

表AN4-1-3 (8/13) 2000年の県別加入者需要数

5401 KAB	COVALIMA	31	3	47	0	81	44	4	65	0	113
5402 KAB	AINARO	48	5	60	0	113	65	7	84	0	156
5403 KAB	SAME (MANUFAHI)	31	3	47	0	81	42	4	65	0	111
5404 KAB	VIQUE QUE	62	7	67	0	136	85	10	95	1	191
5405 KAB	LAUTEM	45	4	56	0	105	62	7	78	0	147
5406 KAB	BAUCAU	76	8	78	0	162	103	12	111	1	227
5407 KAB	MANA TUTU	28	2	43	0	73	37	4	58	0	99
5408 KAB	DILI	60	6	74	0	140	81	8	106	1	196
5409 KAB	AILEU	18	1	37	0	56	25	2	50	0	77
5410 KAB	LIKUICA	29	2	48	0	79	39	3	65	0	107
5411 KAB	ERAMERA	54	5	67	0	126	73	8	95	1	177
5412 KAB	BOBONARO	66	7	71	0	144	90	10	100	1	201
5413 KAB	AMBENO	39	3	55	0	97	53	5	78	0	136
TOTAL DEMAND (NUSATENGARA)		7588	1157	13528	4873	27146	9816	1590	20883	19480	51289

## 表AN4-1-3 (9/13)

## 2000年の県別加入者需要数

FILE:DEM-EST6 (IR 41)

CODE CLASS NAME (KAB.KOD.)	PDA (1984)	PDB (1984)	ID (1984)	RD (1984)	SUMMED (1984)	PDA (2000)	PDB (2000)	ID (2000)	RD (2000)	SUMMED (2000)
6100 PROP KALIMANTAN BARAT	2915	630	4050	2892	10487	4003	932	6344	11313	22592
6101 KAB SAMBAS	715	160	1009	977	2861	965	231	1587	3775	6558
6102 KAB PONTIANAK	778	184	1010	976	2948	1083	277	1636	4017	7013
6103 KAB SANGGAU	460	97	531	359	1547	626	142	973	1340	3081
6104 KAB KETAPANG	374	75	528	242	1219	526	115	828	943	2412
6105 KAB SINTANG	393	81	543	257	1274	539	119	834	958	2450
6106 KAB KAPUAS HULU	195	33	329	81	638	264	48	486	280	1078
6171 KODYA PONTIANAK (A)										
6200 PROP KALIMANTAN TENGAH	1367	226	2724	962	5279	2142	397	4272	3440	10251
6201 KAB KOTAWARINGIN BARAT	150	23	301	80	554	244	43	481	302	1070
6202 KAB KOTAWARINGIN TIMUR	288	55	467	229	1039	415	87	699	718	1919
6203 KAB KOERINGAN	108	15	243	47	413	183	30	392	184	789
6204 KAB KAPUAS	386	78	608	419	1491	603	136	988	1554	3281
6205 KAB BARIJO SELATAN	101	13	250	50	414	168	25	399	192	784
6206 KAB BARIJO TIMUR	69	8	206	31	314	115	15	327	118	575
6207 KAB BARIJO UTARA	94	12	238	45	389	162	24	392	184	762
6208 KAB KAHAYAN HULU/G.MAS	87	11	214	34	346	138	20	327	118	603
6209 KAB MURUNG RAYA	84	11	197	27	319	114	17	267	70	468
6271 KODYA PALANGKA RAYA (A)										
6300 KELIMANTAN SELATAN	2060	343	3980	1730	8113	2842	514	6131	6533	16020
6301 KAB TANAH LAUT	139	18	340	90	587	228	33	600	478	1339
6302 KAB KOTA BARU	372	70	617	380	1439	496	100	908	1211	2715
6303 KAB BANJAR	234	37	424	133	828	303	51	663	600	1617
6304 KAB BARITO KUALA	137	18	306	65	526	184	27	474	276	961
6305 KAB TAPIN	328	74	383	125	910	441	108	551	393	1493
6306 KAB HULU SEI SELATAN	179	24	427	153	783	215	31	589	458	1293
6307 KAB JULU SEI TENGAH	202	28	489	210	929	257	37	709	599	1702
6308 KAB JULU SEIUTARA	149	20	327	72	568	166	23	446	238	873
6309 KAB TABALONG	320	54	667	502	1543	552	104	1191	2180	4027
6371 KODYA BANJAR MASIN (A)										

表AN4-1-3 (10/13) 2000年の県別加入者需要数

6400 PROP	KALIMANTAN TIMUR	1204	263	2257	3499	7223	2097	527	3769	12435	18828
6401 KAB	PASIR	135	20	353	186	694	240	42	574	669	1525
6402 KAB	KUTAI	657	164	1056	2528	4405	1124	321	1792	8903	12140
6403 KAB	BERAU	83	11	236	64	394	148	24	371	225	768
6404 KAB	BULONGAN	329	68	612	721	1730	585	140	1032	2638	4395
6471 KODYA	BALIK PAPAN (A)										
6472 KODYA	SAMARINDA (B)										
GRAND TOTAL (KALIMANTAN)		7546	1462	13011	9083	31102	11084	2370	20516	33721	67691

表AN4-1-3 (11/13) 2000年の県別加入者需要数

FILE:DEM-EST7 (IR 41)

CODE CLASS NAME (KAB.KOD.)	PDA (1984)	PDB (1984)	ID (1984)	RD (1984)	SUMMED (1984)	PDA (2000)	PDB (2000)	ID (2000)	RD (2000)	SUMMED (2000)
7100 PROP SULAWESI UTARA	1865	359	3275	3066	8565	2540	525	5191	12535	20791
7101 KAB GORONTALO	587	123	903	830	2443	799	179	1433	3326	5737
7102 KAB BALANG MANGONDOW	354	64	615	361	1394	510	100	1005	1558	3173
7103 KAB MINAHASA	699	139	1254	1647	3739	956	204	2045	6935	10140
7104 KAB SANGIHE TALAUT	225	33	503	228	989	275	42	708	716	1741
7171 KODYA GORONTALO (A)										
7172 KODYA MANADO (B)										
7200 PROP SULAWESI TENGAH	1747	364	2152	774	5037	2761	640	3556	2881	9838
7201 KAB LUWUK/BANGGAI	353	66	475	130	1024	559	116	776	474	1925
7202 KAB POSO	391	79	470	127	1067	590	131	733	420	1874
7203 KAB DONGGALA	779	183	852	448	2262	1249	328	1465	1731	4773
7204 KAB BUAL TOLI TOLI	224	36	355	69	684	363	65	582	256	1266
7300 PROP SULAWESI SELATAN	5108	827	10209	4595	20739	6340	1087	15089	17636	40152
7301 KAB SELAYAR	96	11	247	38	392	113	14	339	120	586
7302 KAB BULUKUMBA	265	39	575	271	1150	338	53	879	1098	2368
7303 KAB BANTAEANG	98	11	298	60	467	129	15	450	238	832
7304 KAB JENEPONTO	188	24	467	168	847	212	28	638	537	1415
7305 KAB TAKALAR	140	17	384	109	650	170	21	553	387	1131
7306 KAB GOWA	315	50	634	333	1332	375	62	918	1206	2561
7307 KAB SINJAI	153	19	384	109	665	205	28	596	459	1288
7308 KAB BONE	579	111	972	827	2489	686	137	1423	3082	5328
7309 KAB MAROS	174	23	421	134	752	218	30	524	510	1382
7310 KAB PANGKAJENE KEP	190	26	448	155	819	238	34	666	591	1528
7311 KAB BARRU	129	16	319	142	534	142	18	419	201	780
7312 KAB SOPPENG	207	29	466	169	871	246	36	666	591	1539
7313 KAB WAJO	332	54	643	342	1371	370	61	879	1098	2408
7314 KAB SINDERENG RAPPANG	210	31	439	146	828	271	42	666	591	1570
7315 KAB PINRANG	254	39	517	213	1023	312	50	761	797	1920
7316 KAB ENREKANG	129	16	318	70	533	149	19	435	219	822
7317 KAB LUWU	642	144	829	594	2209	865	209	1351	2762	5187
7318 KAB TANA TORAJA	327	54	601	297	1279	382	66	853	1026	2327
7319 KAB POLEWALI MAMASA	417	78	564	372	1531	549	110	1045	1598	3302
7320 KAB MAJENE	130	16	316	70	532	192	27	524	341	1084

表 AN4-1-3 (12/13) 2000 年の県別加入者需要数

7321 KAB	MAMUJU	133	19	267	46	465	178	27	404	184	793
7371 KODYA	UJUNG PANDANG (A)										
7372	PARE-PARE (B)										
7400 PROP	SULAWESI TENGGARA	1163	205	1899	713	3980	1734	336	3027	2661	7758
7401 KAB	BUTON	352	62	583	264	1261	468	88	855	828	2239
7402 KAB	MUNA	205	31	389	107	732	297	49	600	380	1326
7403 KAB	KENDARI	405	80	576	257	1318	620	135	953	1045	2753
7404 KAB	KOLAKA	201	32	351	85	669	349	64	619	408	1440
GRAND TOTAL (SULAWESI)		9883	1755	17535	9148	38321	13375	2588	26863	35713	78539

表AN4-1-3 (13/13) 2000年の県別加入者需要数

FILE:DEM-EST8 (IR 41)

CODE CLASS NAME (KAB.KOD.)	PDA (1984)	PDB (1984)	ID (1984)	RD (1984)	SUMMED (1984)	PDA (2000)	PDB (2000)	ID (2000)	RD (2000)	SUMMED (2000)
8100 PROP MALUKU	1650	344	2466	1721	6181	2342	530	3867	6393	13132
8101 KAB MALUKU TENGGARA	343	66	529	261	1199	447	92	761	805	2105
8102 KAB MALUKU TENGAH	610	137	843	730	2320	858	208	1326	2678	5070
8103 KAB HALMAHERA TENGAH	134	19	286	62	501	210	34	458	250	952
8104 KAB MALUKU UTARA	563	122	808	668	2161	827	196	1322	2660	5005
8171 KODYA AMBON (A)										
8200 PROP IRIAN JAYA	1731	298	4292	4583	10904	2564	484	6795	18817	28660
8201 KAB MERAUKE	322	69	567	632	1590	411	94	788	1817	3110
8202 KAB PEG-JAYA WIJAYA	328	58	830	1584	2800	538	107	1474	7732	9851
8203 KAB JAYAPURA	178	25	562	630	1395	292	47	976	3009	4324
8204 KAB PANIAI	233	39	590	698	1560	317	57	871	2303	3548
8205 KAB FAK FAK	117	18	295	122	552	178	31	453	463	1125
8206 KAB SORONG	229	42	497	463	1231	344	70	783	1791	2988
8207 KAB MANOKWARI	149	24	361	208	742	235	43	580	860	1718
8208 KAB YAPEN WAROPEN	93	13	277	103	486	132	20	405	347	904
8209 KAB TELUK CENDERAWASIH	82	10	313	143	548	117	15	465	495	1092
GRAND TOTAL (MLK,IRIAN)	3381	642	6758	6304	17085	4906	1014	10662	25210	41792



- ANNEX 4-2-1 参考20ヶ国の一覧表
- ANNEX 4-2-2 参考20ヶ国のデータ
- ANNEX 4-2-3 全国需要の感度分析結果

上記資料はインドネシア全国の電話需要予測に際し、使用した基礎データであり、略称は次のとおりである。

M/L ADD	当該年度の新規加入者数
NA + W	新規加入者数と当該年度の積滞数の和
POP	人口
REAL GDP	1975年価格での実質国内総生産額 (US \$)
REAL SUB FEE	1975年価格での1加入者当り平均実質電話架設料金 (US \$)
SPL	供給量
SF	実質電話架設料金
SPL-I	2000年まで毎年10%ずつ供給量を増加する場合
SPL-II	第4次計画中は毎年10%、第5次計画中は毎年12.5%、それ以降は2000年まで毎年15%ずつ供給量を増加する場合
SPL-III	第4次計画中は毎年10%、第5次計画中は毎年15%、それ以降は2000年まで毎年20%ずつ供給量を増加する場合
SF (-20%)	電話架設料金を20%下げた場合
SF (+20%)	電話架設料金を20%上げた場合





表AN4-2-1 参考20ヶ国の一覧表

NAME OF COUNTRY	COUNTRY NO.
GERMANY	1
BELGIUM	2
AUSTRALIA	3
BOTSWANA	4
CHILE	5
DENMARK	6
U. S. A	7
GREECE	8
INDONESIA	9
ITALY	10
JAPAN	11
MALAYSIA	12
MALTA	13
PARAGUAY	14
NETHERLANDS	15
PHILIPPINE	16
UNITED KINGDOM	17
SINGAPORE	18
THAILAND	19
URUGUAY	20

表AN4-2-2 (1/4)

参考 20ヶ国のデータ

FILE:INTER-1 (IR 41)

(SOURCE: TELECOMMUNICATION STATISTICS OF ITU)

