58	2.58													
54	SFC	3 MURAN SEITHAKIT			24991	42460	28073	17869							0.00	3.39	1.36	1.35	1.35	4.39	0.46	1.88	1.88	1.88													
54	SFC	3 MURAN SEITHAKIT - CP	57865	57865	57865	57865	57865		5.19	2.06		4.85	4.85	4.85				3.81	3.81	5.19	3.81	3.81	3.81	3.81													
		Planning and Administration									25	25.00			20	20.00		16	16																		
		AREA TOTAL	346544	882881	1157069	1566497	0	484680	317382	213427	92.29	87.83	90	198035	0.00	55.63	20.76	127.38	107.48	25	259.77	35.09	121.61	20.74	99.37	94.51	21	198.98	0	153.79	4.09	124.37	98.97	13	13.00	18	281.34

14-8 The Necessary Number of Employees in the Headquarters and the Surrounding Areas (5/5)

No.	Type Area	Branch Name	Quantitative Index						Number of Standard						EFFICIENCY (Phase 1)						EFFICIENCY (Phase 2)						EFFICIENCY (Phase 3)					
			Number of Capacity			Increase number of subscribers			1997 (25-45)			1997 (25-45)			2002 (23-4)			2002 (23-4)			2007 (22-9)			2007 (22-9)								
			1992	2002	2007	1992	2002	2007	Manu.	Yot.	Obse.	Manu.	Yot.	Obse.	Manu.	Yot.	Obse.	Manu.	Yot.	Obse.	Manu.	Yot.	Obse.	Manu.	Yot.	Obse.	Manu.	Yot.	Obse.			
			3000	3000	3000	3000	3.15	2.32	1.47	3.15	0.09	3.25	3.15	0.09	3.25	3.15	0.09	3.25	3.15	0.09	3.25	3.15	0.09	3.25	3.15	0.09	3.25					
100 XB		6 NAKHON PATHOM	22264	72718	95472	119628	3.26	3.40	6.66	5.92	5.23	11.15	6.96	6.48	13.43	6.96	6.48	13.43	6.96	6.48	13.43	6.96	6.48	13.43	6.96	6.48	13.43					
100 SPC		6 NAKHON PATHOM	2000	2000	2000	2000	2.63	3.10	4.73	2.63	0.06	2.69	2.63	0.06	2.69	2.63	0.06	2.69	2.63	0.06	2.69	2.63	0.06	2.69	2.63	0.06	2.69					
101 XB		6 SAMUT SAKHON	12264	11284	14674	18078	2.87	3.48	5.13	7.68	6.65	14.32	8.91	7.70	16.61	8.91	7.70	16.61	8.91	7.70	16.61	8.91	7.70	16.61	8.91	7.70	16.61					
101 SPC		6 SAMUT SAKHON	1456	6507	7198	7995	2.32	1.96	4.30	4.83	0.20	5.07	5.13	0.22	5.35	5.13	0.22	5.35	5.13	0.22	5.35	5.13	0.22	5.35	5.13	0.22	5.35					
102 XB		9 AYUTTHAYA	22304	78473	99030	122125	3.26	3.40	6.67	639	5.06	11.25	7.11	5.77	12.88	7.11	5.77	12.88	7.11	5.77	12.88	7.11	5.77	12.88	7.11	5.77	12.88					
102 SPC		9 AYUTTHAYA	63258	273352	352446	435688	17.29	15.69	32.96	3040	17.30	47.70	33.88	20.33	54.21	33.88	20.33	54.21	33.88	20.33	54.21	33.88	20.33	54.21	33.88	20.33	54.21					
		AREA TOTAL	1391246	4397702	5710866	6761332	504.69	345.66	199	504.34	468.13	153	1210.47	135.73	517.85	115.34	537.46	438.71	122	1082.17	122	1082.17	122	1082.17	122	1082.17	122	1082.17				
		ALL TOTAL					348	1391.35		348	1391.35		285	1487.47		285	1487.47		285	1487.47		285	1487.47		285	1487.47		285	1487.47			

ANNEX

CHAPTER 16 FINANCIAL ANALYSIS

16-1 Estimated Capital Expenditure for the Project in Detail (1/16)

Capital Expenditure	Phase-1	Phase-2	Phase-3	Total
Cost				
Exchange	100%			
	5.5			
Number or Installation				
0. Land & Building (Local Only) (M B)	94.06	47.98	26.90	
0.1 Land (M B)	31.35	15.99	8.97	
0.2 Building (M B)	62.71	31.99	17.93	
10.00 1. Switching				
1.1 Expansion Plan (M B)	20,819.27	10,218.21	8,058.01	39,095.49
1.1.1 Local (M B)	963.87	475.89	378.97	1,818.74
1.1.2 Foreign (M ¥)	109,204.70	53,582.76	42,234.68	205,022.14
1.2 XB Replacement	1,704.25	898.45	0.00	2,602.70
1.2.1 Local (M B)	118.32	60.18	0.00	178.49
1.2.2 Foreign (M ¥)	8,722.61	4,610.53	0.00	13,333.15
1.3 SPC Replacement		5,011.22	4,153.37	9,164.59
1.3.1 Local (M B)		315.13	623.66	938.79
1.3.2 Foreign (M ¥)		25,828.51	19,413.40	45,241.91
1.4 Sub Total	22,523.52	16,127.89	12,211.38	50,862.78
1.4.1 Local (M B)	1,082.19	851.20	1,002.64	2,936.02
1.4.2 Foreign (M ¥)	117,927.31	84,021.80	61,648.08	263,597.19
1.5 1st Replacement	0.00	0.00	0.00	0.00
1.5.1 Local (M B)	0.00	0.00	0.00	0.00
1.5.2 Foreign (M ¥)	0.00	0.00	0.00	0.00
1.6 2nd Replacement	0.00	0.00	0.00	0.00
1.6.1 Local (M B)	0.00	0.00	0.00	0.00
1.6.2 Foreign (M ¥)	0.00	0.00	0.00	0.00
1.7 Total	22,523.52	16,127.89	12,211.38	50,862.78
1.7.1 Local (M B)	1,082.19	851.20	1,002.64	2,936.02
1.7.2 Foreign (M ¥)	117,927.31	84,021.80	61,648.08	263,597.19
1.7.3 Foreign (M B)	21,441.33	15,276.69	11,208.74	47,926.76
20.00 2. Outside Plant				
2.1 Expansion Plan (M B)	35,443.73	16,149.18	10,143.45	61,736.36
2.1.1 Local (M B)	26,765.00	12,195.00	7,660.00	46,620.00
2.1.2 Foreign (M ¥)	47,733.00	21,748.00	13,659.00	83,140.00
800.00 2.2 Drop Wire Instl.(M B)	2,006.72	1,332.89	932.24	4,271.84
2.3 Rehabilitation	2,269.45	1,213.00	1,995.55	5,478.00
2.3.1 Local (M B)	1,764.00	943.00	1,551.00	4,258.00
2.3.2 Foreign (M ¥)	2,780.00	1,485.00	2,445.00	6,710.00
2.4 1st Replacement	0.00	0.00	0.00	0.00
2.4.1 Local (M B)				
2.4.2 Foreign (M ¥)				
2.5 Total Outside	39,719.90	18,695.07	13,071.24	71,486.20
2.5.1 Local (M B)	30,535.72	14,470.89	10,143.24	55,149.84
2.5.2 Foreign (M ¥)	50,513.00	23,233.00	16,104.00	89,850.00
2.5.3 Foreign (M B)	9,184.18	4,224.18	2,928.00	16,336.36
15.00 3. Transmission				
3.1 Expansion Plan (M B)	7,657.73	8,112.72	6,072.39	21,842.83
3.1.1 Local (M B)	1,112.58	1,178.66	882.19	3,173.43
3.1.2 Foreign (M ¥)	35,998.34	38,137.32	28,546.06	102,681.72
3.2 Rehabilitation	3,917.21	3,871.87	3,292.84	11,081.91
3.2.1 Local (M B)	568.81	562.23	478.15	1,609.20
3.2.2 Foreign (M ¥)	18,416.16	18,203.01	15,480.78	52,099.95
3.3 1st Replacement	0.00	0.00	0.00	0.00
3.3.1 Local (M B)				
3.3.2 Foreign (M ¥)				
3.4 2nd Replacement	0.00	0.00	0.00	0.00
3.4.1 Local (M B)				
3.4.2 Foreign (M ¥)				
3.5 Total Transmission	11,574.93	11,984.59	9,365.22	32,924.75
3.5.1 Local (M B)	1,681.39	1,740.89	1,360.34	4,782.63

16-1 Estimated Capital Expenditure for the Project in Detail (2/16)

Capital Expenditure		Phase-1	Phase-2	Phase-3	Total
Cost	100%				
	3.5.2 Foreign (M ¥)	54,414.50	56,340.33	44,026.84	154,781.67
	3.5.3 Foreign (M B)	9,893.55	10,243.70	8,004.88	28,142.12
15.00	4. CCS No.7				
	4.1 Introduction Plan (M B)	612.82	49.09	0.00	661.91
	4.1.1 Local (M B)	0.00	0.00	0.00	0.00
	4.1.2 Foreign (M ¥)	3,370.50	270.00	0.00	3,640.50
	4.2 1st Replacement	0.00	0.00	0.00	0.00
	4.2.1 Local (M B)	0.00	0.00	0.00	0.00
	4.2.2 Foreign (M ¥)	0.00	0.00	0.00	0.00
	4.3 2nd Replacement	0.00	0.00	0.00	0.00
	4.4 Total CCS No.7	612.82	49.09	0.00	661.91
	4.4.1 Local (M B)	0.00	0.00	0.00	0.00
	4.4.2 Foreign (M ¥)	3,370.50	270.00	0.00	3,640.50
	4.4.3 Foreign (M B)	612.82	49.09	0.00	661.91
10.00	5. Public Telephone				
	New Installation No of Set				
	5.1 Expansion Plan (M B)	2,046.48	2,315.03	2,623.49	6,984.99
32,700	5.1.1 Local (M B)	736.34	832.97	943.95	2,513.26
320,000	5.1.2 Foreign (M ¥)	7,205.76	8,151.36	9,237.44	24,594.56
	5.2 1st Replacement	0.00	0.00	2,046.48	2,046.48
	5.2.1 Local (M B)			736.34	736.34
	5.2.2 Foreign (M ¥)			7,205.76	7,205.76
	5.3 2nd Replacement	0.00	0.00	0.00	0.00
	5.3.1 Local (M B)				
	5.3.2 Foreign (M ¥)				
	5.4 Total Public Tel	2,046.48	2,315.03	4,669.96	9,031.47
	5.4.1 Local (M B)	736.34	832.97	1,680.29	3,249.60
	5.4.2 Foreign (M ¥)	7,205.76	8,151.36	16,443.20	31,800.32
	5.4.3 Foreign (M B)	1,310.14	1,482.07	2,989.67	5,781.88
	6. Sub Total Capital EX	76,571.71	49,219.65	39,344.70	165,136.06
	6.1 Local (M B)	34,129.69	17,943.92	14,213.40	66,287.02
	6.2 Foreign (M ¥)	233,431.07	172,016.49	138,222.12	543,669.68
	6.3 Foreign (M B)	42,442.01	31,275.73	25,131.29	98,849.03
		76,571.71	49,219.65	39,344.70	165,136.06
20%	7. Other Project Cost	15,314.34	9,843.93	7,868.94	33,027.21
	7.1 Local (M B)	6,825.94	3,588.78	2,842.68	13,257.40
	7.2 Foreign (M ¥)	46,686.21	34,403.30	27,644.42	108,733.94
	7.3 Foreign (M B)	8,488.40	6,255.15	5,026.26	19,769.81
	8. Total Capital Expend.	91,886.05	59,063.58	47,213.64	198,163.27
	8.1 Local (M B)	40,955.63	21,532.71	17,056.09	79,544.43
	8.2 Foreign (M ¥)	280,117.29	206,419.79	165,866.54	652,403.62
	8.3 Foreign (M B)	50,930.42	37,530.87	30,157.55	118,618.84

16-1 Estimated Capital Expenditure for the Project in Detail (3/16)

Capital Expenditure		1993	1994	1995	1996	1997
Cost	100%	1	2	3	4	5
Exchange	5.5					
	Number or Installation	501,370	501,544	501,693	501,827	501,964
	0. Land & Building (Local Only) (M B)	94.06				
	0.1 Land (M B)	31.35				
	0.2 Building (M B)	62.71				
10.00	1. Switching					
	1.1 Expansion Plan (M B)	4,163.85	4,163.85	4,163.85	4,163.85	4,163.85
	1.1.1 Local (M B)	192.77	192.77	192.77	192.77	192.77
	1.1.2 Foreign (M ¥)	21,840.94	21,840.94	21,840.94	21,840.94	21,840.94
	1.2 XB Replacement	368.46	344.16	342.35	330.18	319.10
	1.2.1 Local (M B)	24.03	24.17	24.09	23.51	22.52
	1.2.2 Foreign (M ¥)	1,894.36	1,759.93	1,750.46	1,686.71	1,631.15
	1.3 SPC Replacement	0.00	0.00	0.00	0.00	0.00
	1.3.1 Local (M B)	0.00	0.00	0.00	0.00	0.00
	1.3.2 Foreign (M ¥)	0.00	0.00	0.00	0.00	0.00
	1.4 Sub Total	4,532.31	4,508.01	4,506.21	4,494.04	4,482.95
	1.4.1 Local (M B)	216.80	216.95	216.86	216.28	215.30
	1.4.2 Foreign (M ¥)	23,735.30	23,600.87	23,591.40	23,527.65	23,472.09
	1.5 1st Replacement					
	1.5.1 Local (M B)					
	1.5.2 Foreign (M ¥)					
	1.6 2nd Replacement					
	1.6.1 Local (M B)					
	1.6.2 Foreign (M ¥)					
	1.7 Total	4,532.31	4,508.01	4,506.21	4,494.04	4,482.95
	1.7.1 Local (M B)	216.80	216.95	216.86	216.28	215.30
	1.7.2 Foreign (M ¥)	23,735.30	23,600.87	23,591.40	23,527.65	23,472.09
	1.7.3 Foreign (M B)	4,315.51	4,291.07	4,289.35	4,277.75	4,267.65
20.00	2. Outside Plant					
	2.1 Expansion Plan (M B)	5,095.82	7,773.27	7,956.18	7,148.36	7,470.09
	2.1.1 Local (M B)	3,848.00	5,870.00	6,008.00	5,398.00	5,641.00
	2.1.2 Foreign (M ¥)	6,863.00	10,468.00	10,715.00	9,627.00	10,060.00
800.00	2.2 Drop Wire Instl.(M B)	401.10	401.24	401.35	401.46	401.57
	2.3 Rehabilitation	453.89	453.89	453.89	453.89	453.89
	2.3.1 Local (M B)	352.80	352.80	352.80	352.80	352.80
	2.3.2 Foreign (M ¥)	556.00	556.00	556.00	556.00	556.00
	2.4 1st Replacement					
	2.4.1 Local (M B)					
	2.4.2 Foreign (M ¥)					
	2.5 Total Outside	5,950.81	8,628.40	8,811.43	8,003.72	8,325.55
	2.5.1 Local (M B)	4,601.90	6,624.04	6,762.15	6,152.26	6,395.37
	2.5.2 Foreign (M ¥)	7,419.00	11,024.00	11,271.00	10,183.00	10,616.00
	2.5.3 Foreign (M B)	1,348.91	2,004.36	2,049.27	1,851.45	1,930.18
15.00	3. Transmission					
	3.1 Expansion Plan (M B)	1,531.55	1,531.55	1,531.55	1,531.55	1,531.55
	3.1.1 Local (M B)	222.52	222.52	222.52	222.52	222.52
	3.1.2 Foreign (M ¥)	7,199.67	7,199.67	7,199.67	7,199.67	7,199.67
	3.2 Rehabilitation	783.44	783.44	783.44	783.44	783.44
	3.2.1 Local (M B)	113.76	113.76	113.76	113.76	113.76
	3.2.2 Foreign (M ¥)	3,683.23	3,683.23	3,683.23	3,683.23	3,683.23
	3.3 1st Replacement					
	3.3.1 Local (M B)					
	3.3.2 Foreign (M ¥)					
	3.4 2nd Replacement					
	3.4.1 Local (M B)					
	3.4.2 Foreign (M ¥)					
	3.5 Total Transmission	2,314.99	2,314.99	2,314.99	2,314.99	2,314.99
	3.5.1 Local (M B)	336.28	336.28	336.28	336.28	336.28

16-1 Estimated Capital Expenditure for the Project in Detail (4/16)

Capital Expenditure		1993	1994	1995	1996	1997
Cost	100%	1	2	3	4	5
	3.5.2 Foreign (M ¥)	10,882.90	10,882.90	10,882.90	10,882.90	10,882.90
	3.5.3 Foreign (M B)	1,978.71	1,978.71	1,978.71	1,978.71	1,978.71
15.00	4. CCS No.7					
	4.1 Introduction Plan (M B)	51.91	120.91	16.36	396.36	27.27
	4.1.1 Local (M B)					
	4.1.2 Foreign (M ¥)	285.50	665.00	90.00	2,180.00	150.00
	4.2 1st Replacement					
	4.2.1 Local (M B)					
	4.2.2 Foreign (M ¥)					
	4.3 2nd Replacement					
	4.4 Total CCS No.7	51.91	120.91	16.36	396.36	27.27
	4.4.1 Local (M B)	0.00	0.00	0.00	0.00	0.00
	4.4.2 Foreign (M ¥)	285.50	665.00	90.00	2,180.00	150.00
	4.4.3 Foreign (M B)	51.91	120.91	16.36	396.36	27.27
10.00	5. Public Telephone					
	New Installation No of Set	4,194	4,368	4,517	4,651	4,788
	5.1 Expansion Plan (M B)	381.16	396.96	410.50	422.73	435.13
32,700	5.1.1 Local (M B)	137.14	142.83	147.70	152.10	156.56
320,000	5.1.2 Foreign (M ¥)	1,342.09	1,397.73	1,445.38	1,488.46	1,532.10
	5.2 1st Replacement					
	5.2.1 Local (M B)					
	5.2.2 Foreign (M ¥)					
	5.3 2nd Replacement					
	5.3.1 Local (M B)					
	5.3.2 Foreign (M ¥)					
	5.4 Total Public Tel	381.16	396.96	410.50	422.73	435.13
	5.4.1 Local (M B)	137.14	142.83	147.70	152.10	156.56
	5.4.2 Foreign (M ¥)	1,342.09	1,397.73	1,445.38	1,488.46	1,532.10
	5.4.3 Foreign (M B)	244.02	254.13	262.80	270.63	278.56
	6. Sub Total Capital EX	13,325.23	15,969.27	16,059.48	15,631.83	15,585.89
	6.1 Local (M B)	5,386.18	7,320.09	7,462.99	6,856.92	7,103.51
	6.2 Foreign (M ¥)	43,664.79	47,570.51	47,280.68	48,262.01	46,653.09
	6.3 Foreign (M B)	7,939.05	8,649.18	8,596.49	8,774.91	8,482.38
20%	7. Other Project Cost	2,665.05	3,193.85	3,211.90	3,126.37	3,117.18
	7.1 Local (M B)	1,077.24	1,464.02	1,492.60	1,371.38	1,420.70
	7.2 Foreign (M ¥)	8,732.96	9,514.10	9,456.14	9,652.40	9,330.62
	7.3 Foreign (M B)	1,587.81	1,729.84	1,719.30	1,754.98	1,696.48
	8. Total Capital Expend.	15,990.28	19,163.13	19,271.37	18,758.20	18,703.07
	8.1 Local (M B)	6,463.42	8,784.11	8,955.59	8,228.31	8,524.21
	8.2 Foreign (M ¥)	52,397.74	57,084.61	56,736.82	57,914.41	55,983.71
	8.3 Foreign (M B)	9,526.86	10,379.02	10,315.78	10,529.89	10,178.86

16-1 Estimated Capital Expenditure for the Project In Detail (5/16)

Capital Expenditure		1998	1999	2000	2001	2002
Cost	100%	6	7	8	9	10
Exchange	5.5					
	Number or Installation	332,924	333,103	333,246	333,336	333,499
	0. Land & Building (Local Only) (M B)	47.98				
	0.1 Land (M B)	15.99				
	0.2 Building (M B)	31.99				
10.00	1. Switching					
	1.1 Expansion Plan (M B)	2,043.64	2,043.64	2,043.64	2,043.64	2,043.64
	1.1.1 Local (M B)	95.18	95.18	95.18	95.18	95.18
	1.1.2 Foreign (M ¥)	10,716.55	10,716.55	10,716.55	10,716.55	10,716.55
	1.2 XB Replacement	273.53	250.26	374.67		
	1.2.1 Local (M B)	19.51	17.11	23.56		
	1.2.2 Foreign (M ¥)	1,397.09	1,282.34	1,931.11		
	1.3 SPC Replacement	1,002.24	1,002.24	1,002.24	1,002.24	1,002.24
	1.3.1 Local (M B)	63.03	63.03	63.03	63.03	63.03
	1.3.2 Foreign (M ¥)	5,165.70	5,165.70	5,165.70	5,165.70	5,165.70
	1.4 Sub Total	3,319.42	3,296.14	3,420.55	3,045.89	3,045.89
	1.4.1 Local (M B)	177.72	175.31	181.76	158.20	158.20
	1.4.2 Foreign (M ¥)	17,279.34	17,164.59	17,813.36	15,882.25	15,882.25
	1.5 1st Replacement					
	1.5.1 Local (M B)					
	1.5.2 Foreign (M ¥)					
	1.6 2nd Replacement					
	1.6.1 Local (M B)					
	1.6.2 Foreign (M ¥)					
	1.7 Total	3,319.42	3,296.14	3,420.55	3,045.89	3,045.89
	1.7.1 Local (M B)	177.72	175.31	181.76	158.20	158.20
	1.7.2 Foreign (M ¥)	17,279.34	17,164.59	17,813.36	15,882.25	15,882.25
	1.7.3 Foreign (M B)	3,141.70	3,120.83	3,238.79	2,887.68	2,887.68
20.00	2. Outside Plant					
	2.1 Expansion Plan (M B)	3,063.00	3,807.00	4,002.00	2,893.55	2,383.64
	2.1.1 Local (M B)	2,313.00	2,875.00	3,022.00	2,185.00	1,800.00
	2.1.2 Foreign (M ¥)	4,125.00	5,126.00	5,390.00	3,897.00	3,210.00
800.00	2.2 Drop Wire Instl.(M B)	266.34	266.48	266.60	266.67	266.80
	2.3 Rehabilitation	242.60	242.60	242.60	242.60	242.60
	2.3.1 Local (M B)	188.60	188.60	188.60	188.60	188.60
	2.3.2 Foreign (M ¥)	297.00	297.00	297.00	297.00	297.00
	2.4 1st Replacement					
	2.4.1 Local (M B)					
	2.4.2 Foreign (M ¥)					
	2.5 Total Outside	3,571.94	4,316.08	4,511.20	3,402.81	2,893.04
	2.5.1 Local (M B)	2,767.94	3,330.08	3,477.20	2,640.27	2,255.40
	2.5.2 Foreign (M ¥)	4,422.00	5,423.00	5,687.00	4,194.00	3,507.00
	2.5.3 Foreign (M B)	804.00	986.00	1,034.00	762.55	637.64
15.00	3. Transmission					
	3.1 Expansion Plan (M B)	1,622.54	1,622.54	1,622.54	1,622.54	1,622.54
	3.1.1 Local (M B)	235.73	235.73	235.73	235.73	235.73
	3.1.2 Foreign (M ¥)	7,627.46	7,627.46	7,627.46	7,627.46	7,627.46
	3.2 Rehabilitation	774.37	774.37	774.37	774.37	774.37
	3.2.1 Local (M B)	112.45	112.45	112.45	112.45	112.45
	3.2.2 Foreign (M ¥)	3,640.60	3,640.60	3,640.60	3,640.60	3,640.60
	3.3 1st Replacement					
	3.3.1 Local (M B)					
	3.3.2 Foreign (M ¥)					
	3.4 2nd Replacement					
	3.4.1 Local (M B)					
	3.4.2 Foreign (M ¥)					
	3.5 Total Transmission	2,396.92	2,396.92	2,396.92	2,396.92	2,396.92
	3.5.1 Local (M B)	348.18	348.18	348.18	348.18	348.18

16-1 Estimated Capital Expenditure for the Project in Detail (6/16)

Capital Expenditure		1998	1999	2000	2001	2002
Cost	100%	6	7	8	9	10
	3.5.2 Foreign (M ¥)	11,268.07	11,268.07	11,268.07	11,268.07	11,268.07
	3.5.3 Foreign (M B)	2,048.74	2,048.74	2,048.74	2,048.74	2,048.74
15.00	4. CCS No.7					
	4.1 Introduction Plan (M B)	24.55	24.55			
	4.1.1 Local (M B)					
	4.1.2 Foreign (M ¥)	135.00	135.00			
	4.2 1st Replacement					
	4.2.1 Local (M B)					
	4.2.2 Foreign (M ¥)					
	4.3 2nd Replacement					
	4.4 Total CCS No.7	24.55	24.55	0.00	0.00	0.00
	4.4.1 Local (M B)	0.00	0.00	0.00	0.00	0.00
	4.4.2 Foreign (M ¥)	135.00	135.00	0.00	0.00	0.00
	4.4.3 Foreign (M B)	24.55	24.55	0.00	0.00	0.00
10.00	5. Public Telephone					
	New Installation No of Set	4,797	4,976	5,119	5,209	5,372
	5.1 Expansion Plan (M B)	435.94	452.23	465.24	473.42	488.20
32,700	5.1.1 Local (M B)	156.86	162.72	167.40	170.34	175.66
320,000	5.1.2 Foreign (M ¥)	1,534.98	1,592.32	1,638.14	1,666.94	1,718.98
	5.2 1st Replacement					
	5.2.1 Local (M B)					
	5.2.2 Foreign (M ¥)					
	5.3 2nd Replacement					
	5.3.1 Local (M B)					
	5.3.2 Foreign (M ¥)					
	5.4 Total Public Tel	435.94	452.23	465.24	473.42	488.20
	5.4.1 Local (M B)	156.86	162.72	167.40	170.34	175.66
	5.4.2 Foreign (M ¥)	1,534.98	1,592.32	1,638.14	1,666.94	1,718.98
	5.4.3 Foreign (M B)	279.09	289.51	297.84	303.08	312.54
	6. Sub Total Capital EX	9,796.74	10,485.92	10,793.91	9,319.04	8,824.04
	6.1 Local (M B)	3,498.67	4,016.29	4,174.54	3,316.99	2,937.44
	6.2 Foreign (M ¥)	34,639.39	35,582.97	36,406.57	33,011.26	32,376.29
	6.3 Foreign (M B)	6,298.07	6,469.63	6,619.38	6,002.05	5,886.60
20%	7. Other Project Cost	1,959.35	2,097.18	2,158.78	1,863.81	1,764.81
	7.1 Local (M B)	699.73	803.26	834.91	663.40	587.49
	7.2 Foreign (M ¥)	6,927.88	7,116.59	7,281.31	6,602.25	6,475.26
	7.3 Foreign (M B)	1,259.61	1,293.93	1,323.88	1,200.41	1,177.32
	8. Total Capital Expend.	11,756.09	12,583.10	12,952.69	11,182.85	10,588.85
	8.1 Local (M B)	4,198.40	4,819.54	5,009.44	3,980.39	3,524.93
	8.2 Foreign (M ¥)	41,567.26	42,699.57	43,687.88	39,613.52	38,851.55
	8.3 Foreign (M B)	7,557.68	7,763.56	7,943.25	7,202.46	7,063.92

16-1 Estimated Capital Expenditure for the Project in Detail (7/16)