CONT NO.	YEAR	MAIN LINE (10 <sup>6</sup> )	M/L ADD (10 <sup>6</sup> )	NA+W (10 <sup>6</sup> )	POP (10 <sup>6</sup> )	REAL GDP (10 <sup>6</sup> )	REAL SUB FEE
1	73	11.482	0.703	1.625	61.98	385311	122.08
1	74	12.167	0.685	1.321	62.05	434356	153.14
1	75	12.834	0.667	1.405	61.83	393905	206.48
1	76	14.212	1.378	2.204	61.53	453071	141.63
1	77	15.748	1.536	2.251	61.4	524161	160.52
1	78	17.305	1.557	2.455	61.32	632988	178.59
1	79	18.917	1.612	2.437	61.44	695823	172.49
1	80	20.535	1.618	2.309	61.5	621053	109.43
1	81	21.769	1.234	1.9765	61.7	521954	102.69
1	82	22.713	0.944	1.758841	61.6	490469	58.86
2	73	3.147	0.259	0.6344	13.38	72261	101.45
2	74	3.361	0.214	0.675	13.599	79132	168.01
2	75	3.539	0.178	0.5768	13.771	72987	159.39
2	76	3.7	0.161	0.4064	13.916	69584	187.3
2	77	3.907	0.207	0.4647	14.074	64077	149.07
2	78	4.166	0.259	0.5196	14.249	66478	128.65
2	79	4.449	0.283	0.5852	14.422	66639	106.11
2	80	4.743	0.294	0.6463	14.616	70125	101.65
2	81	5.213	0.47	0.616521	15.0495	85850	147.62
2	82	5.48	0.267	0.548841	15.2761	62855	260.04
3	73	1.652	0.1	0.2	9.756	51001	120.56
3	74	1.766	0.114	0.232	9.788	53976	102.07
3	75	1.871	0.105	0.159	9.813	52972	157.32
3	76	1.941	0.07	0.214	9.823	55227	272.4
3	77	2.05	0.109	0.203	9.837	65893	259.82
3	78	2.178	0.128	0.241	9.842	77777	282.38
3	79	2.317	0.139	0.281	9.855	81557	265.95
3	80	2.463	0.146	0.269	9.863	68269	225.56
3	81	2.609	0.146	0.2745	9.868	57476	172.98
3	82	2.745273	0.136273	0.244325	9.867953	47294	139.65
4	73	0.0039	0.0004	0.00068	0.653	225	164
4	74	0.0043	0.0004	0.000803	0.672	391	188.17
4	75	0.0047	0.0004	0.000968	0.696	354	121.79
4	76	0.005	0.0003	0.001449	0.719	366	199.95
4	77	0.0055	0.0005	0.001321	0.739	321	67.91
4	78	0.0059	0.0004	0.001481	0.767	358	72.76
4	79	0.0064	0.0005	0.001812	0.797	339	126.86
4	80	0.0068	0.0004	0.002841	0.846	290	193.36
4	81	0.0072	0.0004	0.00387	0.925	275	226.22
4	82	0.008564	0.001364	0.004898	0.943	251	72.43
5	73	0.282	0.006	0.165	9.899	114815	3348.77
5	74	0.289	0.007	0.164	10.076	24972	1133.66
5	75	0.297	0.008	0.143	10.253	4688	350.95
5	76	0.308	0.011	0.137	10.555	3304	129.53
5	77	0.325	0.017	0.148	10.756	1915	59.73
5	78	0.345	0.02	0.138	10.801	1573	65.96
5	79	0.351	0.006	0.139	11.104	1543	128.33
5	80	0.363	0.012	0.15	11.1865	1404	87.14
5	81	0.3836	0.0206	0.1315	11.269	966	31.22
5	82	0.404196	0.020596	0.112932	11.27544	324	9.58

NOTE: GDP. SUB FEE: US\$ IN 1975 PRICE

表AN4-2-2 (2/4)

参考20ヶ国のデータ

FILE: INTER-2 (IR 41)

(SOURCE: TELECOMMUNICATION STATISTICS OF ITU)

CONTI NO.1	YEAR	MAIN LINE (10 <sup>6</sup> )	M/L ADD (10 <sup>6</sup> )	NA+W (10 <sup>6</sup> )	POP (10 <sup>6</sup> )	REAL GDP (10 <sup>6</sup> )	REAL SUB FEE
6	73	1.501	0.094	0.001027	5.034	302	3.16
6	74	1.6	0.099	0.001234	5.053	331	3.09
6	75	1.707	0.107	0.001593	5.06	308	2.6
6	76	1.835	0.128	0.002652	5.075	351	2.52
6	77	1.954	0.119	0.001591	5.092	348	2.45
6	78	2.055	0.101	0.00085	5.112	395	2.99
6	79	2.155	0.1	0.000617	5.122	374	2.96
6	80	2.226	0.071	0.000366	5.122	321	3.71
6	81	2.289	0.063	0.000114	5.119	259	2.78
6	82	2.351	0.062	0.000012	5.116	278	2.32
7	73	77.58	0.557	0.058	212.932	1428692	1882.27
7	74	78.744	1.164	0.046	214.931	1389301	875.99
7	75	80.515	1.771	0.038	217.095	1361600	583.29
7	76	82.802	2.287	0.036	219.179	1462382	489.33
7	77	85.426	2.624	0.038	221.477	1537300	463
7	78	88.431	3.005	0.036	223.88	1599422	434.92
7	79	91.265	2.834	0.072	226.444	1622461	484.95
7	80	94.282	3.017	0.065	228.83	1583932	479.54
7	81	94.429	0.147	0.057	230.508	1723254	9089.08
7	82	94.90585	0.47685	0.049	231.99	1679810	2615.23
8	73	1.413	0.125	0.433	8.945	20568	65.71
8	74	1.573	0.16	0.5	8.99	19173	31.89
8	75	1.687	0.114	0.467	9.08	16477	32.89
8	76	1.806	0.119	0.679	9.15	17622	30.28
8	77	1.905	0.099	0.885	9.25	18952	30.82
8	78	2.025	0.12	0.932	9.37	20002	29.84
8	79	2.156	0.131	0.988	9.48	19357	36.78
8	80	2.27	0.114	1.036	9.68	15686	42.09
8	81	2.40116	0.13116	1.13648	9.78	12147	34.16
8	82	2.53441	0.13325	1.122765	9.82	10043	23.23
9	73	0.1834	0.012	0.0752	125.549	27258	440.96
9	74	0.1976	0.0142	0.07856	128.636	30717	311.1
9	75	0.2075	0.0099	0.0747	131.799	30464	1474.02
9	76	0.2194	0.0119	0.08566	135.04	31084	752.71
9	77	0.241	0.0216	0.13153	138.361	34417	1020.7
9	78	0.2751	0.0341	0.11946	141.755	24425	439.5
9	79	0.3171	0.042	0.13144	143.457	28234	290.66
9	80	0.3758	0.0587	0.14322	147.383	26021	200.99
9	81	0.42706	0.05126	0.3338	150.421	37436	188.74
9	82	0.475459	0.048399	0.5244	153	23774	150.83
10	73	8.441	0.695	1.125	55.199	173471	171.57
10	74	9.09	0.649	1.433	55.665	165476	133.25
10	75	9.66	0.57	0.703	56.034	171730	177.02
10	76	10.166	0.506	1.072	56.343	143222	166.87
10	77	10.778	0.612	1.222	56.621	145818	151.44
10	78	11.456	0.678	1.54	56.849	159915	147.89
10	79	12.172	0.716	2.047	57.02	174650	138.3
10	80	13.017	0.845	1.832	57.162	154976	119.41
10	81	13.86	0.843	1.664	56.266	118992	97.44
10	82	14.69778	0.83778	1.62175	56.76438	105369	81.21

NOTE: GDP, SUB FEE: US\$ IN 1975 PRICE

表AN4-2-2 (3/4) 参考20ヶ国のデータ

FILE:INTER-3 (IR 41)

(SOURCE: TELECOMMUNICATION STATISTICS OF ITU)

CONTI NO.:	YEAR:	MAIN LINE (10 <sup>6</sup> )	M/L ADD (10 <sup>6</sup> )	NA+W (10 <sup>6</sup> )	POP (10 <sup>6</sup> )	REAL GDP (10 <sup>6</sup> )	REAL SUB FEE
11	74	26.274	3.581	4.446	109.789	535547	223.27
11	75	29.502	3.228	3.311	111.216	491423	195.96
11	76	32.377	2.875	2.788	112.464	480711	179.22
11	77	34.444	2.067	1.971	113.566	502832	196.25
11	78	35.837	1.393	1.422	114.624	688645	368.16
11	79	37.214	1.377	1.427	115.622	771752	392.42
11	80	38.611	1.397	1.449	116.541	660803	312.09
11	81	39.934	1.323	1.321	117.415	836006	347.26
11	82	41.19	1.256	1.28	117.009	802394	332.72
11	83	42.429	1.239	1.342	117.777	719907	284.43
12	73	0.136	0.006	0.0567	11.443	9309	383.25
12	74	0.149	0.013	0.0775	11.795	10342	114.85
12	75	0.169	0.02	0.1003	12.187	8630	86.95
12	76	0.194	0.025	0.1263	12.579	10772	66.13
12	77	0.228	0.034	0.1484	12.972	12728	45.14
12	78	0.271	0.043	0.1712	13.332	14616	48.56
12	79	0.325	0.054	0.2187	17.706	17361	87.58
12	80	0.396	0.071	0.277	13.436	18651	37.69
12	81	0.48867	0.09267	0.32684	13.436	18202	15.86
12	82	0.58539	0.09672	0.39049	13.704	32502	160.06
13	73	0.0264	0.0002	0.0169	0.321	323	288.36
13	74	0.0269	0.0005	0.0168	0.318	347	105.19
13	75	0.0277	0.0008	0.0067	0.31	347	51.55
13	76	0.0285	0.0008	0.0249	0.301	371	43.06
13	77	0.0338	0.0053	0.0259	0.305	405	15.36
13	78	0.0426	0.0088	0.0294	0.309	469	15.2
13	79	0.0465	0.0039	0.0309	0.312	564	48.51
13	80	0.0511	0.0046	0.0313	0.312	579	22.05
13	81	0.0605	0.0094	0.0415	0.3187	94	4.01
13	82	0.0656	0.0051	0.04	0.32272	103	7.83
14	73	0.0238	0.004	0.0001	2.516	1261	160.85
14	74	0.0274	0.0036	0.0001	2.608	1365	475.48
14	75	0.03	0.0026	0.0001	2.686	1449	404.76
4	76	0.032	0.002	0.0001	2.765	1558	571.85
14	77	0.0353	0.0033	0.0001	2.846	1761	450.23
4	78	0.0401	0.0048	0.0001	2.971	1923	456.46
14	79	0.0458	0.0057	0.0001	3.108	1974	395
14	80	0.0495	0.0037	0.0001	3.218	2184	799.25
14	81	0.05474	0.00524	0.0001	3.3144	2403	557.25
14	82	0.05998	0.00524	0.0001	3.4108	2572	552.03
15	73	2.8136	0.276	0.31	13.49	63801	270.01
15	74	3.0636	0.25	0.3778	13.598	75097	354.33
15	75	3.3355	0.2719	0.4264	13.734	70212	304.89
15	76	3.6121	0.2766	0.4686	13.815	78870	324.97
15	77	3.9328	0.3207	0.5192	13.898	92172	328.21
15	78	4.2799	0.3471	0.4786	13.986	110428	374.83
5	79	4.6048	0.3249	0.4222	14.091	115815	408.6
15	80	4.8921	0.2873	0.3637	14.209	103201	430.88
15	81	5.1033	0.2112	0.3063	14.286	87109	452.93
15	82	5.291	0.1877	0.3144	14.338	82373	423.12

NOTE: GDP, SUB FEE: US\$ IN 1975 PRICE

FILE:INTER-4 (IR 41)

(SOURCE: TELECOMMUNICATION STATISTICS OF ITU)

CONT NO.	YEAR	MAIN LINE (10 <sup>6</sup> )	M/L ADD (10 <sup>6</sup> )	NA+W (10 <sup>6</sup> )	POP (10 <sup>6</sup> )	REAL GDP (10 <sup>6</sup> )	REAL SUB FEE
16	73	0.239	0.027	0.1096	40.002	13904	1.23
16	74	0.265	0.026	0.622	41.116	13505	2.09
16	75	0.284	0.019	0.716	42.216	13670	5.65
16	76	0.304	0.02	0.819	43.4	15000	5.62
16	77	0.364	0.06	0.1092	44.54	15980	1.3
16	78	0.371	0.007	0.1363	45.771	16952	15.95
6	79	0.389	0.018	0.1832	47.005	17602	5.9
16	80	0.42	0.031	0.2041	48.054	17809	4.43
16	81	0.44284	0.02284	0.1982	49.1066	17197	146.53
16	82	0.48074	0.0379	0.194319	50.28847	28737	170.12
17	74	12.007	0.838	1.466	55.915	226798	151.19
17	75	12.807	0.8	3.443	55.917	236981	170.18
17	76	13.341	0.534	1.213	55.897	189595	186.91
17	77	14.074	0.733	1.463	55.877	168026	153.8
7	78	15.184	1.11	1.987	55.844	189925	111.32
17	79	16.479	1.295	2.391	55.835	218069	109.1
17	80	17.717	1.238	2.163	55.883	224243	102.92
17	81	18.543	0.826	1.68	55.938	324624	249.4
17	82	19.08854	0.54554	1.589	55.992	261299	349.56
17	83	19.54938	0.46084	1.58	56.252	76801	129.66
18	73	0.1567	0.0163	0.0479	2.193	4934	93.01
18	74	0.1761	0.0194	0.0626	2.2298	5016	63.88
18	75	0.2016	0.0255	0.0786	2.2626	5525	62.36
18	76	0.2496	0.048	0.0759	2.2933	5577	39.34
18	77	0.3226	0.073	0.0764	2.3253	5952	36.25
8	78	0.3969	0.0743	0.0884	2.3536	6675	42.77
8	79	0.4648	0.0679	0.0903	2.3835	7772	49.88
18	80	0.5234	0.0586	0.0934	2.4139	8372	52.5
18	81	0.57548	0.05208	0.09013	2.4433	9478	62.76
18	82	0.630357	0.054877	0.091514	2.48782	10039	60.18
19	73	0.255	0.03	0.002	39.95	13764	33.49
19	74	0.271	0.016	0.002	41.334	14035	66.79
19	75	0.312	0.041	0.002	42.391	14509	70
19	76	0.334	0.022	0.032	43.214	15899	89.51
19	77	0.367	0.033	0.092	44.273	17217	71.68
19	78	0.409	0.042	0.152	45.222	19128	66.67
19	79	0.451	0.042	0.333	46.114	20511	70.38
19	80	0.497	0.046	0.349	46.995	21043	46.75
19	81	0.52911	0.03211	0.43055	47.875	20934	53.77
19	82	0.56122	0.03211	0.48836	48.8469	22183	225.16
20	73	0.167	0.007	0.213	2.74	22143	545.19
20	74	0.177	0.01	0.227	2.76	6927	160.81
20	75	0.187	0.01	0.241	2.783	2604	67.77
20	76	0.193	0.006	0.255	2.803	1804	68.76
20	77	0.202	0.009	0.28	2.803	1333	27
0	78	0.204	0.002	0.284	2.803	1068	131.76
20	79	0.212	0.008	0.302	2.831	976	22.86
20	80	0.22	0.008	0.346	2.899	820	18.66
20	81	0.22645	0.00645	0.37606	2.92574	2782	103.8
20	82	0.229	0.00255	0.406	2.93	2452	263.55