Capital Expenditure		2003	2004	2005	2006	2007
Cost	100%	11	12	13	14	15
Exchange	5.5					
	Number or Installation	232,768	232,934	233,081	233,194	233,319
	0. Land & Building (Local Only) (M B)	26.90				
	0.1 Land (M B)	8.97				
	0.2 Building (M B)	17.93				
10.00	1. Switching					
	1.1 Expansion Plan (M B)	1,611.60	1,611.60	1,611.60	1,611.60	1,611.60
	1.1.1 Local (M B)	75.79	75.79	75.79	75.79	75.79
	1.1.2 Foreign (M ¥)	8,446.94	8,446.94	8,446.94	8,446.94	8,446.94
	1.2 XB Replacement					
	1.2.1 Local (M B)					
	1.2.2 Foreign (M ¥)					
	1.3 SPC Replacement	830.67	830.67	830.67	830.67	830.67
	1.3.1 Local (M B)	124.73	124.73	124.73	124.73	124.73
	1.3.2 Foreign (M ¥)	3,882.68	3,882.68	3,882.68	3,882.68	3,882.68
	1.4 Sub Total	2,442.28	2,442.28	2,442.28	2,442.28	2,442.28
	1.4.1 Local (M B)	200.53	200.53	200.53	200.53	200.53
	1.4.2 Foreign (M ¥)	12,329.62	12,329.62	12,329.62	12,329.62	12,329.62
	1.5 1st Replacement					
	1.5.1 Local (M B)					
	1.5.2 Foreign (M ¥)					
	1.6 2nd Replacement					
	1.6.1 Local (M B)					
	1.6.2 Foreign (M ¥)					
	1.7 Total	2,442.28	2,442.28	2,442.28	2,442.28	2,442.28
	1.7.1 Local (M B)	200.53	200.53	200.53	200.53	200.53
	1.7.2 Foreign (M ¥)	12,329.62	12,329.62	12,329.62	12,329.62	12,329.62
	1.7.3 Foreign (M B)	2,241.75	2,241.75	2,241.75	2,241.75	2,241.75
20.00	2. Outside Plant					
	2.1 Expansion Plan (M B)	1,766.55	2,290.91	2,669.64	2,004.91	1,411.45
	2.1.1 Local (M B)	1,334.00	1,730.00	2,016.00	1,514.00	1,066.00
	2.1.2 Foreign (M ¥)	2,379.00	3,085.00	3,595.00	2,700.00	1,900.00
800.00	2.2 Drop Wire Instl.(M B)	186.21	186.35	186.46	186.56	186.66
	2.3 Rehabilitation	399.11	399.11	399.11	399.11	399.11
	2.3.1 Local (M B)	310.20	310.20	310.20	310.20	310.20
	2.3.2 Foreign (M ¥)	489.00	489.00	489.00	489.00	489.00
	2.4 1st Replacement					
	2.4.1 Local (M B)					
	2.4.2 Foreign (M ¥)					
	2.5 Total Outside	2,351.87	2,876.37	3,255.21	2,590.57	1,997.22
	2.5.1 Local (M B)	1,830.41	2,226.55	2,512.66	2,010.76	1,562.86
	2.5.2 Foreign (M ¥)	2,868.00	3,574.00	4,084.00	3,189.00	2,389.00
	2.5.3 Foreign (M B)	521.45	649.82	742.55	579.82	434.36
15.00	3. Transmission					
	3.1 Expansion Plan (M B)	1,214.48	1,214.48	1,214.48	1,214.48	1,214.48
	3.1.1 Local (M B)	176.44	176.44	176.44	176.44	176.44
	3.1.2 Foreign (M ¥)	5,709.21	5,709.21	5,709.21	5,709.21	5,709.21
	3.2 Rehabilitation	658.57	658.57	658.57	658.57	658.57
	3.2.1 Local (M B)	95.63	95.63	95.63	95.63	95.63
	3.2.2 Foreign (M ¥)	3,096.16	3,096.16	3,096.16	3,096.16	3,096.16
	3.3 1st Replacement					
	3.3.1 Local (M B)					
	3.3.2 Foreign (M ¥)					
	3.4 2nd Replacement					
	3.4.1 Local (M B)					
	3.4.2 Foreign (M ¥)					
	3.5 Total Transmission	1,873.04	1,873.04	1,873.04	1,873.04	1,873.04
	3.5.1 Local (M B)	272.07	272.07	272.07	272.07	272.07

16-1 Estimated Capital Expenditure for the Project in Detail (8/16)

Capital Expenditure		2003	2004	2005	2006	2007
Cost	100%	11	12	13	14	15
	3.5.2 Foreign (M ¥)	8,805.37	8,805.37	8,805.37	8,805.37	8,805.37
	3.5.3 Foreign (M B)	1,600.98	1,600.98	1,600.98	1,600.98	1,600.98
15.00	4. CCS No.7					
	4.1 Introduction Plan (M B)					
	4.1.1 Local (M B)					
	4.1.2 Foreign (M ¥)					
	4.2 1st Replacement					
	4.2.1 Local (M B)					
	4.2.2 Foreign (M ¥)					
	4.3 2nd Replacement					
	4.4 Total CCS No.7	0.00	0.00	0.00	0.00	0.00
	4.4.1 Local (M B)	0.00	0.00	0.00	0.00	0.00
	4.4.2 Foreign (M ¥)	0.00	0.00	0.00	0.00	0.00
	4.4.3 Foreign (M B)	0.00	0.00	0.00	0.00	0.00
10.00	5. Public Telephone					
	New Installation No of Set	5,482	5,648	5,795	5,908	6,033
	5.1 Expansion Plan (M B)	498.23	513.34	526.64	536.95	548.33
32,700	5.1.1 Local (M B)	179.27	184.70	189.49	193.20	197.29
320,000	5.1.2 Foreign (M ¥)	1,754.30	1,807.49	1,854.34	1,890.62	1,930.69
	5.2 1st Replacement	381.16	396.96	410.50	422.73	435.13
	5.2.1 Local (M B)	137.14	142.83	147.70	152.10	156.56
	5.2.2 Foreign (M ¥)	1,342.09	1,397.73	1,445.38	1,488.46	1,532.10
	5.3 2nd Replacement					
	5.3.1 Local (M B)					
	5.3.2 Foreign (M ¥)					
	5.4 Total Public Tel	879.39	910.30	937.14	959.68	983.45
	5.4.1 Local (M B)	316.41	327.53	337.19	345.30	353.85
	5.4.2 Foreign (M ¥)	3,096.39	3,205.22	3,299.71	3,379.08	3,462.79
	5.4.3 Foreign (M B)	562.98	582.77	599.95	614.38	629.60
	6. Sub Total Capital EX	7,573.48	8,101.99	8,507.67	7,865.57	7,295.99
	6.1 Local (M B)	2,646.32	3,026.68	3,322.45	2,828.65	2,389.30
	6.2 Foreign (M ¥)	27,099.37	27,914.21	28,518.70	27,703.07	26,986.77
	6.3 Foreign (M B)	4,927.16	5,075.31	5,185.22	5,036.92	4,906.69
20%	7. Other Project Cost	1,514.70	1,620.40	1,701.53	1,573.11	1,459.20
	7.1 Local (M B)	529.26	605.34	664.49	565.73	477.86
	7.2 Foreign (M ¥)	5,419.87	5,582.84	5,703.74	5,540.61	5,397.35
	7.3 Foreign (M B)	985.43	1,015.06	1,037.04	1,007.38	981.34
	8. Total Capital Expend.	9,088.18	9,722.38	10,209.20	9,438.69	8,755.19
	8.1 Local (M B)	3,175.59	3,632.01	3,986.94	3,394.38	2,867.17
	8.2 Foreign (M ¥)	32,519.25	33,497.05	34,222.44	33,243.68	32,384.13
	8.3 Foreign (M B)	5,912.59	6,090.37	6,222.26	6,044.31	5,888.02

16-1 Estimated Capital Expenditure for the Project in Detail (9/16)

Capital Expenditure		2008	2009	2010	2011	2012
Cost	100%	16	17	18	19	20
Exchange	5.5					
	Number of Installation					
	0. Land & Building (Local Only) (M B)					
	0.1 Land (M B)					
	0.2 Building (M B)					
10.00	1. Switching					
	1.1 Expansion Plan (M B)					
	1.1.1 Local (M B)					
	1.1.2 Foreign (M ¥)					
	1.2 XB Replacement					
	1.2.1 Local (M B)					
	1.2.2 Foreign (M ¥)					
	1.3 SPC Replacement					
	1.3.1 Local (M B)					
	1.3.2 Foreign (M ¥)					
	1.4 Sub Total					
	1.4.1 Local (M B)					
	1.4.2 Foreign (M ¥)					
	1.5 1st Replacement	4,163.85	4,163.85	4,163.85	4,163.85	4,163.85
	1.5.1 Local (M B)	192.77	192.77	192.77	192.77	192.77
	1.5.2 Foreign (M ¥)	21,840.94	21,840.94	21,840.94	21,840.94	21,840.94
	1.6 2nd Replacement					
	1.6.1 Local (M B)					
	1.6.2 Foreign (M ¥)					
	1.7 Total	4,163.85	4,163.85	4,163.85	4,163.85	4,163.85
	1.7.1 Local (M B)	192.77	192.77	192.77	192.77	192.77
	1.7.2 Foreign (M ¥)	21,840.94	21,840.94	21,840.94	21,840.94	21,840.94
	1.7.3 Foreign (M B)	3,971.08	3,971.08	3,971.08	3,971.08	3,971.08
20.00	2. Outside Plant					
	2.1 Expansion Plan (M B)					
	2.1.1 Local (M B)					
	2.1.2 Foreign (M ¥)					
800.00	2.2 Drop Wire Instl.(M B)					
	2.3 Rehabilitation					
	2.3.1 Local (M B)					
	2.3.2 Foreign (M ¥)					
	2.4 1st Replacement					
	2.4.1 Local (M B)					
	2.4.2 Foreign (M ¥)					
	2.5 Total Outside	0.00	0.00	0.00	0.00	0.00
	2.5.1 Local (M B)	0.00	0.00	0.00	0.00	0.00
	2.5.2 Foreign (M ¥)	0.00	0.00	0.00	0.00	0.00
	2.5.3 Foreign (M B)	0.00	0.00	0.00	0.00	0.00
15.00	3. Transmission					
	3.1 Expansion Plan (M B)					
	3.1.1 Local (M B)					
	3.1.2 Foreign (M ¥)					
	3.2 Rehabilitation					
	3.2.1 Local (M B)					
	3.2.2 Foreign (M ¥)					
	3.3 1st Replacement	2,314.99	2,314.99	2,314.99	2,314.99	2,314.99
	3.3.1 Local (M B)	336.28	336.28	336.28	336.28	336.28
	3.3.2 Foreign (M ¥)	10,882.90	10,882.90	10,882.90	10,882.90	10,882.90
	3.4 2nd Replacement					
	3.4.1 Local (M B)					
	3.4.2 Foreign (M ¥)					
	3.5 Total Transmission	2,314.99	2,314.99	2,314.99	2,314.99	2,314.99
	3.5.1 Local (M B)	336.28	336.28	336.28	336.28	336.28

16-1 Estimated Capital Expenditure for the Project in Detail (10/16)

Capital Expenditure		2008	2009	2010	2011	2012
Cost	100%	16	17	18	19	20
	3.5.2 Foreign (M ¥)	10,882.90	10,882.90	10,882.90	10,882.90	10,882.90
	3.5.3 Foreign (M B)	1,978.71	1,978.71	1,978.71	1,978.71	1,978.71
15.00	4. CCS No.7					
	4.1 Introduction Plan (M B)					
	4.1.1 Local (M B)					
	4.1.2 Foreign (M ¥)					
	4.2 1st Replacement	51.91	120.91	16.36	396.36	27.27
	4.2.1 Local (M B)					
	4.2.2 Foreign (M ¥)					
	4.3 2nd Replacement					
	4.4 Total CCS No.7	51.91	120.91	16.36	396.36	27.27
	4.4.1 Local (M B)	0.00	0.00	0.00	0.00	0.00
	4.4.2 Foreign (M ¥)	0.00	0.00	0.00	0.00	0.00
	4.4.3 Foreign (M B)	0.00	0.00	0.00	0.00	0.00
10.00	5. Public Telephone					
	New Installation No of Set					
	5.1 Expansion Plan (M B)					
32,700	5.1.1 Local (M B)					
320,000	5.1.2 Foreign (M ¥)					
	5.2 1st Replacement	435.94	452.23	465.24	473.42	488.20
	5.2.1 Local (M B)	156.86	162.72	167.40	170.34	175.66
	5.2.2 Foreign (M ¥)	1,534.98	1,592.32	1,638.14	1,666.94	1,718.98
	5.3 2nd Replacement					
	5.3.1 Local (M B)					
	5.3.2 Foreign (M ¥)					
	5.4 Total Public Tel	435.94	452.23	465.24	473.42	488.20
	5.4.1 Local (M B)	156.86	162.72	167.40	170.34	175.66
	5.4.2 Foreign (M ¥)	1,534.98	1,592.32	1,638.14	1,666.94	1,718.98
	5.4.3 Foreign (M B)	279.09	289.51	297.84	303.08	312.54
	6. Sub Total Capital EX	6,966.69	7,051.98	6,960.45	7,348.63	6,994.31
	6.1 Local (M B)	685.91	691.77	696.45	699.39	704.71
	6.2 Foreign (M ¥)	34,258.82	34,316.16	34,361.98	34,390.78	34,442.82
	6.3 Foreign (M B)	6,228.88	6,239.30	6,247.63	6,252.87	6,262.33
20%	7. Other Project Cost	1,393.34	1,410.40	1,392.09	1,469.73	1,398.86
	7.1 Local (M B)	137.18	138.35	139.29	139.88	140.94
	7.2 Foreign (M ¥)	6,851.76	6,863.23	6,872.40	6,878.16	6,888.56
	7.3 Foreign (M B)	1,245.78	1,247.86	1,249.53	1,250.57	1,252.47
	8. Total Capital Expend.	8,360.03	8,462.37	8,352.54	8,818.35	8,393.18
	8.1 Local (M B)	823.09	830.12	835.74	839.27	845.65
	8.2 Foreign (M ¥)	41,110.58	41,179.39	41,234.38	41,268.94	41,331.38
	8.3 Foreign (M B)	7,474.65	7,487.16	7,497.16	7,503.44	7,514.80

16-1 Estimated Capital Expenditure for the Project in Detail (11/16)