NOTE: GDP, SUB FEE: US\$ IN 1975 PRICE

表AN4-2-3 全国需要の感度分析結果

FILE:INT-INDO (IR 41)

(Unit:  $\times 10^6$  Main Lines)

YEAR	<GDP: 3% PER ANNUM>			<GDP: 5% PER ANNUM>			<GDP: 7% PER ANNUM>			<GDP: 5% PER ANNUM (SPL-I)>			
	SPL-I	SPL-II	SPL-III	SPL-I	SPL-II	SPL-III	SPL-I	SPL-II	SPL-III	SPL-I	SPL-II	SPL-III	SF(+20%)
1985	1.3957	1.3957	1.3957	1.4014	1.4014	1.4014	1.4071	1.4071	1.4071	1.4754	1.4014	1.4014	1.3458
1990	2.2776	2.3174	2.3571	2.3298	2.3703	2.4106	2.3833	2.4245	2.4655	2.4446	2.3298	2.3298	2.2435
1995	3.14	3.4072	3.6705	3.2682	3.5432	3.8139	3.4045	3.6877	3.9664	3.4248	3.2682	3.2682	3.1504
2000	4.0037	4.6362	5.2534	4.2393	4.8978	5.5391	4.4991	5.1863	5.8542	4.4408	4.2393	4.2393	4.0878

NOTE: SPL-I 0.1/ANNUM UP TO YEAR 2000 ( $\times 10^6$ )  
 SPL-II IV:0.1, V:0.125, 0.15/ANNUM UP TO YEAR 2000 ( $\times 10^6$ )  
 SPL-III IV:0.1, V:0.15, 0.2/ANNUM UP TO YEAR 2000 ( $\times 10^6$ )

- ANNEX 4-3-1 手動局の市外完了呼数と総課金時分
- ANNEX 4-3-2 手動局の市外トラフィック
- ANNEX 4-3-3 既存トラフィックの分配
- ANNEX 4-3-4 トラフィック分析の使用データ
- ANNEX 4-3-5 加入者通話度数の一考察





表AN4-3-1 手動局の市外完了呼数と総課金時分

Zone	Pulse Inter- val (Sec)	km	1979		1980		1981		1982		1979-1982						
			No. of Calls	Minutes	No. of Calls	Minutes	No. of Calls	Minutes	No. of Calls	Minutes	No. of Calls	Minutes					
--	60	0-25	3,093.9 (25.54)	17,421.2 (24.78)	2,601 (24.77)	16,003.0 (25.34)	2,830.7 (27.72)	16,852.1 (26.26)	2,941.8 (27.67)	17,847.2 (26.39)	11,556.4 (26.37)	68,123.5 (25.68)					
I	6	25-100	3,776.6 (31.17)	20,530.6 (29.20)	3,575.1 (32.91)	17,024.3 (26.95)	3,125.7 (30.60)	17,078.0 (27.55)	3,045.3 (28.54)	18,624.8 (27.54)	13,522.8 (30.86)	73,857.7 (27.84)					
II	5	100-200	1,806.1 (14.91)	10,392.2 (14.76)	1,513.7 (13.94)	9,199.4 (14.57)	1,382.4 (13.54)	8,680.4 (13.54)	1,439.7 (13.54)	9,508.0 (14.06)	6,142.0 (14.02)	37,786.0 (14.25)					
III	4	200-300	312.2 (2.58)	1,592.9 (2.26)	201.2 (1.86)	1,531.4 (2.42)	209.5 (2.05)	1,483.3 (2.31)	256.3 (2.41)	1,399.6 (2.07)	979.1 (2.23)	6,007.2 (2.26)					
IV	3	300-1000	2,413.6 (19.92)	14,652.9 (20.84)	2,140.1 (19.70)	13,907.9 (22.02)	2,001.5 (19.60)	14,410.6 (22.45)	2,339.6 (22.00)	14,607.7 (21.60)	8,894.8 (20.30)	57,579.1 (21.71)					
V	2	1000-	712.6 (5.88)	5,726.4 (8.14)	742.3 (6.83)	5,492.8 (8.70)	662.7 (6.49)	5,064.1 (7.89)	609.6 (5.74)	5,634.2 (8.34)	2,727.2 (6.22)	21,917.4 (8.26)					
Total			12,114.8 (100.0)	70,316.2 (100.0)	10,862.5 (100.0)	63,158.8 (100.0)	10,212.6 (100.0)	64,174.5 (100.0)	10,632.3 (100.0)	67,621.5 (100.0)	43,822.2 (100.0)	265,270.9 (100.0)					
No. of Subscribers			63,419			50,540			53,893			56,202			224,054		

No. of pulses per minute

98123.5 × 60	73857.7 × 60	37786.0 × 60	6007.2 × 60	57579.1 × 60	21917.4 × 60
5900	4400	2260	360	3400	1310
-----					
265270.9					

-12.0 (pls)

表AN4-3-2 (1/3) 手動局の市外トラフィック

Exchange	No. of Subscribers	Monthly Conversation Minutes (Sep. 1983)	Erlang Value Outgoing (Erl)	Trunk Traffic Calling Rate Outgoing ( $\mu$ Erlang)
MAJALAYA	545	13.934	1.3934	2.56
PANDEGLANG	283	4.413	0.4413	1.56
RANGKASBITUNG	561	7.793	0.7593	1.35
SUBANG	217	3.305	0.3305	1.52
CIKAMPEK	171	4.832	0.4832	2.83
PAMANUKAN	95	1.159	0.1159	1.22
CIAMIS	667	17.563	1.7563	2.63
BANJAR	525	11.950	1.1940	2.27
CIKONENG	34	1.495	0.1495	4.40
BANJARSARI	141	1.421	0.1421	1.00
CLBALONG	21	1.170	0.1170	5.57
SINGAPARNA	184	2.336	0.2336	1.27
KUNINGAN	218	3.457	0.3457	1.59
MAJALENGKA	119	2.094	0.2094	1.76
INDRAMAYU	302	7.812	0.7812	2.59
UNGARAN	180	5.376	0.5376	2.99
AMBARAWA	153	4.653	0.4653	3.04
JEPARA	196	7.702	0.7702	3.93
WONOSOBO	330	8.223	0.8223	2.49
PURWOREJO	385	10.840	1.0840	2.82

Source : Anedatel's Data Traffic

表AN4-3-2 (2/3) 手動局の市外トラフィック

Exchange	No. of Subscribers	Monthly Conversation Minutes (Sep. 1983)	Erlang Value Outgoing (Er1)	Trunk Traffic Calling Rate Outgoing (mErlang)
TEMANGGUNG	335	11,038	1.1038	3.29
SLAWI	149	10,103	1.103	6.78
WATES	109	5,329	0.5329	4.89
PALBAPANG	40	3,359	0.3359	8.40
GODEAN	27	1,605	0.1605	5.94
SLEMAN	47	3,979	0.3979	8.47
KALIURANG	55	1,017	0.1017	1.85
KALASAN	24	3,211	0.3211	* 13.38
WONOSARI	162	3,220	0.3220	1.99
SUKOHARJO	97	5,604	0.5604	5.78
BOYOLALI	113	1,068	0.1068	0.95
KARANGANYAR	124	6,435	0.6435	5.19
TAWANGMANJU	90	1,278	0.1278	1.42
SRAGEN	206	6,818	0.6818	3.31
BATURETNO	37	1,431	0.1431	3.87
WONOGIRI	143	4,366	0.4366	3.05
REMBANG	251	5,244	0.5244	2.09
BLORA	283	8,297	0.8297	2.93
BANGKALAN	277	9,094	0.9094	3.28
SAMPANG	158	2,030	0.2030	1.28

表 AN4-3-2 (3/3) 手動局の市外トラフィック

Exchange	No of Subscribers	Monthly Conversation Minutes (Sep. 1983)	Erlang Value Outgoing (Erl)	Trunk Traffic Calling Rate Outgoing (mErlang)
PARE	293	8.017	0.8017	2.74
TRENGGALEK	146	5.209	0.5209	3.57
MAGETAN	182	9.622	0.9622	5.29
NGAWI	227	10.863	1.0863	4.79
TUBAN	343	7.724	0.7724	2.25
LAMONGAN	193	5.591	0.5591	2.90
BATU	450	11.278	1.1278	2.51
KRAKSSAN	175	4.656	0.4656	2.66
SEPANJANG	222	7.419	0.7419	3.34

表AN4-3-3 既存トラフィックの分配

No. of Calls . Sep. 1983

Distination Exchange	Primary Area		Other Areas	Total
	Primary Center	Other Exchanges		
MAJALAYA	3462 (79.4)	233 ( 5.3)	669 (15.3)	4362 (100)
CIKAMPAK	171 (10.6)	467 (29.0)	922 (57.4)	1607 (100)
PAMANUKAN	19 ( 4.5)	77 (1801)	329 (77.4)	425 (100)
CIAMAS	1380 (26.6)	1835 (35.4)	1963 (37.9)	5178 (100)
BANJAR	599 (16.1)	1701 (45.8)	1415 (38.1)	3715 (100)
CIKONENG	109 (22.0)	333 (67.1)	54 (10.9)	496 (100)
UNGARAN	1275 (69.4)	112 ( 6.1)	451 (24.5)	1838 (100)
AMBARAWA	485 (31.6)	103 ( 6.7)	948 (61.7)	1536 (100)
Jepara	613 (27.0)	18 ( 0.7)	1643 (72.3)	2274 (100)
MAOS	407 (69.1)	16 ( 2.4)	156 (26.5)	589 (100)
KROYA	219 (26.7)	0 ( 0 )	601 (73.3)	820 (100)
MAJENANG	299 (19.8)	72 ( 4.8)	1137 (75.4)	1508 (100)
MELUWUNG	230 (22.5)	80 ( 7.7)	683 (66.8)	1022 (100)
BANYUMAS	739 (67.3)	131 (11.9)	228 (20.8)	1098 (100)
JUKOREJO	139 (29.6)	67 (14.2)	264 (56.2)	470 (100)
PUREOLINGGO	1589 (48.5)	135 ( 4.1)	1554 (56.2)	3278 (100)
AIR MOLEK	14 (27.1)	0 ( 0 )	37 (72.5)	51 (100)
TANJUNG BALI	466 (27.0)	0 ( 0 )	1259 (55.5)	1725 (100)
BRASTAGI	833 (44.5)	0 ( 0 )	1040 (36.2)	1873 (100)
PARIAMAN	327 (65.8)	0 ( 0 )	180 (36.2)	497 (100)
PAYAKUMBUH	453 (24.4)	0 ( 0 )	1403 (75.6)	1856 (100)
BATUSANGKAR	149 (21.5)	180 (25.9)	365 (52.6)	694 (100)
比 率	37.9%	15.1%	47.0%	

Source : Anedatel'S Data Traffic

NAME OF PROVINCE	SUBSCRIBER				NO. OF PULSES (x1,000Pls)			
	1979	1980	1981	1982	1979	1980	1981	1982
ACEH	1,775	2,266	3,897	5,083	7,306	13,702	17,767	42,944
SUMATERA UTARA	17,003	21,709	25,889	30,864	184,889	244,119	297,193	343,605
SUMATERA BARAT	5,078	5,947	6,080	6,240	39,363	51,188	56,106	67,626
RIAU	2,979	3,488	4,161	4,295	14,765	20,950	30,921	37,476
JAMBI	2,679	2,873	2,872	2,894	22,041	26,599	29,756	30,598
SUMATERA SELATAN	4,505	4,832	5,780	6,880	62,424	82,478	97,976	114,973
LAMPUNG	3,930	4,215	4,802	4,946	29,703	39,641	50,426	57,579
BENGKULU	858	921	927	939	299	710	3,213	5,458
JAKARTA	93,486	122,970	151,560	171,894	1,101,931	1,502,767	1,862,343	2,110,410
JAWA BARAT	29,742	34,421	37,447	40,020	237,223	308,699	399,337	438,068
JAWA TENGAH	21,602	28,013	29,953	31,808	158,681	217,642	316,250	356,408
YOGYAKARTA	2,530	3,281	3,626	3,811	32,410	41,671	48,183	59,125
JAWA TIMUR	45,323	52,361	58,430	65,344	386,420	501,302	615,741	676,277
BALI	3,222	4,164	4,968	5,254	40,709	51,176	63,537	67,734
NUSA TENGGARA BARAT	1,902	2,458	3,083	3,426	4,011	6,192	23,893	25,853
NUSA TENGGARA TIMUR	809	1,046	1,251	1,322	15,204	15,514	8,413	11,470
TIMOR TIMUR	256	330	340	380	-	-	-	-
KALIMANTAN BARAT	972	1,749	1,888	1,891	16,111	21,026	25,302	30,555
KALIMANTAN TENGAH	385	693	830	878	299	643	1,401	2,911
KELIMANTAN SELATAN	1,601	2,883	2,890	3,325	33,265	41,777	50,399	55,534
KALIMANTAN TIMUR	1,357	2,443	4,262	5,333	591	1,288	64,766	89,874
SULAWESI UTARA	2,336	3,106	3,319	3,414	35,713	46,525	57,044	69,932
SULAWESI TENGAH	654	870	930	934	258	616	5,461	11,735
SULAWESI SELATAN	6,331	8,417	9,944	11,890	60,107	81,439	110,147	133,705
SULAWESI TENGGARA	501	666	839	912	60	145	2,749	7,916
MALUKU	1,521	1,507	2,283	2,827	15,646	22,807	30,372	38,264
IRIAN JAYA	359	1,674	3,173	3,614	6,310	12,826	28,228	56,731
TOTAL	253,696	319,303	375,424	420,518	2,505,739	3,353,442	4,296,924	4,942,761

SOURCE : POSTEL Annual Report from 1979 up to 1982  
Report of 'TRAFFIC Dalam Angka' 1979-1980 and 1981-1982

NAME OF PROVINCE	Real G.R.D.P (Billion Rp.)				P O P U L A T I O N (x1,000)			
	1979	1980	1981	1982	1979	1980	1981	1982
ACEH	225.3	254.1	292.8	299.4	2,537	2,611	2,685	2,762
SUMATERA UTARA	998.8	1,080.0	1,173.8	1,200.2	8,149	8,361	8,580	8,806
SUMATERA BARAT	251.1	279.9	308.6	315.5	3,337	3,407	3,463	3,519
RIAU	211.6	231.8	249.0	254.6	2,103	2,169	2,237	2,308
JAMBI	127.9	134.1	134.3	137.3	1,389	1,446	1,501	1,558
SUMATERA SELATAN	603.4	662.4	754.7	771.7	4,481	4,630	4,784	4,943
LAMPUNG	313.2	340.3	390.6	399.4	726	758	792	828
BENGKULU	52.9	61.2	68.9	70.4	4,096	4,333	4,645	4,979
JAKARTA	1,527.0	1,686.4	1,949.8	1,993.7	6,258	6,503	6,760	7,026
JAWA BARAT	2,324.2	2,590.1	2,915.3	2,980.9	26,742	27,454	28,124	28,811
JAWA TENGAH	1,519.2	1,717.1	1,929.1	1,972.5	24,963	25,373	25,718	26,067
YOGYAKARTA	172.1	187.3	199.6	204.1	2,721	2,751	2,797	2,844
JAWA TIMUR	2,470.4	2,774.7	3,009.7	3,077.4	28,760	29,189	29,596	30,008
BALI	235.4	275.5	310.8	317.8	2,429	2,470	2,507	2,544
NUSA TENGGARA BARAT	132.1	144.1	161.9	165.6	2,662	2,725	2,791	2,858
NUSA TENGGARA TIMUR	127.6	144.7	159.1	162.7	2,685	2,737	2,798	2,859
TIMOR TIMUR	-	-	-	-	-	555	569	584
KALIMANTAN BARAT	228.3	261.0	247.3	252.8	2,430	2,486	2,553	2,621
KALIMANTAN TENGAH	105.6	129.6	138.3	141.4	923	954	990	1,028
KELIMANTAN SELATAN	162.0	176.2	197.9	202.4	2,021	2,065	2,111	2,158
KALIMANTAN TIMUR	357.2	353.2	355.2	363.2	1,152	1,218	1,278	1,341
SULAWESI UTARA	204.1	241.6	283.5	289.9	2,068	2,115	2,168	2,223
SULAWESI TENGAH	85.2	93.8	103.1	105.4	1,242	1,290	1,338	1,389
SULAWESI SELATAN	503.6	546.5	603.0	616.6	5,959	6,062	6,176	6,291
SULAWESI TENGGARA	58.1	70.0	81.9	83.7	914	942	970	1,000
MALUKU	140.4	168.5	196.6	201.0	1,372	1,411	1,455	1,501
IRIAN JAYA	126.9	144.2	156.8	160.3	1,143	1,174	1,210	1,248
T O T A L	13,264.5	14,748.4	16,371.3	16,739.7	143,262	147,188	150,596	154,102

REMARK : Calculated based on price indexes of 1975

SOURCE : Stastical Yearbook of INDONESIA 1983



表AN4-3-4 (3/3)

トラフィック分析の使用データ

NAME OF PROVINCE	Real Calling Fee (Rp.)			
	1979	1980	1981	1982
ACEH	21.7	17.8	15.9	15.9
SUMATERA UTARA	22.7	17.5	16.0	16.0
SUMATERA BARAT	22.0	18.2	15.1	15.2
RIAU	20.9	17.1	15.4	15.5
JAMBI	18.6	16.5	15.6	15.6
SUMATERA SELATAN	21.6	18.4	17.4	17.5
LAMPUNG	20.2	17.2	16.9	16.9
BENGKULU	23.2	19.0	19.8	19.8
JAKARTA	21.2	18.0	16.2	16.2
JAWA BARAT	23.2	18.3	16.9	16.9
JAWA TENGAH	21.4	18.4	17.6	17.6
YOGYAKARTA	21.2	18.3	15.7	15.7
JAWA TIMUR	23.3	18.9	17.2	17.2
BALI	26.5	22.7	20.8	20.8
NUSA TENGGARA BARAT	21.4	19.2	17.4	17.4
NUSA TENGGARA TIMUR	22.4	20.6	18.3	18.3
TIMOR TIMUR	-	-	-	-
KALIMANTAN BARAT	24.1	19.8	18.1	18.1
KALIMANTAN TENGAH	18.1	16.2	15.4	15.4
KELIMANTAN SELATAN	20.5	17.6	15.3	15.4
KALIMANTAN TIMUR	19.4	14.5	11.6	11.6
SULAWESI UTARA	21.3	18.5	19.1	19.2
SULAWESI TENGAH	18.6	17.4	16.3	16.3
SULAWESI SELATAN	22.5	19.1	17.9	17.9
SULAWESI TENGGARA	24.0	18.7	16.1	16.1
MALUKU	17.9	17.0	16.5	16.5
IRIAN JAYA	25.3	23.1	20.8	20.8

REMARK : Calculated based on price indexes of 1975

SOURCE : Statistical Yearbook of INDONESIA 1983

ANNEX 4-3-5 加入当りの通話度数の一考察

1969年から1983年の各種データ（次頁の表を参照）を用いて、全国レベルの加入当り通話度数を回帰分析した結果、次の回帰式を得た。

$$\ln(\text{TRFC}/\text{SUB}) = -4.516 + 1.788 \ln(\text{GDP}/\text{C}) - 0.348(\text{CF})$$

\*\*(8.59362)
\*(-2.58319)

$$R = 0.964145$$

- ここで、
- TRFC/SUB : 加入当り年間通話度数 (1,000 pls)
  - GDP/C : 国民一人当りの実質 (Rp. 1,000)
  - CF : 実質単位通話料金 (Rp./pls)
  - R : 重相関係数
  - ( ) : t 値
  - \*\* : 係数が両側 1 % で有意であることを示す。
  - \* : 係数が両側 5 % で有意であることを示す。

書き代えると、

$$\text{TRFC}/\text{SUB} = 10.93 \times 10^{-3} \frac{(\text{GDP}/\text{C})^{1.788}}{(\text{CF})^{0.348}}$$

となり、全国的にみると加入当り通話度数は実質単位通話料金の 3 乗根に反比例している。

表AN4-3-5 加入当りの通話度数の一考察

Year	Auto SUBSCRIBER	No. of Pulses (1,000 Pls)	Pulses per Auto SUB (Pls)	Real Calling Fee (Rp)	Consumer's Price Index	Real G.D.P. (bil. Rp)	Real GDP per Capita (1,000 Rp.)
1969	65,691	231,698	3,527	20.16	0.496	5,507.80	47.79
1970	72,864	-	-	15.85	0.631	5,322.30	45.28
1971	72,832	-	-	14.88	0.672	5,676.60	47.54
1972	91,016	-	-	13.30	0.752	6,067.20	50.00
1973	102,197	631,209	6,176	10.00	1.000	6,753.40	54.19
1974	113,107	758,760	6,708	6.79	1.473	7,267.90	57.20
1975	129,791	875,007	6,742	12.07	1.657	7,630.80	58.20
1976	137,525	1,137,972	8,275	10.55	1.896	8,156.30	61.09
1977	156,358	1,543,184	9,870	9.37	2.135	8,761.00	63.39
1978	192,857	2,164,648	11,224	8.41	2.378	9,566.50	68.45
1979	253,696	2,504,542	9,872	12.69	3.151	10,164.90	70.92
1980	319,843	3,353,442	10,485	9.83	4.069	11,169.20	75.78
1981	362,800	4,297,047	11,844	8.92	4.482	12,054.60	79.75
1982	416,078	4,949,036	11,894	10.33	4.838	12,325.40	79.68
1983	455,957	5,384,294	11,809	9.76	5.123	12,695.20	80.46

REMARK : BASED ON 1973 PRICE

SOURCE : POSTEL Annual Report from 1974 up to 1983  
Statistical Yearbook of INDONESIA from 1973 up to 1983

ANNEX 5-3-1 番号計画



表AN5-3-1 (1/10) 番 号 計 画

( ) : WITEL

Tertiary Zone	Area Code	Province
(1) Jakarta ( IV )	2	DKI Jakarta (IV) Jawa Barat (V) Jawa Tengah (VI) DI Yogyakarta "
(2) Surabaya ( VII )	3	Jawa Timur (VII) Bali (VIII) Nusa Tenggara Barat " Nusa Tenggara Timur " Timor Timur "
(3) Ujung Pandang ( X )	4	Sulawesi Utara (X) Sulawesi Tengah " Sulawesi Selatan " Sulawesi Tenggara "
(4) Banjarmasin ( IX )	5	Kalimantan Barat (IX) Kalimantan Tengah " Kalimantan Timur " Kalimantan Selatan "
(5) Medan ( I )	6	DI Aceh (I) Sumatra Utara "
(6) Palembang ( III )	7	Sumatra Barat (II) Riau " Jambi (III) Sumatra Selatan " Bengkulu " Lampung "
(7) Ambon ( XI )	9	Maluku (XI) Irian Jaya (XII)

( ) : WITEL

Tertiary Area		Secondary Area		Primary Area		Province		
Code	Trunk Center	Code	Trunk Center	Code	Trunk Center			
2	JAKARTA (IV)	21	JAKARTA	21	JAKARTA	DKI Jakarta		
		25	JAKARTA (IV) (V)	251	BOGOR	Jawa Barat		
				2	Rangkasbitung			
				3	Pandeglang			
				4	Serang			
				5	Cipanas			
				22	BANDUNG			
				26	BANDUNG (V)	261	Sumedang	
						2	Garut	
						3	Cianjur	
						4	Purwakarta	
						5	Tasikmalaya	
						6	Sukabumi	
				23	CIREBON (V)	231	CIREBON	
						2	Kuningan	
						3	Majalengka	
						4	Indramayu	
				24	SEMARANG	24	SEMARANG	Jawa Tengah
				29	SEMARANG (VI)	291	Kudus	
						2	Purwodadi	
						3	Mngelang	
						4	Kendal	
						5	Pati	
						6	Cepu	
						7	Karimunjawa	
						8	Salatiga	
				27	SOLO (VI)	271	SOLO	D.I. Yogyakarta
						2	Klaten	
				3	Wonogiri			
				4	Yogyakarta			
		28	PURWOKERTO (VI)	281	PURWOKERT	Jawa Tengah		
				2	Cilacap			
				3	Tegal			
				4	Pemalang			
				5	Pekalongan			
				6	Wonosobo			
				7	Kebumen			
				8	Purworejo			

( ) : WITEL

Tertiary Area		Secondary Area		Primary Area		Province		
Code	Trunk Center	Code	Trunk Center	Code	Trunk Center			
3	SURABAYA (VII)	31	SURABAYA (VII)	31	SURABAYA	Java Timur		
		32		321	Mojokerto			
				2	Lamongan			
				3	Bangkalan			
				4	Pamekasan			
				5	Bawean			
				6	Sapudi			
			7	Kangean				
			33	JEMBER (VII)	331		JEMBER	
					2		Bondowoso	
					3		Banyuwangi	
					4		Lumajang	
					5		Probolinggo	
			34	MALANG (VII)	341		MALANG	
					2		Blitar	
					3		Pasuruan	
			35	MADIUN	351		MADIUN	
					2		Pacitan	
					3		Bojonegoro	
					4		Kediri	
					5		Tulungaung	
					6		Tuban	
			36	DENPASAR (VIII)	361		DENPASAR	Bali
					2		Singaraja	
					3		Karangasem	
					4		Mataran	
			37	SUMBAWA BESAR (VIII)	371		SUMBAWABESAR	Nusa Tenggara Barat
					2		Tailwang	
		3	Dompu					
		4	Raba					
	38	ENDE (VIII)	381	ENDE	Nusa Tenggara Timur			
			2	Maumere				
			3	Larantuka				
			4	Bajawa				
			5	Ruteng				
			6	Waingapu				
			7	Waikabubak				



表AN5-3-1 (4/10) 番号計画

( ) : WITEL

Tertiary Area		Secondary Area		Primary Area		Province		
Code	Trunk Center	Code	Trunk Center	Code	Trunk Center			
3	SURABAYA (VII)	39	KUPANG (VIII)          (VIII)	391	KUPANG	Timor Timur		
				2	Soe			
				3	Kefamenanu			
				4	Atambua			
				5	Baa			
				6	Seba			
				7	Kalabahi			
				8	Iiwaki			
				9	Baucau			
				0	Dilili			
4	UJUNG PANDANG (X)	41	UJUNG PANDANG (X)	411	UJUNGPANDANG	Sulawesi Selatan		
				2	Watampone			
				3	Bantaeng			
				4	Benteng			
				5	Tanajampea			
		42	PARE-PARE (X)	421	PARE-PARE (X)	2	Majene	
						3	Rantepao	
						4	Palopo	
						5	Singgang	
						6	Mamuju	
						7	Masaba	
						8	Malili	
		9	Karosa					
		43	MANADO (X)	431	MANADO (X)	2	Tahuna	Sulawesi Utara
						3	Beo	
						4	Kotamobagu	
						5	Gorontalo	
						6	Tilamuta	
						7	Paleleh	
						45	PALU (X)	
		3	Toli-toli					
4	Tojo							
5	Kolonodale							
6	Bungku							
7	Katupa							
8	Luwuk							
9	Banggai							

表 AN5-3-1 (5/10) 番 号 計 画

( ) : WITEL

Tertiary Area		Secondary Area		Primary Area		Province		
Code	Trunk Center	Code	Trunk Center	Code	Trunk Center			
4	UJUNG PANDANG (X)	40	KENDARI (X)	401	KENDARI	Sulawesi Tenggara		
				2	Baubau			
				3	Raha			
				4	Papalia			
				5	Kolaka			
				6	Malamala			
				7	Wawotobi			
5	BANJARMASIN (IX)	51	BANJARMASIN (IX)	511	BANJARMASIN	Kalimantan Selatan		
				2	Pleihari			
				3	Kualakapuas			
				4	Palangharaya			
				5	Buntok			
				6	Tanjung			
				7	Kandangan			
				8	Kotabaru			
				9	Muarateweh			
		53	SAMPIT (IX)	531	SAMPIT	2	Panghalanbun	Kalimantan Timur
						3	Nangatayap	
						4	Ketapang	
						5	Sukadana	
						6	Senawang	
						7	Kualakurun	
						8	Purukcau	
						54	SAMARINDA (IX)	
		3	Tanahgrogot					
		4	Muarasiram					
		5	Longberang					
6	Tabang							
7	Sangkulirang							
55	TARAKAN	551	TARAKAN	2	Tanjungselor			
				3	Binuang			
				4	Tanjungredeb			
				5	Longnawan			