Capital Expenditure		2013	2014	2015	2016	2017
Cost	100%	21	22	23	24	25
Exchange	5.5					
	Number or Installation					
	0. Land & Building (Local Only) (M B)					
	0.1 Land (M B)					
	0.2 Building (M B)					
10.00	1. Switching					
	1.1 Expansion Plan (M B)					
	1.1.1 Local (M B)					
	1.1.2 Foreign (M ¥)					
	1.2 XB Replacement					
	1.2.1 Local (M B)					
	1.2.2 Foreign (M ¥)					
	1.3 SPC Replacement					
	1.3.1 Local (M B)					
	1.3.2 Foreign (M ¥)					
	1.4 Sub Total					
	1.4.1 Local (M B)					
	1.4.2 Foreign (M ¥)					
	1.5 1st Replacement	2,043.64	2,043.64	2,043.64	2,043.64	2,043.64
	1.5.1 Local (M B)	95.18	95.18	95.18	95.18	95.18
	1.5.2 Foreign (M ¥)	10,716.55	10,716.55	10,716.55	10,716.55	10,716.55
	1.6 2nd Replacement					
	1.6.1 Local (M B)					
	1.6.2 Foreign (M ¥)					
	1.7 Total	2,043.64	2,043.64	2,043.64	2,043.64	2,043.64
	1.7.1 Local (M B)	95.18	95.18	95.18	95.18	95.18
	1.7.2 Foreign (M ¥)	10,716.55	10,716.55	10,716.55	10,716.55	10,716.55
	1.7.3 Foreign (M B)	1,948.46	1,948.46	1,948.46	1,948.46	1,948.46
20.00	2. Outside Plant					
	2.1 Expansion Plan (M B)					
	2.1.1 Local (M B)					
	2.1.2 Foreign (M ¥)					
800.00	2.2 Drop Wire Instl.(M B)					
	2.3 Rehabilitation					
	2.3.1 Local (M B)					
	2.3.2 Foreign (M ¥)					
	2.4 1st Replacement	5,950.81	8,628.40	8,811.43	8,003.72	8,325.55
	2.4.1 Local (M B)	4,601.90	6,624.04	6,762.15	6,152.26	6,395.37
	2.4.2 Foreign (M ¥)	7,419.00	11,024.00	11,271.00	10,183.00	10,616.00
	2.5 Total Outside	5,950.81	8,628.40	8,811.43	8,003.72	8,325.55
	2.5.1 Local (M B)	4,601.90	6,624.04	6,762.15	6,152.26	6,395.37
	2.5.2 Foreign (M ¥)	7,419.00	11,024.00	11,271.00	10,183.00	10,616.00
	2.5.3 Foreign (M B)	1,348.91	2,004.36	2,049.27	1,851.45	1,930.18
15.00	3. Transmission					
	3.1 Expansion Plan (M B)					
	3.1.1 Local (M B)					
	3.1.2 Foreign (M ¥)					
	3.2 Rehabilitation					
	3.2.1 Local (M B)					
	3.2.2 Foreign (M ¥)					
	3.3 1st Replacement	2,396.92	2,396.92	2,396.92	2,396.92	2,396.92
	3.3.1 Local (M B)	348.18	348.18	348.18	348.18	348.18
	3.3.2 Foreign (M ¥)	11,268.07	11,268.07	11,268.07	11,268.07	11,268.07
	3.4 2nd Replacement					
	3.4.1 Local (M B)					
	3.4.2 Foreign (M ¥)					
	3.5 Total Transmission	2,396.92	2,396.92	2,396.92	2,396.92	2,396.92
	3.5.1 Local (M B)	348.18	348.18	348.18	348.18	348.18

16-1 Estimated Capital Expenditure for the Project in Detail (12/16)

Capital Expenditure		2013	2014	2015	2016	2017
Cost	100%	21	22	23	24	25
	3.5.2 Foreign (M ¥)	11,268.07	11,268.07	11,268.07	11,268.07	11,268.07
	3.5.3 Foreign (M B)	2,048.74	2,048.74	2,048.74	2,048.74	2,048.74
15.00	4. CCS No.7					
	4.1 Introduction Plan (M B)					
	4.1.1 Local (M B)					
	4.1.2 Foreign (M ¥)					
	4.2 1st Replacement	24.55	24.55	0.00	0.00	0.00
	4.2.1 Local (M B)					
	4.2.2 Foreign (M ¥)					
	4.3 2nd Replacement					
	4.4 Total CCS No.7	24.55	24.55	0.00	0.00	0.00
	4.4.1 Local (M B)	0.00	0.00	0.00	0.00	0.00
	4.4.2 Foreign (M ¥)	0.00	0.00	0.00	0.00	0.00
	4.4.3 Foreign (M B)	0.00	0.00	0.00	0.00	0.00
10.00	5. Public Telephone					
	New Installation No of Set					
	5.1 Expansion Plan (M B)					
32,700	5.1.1 Local (M B)					
320,000	5.1.2 Foreign (M ¥)					
	5.2 1st Replacement	498.23	513.34	526.64	536.95	548.33
	5.2.1 Local (M B)	179.27	184.70	189.49	193.20	197.29
	5.2.2 Foreign (M ¥)	1,754.30	1,807.49	1,854.34	1,890.62	1,930.69
	5.3 2nd Replacement	381.16	396.96	410.50	422.73	435.13
	5.3.1 Local (M B)	137.14	142.83	147.70	152.10	156.56
	5.3.2 Foreign (M ¥)	1,342.09	1,397.73	1,445.38	1,488.46	1,532.10
	5.4 Total Public Tel	879.39	910.30	937.14	959.68	983.45
	5.4.1 Local (M B)	316.41	327.53	337.19	345.30	353.85
	5.4.2 Foreign (M ¥)	3,096.39	3,205.22	3,299.71	3,379.08	3,462.79
	5.4.3 Foreign (M B)	562.98	582.77	599.95	614.38	629.60
	6. Sub Total Capital EX	11,295.30	14,003.81	14,189.13	13,403.96	13,749.57
	6.1 Local (M B)	5,361.67	7,394.93	7,542.70	6,940.92	7,192.58
	6.2 Foreign (M ¥)	32,500.01	36,213.84	36,555.33	35,546.70	36,063.41
	6.3 Foreign (M B)	5,909.09	6,584.33	6,646.42	6,463.04	6,556.98
20%	7. Other Project Cost	2,259.06	2,800.76	2,837.83	2,680.79	2,749.91
	7.1 Local (M B)	1,072.33	1,478.99	1,508.54	1,388.18	1,438.52
	7.2 Foreign (M ¥)	6,500.00	7,242.77	7,311.07	7,109.34	7,212.68
	7.3 Foreign (M B)	1,181.82	1,316.87	1,329.28	1,292.61	1,311.40
	8. Total Capital Expend.	13,554.36	16,804.57	17,026.95	16,084.75	16,499.48
	8.1 Local (M B)	6,434.00	8,873.91	9,051.24	8,329.10	8,631.10
	8.2 Foreign (M ¥)	39,000.01	43,456.61	43,866.40	42,656.04	43,276.09
	8.3 Foreign (M B)	7,090.91	7,901.20	7,975.71	7,755.64	7,868.38

16-1 Estimated Capital Expenditure for the Project in Detail (13/16)

Capital Expenditure		2018	2019	2020	2021	2022
Cost	100%	26	27	28	29	30
Exchange	5.5					
	Number or Installation					
	0. Land & Building (Local Only) (M B)					
	0.1 Land (M B)					
	0.2 Building (M B)					
10.00	1. Switching					
	1.1 Expansion Plan (M B)					
	1.1.1 Local (M B)					
	1.1.2 Foreign (M ¥)					
	1.2 XB Replacement					
	1.2.1 Local (M B)					
	1.2.2 Foreign (M ¥)					
	1.3 SPC Replacement					
	1.3.1 Local (M B)					
	1.3.2 Foreign (M ¥)					
	1.4 Sub Total					
	1.4.1 Local (M B)					
	1.4.2 Foreign (M ¥)					
	1.5 1st Replacement	1,611.60	1,611.60	1,611.60	1,611.60	1,611.60
	1.5.1 Local (M B)	75.79	75.79	75.79	75.79	75.79
	1.5.2 Foreign (M ¥)	8,446.94	8,446.94	8,446.94	8,446.94	8,446.94
	1.6 2nd Replacement					
	1.6.1 Local (M B)					
	1.6.2 Foreign (M ¥)					
	1.7 Total	1,611.60	1,611.60	1,611.60	1,611.60	1,611.60
	1.7.1 Local (M B)	75.79	75.79	75.79	75.79	75.79
	1.7.2 Foreign (M ¥)	8,446.94	8,446.94	8,446.94	8,446.94	8,446.94
	1.7.3 Foreign (M B)	1,535.81	1,535.81	1,535.81	1,535.81	1,535.81
20.00	2. Outside Plant					
	2.1 Expansion Plan (M B)					
	2.1.1 Local (M B)					
	2.1.2 Foreign (M ¥)					
800.00	2.2 Drop Wire Instl.(M B)					
	2.3 Rehabilitation					
	2.3.1 Local (M B)					
	2.3.2 Foreign (M ¥)					
	2.4 1st Replacement	3,571.94	4,316.08	4,511.20	3,402.81	2,893.04
	2.4.1 Local (M B)	2,767.94	3,330.08	3,477.20	2,640.27	2,255.40
	2.4.2 Foreign (M ¥)	4,422.00	5,423.00	5,687.00	4,194.00	3,507.00
	2.5 Total Outside	3,571.94	4,316.08	4,511.20	3,402.81	2,893.04
	2.5.1 Local (M B)	2,767.94	3,330.08	3,477.20	2,640.27	2,255.40
	2.5.2 Foreign (M ¥)	4,422.00	5,423.00	5,687.00	4,194.00	3,507.00
	2.5.3 Foreign (M B)	804.00	986.00	1,034.00	762.55	637.64
15.00	3. Transmission					
	3.1 Expansion Plan (M B)					
	3.1.1 Local (M B)					
	3.1.2 Foreign (M ¥)					
	3.2 Rehabilitation					
	3.2.1 Local (M B)					
	3.2.2 Foreign (M ¥)					
	3.3 1st Replacement	1,873.04	1,873.04	1,873.04	1,873.04	1,873.04
	3.3.1 Local (M B)	272.07	272.07	272.07	272.07	272.07
	3.3.2 Foreign (M ¥)	8,805.37	8,805.37	8,805.37	8,805.37	8,805.37
	3.4 2nd Replacement					
	3.4.1 Local (M B)					
	3.4.2 Foreign (M ¥)					
	3.5 Total Transmission	1,873.04	1,873.04	1,873.04	1,873.04	1,873.04
	3.5.1 Local (M B)	272.07	272.07	272.07	272.07	272.07

16-1. Estimated Capital Expenditure for the Project in Detail (14/16)

Capital Expenditure		2018	2019	2020	2021	2022
Cost	100%	26	27	28	29	30
	3.5.2 Foreign (M ¥)	8,805.37	8,805.37	8,805.37	8,805.37	8,805.37
	3.5.3 Foreign (M B)	1,600.98	1,600.98	1,600.98	1,600.98	1,600.98
15.00	4. CCS No.7					
	4.1 Introduction Plan (M B)					
	4.1.1 Local (M B)					
	4.1.2 Foreign (M ¥)					
	4.2 1st Replacement	0.00	0.00	0.00	0.00	0.00
	4.2.1 Local (M B)					
	4.2.2 Foreign (M ¥)					
	4.3 2nd Replacement					
	4.4 Total CCS No.7	0.00	0.00	0.00	0.00	0.00
	4.4.1 Local (M B)	0.00	0.00	0.00	0.00	0.00
	4.4.2 Foreign (M ¥)	0.00	0.00	0.00	0.00	0.00
	4.4.3 Foreign (M B)	0.00	0.00	0.00	0.00	0.00
10.00	5. Public Telephone					
	New Installation No of Set					
	5.1 Expansion Plan (M B)					
32,700	5.1.1 Local (M B)					
320,000	5.1.2 Foreign (M ¥)					
	5.2 1st Replacement					
	5.2.1 Local (M B)					
	5.2.2 Foreign (M ¥)					
	5.3 2nd Replacement	435.94	452.23	465.24	473.42	488.20
	5.3.1 Local (M B)	156.86	162.72	167.40	170.34	175.66
	5.3.2 Foreign (M ¥)	1,534.98	1,592.32	1,638.14	1,666.94	1,718.98
	5.4 Total Public Tel	435.94	452.23	465.24	473.42	488.20
	5.4.1 Local (M B)	156.86	162.72	167.40	170.34	175.66
	5.4.2 Foreign (M ¥)	1,534.98	1,592.32	1,638.14	1,666.94	1,718.98
	5.4.3 Foreign (M B)	279.09	289.51	297.84	303.08	312.54
	6. Sub Total Capital EX	7,492.53	8,252.96	8,461.08	7,360.88	6,865.88
	6.1 Local (M B)	3,272.66	3,840.66	3,992.46	3,158.47	2,778.92
	6.2 Foreign (M ¥)	23,209.28	24,267.62	24,577.45	23,113.25	22,478.28
	6.3 Foreign (M B)	4,219.87	4,412.30	4,468.63	4,202.41	4,086.96
20%	7. Other Project Cost	1,498.51	1,650.59	1,692.22	1,472.18	1,373.18
	7.1 Local (M B)	654.53	768.13	798.49	631.69	555.78
	7.2 Foreign (M ¥)	4,641.86	4,853.52	4,915.49	4,622.65	4,495.66
	7.3 Foreign (M B)	843.97	882.46	893.73	840.48	817.39
	8. Total Capital Expend.	8,991.03	9,903.55	10,153.30	8,833.06	8,239.06
	8.1 Local (M B)	3,927.19	4,608.79	4,790.95	3,790.17	3,334.70
	8.2 Foreign (M ¥)	27,851.14	29,121.15	29,492.94	27,735.90	26,973.94
	8.3 Foreign (M B)	5,063.84	5,294.75	5,362.35	5,042.89	4,904.35

16-1 Estimated Capital Expenditure for the Project in Detail (15/16)

Capital Expenditure		2023	2024	2025	2026	2027
Cost	100%	31	32	33	34	35
Exchange	5.5					
	Number or Installation					
	0. Land & Building (Local Only) (M B)					
	0.1 Land (M B)					
	0.2 Building (M B)					
10.00	1. Switching					
	1.1 Expansion Plan (M B)					
	1.1.1 Local (M B)					
	1.1.2 Foreign (M ¥)					
	1.2 XB Replacement					
	1.2.1 Local (M B)					
	1.2.2 Foreign (M ¥)					
	1.3 SPC Replacement					
	1.3.1 Local (M B)					
	1.3.2 Foreign (M ¥)					
	1.4 Sub Total					
	1.4.1 Local (M B)					
	1.4.2 Foreign (M ¥)					
	1.5 1st Replacement					
	1.5.1 Local (M B)					
	1.5.2 Foreign (M ¥)					
	1.6 2nd Replacement	4,163.85	4,163.85	4,163.85	4,163.85	4,163.85
	1.6.1 Local (M B)	192.77	192.77	192.77	192.77	192.77
	1.6.2 Foreign (M ¥)	21,840.94	21,840.94	21,840.94	21,840.94	21,840.94
	1.7 Total	4,163.85	4,163.85	4,163.85	4,163.85	4,163.85
	1.7.1 Local (M B)	192.77	192.77	192.77	192.77	192.77
	1.7.2 Foreign (M ¥)	21,840.94	21,840.94	21,840.94	21,840.94	21,840.94
	1.7.3 Foreign (M B)	3,971.08	3,971.08	3,971.08	3,971.08	3,971.08
20.00	2. Outside Plant					
	2.1 Expansion Plan (M B)					
	2.1.1 Local (M B)					
	2.1.2 Foreign (M ¥)					
800.00	2.2 Drop Wire Instl.(M B)					
	2.3 Rehabilitation					
	2.3.1 Local (M B)					
	2.3.2 Foreign (M ¥)					
	2.4 1st Replacement	2,351.87	2,876.37	3,255.21	2,590.57	1,997.22
	2.4.1 Local (M B)	1,830.41	2,226.55	2,512.66	2,010.76	1,562.86
	2.4.2 Foreign (M ¥)	2,868.00	3,574.00	4,084.00	3,189.00	2,389.00
	2.5 Total Outside	2,351.87	2,876.37	3,255.21	2,590.57	1,997.22
	2.5.1 Local (M B)	1,830.41	2,226.55	2,512.66	2,010.76	1,562.86
	2.5.2 Foreign (M ¥)	2,868.00	3,574.00	4,084.00	3,189.00	2,389.00
	2.5.3 Foreign (M B)	521.45	649.82	742.55	579.82	434.36
15.00	3. Transmission					
	3.1 Expansion Plan (M B)					
	3.1.1 Local (M B)					
	3.1.2 Foreign (M ¥)					
	3.2 Rehabilitation					
	3.2.1 Local (M B)					
	3.2.2 Foreign (M ¥)					
	3.3 1st Replacement					
	3.3.1 Local (M B)					
	3.3.2 Foreign (M ¥)					
	3.4 2nd Replacement	2,314.99	2,314.99	2,314.99	2,314.99	2,314.99
	3.4.1 Local (M B)	336.28	336.28	336.28	336.28	336.28
	3.4.2 Foreign (M ¥)	10,882.90	10,882.90	10,882.90	10,882.90	10,882.90
	3.5 Total Transmission	2,314.99	2,314.99	2,314.99	2,314.99	2,314.99
	3.5.1 Local (M B)	336.28	336.28	336.28	336.28	336.28

16-1 Estimated Capital Expenditure for the Project in Detail (16/16)

Capital Expenditure		2023	2024	2025	2026	2027
Cost	100%	31	32	33	34	35
	3.5.2 Foreign (M ¥)	10,882.90	10,882.90	10,882.90	10,882.90	10,882.90
	3.5.3 Foreign (M B)	1,978.71	1,978.71	1,978.71	1,978.71	1,978.71
15.00	4. CCS No.7					
	4.1 Introduction Plan (M B)					
	4.1.1 Local (M B)					
	4.1.2 Foreign (M ¥)					
	4.2 1st Replacement					
	4.2.1 Local (M B)					
	4.2.2 Foreign (M ¥)					
	4.3 2nd Replacement	51.91	120.91	16.36	396.36	27.27
	4.4 Total CCS No.7	51.91	120.91	16.36	396.36	27.27
	4.4.1 Local (M B)	0.00	0.00	0.00	0.00	0.00
	4.4.2 Foreign (M ¥)	51.91	120.91	16.36	396.36	27.27
	4.4.3 Foreign (M B)	9.44	21.98	2.98	72.07	4.96
10.00	5. Public Telephone					
	New Installation No of Set					
	5.1 Expansion Plan (M B)					
32,700	5.1.1 Local (M B)					
320,000	5.1.2 Foreign (M ¥)					
	5.2 1st Replacement					
	5.2.1 Local (M B)					
	5.2.2 Foreign (M ¥)					
	5.3 2nd Replacement	498.23	513.34	526.64	536.95	548.33
	5.3.1 Local (M B)	179.27	184.70	189.49	193.20	197.29
	5.3.2 Foreign (M ¥)	1,754.30	1,807.49	1,854.34	1,890.62	1,930.69
	5.4 Total Public Tel	498.23	513.34	526.64	536.95	548.33
	5.4.1 Local (M B)	179.27	184.70	189.49	193.20	197.29
	5.4.2 Foreign (M ¥)	1,754.30	1,807.49	1,854.34	1,890.62	1,930.69
	5.4.3 Foreign (M B)	318.96	328.63	337.15	343.75	351.03
	6. Sub Total Capital EX	9,380.85	9,989.45	10,277.06	10,002.73	9,051.66
	6.1 Local (M B)	2,538.73	2,940.30	3,231.21	2,733.01	2,289.20
	6.2 Foreign (M ¥)	37,398.05	38,226.24	38,678.54	38,199.83	37,070.80
	6.3 Foreign (M B)	6,799.65	6,950.22	7,032.46	6,945.42	6,740.15
20%	7. Other Project Cost	1,876.17	1,997.89	2,055.41	2,000.55	1,810.33
	7.1 Local (M B)	507.75	588.06	646.24	546.60	457.84
	7.2 Foreign (M ¥)	7,479.61	7,645.25	7,735.71	7,639.97	7,414.16
	7.3 Foreign (M B)	1,359.93	1,390.04	1,406.49	1,389.08	1,348.03
	8. Total Capital Expend.	11,257.02	11,987.34	12,332.47	12,003.27	10,861.99
	8.1 Local (M B)	3,046.48	3,528.36	3,877.45	3,279.61	2,747.04
	8.2 Foreign (M ¥)	44,877.66	45,871.48	46,414.25	45,839.79	44,484.96
	8.3 Foreign (M B)	8,159.58	8,340.27	8,438.95	8,334.51	8,088.17

16-2 Cash Flow of the Project without Financing Condition (1/6)

Term Year	0 1992	1 1993	2 1994	3 1995	4 1996	5 1997
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
1. Operating Revenue	0	5,562,221	10,392,431	15,231,056	20,075,582	24,925,168
1.1 Installation Fee		1,662,688	1,662,403	1,662,090	1,661,745	1,661,365
1.2 Subscription Fee		223,346	670,000	1,116,574	1,563,059	2,009,447
1.3 Local Call Charge		1,223,998	3,616,697	5,971,992	8,308,175	10,633,129
1.4 Trunk Call Charge		705,669	2,177,983	3,689,626	5,220,556	6,762,309
1.5 Deposit		1,488,975	1,488,719	1,488,438	1,488,130	1,487,790
1.6 Public Telephone Usages		78,985	240,236	407,482	580,161	758,091
1.7 Other Service		178,560	536,393	894,854	1,253,756	1,613,038
II. Cash Out-Flow						
1. Capital Expenditure	7,995,140	21,576,960	25,936,631	28,022,248	30,021,407	28,813,015
1.1 Local Portion	3,231,709	7,623,763	8,869,849	8,591,949	8,376,258	6,361,306
1.2 Foreign Portion	4,763,431	9,952,941	10,347,402	10,422,839	10,354,375	8,868,270
2. Operating Expenditure		1,104,707	2,121,893	3,108,498	4,090,962	5,083,159
2.1 Staff Remuneration		422,923	750,530	1,047,282	1,339,661	1,641,548
2.2 Other Administrative Expenses		464,920	930,002	1,395,222	1,860,566	2,326,037
2.3 Repair & maintenance Expenses		176,131	352,324	528,568	704,860	881,200
2.4 Bad Debt Expense		40,732	89,037	137,426	185,875	234,374
3. Working Capital		2,036,623	4,451,856	6,871,309	9,293,726	11,718,689
3.1 Working Capital Increase		2,036,623	2,415,232	2,419,453	2,422,418	2,424,963
4. Taxation		858,926	2,006,036	3,166,789	4,341,028	5,517,125
4.1 Remittance to the Treasury		597,619	1,439,267	2,294,396	3,162,981	4,033,433
4.2 VAT 7% (6.54% on 1.1., 2., 3., 4., 7)		261,307	566,769	872,392	1,178,047	1,483,692
5. Interest	0	0	0	0	0	0
6. Bonus Payment		0	176,218	312,721	436,367	558,192
Net Cash Flow without Interest	-7,995,140	-16,014,739	-15,544,200	-12,791,192	-9,945,825	-3,887,847
Acc. Net Cash without Interest (M B)	-7,995	-24,010	-39,554	-52,345	-62,291	-66,179
FIRR	10.05%					
III. Net Cash Flow	-7,995,140	-16,014,739	-15,544,200	-12,791,192	-9,945,825	-3,887,847
IV. Accumulated Net Cash Flow (M B)	-7,995	-24,010	-39,554	-52,345	-62,291	-66,179
Financing Assumption						
1. Cash Balance (at Beginig)		-7,995,140	-24,009,878	-39,554,079	-52,345,271	-62,291,096
1.1 Cash from Operation	-7,995,140	-16,014,739	-15,544,200	-12,791,192	-9,945,825	-3,887,847
2. Own Fund						
3. Long-term Debt						
3.1 Borrowing						
3.2 Amortization	0	0	0	0	0	0
4. Cash Balance (at Ending)	-7,995,140	-24,009,878	-39,554,079	-52,345,271	-62,291,096	-66,178,943
5. Total Amount of Borrowings	0					
6. Total Own Fund	0	#NUM!				

16-2 Cash Flow of the Project without Financing Condition (2/6)

Term Year	6 1998	7 1999	8 2000	9 2001	10 2002	11 2003
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
1. Operating Revenue	27,964,871	31,342,175	34,724,329	38,109,726	41,498,383	43,763,490
1.1 Installation Fee	1,094,633	1,094,174	1,093,669	1,093,113	1,092,502	754,012
1.2 Subscription Fee	2,379,656	2,673,674	2,967,564	3,261,311	3,554,901	3,802,940
1.3 Local Call Charge	12,547,052	14,053,945	15,558,693	17,061,512	18,562,541	19,829,418
1.4 Trunk Call Charge	8,112,163	9,266,128	10,421,358	11,577,432	12,734,031	13,718,354
1.5 Deposit	980,268	979,857	979,405	978,907	978,360	675,235
1.6 Public Telephone Usages	933,324	1,106,387	1,285,029	1,467,992	1,655,492	1,847,662
1.7 Other Service	1,917,776	2,168,011	2,418,612	2,669,460	2,920,557	3,135,870
II. Cash Out-Flow	26,853,868	29,027,380	30,009,173	30,590,586	31,357,598	32,231,902
1. Capital Expenditure	12,169,594	12,767,898	12,067,772	10,885,848	9,838,513	9,405,281
1.1 Local Portion	4,508,973	4,914,493	4,494,917	3,752,660	3,350,258	3,403,800
1.2 Foreign Portion	7,660,621	7,853,405	7,572,854	7,133,188	6,488,255	6,001,482
2. Operating Expenditure	5,816,076	6,573,686	7,361,114	8,181,859	9,039,837	9,738,276
2.1 Staff Remuneration	1,913,317	2,211,243	2,538,758	2,899,440	3,297,115	3,672,254
2.2 Other Administrative Expenses	2,634,757	2,943,644	3,252,663	3,561,765	3,871,018	4,086,864
2.3 Repair & maintenance Expenses	998,156	1,115,175	1,232,245	1,349,346	1,466,504	1,548,275
2.4 Bad Debt Expense	269,846	303,623	337,449	371,308	405,200	430,883
3. Working Capital	13,492,302	15,181,159	16,872,462	18,565,409	20,260,012	21,544,128
3.1 Working Capital Increase	1,773,612	1,688,858	1,691,303	1,692,947	1,694,602	1,284,116
4. Taxation	6,410,607	7,199,723	7,967,632	8,772,116	9,576,546	10,430,431
4.1 Remittance to the Treasury	4,706,317	5,285,784	5,844,087	6,439,034	7,034,007	7,732,448
4.2 VAT 7% (6.54% on 1.1.,2.,3.,4.,7)	1,704,289	1,913,939	2,123,545	2,333,082	2,542,539	2,697,983
5. Interest	0	0	0	0	0	0
6. Bonus Payment	683,978	797,215	921,351	1,057,816	1,208,100	1,373,798
Net Cash Flow without Interest	1,111,003	2,314,796	4,715,157	7,519,140	10,140,785	11,531,589
Acc. Net Cash without Interest (M B)	-65,068	-62,753	-58,038	-50,519	-40,378	-28,846
FIRR						
III. Net Cash Flow	1,111,003	2,314,796	4,715,157	7,519,140	10,140,785	11,531,589
IV. Accumulated Net Cash Flow (M B)	-65,068	-62,753	-58,038	-50,519	-40,378	-28,846
Financing Assumption						
1. Cash Balance (at Beginig)	-66,178,943	-65,067,939	-62,753,144	-58,037,987	-50,518,847	-40,378,062
1.1 Cash from Operation	1,111,003	2,314,796	4,715,157	7,519,140	10,140,785	11,531,589
2. Own Fund						
3. Long-term Debt						
3.1 Borrowing						
3.2 Amortization	0	0	0	0	0	0
4. Cash Balance (at Ending)	-65,067,939	-62,753,144	-58,037,987	-50,518,847	-40,378,062	-28,846,474
5. Total Amount of Borrowings						
	0					
6. Total Own Fund						
	0					

16-2 Cash Flow of the Project without Financing Condition (3/6)