( ) : WITEL

Tertiary Area		Secondary Area		Primary Area		Province			
Code	Trunk Center	Code	Trunk Center	Code	Trunk Center				
5	BANJARMASIN (IX)	56	PONTIANAK (IX)	561	PONTIANAK	Kalimantan Barat			
				2	Singkawang				
				3	Ngabang				
				4	Sanggau				
				5	Sintang				
				6	Semitau				
				7	Putusibau				
				8	Nangapinoh				
				9	P. Karimata				
6	MEDAN (I)	64	LANGSA (I)	641	LANGSA	D.I. ACEH			
				2	Blangkejeren				
				3	Tekeungon				
				4	Biroun				
				5	Lhokseumawe				
				6	Idi				
		65	BANDA ACEH	651	BANDA ACEH		2	Sabang	
							3	Sigli	
							4	Calang	
							5	Meulaboh	
							6	Tapaktuan	
							7	Bakongan	
							8	Singkil	
							9	Kep. Banyak	
							0	Sinabang	
							61	MEDAN (I)	61
		62	Tebingtinggi						
		62					2	Pematangsiantar	
3	Tanjungbalai								
4	Rantauprapat								
5	Bangansiapiapi								
6	Pangururan								
8	Kabanjahe								
9	Kutacane								
0	Pallikalanberandan								

表AN5-3-1 (7/10) 番 号 計 画

( ) : WITEL

Tertiary Area		Secondary Area		Primary Area		Province							
Code	Trunk Center	Code	Trunk Center	Code	Trunk Center								
6	MEDAN (1)	63	SIBOLGA (1)	631	SIBOLGA								
				2	Balige								
				3	Tarutung								
				4	Padangsidempuan								
				5	Gunungtua								
				6	Kotanopan								
				7	Natal								
				8	Pulautele								
				9	Gunungsitoli								
				7	PALEMBANG (11)		75	PADANG (11)	751	PADANG	Sumatera Barat		
2	Bukittinggi												
3	Lubuksikaping												
4	Sijunjung												
5	Solok												
6	Painan												
7	Tapan												
8	Matobe												
9	Muarasiberut												
76	PAKANBARU (11)	761	PAKANBARU (11)			761	PAKANBARU	Riau					
						2	Bangkinang						
						3	Pasirpangarayan						
						4	Siaksriindrapura						
						5	Dumai						
						6	Bengkalis						
						7	Selatpanjang						
						8	Tembilahan						
						9	Rengat						
						0	Telukkuantan						
						77	TANJUNGPINANG (11)		771	TANJUNGPINANG (11)	771	TANJUNGPINANG	
											2	Terempa	
3	Genting												
4	Natuna Selatan												
5	Tambelan												
6	Dabo												
7	Tanjungbalai Karimun												
8	Tanjunguban												

表AN5-3-1 (8-10) 番 号 計 画

( ) : WITEL

Tertiary Area		Secondary Area		Primary Area		Province		
Code	Trunk Center	Code	Trunk Center	Code	Trunk Center			
7	PALEMBANG (III)	74	JAMBI (III)	741	JAMBI	Jambi		
				2	Kualatungkal			
				3	Muaratebesi			
				4	Muaratebo			
				5	Sarolangun			
				6	Bangko			
				7	Muarabungo			
				8	Sungai penuh			
		71	PALEMBANG (III)	711	PALEMBANG (III)	711	PALEMBANG	Sumatera Selatan
						2	Kayuagung	
						3	Payakabung	
						4	Sekayu	
						5	Muntok	
						6	Pangkalpinang	
						7	Koba	
						8	Tanjungpandan	
		73	LAHAT (III)	731	LAHAT (III)	731	LAHAT	Bengkulu
						3	Lubuklinggau	
						4	Muaraenim	
						5	Baturaja	
						7	Muaraaman	
						8	Surulangun	
						9	Mukomuko	
						0	Barhau	
72	TANJUNG- KARANG (III)	721	TANJUNGKA- RANG (III)	721	TANJUNGKA- RANG	Lampung		
				2	Kotaagung			
				3	Krui			
				4	Kotabumi			
				5	Metro			
				6	Menggala			

表AN5-3-1 (9/10) 番 号 計 画

( ) : WITEL

Tertiary Area		Secondary Area		Primary Area		Province
Code	Trunk Center	Code	Trunk Center	Code	Trunk Center	
9	AMBON (XI)	91	AMBON (XI)	911	AMBON	Maluku
				2	Piru	
				3	Namlea	
				4	Masohi	
				5	Bula	
				6	Tual	
				7	Dobo	
				8	Saumlaki	
				9	Tepa	
				0	Bandanaera	
		92	TERNATE (XI)	921	TERNATE	Irian Jaya
				2	Jailolo	
				3	Daruba	
				4	Tobelo	
				5	Weda	
				6	Umela	
				7	Labuha	
				8	Laiwui	
				9	Sanana	
		95	SORONG (XII)	951	SORONG	Irian Jaya
				2	Samate	
				3	Atkri	
				4	Inanwatan	
				5	Babo	
6	Fakfak					
7	Kaimana					
8	Mimika					
96	JAYAPURA (XII)	961	Biak	Irian Jaya		
		2	Manokwari			
		3	Serui			
		4	Nabire			
		5	Waren			
		6	Sarmi			
		7	JAYAPURA			
		8	Beoga			
		9	Wamena			
		0	Kive			

表AN5-3-1 (10/10) 番 号 計 画

( ) : WITEL

Tertiary Area		Secondary Area		Primary Area		Province
Code	Trunk Center	Code	Trunk Center	Code	Trunk Center	
9	AMBON (X1)	97	MERAUKE (X11)	971 2 3 4 5 6 7 8	MERAUKE Okaba Kiman Koba Tanah Merah Agats Cumbuyum Waropko	
Total	7		40		299	

ANNEX 5-4-1 交換システムの機能要求事項

ANNEX 5-4-2 デジタル交換機と伝送路インターフェイス





#### ANNEX 5 - 4 - 1 交換システムの機能要求事項

交換システムの Functional Requirement は大別して次の3つに分類される。夫々の代表的な Requirements の項目を表1～表3に示す。

- Subscriber Telephone Service に関する Requirements
  
- Operator Functions and Service に関する Requirements
  
- System Operation, Administration and Maintenance Functions に関する Requirements

表1 Subscriber Telephone Services

Item	Small local exchange	Medium and Large local exchange
o Single party lines	○	○
o Subscriber dialed calls (decadic and/or multi-frequency)	○	○
o Operator services (access to)	○	○
o Information tones/announcements	○	○
o Emergency calls	○	○
o Calling subscriber release	○	○
o Subscriber long distance dialling (SLDD)	○	○
o International subscriber dialling (ISD)	○	○
o Call restriction		
-Administration selected service restriction in the outgoing direction	○	○
-Incoming call barring (Administration selected)	○	○
o Subscriber private exchange		
-Direct dialling-in	△	○
-PBX line hunting	○	○
o Miscellaneous		
-malicious call trace	○	○

Note : ○ ..... This item is likely to be required by most Administrations

△ ..... This item is likely to be required by many Administrations

source - CAS6 : Choice of Telephone Switching System

表2. Operator functions and services

Item
o Call set up assistance
- Expediting call in progress
o Information
- Directory enquires
o Interception of calls
o Call charge information
o Complaints (including fault reports)
o Telegrams(phonograms)

Source - GAS6 : Choice of Telephone Switching System

表3 System operation, administration and maintenance functions

Item	Small local exchange	Medium local exchange	Large local exchange
o Interception of calls	○	○	○
o Automatic exchange circuit test	○	○	○
o Automatic subscriber line test	○	○	○
o Automatic number identification	○	○	○
o Manual or automatic overload control	○	○	○
o Automatic fault identification	○	○	○
o Detailed call accounting (local or centralized)	○	○	○
o Routing (code translation)	○	○	○
o Service observation	○	○	○
o Automatic howler	△	△	△
o Immediate ringing	○	○	○
o Automatic system recovery	○	○	○
o Alternative routing	×	△	○
o Automatic traffic recording	○	○	○
o Transmission measurement and test (auto or manual)	○	○	○

Note : ○..... This item is likely to be required by most Administrations

△..... This item is likely to be required by many Administrations

×..... This item is likely to be required by few Administration

Source -CASB : Choice of Telephone Switching System

多くの電気通信主管庁は、自動交換設備に対する最も重要な条件として都市地域のみならず、地方地域の電話サービスに対しても下記の事項を要望している。

- 24時間サービスが出来ること (24 hour service)
- 接続が迅速であること (fast connection)
- 秘密が守れること (privacy)
- 全ての加入者に対してサービスが平等である  
(equality of service for all subscribers)
- SLDDが可能 (straight forward link-up to national subscriber trunk dialling system)
- 保守費用が安いこと (very low personnel costs)

また、地方地域に設備される自動電話局に対して下記事項を考慮しなくてはならない。例えば、

- 経済的運用が出来ること
- 小形であり、Space factorがよい事。また、モバイル・コンテナに設備出来るものであること
- 無駐在局であること
- 信頼性が高いこと
- 埃り等の環境条件に強いこと
- 建設工事が簡単で早いこと
- Modular designであること
- 消費電力がすくないこと

等である。

加入者サービスの中で、全ての加入者にサービスすることにより交換局の中に大量のデータ領域が必要となり、このため装置コストが増大する可能性がある場合には、一部の加入者を規制する事も考慮すべきである。

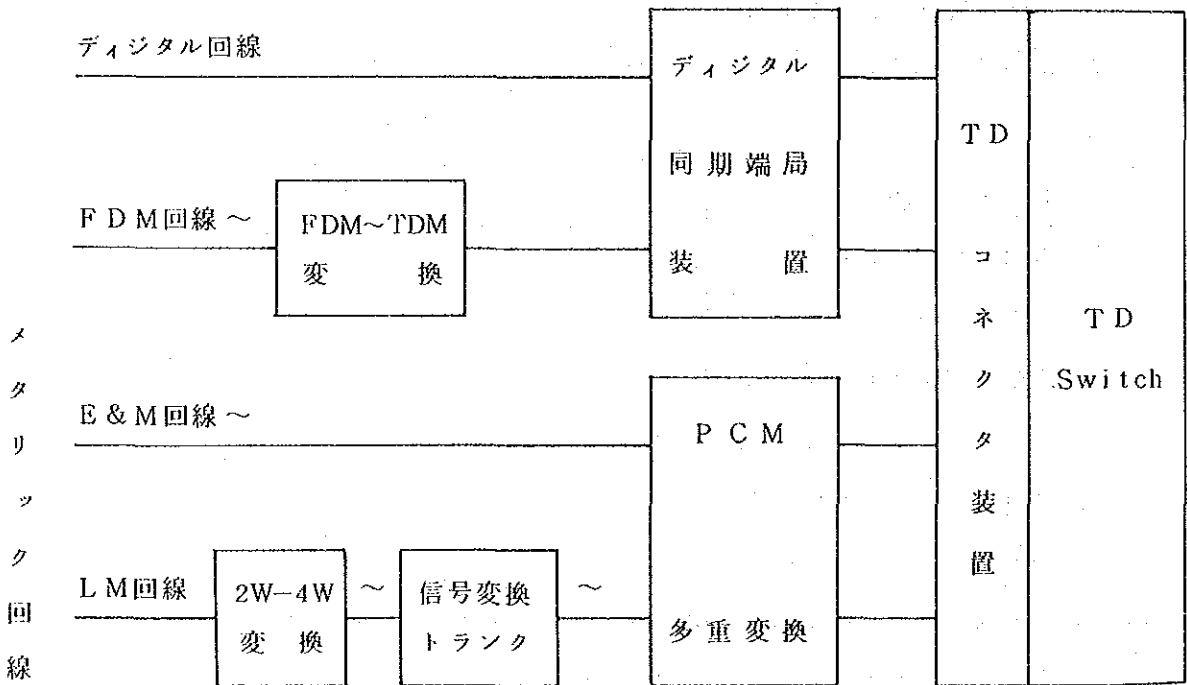
ANNEX 5-4-2 デジタル交換機と伝送路インターフェース

現在インドネシアでは電話網の経済化と将来のISDNへ向けての基盤づくりを目指し、網のデジタル化の一環としてデジタル交換機の導入が徐々に行われている。

本地方電気通信網整備計画においても原則としてデジタルテクノロジーを導入する計画である。

一般にデジタル化を進めて行く場合、既存のアナログ網の中にデジタル交換機デジタル伝送路が設備されるので、デジタル交換機に接続される伝送路にはデジタル伝送路やアナログ伝送路がある。

デジタル伝送路には伝送速度の異なるものがあり、またアナログ網にも同軸回線等の周波数多重(FDM)回線やメタリック回線がある。図Aにデジタル交換機と伝送路の接続概念を示す。



図A デジタル交換機と伝送路の接続概念図

デジタル交換機には多種類の伝送路との接続が考えられるが、交換機内は決められた多重度のデジタル信号で処理し、回線の信号処理も交換機内で統一して行っている。

伝送路と交換機を接続し、必要な交換をしているものに図Aに示すようにFDM-TDM変換装

置、信号変換トランク、同期端局装置等がある。

これら外部装置とデジタル交換機内部装置とのインターフェース装置として、例えば時分割コネクタ装置がある。

#### (1) 時分割コネクタ装置

時分割コネクタ装置はデジタル同期端局装置、信号装置、保守試験装置の各外部装置と時分割スイッチ間のインターフェース装置である。

時分割コネクタ装置のエラスティックストアメモリーは、デジタル信号を時分割スイッチに適するように多重変換を行ったり、タイムスロット位置や位相の修正を行い、端局装置からの伝送路伝播上の遅延時間を補正している。