Term Year	12 2004	13 2005	14 2006	15 2007	16 2008	17 2009
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
I. Operating Revenue	46,185,741	48,611,657	51,040,170	53,470,565	53,264,426	53,264,426
1.1 Installation Fee	753,273	752,459	751,564	750,580	0	0
1.2 Subscription Fee	4,005,411	4,207,673	4,409,706	4,611,487	4,712,311	4,712,311
1.3 Local Call Charge	20,862,442	21,894,098	22,924,310	23,952,986	24,466,903	24,466,903
1.4 Trunk Call Charge	14,529,926	15,341,080	16,151,706	16,961,692	17,366,537	17,366,537
1.5 Deposit	674,572	673,844	673,043	672,161	0	0
1.6 Public Telephone Usages	2,044,717	2,247,291	2,454,614	2,666,264	2,773,162	2,773,162
1.7 Other Service	3,315,400	3,495,211	3,675,227	3,855,394	3,945,513	3,945,513
II. Cash Out-Flow	34,390,565	35,951,821	36,985,990	38,271,018	39,246,065	40,172,041
1. Capital Expenditure	9,965,792	9,823,944	9,096,938	8,557,610	8,411,202	8,407,455
1.1 Local Portion	3,809,476	3,690,660	3,130,773	1,845,127	826,604	832,930
1.2 Foreign Portion	6,156,317	6,133,283	5,966,165	6,681,337	7,480,907	7,492,161
2. Operating Expenditure	10,472,292	11,246,922	12,066,012	12,933,825	15,746,417	15,746,417
2.1 Staff Remuneration	4,084,211	4,536,559	5,033,193	5,578,372	8,386,304	8,386,304
2.2 Other Administrative Expenses	4,302,864	4,519,000	4,735,240	4,951,597	4,951,597	4,951,597
2.3 Repair & maintenance Expenses	1,630,105	1,711,986	1,793,907	1,875,872	1,875,872	1,875,872
2.4 Bad Debt Expense	455,112	479,378	503,671	527,984	532,644	532,644
3. Working Capital	22,755,584	23,968,906	25,183,564	26,399,202	26,632,213	26,632,213
3.1 Working Capital Increase	1,211,456	1,213,322	1,214,657	1,215,638	233,011	0
4. Taxation	11,210,919	11,965,878	12,718,150	13,466,781	12,531,113	12,523,876
4.1 Remittance to the Treasury	8,367,319	8,976,779	9,583,687	10,187,109	9,227,946	9,220,709
4.2 VAT 7% (6.54% on 1.1.,2.,3.,4.,7)	2,843,600	2,989,100	3,134,463	3,279,673	3,303,167	3,303,167
5. Interest	0	0	0	0	0	0
6. Bonus Payment	1,530,106	1,701,755	1,890,233	2,097,164	2,324,322	3,494,293
Net Cash Flow without Interest	11,795,176	12,659,835	14,054,180	15,199,546	14,018,361	13,092,385
Acc. Net Cash without Interest (M B)	-17,051	-4,391	9,663	24,862	38,881	51,973
FIRR						
III. Net Cash Flow	11,795,176	12,659,835	14,054,180	15,199,546	14,018,361	13,092,385
IV. Accumulated Net Cash Flow (M B)	-17,051	-4,391	9,663	24,862	38,881	51,973
Financing Assumption						
1. Cash Balance (at Beginig)	-28,846,474	-17,051,298	-4,391,463	9,662,717	24,862,264	38,880,625
1.1 Cash from Operation	11,795,176	12,659,835	14,054,180	15,199,546	14,018,361	13,092,385
2. Own Fund						
3. Long-term Debt						
3.1 Borrowing						
3.2 Amortization	0	0	0	0	0	0
4. Cash Balance (at Ending)	-17,051,298	-4,391,463	9,662,717	24,862,264	38,880,625	51,973,010
5. Total Amount of Borrowings	0					
6. Total Own Fund	0					

16-2 Cash Flow of the Project without Financing Condition (4/6)

Term Year	18 2010	19 2011	20 2012	21 2013	22 2014	23 2015
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
1. Operating Revenue	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426
1.1 Installation Fee	0	0	0	0	0	0
1.2 Subscription Fee	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311
1.3 Local Call Charge	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903
1.4 Trunk Call Charge	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537
1.5 Deposit	0	0	0	0	0	0
1.6 Public Telephone Usages	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162
1.7 Other Service	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513
II. Cash Out-Flow						
1. Capital Expenditure	40,350,966	40,342,330	42,680,256	46,872,123	48,577,147	48,187,730
1.1 Local Portion	837,505	842,461	3,639,825	7,653,955	8,962,576	8,690,172
1.2 Foreign Portion	7,500,302	7,509,120	7,302,854	7,496,056	7,938,455	7,865,676
2. Operating Expenditure	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417
2.1 Staff Remuneration	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304
2.2 Other Administrative Expenses	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597
2.3 Repair & maintenance Expenses	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872
2.4 Bad Debt Expense	532,644	532,644	532,644	532,644	532,644	532,644
3. Working Capital	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213
3.1 Working Capital Increase	0	0	0	0	0	0
4. Taxation	12,524,812	12,495,857	12,465,776	12,451,946	12,420,677	12,391,171
4.1 Remittance to the Treasury	9,221,645	9,192,690	9,162,609	9,148,780	9,117,510	9,088,004
4.2 VAT 7% (6.54% on 1.1., 2., 3., 4., 7)	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167
5. Interest	0	0	0	0	0	0
6. Bonus Payment	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293
Net Cash Flow without Interest	12,913,460	12,922,096	10,584,170	6,392,303	4,687,280	5,076,696
Acc. Net Cash without Interest (M B)	64,886	77,809	88,393	94,785	99,472	104,549
FIRR						
III. Net Cash Flow	12,913,460	12,922,096	10,584,170	6,392,303	4,687,280	5,076,696
IV. Accumulated Net Cash Flow (M B)						
	64,886	77,809	88,393	94,785	99,472	104,549
Financing Assumption						
1. Cash Balance (at Beginig)	51,973,010	64,886,470	77,808,566	88,392,736	94,785,039	99,472,319
1.1 Cash from Operation	12,913,460	12,922,096	10,584,170	6,392,303	4,687,280	5,076,696
2. Own Fund						
3. Long-term Debt						
3.1 Borrowing						
3.2 Amortization	0	0	0	0	0	0
4. Cash Balance (at Ending)	64,886,470	77,808,566	88,392,736	94,785,039	99,472,319	104,549,015
5. Total Amount of Borrowings	0					
6. Total Own Fund	0					

16-2 Cash Flow of the Project without Financing Condition (5/6)

Term	24	25	26	27	28	29
Year	2016	2017	2018	2019	2020	2021
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
I. Operating Revenue	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426
1.1 Installation Fee	0	0	0	0	0	0
1.2 Subscription Fee	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311
1.3 Local Call Charge	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903
1.4 Trunk Call Charge	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537
1.5 Deposit	0	0	0	0	0	0
1.6 Public Telephone Usages	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162
1.7 Other Service	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513
II. Cash Out-Flow						
1. Capital Expenditure	47,895,633	44,313,092	41,113,009	41,786,627	41,341,467	40,486,336
1.1 Local Portion	16,292,113	12,745,255	9,447,290	10,028,425	9,493,180	8,536,057
1.2 Foreign Portion	8,480,101	6,279,144	4,267,991	4,699,871	4,290,559	3,562,436
1.2 Foreign Portion	7,812,012	6,466,111	5,179,299	5,328,553	5,202,621	4,973,621
2. Operating Expenditure	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417
2.1 Staff Remuneration	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304
2.2 Other Administrative Expenses	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597
2.3 Repair & maintenance Expenses	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872
2.4 Bad Debt Expense	532,644	532,644	532,644	532,644	532,644	532,644
3. Working Capital	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213
3.1 Working Capital Increase	0	0	0	0	0	0
4. Taxation	12,362,809	12,327,126	12,425,009	12,517,491	12,607,576	12,709,569
4.1 Remittance to the Treasury	9,059,642	9,023,959	9,121,842	9,214,325	9,304,410	9,406,402
4.2 VAT 7% (6.54% on 1.1,.2.,3.,4.,7)	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167
5. Interest	0	0	0	0	0	0
6. Bonus Payment	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293
Net Cash Flow without Interest	5,368,794	8,951,335	12,151,417	11,477,800	11,922,959	12,778,090
Acc. Net Cash without Interest (M B)	109,918	118,869	131,021	142,498	154,421	167,199
FIRR						
III. Net Cash Flow	5,368,794	8,951,335	12,151,417	11,477,800	11,922,959	12,778,090
IV. Accumulated Net Cash Flow (M B)						
	109,918	118,869	131,021	142,498	154,421	167,199
Financing Assumption						
1. Cash Balance (at Beginig)	104,549,015	109,917,809	118,869,143	131,020,560	142,498,360	154,421,319
1.1 Cash from Operation	5,368,794	8,951,335	12,151,417	11,477,800	11,922,959	12,778,090
2. Own Fund						
3. Long-term Debt						
3.1 Borrowing						
3.2 Amortization	0	0	0	0	0	0
4. Cash Balance (at Ending)	109,917,809	118,869,143	131,020,560	142,498,360	154,421,319	167,199,409
5. Total Amount of Borrowings	0					
6. Total Own Fund	0					

16-2 Cash Flow of the Project without Financing Condition (6/6)

Term Year	30 2022	31 2023	32 2024	33 2025	34 2026	35 2027
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
1. Operating Revenue	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	37,556,723
1.1 Installation Fee	0	0	0	0	0	0
1.2 Subscription Fee	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311
1.3 Local Call Charge	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903
1.4 Trunk Call Charge	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537
1.5 Deposit	0	0	0	0	0	-15,707,703
1.6 Public Telephone Usages	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162
1.7 Other Service	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513
II. Cash Out-Flow						
1. Capital Expenditure	41,801,435	43,621,332	44,122,240	44,093,112	43,317,185	-68,163,528
1.1 Local Portion	9,748,039	11,622,182	12,159,905	12,167,869	11,432,631	-73,386,049
1.2 Foreign Portion	3,190,593	3,287,422	3,702,905	3,578,527	3,013,323	1,373,520
1.3 Local Portion	6,531,964	8,249,923	8,389,612	8,386,731	8,211,341	4,044,087
2. Operating Expenditure	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417
2.1 Staff Remuneration	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304
2.2 Other Administrative Expenses	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597
2.3 Repair & maintenance Expenses	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872
2.4 Bad Debt Expense	532,644	532,644	532,644	532,644	532,644	532,644
3. Working Capital	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213
3.1 Working Capital Increase	0	0	0	0	0	-26,632,213
4. Taxation	12,812,686	12,758,440	12,721,625	12,684,533	12,643,843	12,614,023
4.1 Remittance to the Treasury	9,509,519	9,455,273	9,418,458	9,381,366	9,340,676	9,310,856
4.2 VAT 7% (6.54% on 1.1.,2.,3.,4.,7)	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167
5. Interest	0	0	0	0	0	0
6. Bonus Payment	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293
Net Cash Flow without Interest	11,462,991	9,643,094	9,142,186	9,171,314	9,947,242	105,720,252
Acc. Net Cash without Interest (M B)	178,662	188,305	197,448	206,619	216,566	322,286
FIRR						
III. Net Cash Flow	11,462,991	9,643,094	9,142,186	9,171,314	9,947,242	105,720,252
IV. Accumulated Net Cash Flow (M B)						
	178,662	188,305	197,448	206,619	216,566	322,286
Financing Assumption						
1. Cash Balance (at Beginig)	167,199,409	178,662,400	188,305,494	197,447,680	206,618,993	216,566,235
1.1 Cash from Operation	11,462,991	9,643,094	9,142,186	9,171,314	9,947,242	105,720,252
2. Own Fund						
3. Long-term Debt						
3.1 Borrowing						
3.2 Amortization	0	0	0	0	0	0
4. Cash Balance (at Ending)	178,662,400	188,305,494	197,447,680	206,618,993	216,566,235	322,286,487
5. Total Amount of Borrowings						
	0					
6. Total Own Fund						
	0					

16-3 Profit and Loss Statement of the Project without Financing Condition (1/4)

Term	0	1	2	3	4	5	6	7	8	9
Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
(Unit: Thousand Baht)										
Income Statements (P/L)										
1. Operating Revenue		4,073,247	8,903,712	13,742,617	18,587,453	23,437,379	26,984,603	30,362,318	33,744,924	37,130,819
1.1 Installation Fee		1,662,688	1,662,403	1,662,090	1,661,745	1,661,365	1,094,633	1,094,174	1,093,669	1,093,113
1.2 Subscription Fee		223,346	670,000	1,116,574	1,563,059	2,009,447	2,379,656	2,673,674	2,967,564	3,251,311
1.3 Local Call Charge		1,223,998	3,616,697	5,971,992	8,308,175	10,633,129	12,547,052	14,053,945	15,558,693	17,061,512
1.4 Trunk Call Charge		705,669	2,177,983	3,689,626	5,220,556	6,762,309	8,112,163	9,266,128	10,421,358	11,577,432
1.5 Public Telephone Usages		78,985	240,236	407,482	580,161	758,091	933,324	1,106,387	1,285,029	1,467,992
1.6 Other Service		178,560	536,393	894,854	1,253,756	1,613,038	1,917,776	2,168,011	2,418,612	2,669,460
2. Operating Expenses		2,579,199	5,305,544	8,006,626	10,680,001	13,353,797	15,218,810	17,147,860	19,134,706	21,033,235
2.1 Administrative Expenses		887,843	1,680,532	2,442,503	3,200,227	3,967,585	4,548,074	5,154,887	5,791,421	6,461,205
2.2 Bad Debt Expenses		40,732	89,037	137,426	185,875	234,374	269,846	303,623	337,449	371,308
2.3 Repair and Maintenance Expenses		176,131	352,324	528,568	704,860	881,200	998,156	1,115,175	1,232,245	1,349,345
2.4 Depreciation		1,213,185	2,616,882	4,025,736	5,410,992	6,786,945	7,698,444	8,660,235	9,650,047	10,518,294
2.5 VAT 7%		261,307	566,769	872,392	1,178,047	1,483,692	1,704,289	1,913,939	2,123,545	2,333,082
3. Operating Income		1,494,048	3,598,167	5,735,991	7,907,451	10,083,582	11,765,793	13,214,459	14,610,219	16,097,584
4. Other Expenses										
4.1 Interest	0	0	0	0	0	0	0	0	0	0
5. Net Income before Tax	0	1,494,048	3,598,167	5,735,991	7,907,451	10,083,582	11,765,793	13,214,459	14,610,219	16,097,584
6. Accumulated Net Income (M B)	0.000	1,494,048	5,092,215	10,828,207	18,735,658	28,819,240	40,585,033	53,799,492	68,409,711	84,507,295
7. Tax (Remittance to the Treasury)	0	597,619	1,439,267	2,294,396	3,162,981	4,033,433	4,706,317	5,285,784	5,844,087	6,439,034
8. Net Income after Tax	0	896,429	2,158,900	3,441,595	4,744,471	6,050,149	7,059,476	7,928,675	8,766,131	9,658,550
9. Bonus Payment		0	176,218	312,721	436,367	558,192	683,978	797,215	921,351	1,057,816
10. Net Income after Tax and Bonus	0	896,429	1,982,683	3,128,874	4,308,103	5,491,957	6,375,498	7,131,460	7,844,780	8,600,735