この事から、時分割スイッチは高速且つ正確な交換動作が可能となり、交換機の出入口には不可欠の機能である。

#### (2) デジタル同期端局装置

デジタル交換機にデジタル伝送路を接続する場合、いくつかの機能が必要である。

交換機側 Highway とデジタル伝送路とは多重度が異なるため多重、分離機能が必要となる。

また、交換機側 Highway 上或いは伝送路上で発生した各種警報を検出し、互に通知する機能、更に複数の交換機と複数対地に設定された各種伝送路との間を効率的、経済的に振り分け、接続する回線設定機能が必要で、これらの機能を実現するためにデジタル同期端局装置がある。

#### (3) アナログ伝送路との接続

##### 1) FDM回線

現在、アナログ中継伝送路には周波数分割多重方式（FDM方式）が使用されている。一方、デジタル交換機は時分割多重（TDM方式）である。

アナログ網にデジタル方式を導入していくには両方式の相互変換が必要となる。FDM回線をデジタル交換機に收容する場合はFDMからTDMに変換した後、デジタル伝送路とデジタル交換機との接続の場合と同様にデジタル同期端局装置に接続する。

##### 2) メタリック回線

デジタル交換機に收容されるメタリック回線にはE&M信号方式とLP信号方式の回線がある。

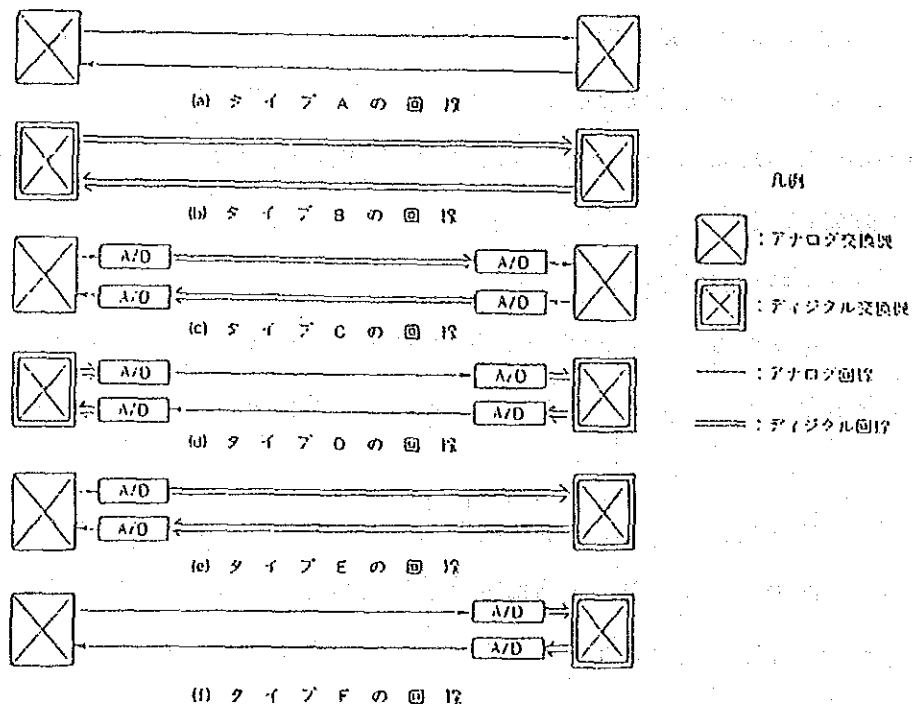
例えば、デジタル交換方式の信号方式を全てE&M信号方式に統一した場合、E&M回



線をデジタル交換機に收容するにあたっては単にA/D変換と多重化を行うだけである。

他方、LP回線をデジタル交換機に收容する場合には、A/D変換、多重化のほかLP/E & Mの信号変換が必要となる。

このLP/E & M変換を行うのが信号変換トランクであり、これによりデジタル交換機内部での一元的な信号処理を可能としている。



図B アナログ/デジタル混在網における回線形態

デジタル網への移行期においては上図のように交換機及び伝送路がアナログかデジタルかにより下記の様に回線形態が分かれる。即ち、

- ① タイプA : アナログ交換機相互間がアナログ伝送路で接続される場合
- ② タイプB : デジタル交換機相互間がデジタル伝送路で接続される場合
- ③ タイプC : アナログ交換機相互間がデジタル伝送路で接続される場合
- ④ タイプD : デジタル交換機相互間がアナログ伝送路で接続される場合
- ⑤ タイプE : アナログ交換機とデジタル交換機間がデジタル伝送路で接続される場合

⑥ タイプF : アナログ交換機とデジタル交換機間がアナログ伝送路で接続される場合の6つのタイプに分類することができる。

タイプA, タイプCでは既存網にもある回線形態であるが, 呼が交換機を経由するごとに, 各回線で減衰歪, 雑音等の品質劣化要因が累加される。

一方, デジタル網においては, タイプBのような形態となり, 減衰歪, 雑音等のアナログ的品質劣化要因は累加しなくなる。そのため, 伝送品質は大幅に向上することとなる。

しかしタイプD, タイプFのような形態の場合, 新たに付加されるA/D, D/A変換によって減衰歪, 雑音等が増大する。



ANNEX 5-5-1	サンプル地域のT.D.M.A-R.C.S (KAB. INDRAGIRI HULU)
ANNEX 5-5-2	システム設計 ( " " )
ANNEX 5-5-3	T.D.M.A-R.C.S ( " KAMPAR )
ANNEX 5-5-4 ( $\frac{1}{2} \sim \frac{2}{2}$ )	システム設計 ( " " )
ANNEX 5-5-5	T.D.M.A-R.C.S ( " CILACAP )
ANNEX 5-5-6	システム設計 ( " " )
ANNEX 5-5-7	T.D.M.A-R.C.S ( " BANYUMAS )
ANNEX 5-5-8	システム設計 ( " " )
ANNEX 5-5-9	T.D.M.A-R.C.S ( " PURBALINGGA )
ANNEX 5-5-10	システム設計 ( " " )
ANNEX 5-5-11	T.D.M.A-R.C.S ( " HULU SEI SELATAN )
ANNEX 5-5-12	システム設計 ( " " )
ANNEX 5-5-13	T.D.M.A-R.C.S ( " HULU SEI TENGAH )
ANNEX 5-5-14	システム設計 ( " " )
ANNEX 5-5-15	T.D.M.A-R.C.S ( " SINJAI )
ANNEX 5-5-16	システム設計 ( " " )
ANNEX 5-5-17	T.D.M.A-R.C.S ( " PANGKEP )
ANNEX 5-5-18	システム設計 ( " " )
ANNEX 5-5-19( $\frac{1}{2} \sim \frac{2}{2}$ )	T.D.M.A-R.C.S ( " MALUKU TENGAH )
ANNEX 5-5-20( $\frac{1}{2} \sim \frac{2}{2}$ )	システム設計 ( " " )
ANNEX 5-5-21( $\frac{1}{4} \sim \frac{7}{4}$ )	県別工事費の内訳



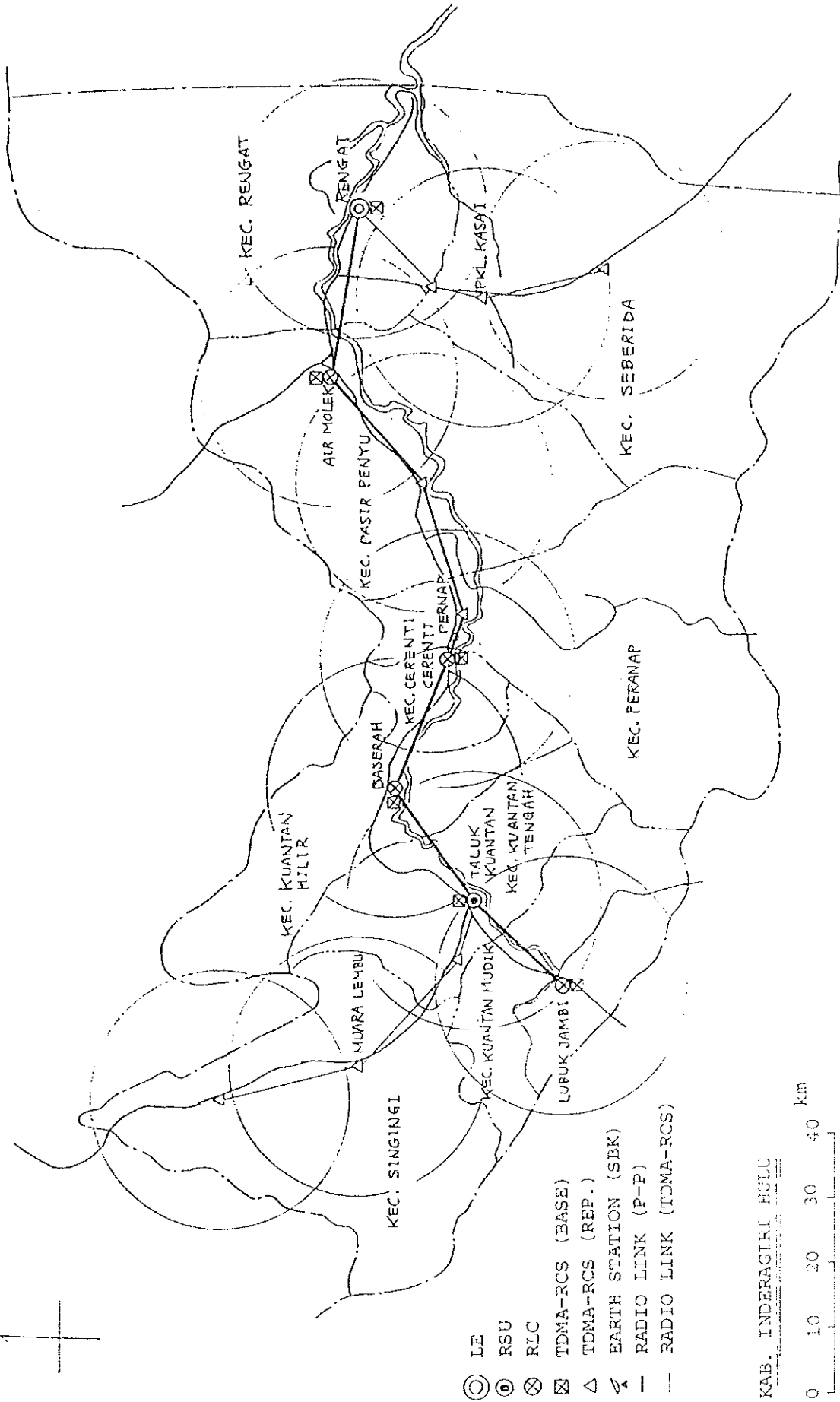
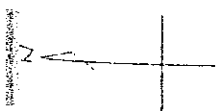
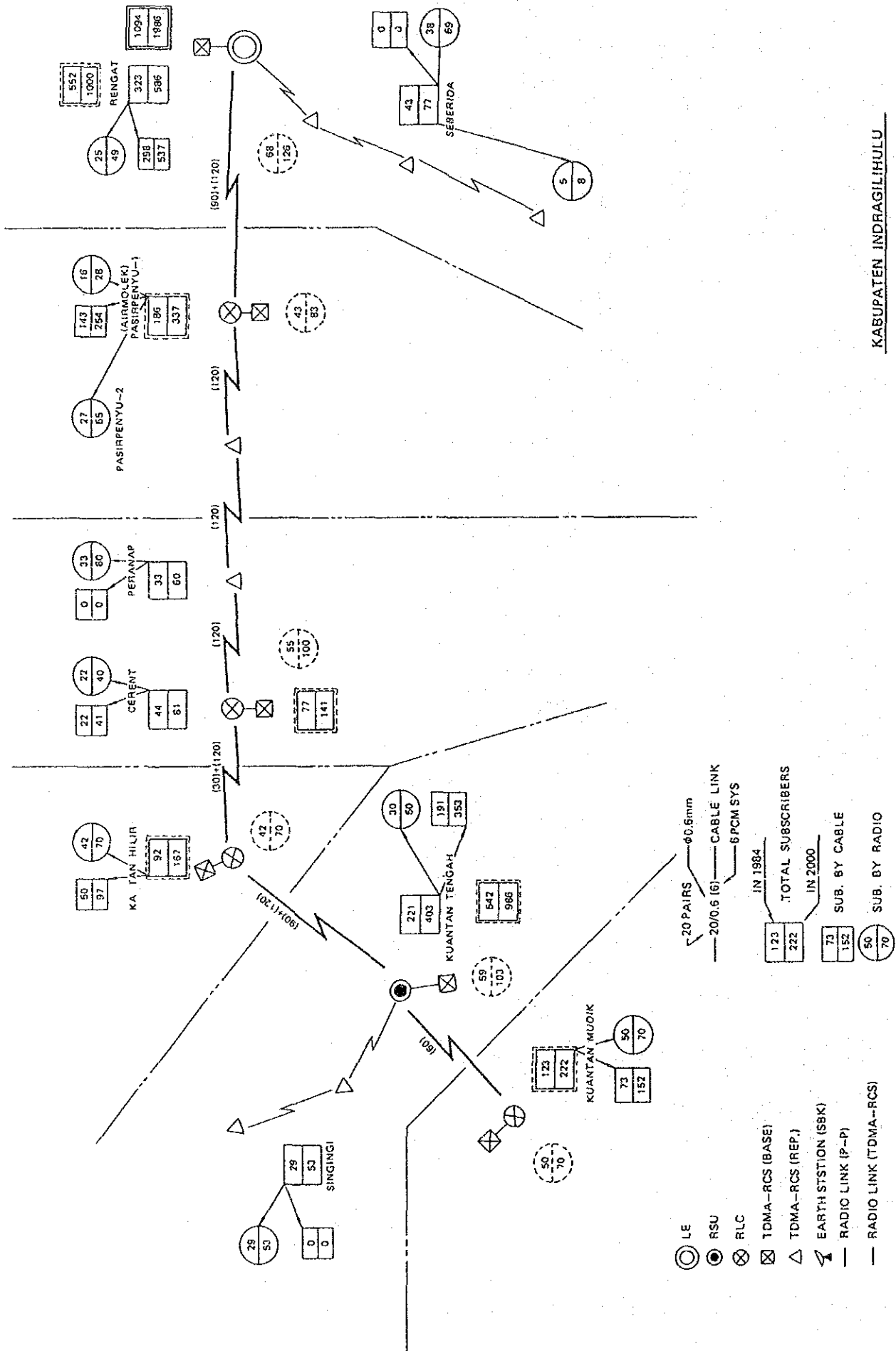
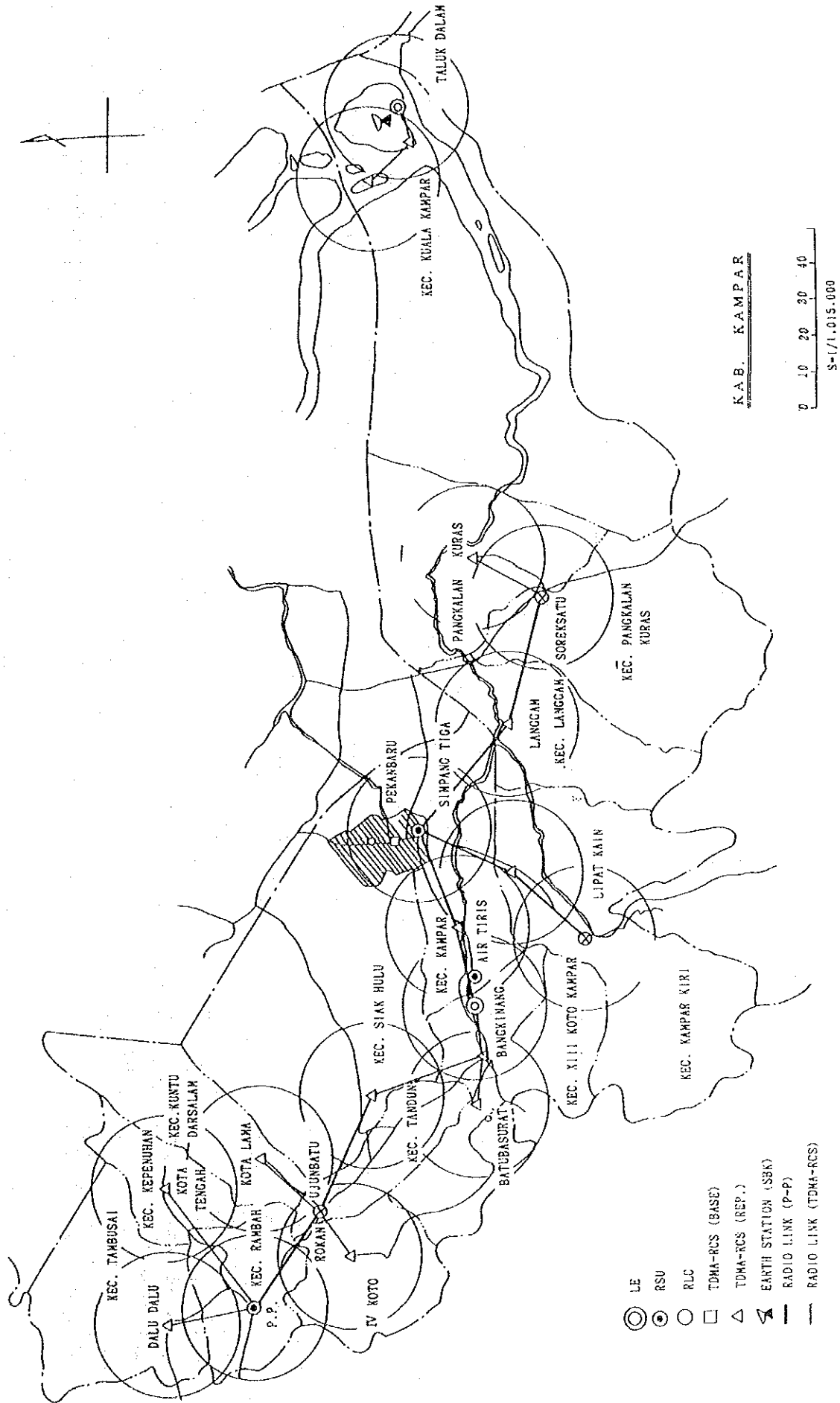


図 A N 5-5-1 サンプル地域の T.D.M.A.-R.C.S. (KAB. INDRAGIRI HULU)

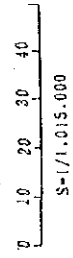


KABUPATEN INDRAGILIHULU

図AN5-5-2 サンプル地域のシステム設計 (KAB. INDRAGIRI HULU)

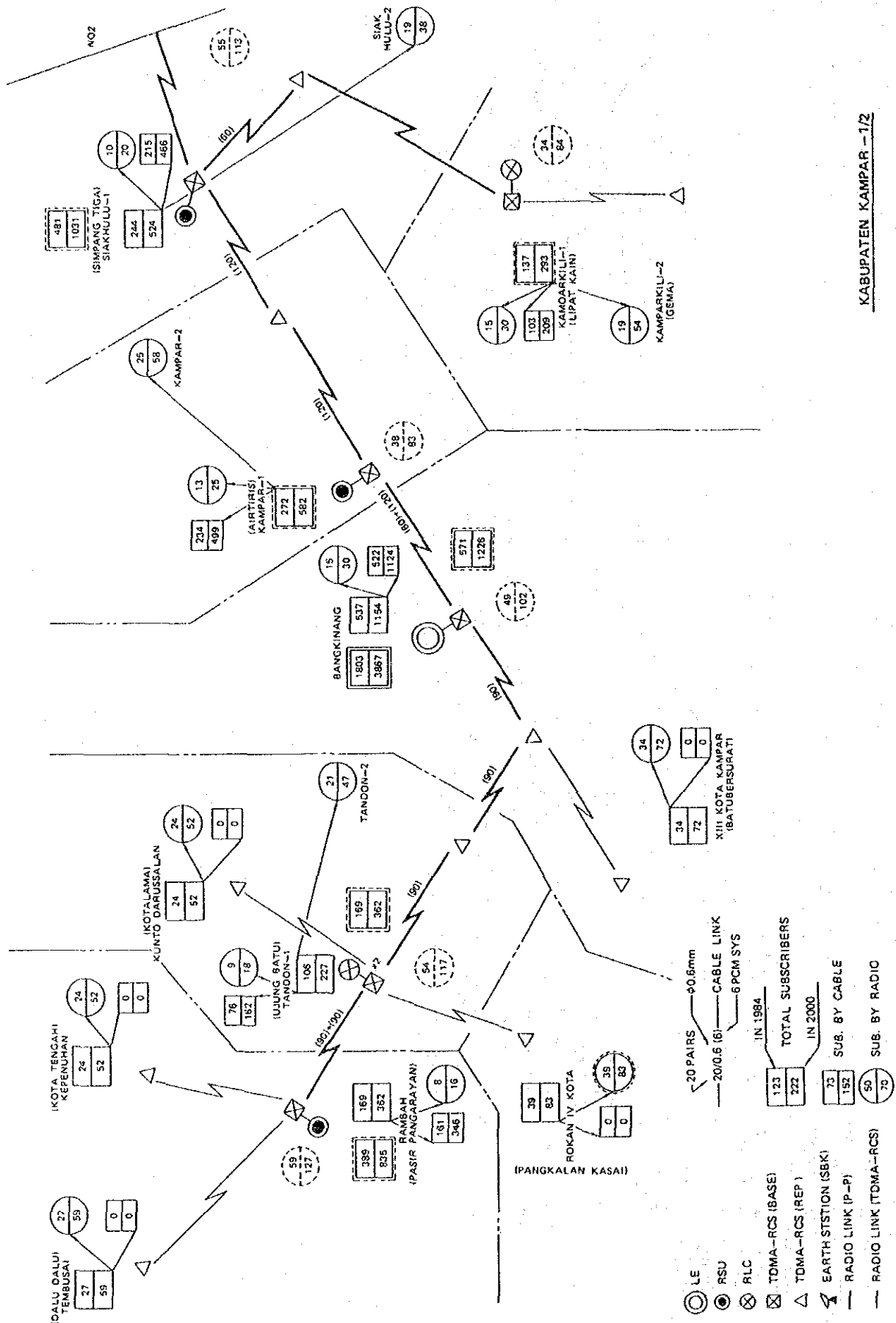


K.A.B. KAMPAR



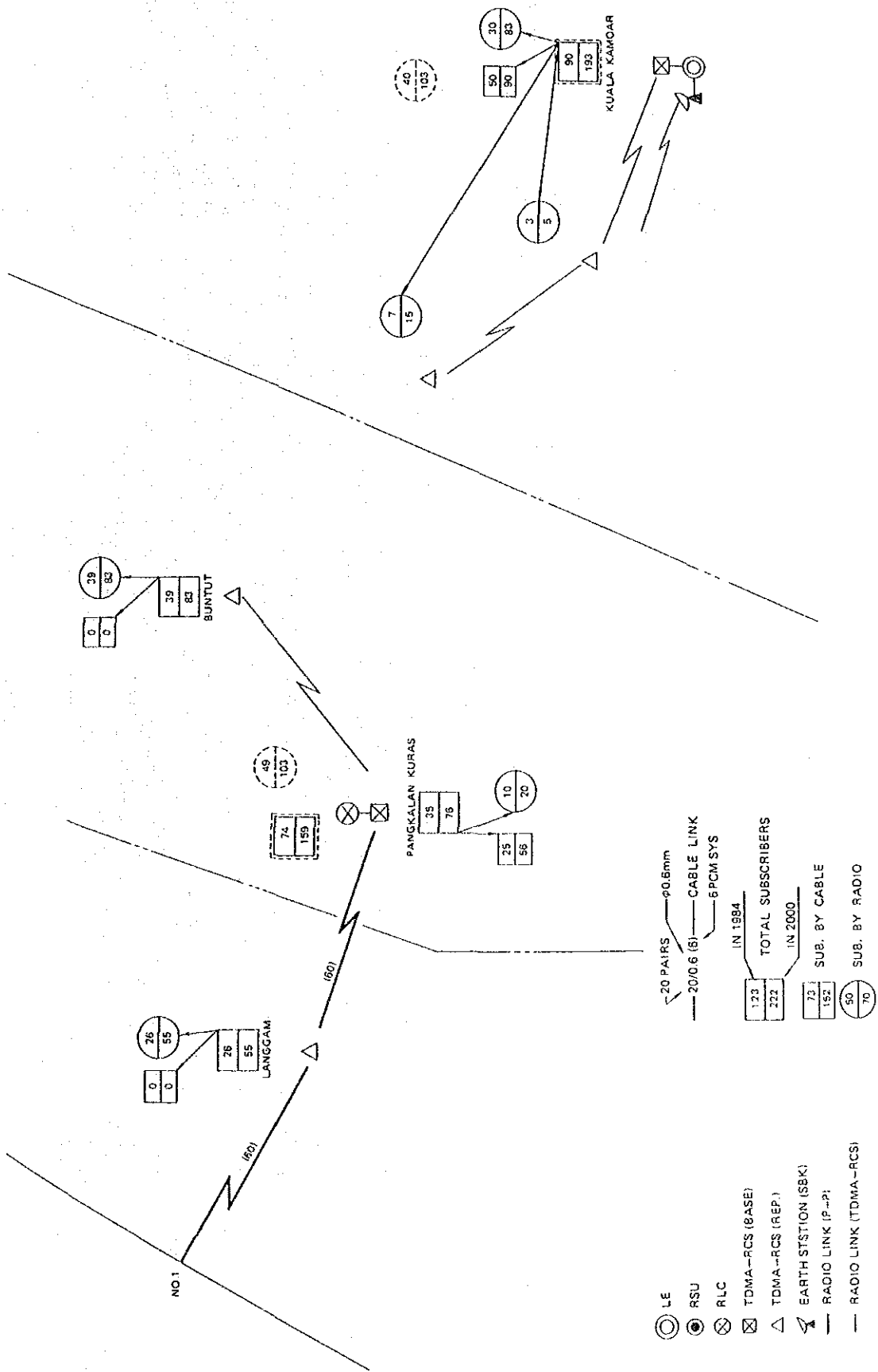
図AN5-5-3 サンプル地域のT.D.M.A.-R.C.S.(K.A.B. KAMPAR)