16-3 Profit and Loss Statement of the Project without Financing Condition (2/4)

Term	10	11	12	13	14	15	16	17	18	19
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
(Unit: Thousand Baht)										
Income Statements (P/L)										
1. Operating Revenue	40,520,023	43,088,256	45,511,168	47,937,813	50,367,127	52,798,404	53,264,426	53,264,426	53,264,426	53,264,426
1.1 Installation Fee	1,092,502	754,012	753,273	752,459	751,564	750,580	0	0	0	0
1.2 Subscription Fee	3,534,901	3,802,940	4,005,411	4,207,673	4,409,706	4,611,487	4,712,311	4,712,311	4,712,311	4,712,311
1.3 Local Call Charge	18,562,541	19,829,418	20,862,442	21,894,098	22,924,310	23,952,986	24,466,903	24,466,903	24,466,903	24,466,903
1.4 Trunk Call Charge	12,734,031	13,718,354	14,529,926	15,341,080	16,151,706	16,961,692	17,366,537	17,366,537	17,366,537	17,366,537
1.5 Public Telephone Usages	1,655,492	1,847,662	2,044,717	2,247,291	2,454,614	2,666,264	2,773,162	2,773,162	2,773,162	2,773,162
1.6 Other Service	2,920,557	3,135,870	3,315,400	3,495,211	3,675,227	3,855,394	3,945,513	3,945,513	3,945,513	3,945,513
2. Operating Expenses	22,935,006	23,757,136	24,592,870	25,495,866	26,407,911	27,330,632	30,194,561	30,212,653	30,210,314	30,282,702
2.1 Administrative Expenses	7,168,133	7,759,119	8,387,075	9,055,558	9,768,433	10,529,969	13,337,901	13,337,901	13,337,901	13,337,901
2.2 Bad Debt Expenses	405,200	430,883	455,112	479,378	503,671	527,984	532,644	532,644	532,644	532,644
2.3 Repair and Maintenance Expenses	1,466,504	1,548,275	1,630,105	1,711,986	1,793,907	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872
2.4 Depreciation	11,352,629	11,320,877	11,276,979	11,259,844	11,207,436	11,117,134	11,144,977	11,163,069	11,160,729	11,233,118
2.5 VAT 7%	2,542,539	2,697,983	2,843,600	2,989,100	3,134,463	3,279,673	3,303,167	3,303,167	3,303,167	3,303,167
3. Operating Income	17,585,017	19,331,120	20,918,298	22,441,947	23,959,217	25,467,772	23,069,865	23,051,773	23,054,113	22,981,724
4. Other Expenses										
4.1 Interest	0	0	0	0	0	0	0	0	0	0
5. Net Income before Tax	17,585,017	19,331,120	20,918,298	22,441,947	23,959,217	25,467,772	23,069,865	23,051,773	23,054,113	22,981,724
6. Accumulated Net Income (M B)	102,092,312	121,423,432	142,341,730	164,783,677	188,742,894	214,210,665	237,280,531	260,332,304	283,386,417	306,368,141
7. Tax (Remittance to the Treasury)	7,034,007	7,732,448	8,367,319	8,976,779	9,583,687	10,187,109	9,227,946	9,220,709	9,221,645	9,192,690
8. Net Income after Tax	10,551,010	11,598,672	12,550,979	13,465,168	14,375,530	15,280,663	13,841,919	13,831,064	13,832,468	13,789,035
9. Bonus Payment	1,208,100	1,373,798	1,530,106	1,701,755	1,890,233	2,097,164	2,324,322	3,494,293	3,494,293	3,494,293
10. Net Income after Tax and Bonus	9,342,910	10,224,874	11,020,873	11,763,413	12,485,297	13,183,500	11,517,598	10,336,771	10,338,174	10,294,741

16-3 Profit and Loss Statement of the Project without Financing Condition (3/4)

Term	20	21	22	23	24	25	26	27	28	29
Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
(Unit: Thousand Baht)										
Income Statements (P/L)										
1. Operating Revenue	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426
1.1 Installation Fee	0	0	0	0	0	0	0	0	0	0
1.2 Subscription Fee	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311
1.3 Local Call Charge	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903
1.4 Trunk Call Charge	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537
1.5 Public Telephone Usages	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162
1.6 Other Service	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513
2. Operating Expenses	30,357,904	30,392,477	30,470,650	30,544,416	30,615,321	30,704,529	30,459,820	30,228,615	30,003,402	29,748,422
2.1 Administrative Expenses	13,337,901	13,337,901	13,337,901	13,337,901	13,337,901	13,337,901	13,337,901	13,337,901	13,337,901	13,337,901
2.2 Bad Debt Expenses	532,644	532,644	532,644	532,644	532,644	532,644	532,644	532,644	532,644	532,644
2.3 Repair and Maintenance Expenses	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872
2.4 Depreciation	11,308,320	11,342,893	11,421,066	11,494,832	11,565,736	11,654,945	11,410,236	11,179,030	10,953,818	10,698,838
2.5 VAT 7%	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167
3. Operating Income	22,906,522	22,871,949	22,793,776	22,720,010	22,649,106	22,559,897	22,804,606	23,035,812	23,261,024	23,516,004
4. Other Expenses										
4.1 Interest	0	0	0	0	0	0	0	0	0	0
5. Net Income before Tax	22,906,522	22,871,949	22,793,776	22,720,010	22,649,106	22,559,897	22,804,606	23,035,812	23,261,024	23,516,004
6. Accumulated Net Income (M/B)	329,274,663	352,146,612	374,940,388	397,660,398	420,309,504	442,869,401	465,674,007	488,709,819	511,970,843	535,486,847
7. Tax (Remittance to the Treasury)	9,162,609	9,148,780	9,117,510	9,088,094	9,059,642	9,023,959	9,121,842	9,214,325	9,304,410	9,406,402
8. Net Income after Tax	13,743,913	13,723,169	13,676,266	13,632,006	13,589,463	13,535,938	13,682,764	13,821,487	13,956,614	14,109,603
9. Bonus Payment	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293
10. Net Income after Tax and Bonus	10,249,620	10,228,876	10,181,972	10,137,713	10,095,170	10,041,645	10,188,470	10,327,194	10,462,321	10,615,309

16-3 Profit and Loss Statement of the Project without Financing Condition (4/4)

Term	30	31	32	33	34	35
Year	2022	2023	2024	2025	2026	2027
(Unit: Thousand Baht)						
Income Statements (P/L)						
1. Operating Revenue	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426
1.1 Installation Fee	0	0	0	0	0	0
1.2 Subscription Fee	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311
1.3 Local Call Charge	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903
1.4 Trunk Call Charge	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537
1.5 Public Telephone Usages	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162
1.6 Other Service	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513
2. Operating Expenses	29,490,628	29,626,244	29,718,282	29,811,012	29,912,735	29,987,286
2.1 Administrative Expenses	13,337,901	13,337,901	13,337,901	13,337,901	13,337,901	13,337,901
2.2 Bad Debt Expenses	532,644	532,644	532,644	532,644	532,644	532,644
2.3 Repair and Maintenance Expenses	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872
2.4 Depreciation	10,441,044	10,576,660	10,668,698	10,761,428	10,863,151	10,937,702
2.5 VAT 7%	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167
3. Operating Income	23,773,798	23,638,182	23,546,145	23,453,414	23,351,691	23,277,140
4. Other Expenses						
4.1 Interest	0	0	0	0	0	0
5. Net Income before Tax	23,773,798	23,638,182	23,546,145	23,453,414	23,351,691	23,277,140
6. Accumulated Net Income (M/B)	559,260,645	582,898,828	606,444,972	629,898,386	653,250,077	676,527,218
7. Tax (Remittance to the Treasury)	9,509,519	9,455,273	9,418,458	9,381,366	9,340,676	9,310,856
8. Net Income after Tax	14,264,279	14,182,909	14,127,687	14,072,049	14,011,015	13,966,284
9. Bonus Payment	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293
10. Net Income after Tax and Bonus	10,769,986	10,688,616	10,633,394	10,577,755	10,516,721	10,471,991

16-4 Cash Flow of the Project with Financing Assumption -Base Case- (1/6)

Term Year	0 1992	1 1993	2 1994	3 1995	4 1996	5 1997
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
1. Operating Revenue	0	5,562,221	10,392,431	15,231,056	20,075,582	24,925,168
1.1 Installation Fee		1,662,688	1,662,403	1,662,090	1,661,745	1,661,365
1.2 Subscription Fee		223,346	670,000	1,116,574	1,563,059	2,009,447
1.3 Local Call Charge		1,223,998	3,616,697	5,971,992	8,308,175	10,633,129
1.4 Trunk Call Charge		705,669	2,177,983	3,689,626	5,220,556	6,762,309
1.5 Deposit		1,488,975	1,488,719	1,488,438	1,488,130	1,487,790
1.6 Public Telephone Usages		78,985	240,236	407,482	580,161	758,091
1.7 Other Service		178,560	536,393	894,854	1,253,756	1,613,038
II. Cash Out-Flow	8,415,140	22,899,341	27,917,364	30,830,248	33,428,036	32,430,501
1. Capital Expenditure	7,995,140	17,576,704	19,217,251	19,014,787	18,730,633	15,229,576
1.1 Local Portion	3,231,709	7,623,763	8,869,849	8,591,949	8,376,258	6,361,306
1.2 Foreign Portion	4,763,431	9,952,941	10,347,402	10,422,839	10,354,375	8,868,270
2. Operating Expenditure		1,104,707	2,121,893	3,108,498	4,090,962	5,083,159
2.1 Staff Remuneration		422,923	750,530	1,047,282	1,339,661	1,641,548
2.2 Other Administrative Expenses		464,920	930,002	1,395,222	1,860,566	2,326,037
2.3 Repair & maintenance Expenses		176,131	352,324	528,568	704,860	881,200
2.4 Bad Debt Expense		40,732	89,037	137,426	185,875	234,374
3. Working Capital		2,036,623	4,451,856	6,871,309	9,293,726	11,718,689
3.1 Working Capital Increase		2,036,623	2,415,232	2,419,453	2,422,418	2,424,963
4. Taxation		261,307	566,769	1,294,789	2,069,942	3,105,467
4.1 Remittance to the Treasury		0	0	422,396	891,895	1,621,776
4.2 VAT 7% (6.54% on 1.1, 2.3, 4.7)		261,307	566,769	872,392	1,178,047	1,483,692
5. Interest	420,000	1,920,000	3,420,000	4,680,000	5,677,714	6,029,143
6. Bonus Payment		0	176,218	312,721	436,367	558,192
Net Cash Flow without Interest	-7,995,140	-15,417,119	-14,104,933	-10,919,192	-7,674,740	-1,476,189
Acc. Net Cash without Interest (M B)	-7,995	-23,412	-37,517	-48,436	-56,111	-57,587
FIRR	11.79%					
III. Net Cash Flow	-8,415,140	-17,337,119	-17,524,933	-15,599,192	-13,352,454	-7,505,332
IV. Accumulated Net Cash Flow (M B)	-8,415	-25,752	-43,277	-58,876	-72,229	-79,734
Financing Assumption						
1. Cash Balance (at Beglnig)		84,860	247,741	222,807	123,615	85,447
1.1 Cash from Operation	-8,415,140	-17,337,119	-17,524,933	-15,599,192	-13,352,454	-7,505,332
2. Own Fund	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
3. Long-term Debt						
3.1 Borrowing	3,500,000	12,500,000	12,500,000	11,000,000	10,600,000	7,000,000
3.2 Amortization	0	0	0	500,000	2,285,714	4,071,429
4. Cash Balance (at Ending)	84,860	247,741	222,807	123,615	85,447	508,686
5. Total Amount of Borrowings						
	73,100,000					
6. Total Own Fund						
	42,000,000	36.49%				

16-4 Cash Flow of the Project with Financing Assumption -Base Case- (2/6)

Term Year	6 1998	7 1999	8 2000	9 2001	10 2002	11 2003
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
1. Operating Revenue	27,964,871	31,342,175	34,724,329	38,109,726	41,498,383	43,763,490
1.1 Installation Fee	1,094,633	1,094,174	1,093,669	1,093,113	1,092,502	754,012
1.2 Subscription Fee	2,379,656	2,673,674	2,967,564	3,261,311	3,554,901	3,802,940
1.3 Local Call Charge	12,547,052	14,053,945	15,558,693	17,061,512	18,562,541	19,829,418
1.4 Trunk Call Charge	8,112,163	9,266,128	10,421,358	11,577,432	12,734,031	13,718,354
1.5 Deposit	980,268	979,857	979,405	978,907	978,360	675,235
1.6 Public Telephone Usages	933,324	1,106,387	1,285,029	1,467,992	1,655,492	1,847,662
1.7 Other Service	1,917,776	2,168,011	2,418,612	2,669,460	2,920,557	3,135,870
II. Cash Out-Flow	30,425,068	32,443,265	33,125,744	33,212,414	33,325,255	33,632,816
1. Capital Expenditure	12,169,594	12,767,898	12,067,772	10,885,848	9,838,513	9,405,281
1.1 Local Portion	4,508,973	4,914,493	4,494,917	3,752,660	3,350,258	3,403,800
1.2 Foreign Portion	7,660,621	7,853,405	7,572,854	7,133,188	6,488,255	6,001,482
2. Operating Expenditure	5,816,076	6,573,686	7,361,114	8,181,859	9,039,837	9,738,276
2.1 Staff Remuneration	1,913,317	2,211,243	2,538,758	2,899,440	3,297,115	3,672,254
2.2 Other Administrative Expenses	2,634,757	2,943,644	3,252,663	3,561,765	3,871,018	4,086,864
2.3 Repair & maintenance Expenses	998,156	1,115,175	1,232,245	1,349,346	1,466,504	1,548,275
2.4 Bad Debt Expense	269,846	303,623	337,449	371,308	405,200	430,883
3. Working Capital	13,492,302	15,181,159	16,872,462	18,565,409	20,260,012	21,544,128
3.1 Working Capital Increase	1,773,612	1,688,858	1,691,303	1,692,947	1,694,602	1,284,116
4. Taxation	4,029,807	4,922,466	5,889,918	7,024,230	8,264,775	9,496,488
4.1 Remittance to the Treasury	2,325,517	3,008,526	3,766,373	4,691,148	5,722,236	6,798,505
4.2 VAT 7% (6.54% on 1.1., 2., 3., 4., 7)	1,704,289	1,913,939	2,123,545	2,333,082	2,542,539	2,697,983
5. Interest	5,952,000	5,693,143	5,194,286	4,369,714	3,279,429	2,334,857
6. Bonus Payment	683,978	797,215	921,351	1,057,816	1,208,100	1,373,798
Net Cash Flow without Interest	3,491,803	4,592,053	6,792,871	9,267,026	11,452,556	12,465,531
Acc. Net Cash without Interest (M B)	-54,096	-49,503	-42,711	-33,444	-21,991	-9,525
FIRR						
III. Net Cash Flow	-2,460,197	-1,101,090	1,598,585	4,897,312	8,173,128	10,130,674
IV. Accumulated Net Cash Flow (M B)	-82,194	-83,295	-81,697	-76,800	-68,626	-58,496
Financing Assumption						
1. Cash Balance (at Beginig)	508,686	405,632	147,400	588,842	614,725	702,138
1.1 Cash from Operation	-2,460,197	-1,101,090	1,598,585	4,897,312	8,173,128	10,130,674
2. Own Fund	3,000,000	3,000,000	3,000,000	2,000,000	1,000,000	
3. Long-term Debt						
3.1 Borrowing	5,000,000	5,000,000	4,000,000	2,000,000		
3.2 Amortization	5,642,857	7,157,143	8,157,143	8,871,429	9,085,714	7,871,429
4. Cash Balance (at Ending)	405,632	147,400	588,842	614,725	702,138	2,961,384
5. Total Amount of Borrowings						
	73,100,000					
6. Total Own Fund						
	42,000,000					

16-4 Cash Flow of the Project with Financing Assumption -Base Case- (3/6)

Term Year	12 2004	13 2005	14 2006	15 2007	16 2008	17 2009
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
1. Operating Revenue	46,185,741	48,611,657	51,040,170	53,470,565	53,264,426	53,264,426
1.1 Installation Fee	753,273	752,459	751,564	750,580	0	0
1.2 Subscription Fee	4,005,411	4,207,673	4,409,706	4,611,487	4,712,311	4,712,311
1.3 Local Call Charge	20,862,442	21,894,098	22,924,310	23,952,986	24,466,903	24,466,903
1.4 Trunk Call Charge	14,529,926	15,341,080	16,151,706	16,961,692	17,366,537	17,366,537
1.5 Deposit	674,572	673,844	673,043	672,161	0	0
1.6 Public Telephone Usages	2,044,717	2,247,291	2,454,614	2,666,264	2,773,162	2,773,162
1.7 Other Service	3,315,400	3,495,211	3,675,227	3,855,394	3,945,513	3,945,513
II. Cash Out-Flow						
1. Capital Expenditure	9,965,792	9,823,944	9,096,938	8,557,610	8,411,202	8,407,455
1.1 Local Portion	3,809,476	3,690,660	3,130,773	1,845,127	826,604	832,930
1.2 Foreign Portion	6,156,317	6,133,283	5,966,165	6,681,337	7,480,907	7,492,161
2. Operating Expenditure	10,472,292	11,246,922	12,066,012	12,933,825	15,746,417	15,746,417
2.1 Staff Remuneration	4,084,211	4,536,559	5,033,193	5,578,372	8,386,304	8,386,304
2.2 Other Administrative Expenses	4,302,864	4,519,000	4,735,240	4,951,597	4,951,597	4,951,597
2.3 Repair & maintenance Expenses	1,630,105	1,711,986	1,793,907	1,875,872	1,875,872	1,875,872
2.4 Bad Debt Expense	455,112	479,378	503,671	527,984	532,644	532,644
3. Working Capital	22,755,584	23,968,906	25,183,564	26,399,202	26,632,213	26,632,213
3.1 Working Capital Increase	1,211,456	1,213,322	1,214,657	1,215,638	233,011	0
4. Taxation	10,582,805	11,568,164	12,478,150	13,336,496	12,476,256	12,510,162
4.1 Remittance to the Treasury	7,739,205	8,579,064	9,343,687	10,056,823	9,173,089	9,206,995
4.2 VAT 7% (6.54% on 1.1, 2., 3., 4., 7)	2,843,600	2,989,100	3,134,463	3,279,673	3,303,167	3,303,167
5. Interest	1,570,286	994,286	600,000	325,714	137,143	34,286
6. Bonus Payment	1,530,106	1,701,755	1,890,233	2,097,164	2,324,322	3,494,293
Net Cash Flow without Interest	12,423,290	13,057,550	14,294,180	15,329,832	14,073,218	13,106,099
Acc. Net Cash without Interest (M B)	2,898	15,955	30,250	45,579	59,653	72,759
FIRR						
III. Net Cash Flow	10,853,004	12,063,264	13,694,180	15,004,118	13,936,075	13,071,813
IV. Accumulated Net Cash Flow (M B)						
	-47,643	-35,579	-21,885	-6,881	7,055	20,127
Financing Assumption						
1. Cash Balance (at Beginig)	2,961,384	7,442,959	14,706,223	25,114,689	37,833,093	50,197,740
1.1 Cash from Operation	10,853,004	12,063,264	13,694,180	15,004,118	13,936,075	13,071,813
2. Own Fund						
3. Long-term Debt						
3.1 Borrowing						
3.2 Amortization	6,371,429	4,800,000	3,285,714	2,285,714	1,571,429	857,143
4. Cash Balance (at Ending)	7,442,959	14,706,223	25,114,689	37,833,093	50,197,740	62,412,410
5. Total Amount of Borrowings						
	73,100,000					
6. Total Own Fund						
	42,000,000					

16-4 Cash Flow of the Project with Financing Assumption -Base Case- (4/6)

Term Year	18 2010	19 2011	20 2012	21 2013	22 2014	23 2015
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
1. Operating Revenue	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426
1.1 Installation Fee	0	0	0	0	0	0
1.2 Subscription Fee	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311
1.3 Local Call Charge	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903
1.4 Trunk Call Charge	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537
1.5 Deposit	0	0	0	0	0	0
1.6 Public Telephone Usages	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162
1.7 Other Service	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513
II. Cash Out-Flow						
1. Capital Expenditure	40,350,966	40,342,330	42,680,256	46,872,123	48,577,147	48,187,730
1.1 Local Portion	837,505	842,461	3,639,825	7,653,955	8,962,576	8,690,172
1.2 Foreign Portion	7,500,302	7,509,120	7,302,854	7,496,056	7,938,455	7,865,676
2. Operating Expenditure	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417
2.1 Staff Remuneration	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304
2.2 Other Administrative Expenses	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597
2.3 Repair & maintenance Expenses	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872
2.4 Bad Debt Expense	532,644	532,644	532,644	532,644	532,644	532,644
3. Working Capital	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213
3.1 Working Capital Increase	0	0	0	0	0	0
4. Taxation	12,524,812	12,495,857	12,465,776	12,451,946	12,420,677	12,391,171
4.1 Remittance to the Treasury	9,221,645	9,192,690	9,162,609	9,148,780	9,117,510	9,088,004
4.2 VAT 7% (6.54% on 1.1.,2.,3.,4.,7)	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167
5. Interest	0	0	0	0	0	0
6. Bonus Payment	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293
Net Cash Flow without Interest	12,913,460	12,922,096	10,584,170	6,392,303	4,687,280	5,076,696
Acc. Net Cash without Interest (M B)	85,672	98,594	109,178	115,571	120,258	125,335
FIRR						
III. Net Cash Flow	12,913,460	12,922,096	10,584,170	6,392,303	4,687,280	5,076,696
IV. Accumulated Net Cash Flow (M B)						
	33,040	45,962	56,546	62,939	67,626	72,703
Financing Assumption						
1. Cash Balance (at Beginig)	62,412,410	75,040,156	87,962,252	98,546,422	104,938,725	109,626,005
1.1 Cash from Operation	12,913,460	12,922,096	10,584,170	6,392,303	4,687,280	5,076,696
2. Own Fund						
3. Long-term Debt						
3.1 Borrowing						
3.2 Amortization	285,714	0	0	0	0	0
4. Cash Balance (at Ending)	75,040,156	87,962,252	98,546,422	104,938,725	109,626,005	114,702,701
5. Total Amount of Borrowings						
	73,100,000					
6. Total Own Fund						
	42,000,000					

16-4 Cash Flow of the Project with Financing Assumption -Base Case- (5/6)

Term Year	24 2016	25 2017	26 2018	27 2019	28 2020	29 2021
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
1. Operating Revenue	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426
1.1 Installation Fee	0	0	0	0	0	0
1.2 Subscription Fee	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311
1.3 Local Call Charge	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903
1.4 Trunk Call Charge	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537
1.5 Deposit	0	0	0	0	0	0
1.6 Public Telephone Usages	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162
1.7 Other Service	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513
II. Cash Out-Flow						
1. Capital Expenditure	47,895,633	44,313,092	41,113,009	41,786,627	41,341,467	40,486,336
1.1 Local Portion	16,292,113	12,745,255	9,447,290	10,028,425	9,493,180	8,536,057
1.2 Foreign Portion	8,480,101	6,279,144	4,267,991	4,699,871	4,290,559	3,562,436
1.3 Other Foreign Portion	7,812,012	6,466,111	5,179,299	5,328,553	5,202,621	4,973,621
2. Operating Expenditure	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417
2.1 Staff Remuneration	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304
2.2 Other Administrative Expenses	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597
2.3 Repair & maintenance Expenses	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872
2.4 Bad Debt Expense	532,644	532,644	532,644	532,644	532,644	532,644
3. Working Capital	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213
3.1 Working Capital Increase	0	0	0	0	0	0
4. Taxation	12,362,809	12,327,126	12,425,009	12,517,491	12,607,576	12,709,569
4.1 Remittance to the Treasury	9,059,642	9,023,959	9,121,842	9,214,325	9,304,410	9,406,402
4.2 VAT 7% (6.54% on 1.1.,2.,3.,4.,7)	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167
5. Interest	0	0	0	0	0	0
6. Bonus Payment	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293
Net Cash Flow without Interest	5,368,794	8,951,335	12,151,417	11,477,800	11,922,959	12,778,090
Acc. Net Cash without Interest (M B)	130,703	139,655	151,806	163,284	175,207	187,985
FIRR						
III. Net Cash Flow	5,368,794	8,951,335	12,151,417	11,477,800	11,922,959	12,778,090
IV. Accumulated Net Cash Flow (M B)						
	78,071	87,023	99,174	110,652	122,575	135,353
Financing Assumption						
1. Cash Balance (at Begining)	114,702,701	120,071,495	129,022,829	141,174,246	152,652,046	164,575,005
1.1 Cash from Operation	5,368,794	8,951,335	12,151,417	11,477,800	11,922,959	12,778,090
2. Own Fund						
3. Long-term Debt						
3.1 Borrowing						
3.2 Amortization	0	0	0	0	0	0
4. Cash Balance (at Ending)	120,071,495	129,022,829	141,174,246	152,652,046	164,575,005	177,353,095
5. Total Amount of Borrowings						
	73,100,000					
6. Total Own Fund						
	42,000,000					

16-4 Cash Flow of the Project with Financing Assumption -Base Case- (6/6)

Term Year	30 2022	31 2023	32 2024	33 2025	34 2026	35 2027
(Unit: Thousand Baht)						
Cash Flow Table						
I. Cash In-Flow						
1. Operating Revenue	53,264,426	53,264,426	53,264,426	53,264,426	53,264,426	37,556,723
1.1 Installation Fee	0	0	0	0	0	0
1.2 Subscription Fee	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311	4,712,311
1.3 Local Call Charge	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903	24,466,903
1.4 Trunk Call Charge	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537	17,366,537
1.5 Deposit	0	0	0	0	0	-15,707,703
1.6 Public Telephone Usages	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162	2,773,162
1.7 Other Service	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513	3,945,513
II. Cash Out-Flow						
1. Capital Expenditure	9,748,039	11,622,182	12,159,905	12,167,869	11,432,631	-73,386,049
1.1 Local Portion	3,190,593	3,287,422	3,702,905	3,578,527	3,013,323	1,373,520
1.2 Foreign Portion	6,531,964	8,249,923	8,389,612	8,386,731	8,211,341	4,044,087
2. Operating Expenditure	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417	15,746,417
2.1 Staff Remuneration	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304	8,386,304
2.2 Other Administrative Expenses	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597	4,951,597
2.3 Repair & maintenance Expenses	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872	1,875,872
2.4 Bad Debt Expense	532,644	532,644	532,644	532,644	532,644	532,644
3. Working Capital	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213	26,632,213
3.1 Working Capital Increase	0	0	0	0	0	-26,632,213
4. Taxation	12,812,686	12,758,440	12,721,625	12,684,533	12,643,843	12,614,023
4.1 Remittance to the Treasury	9,509,519	9,455,273	9,418,458	9,381,366	9,340,676	9,310,856
4.2 VAT 7% (6.54% on 1.1,2,3,4,7)	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167	3,303,167
5. Interest	0	0	0	0	0	0
6. Bonus Payment	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293	3,494,293
Net Cash Flow without Interest	11,462,991	9,643,094	9,142,186	9,171,314	9,947,242	105,720,252
Acc. Net Cash without Interest (M B)	199,448	209,091	218,233	227,405	237,352	343,072
FIRR						
III. Net Cash Flow	11,462,991	9,643,094	9,142,186	9,171,314	9,947,242	105,720,252
IV. Accumulated Net Cash Flow (M B)						
	146,816	156,459	165,601	174,773	184,720	290,440
Financing Assumption						
1. Cash Balance (at Begining)	177,353,095	188,816,086	198,459,180	207,601,366	216,772,679	226,719,921
1.1 Cash from Operation	11,462,991	9,643,094	9,142,186	9,171,314	9,947,242	105,720,252
2. Own Fund						
3. Long-term Debt						
3.1 Borrowing						
3.2 Amortization	0	0	0	0	0	0
4. Cash Balance (at Ending)	188,816,086	198,459,180	207,601,366	216,772,679	226,719,921	332,440,173
5. Total Amount of Borrowings						
	73,100,000					
6. Total Own Fund						
	42,000,000					