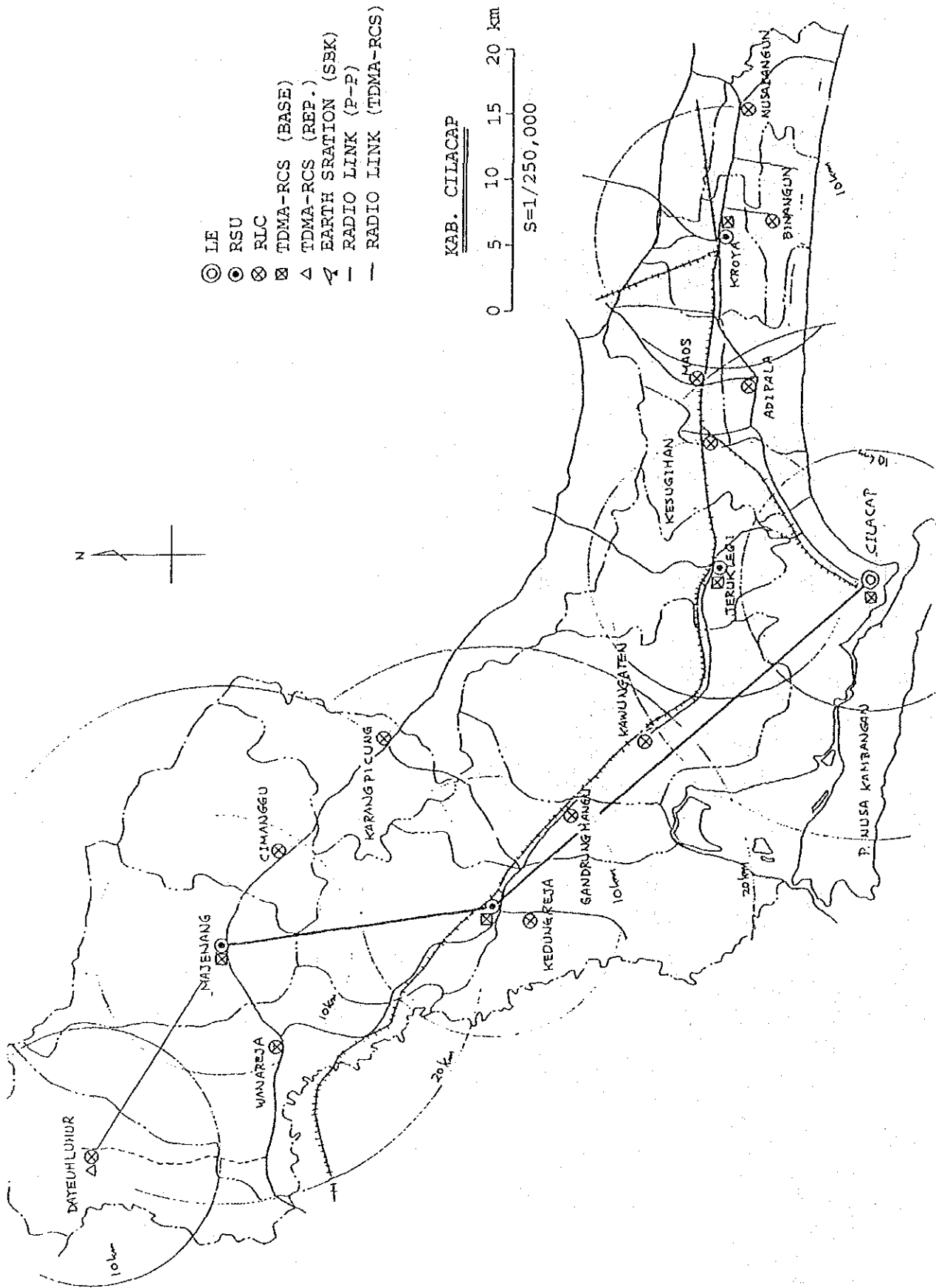
KABUPATEN KAMPAR -1/2

AN 5-5-4 (1/2) サンプル地域のシステム設計 (KAB. KAMPAR)



KABUPATEN KAMPAR -2/2

図 AN 5-5-4 (2/2) サンプル地域のシステム設計 (KAB. KAMPAR)



図AN5-5-5 サンプル地域のT.D.M.A.-R.C.S. (KAB. CILACAP)



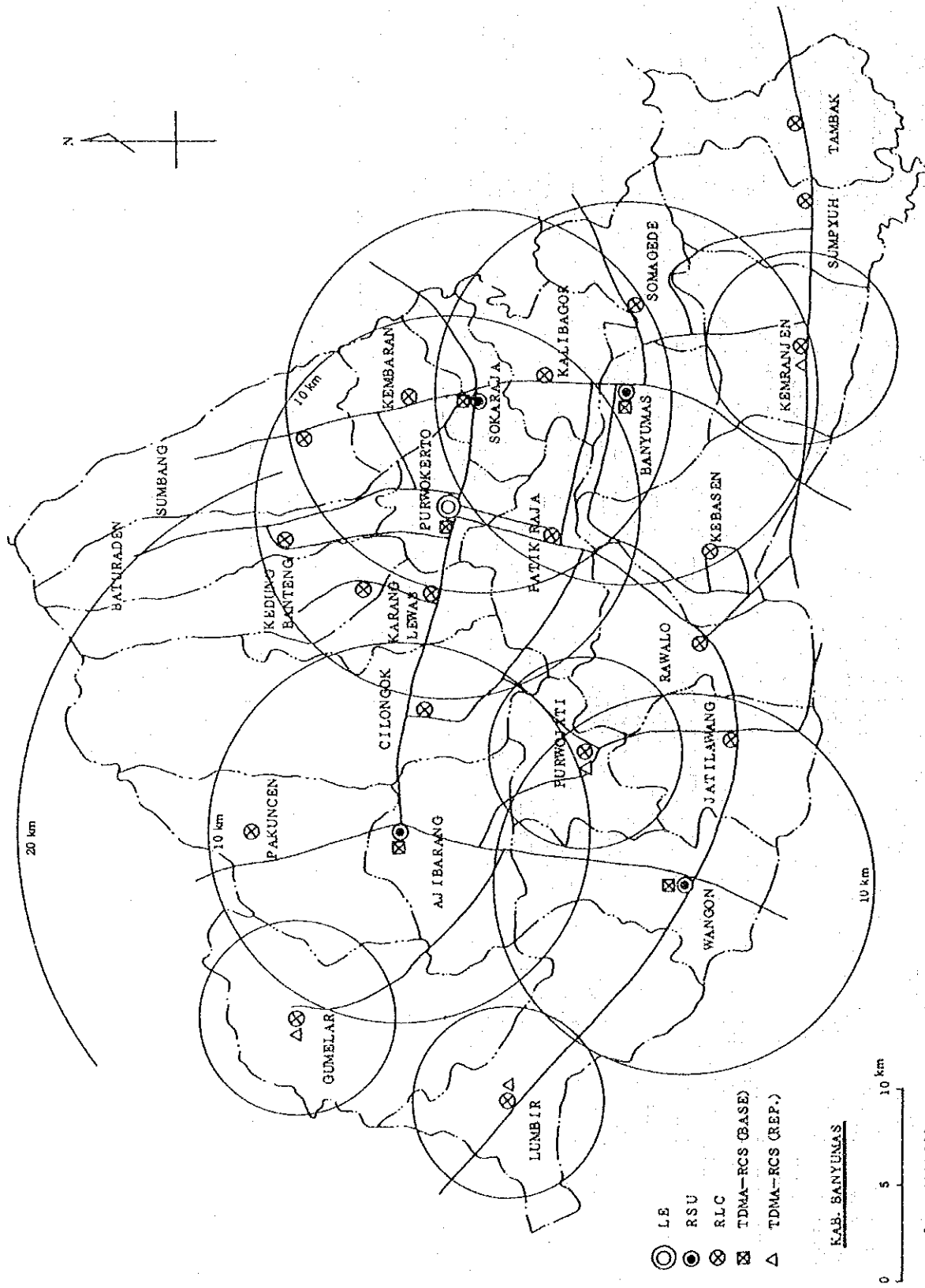


図 AN5-5-7 サンプル地域の T.D.M.A.-R.C.S. ( KAB. BANYUMAS )



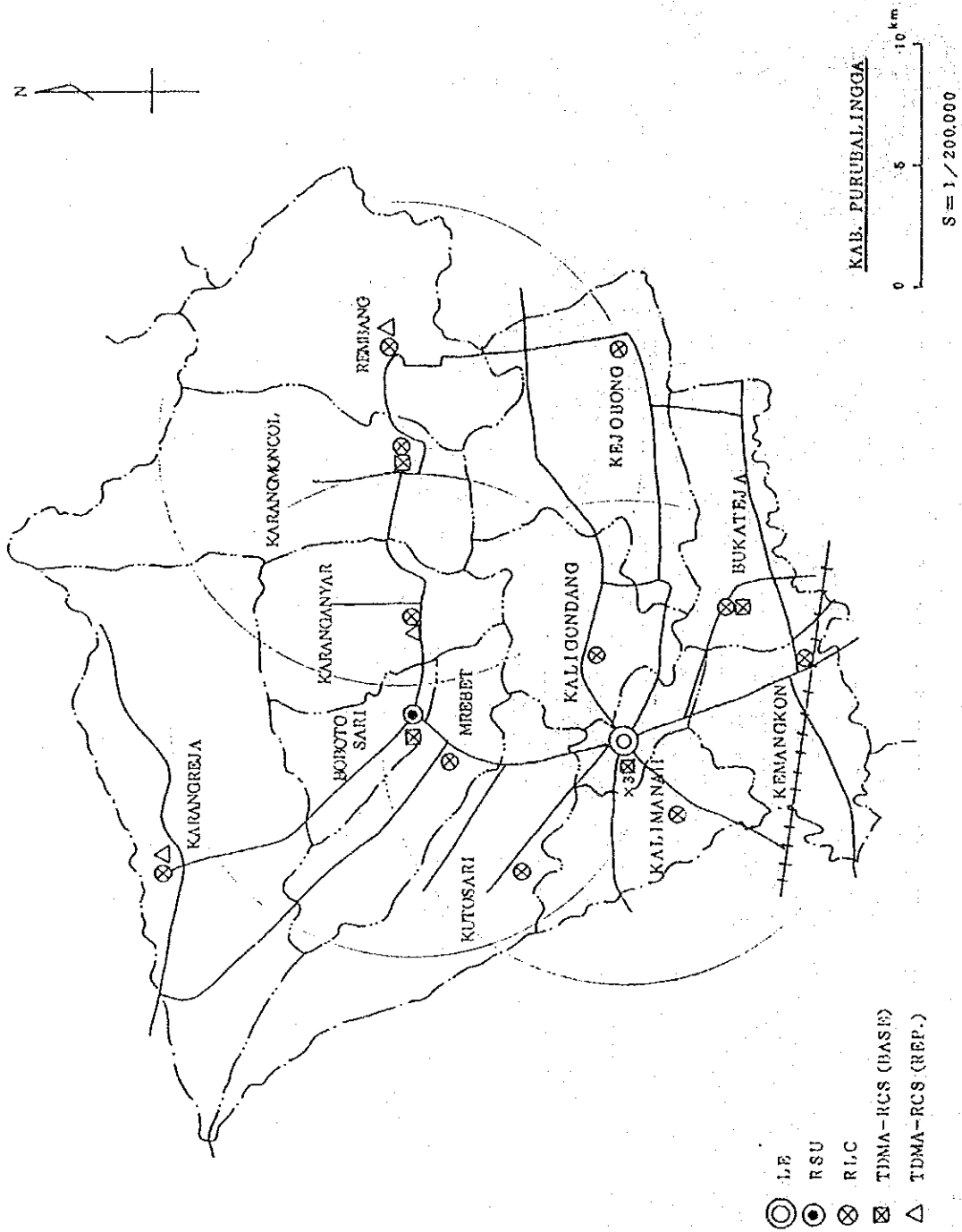


図 AN5-5-9 サンプル地域の T.D.M.A. - R.C.S. (KAB. PURBALINGGA)

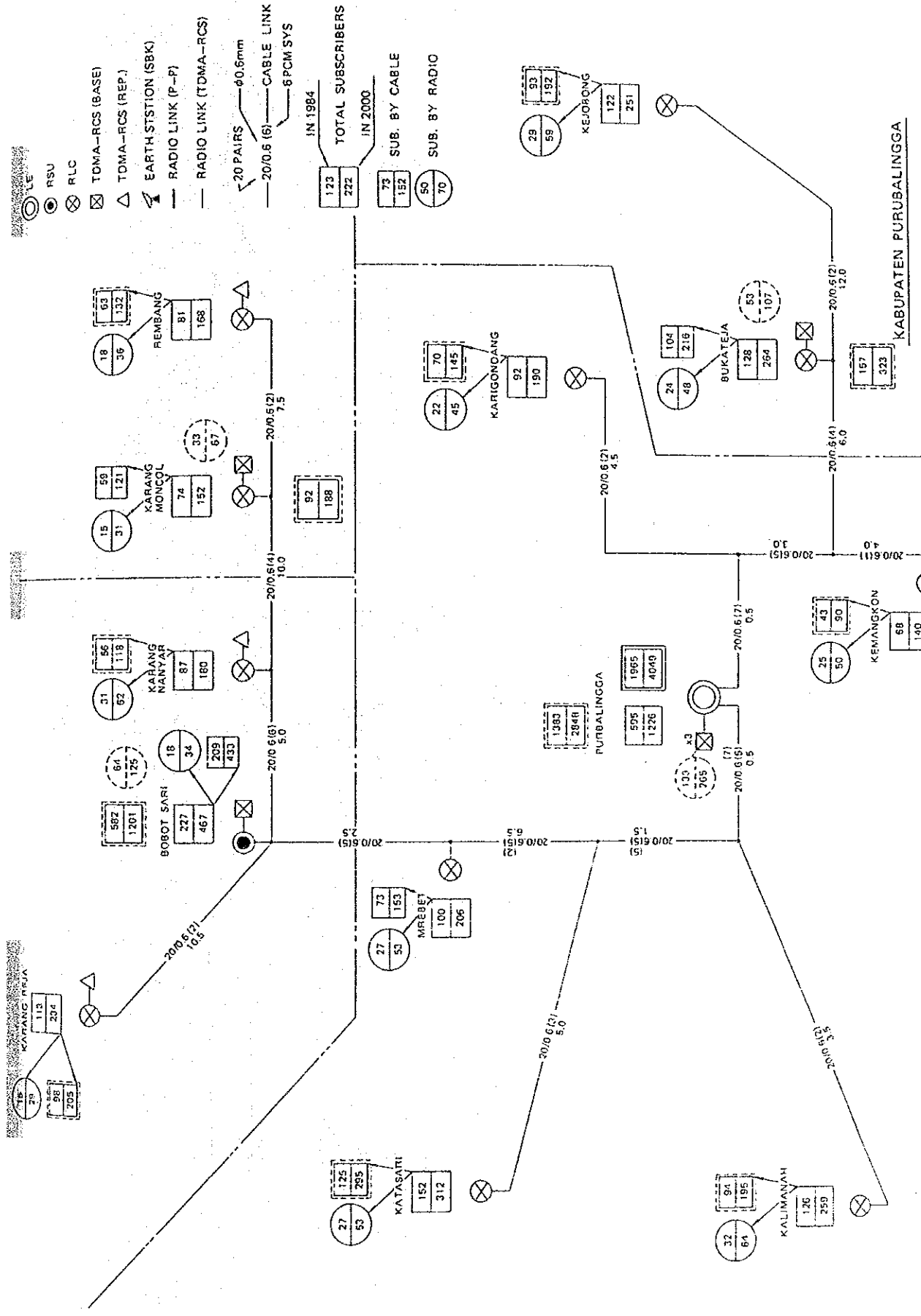


図 AN5-5-10 サンプル地域のシステム設計 (KAB. PURBALINGGA)



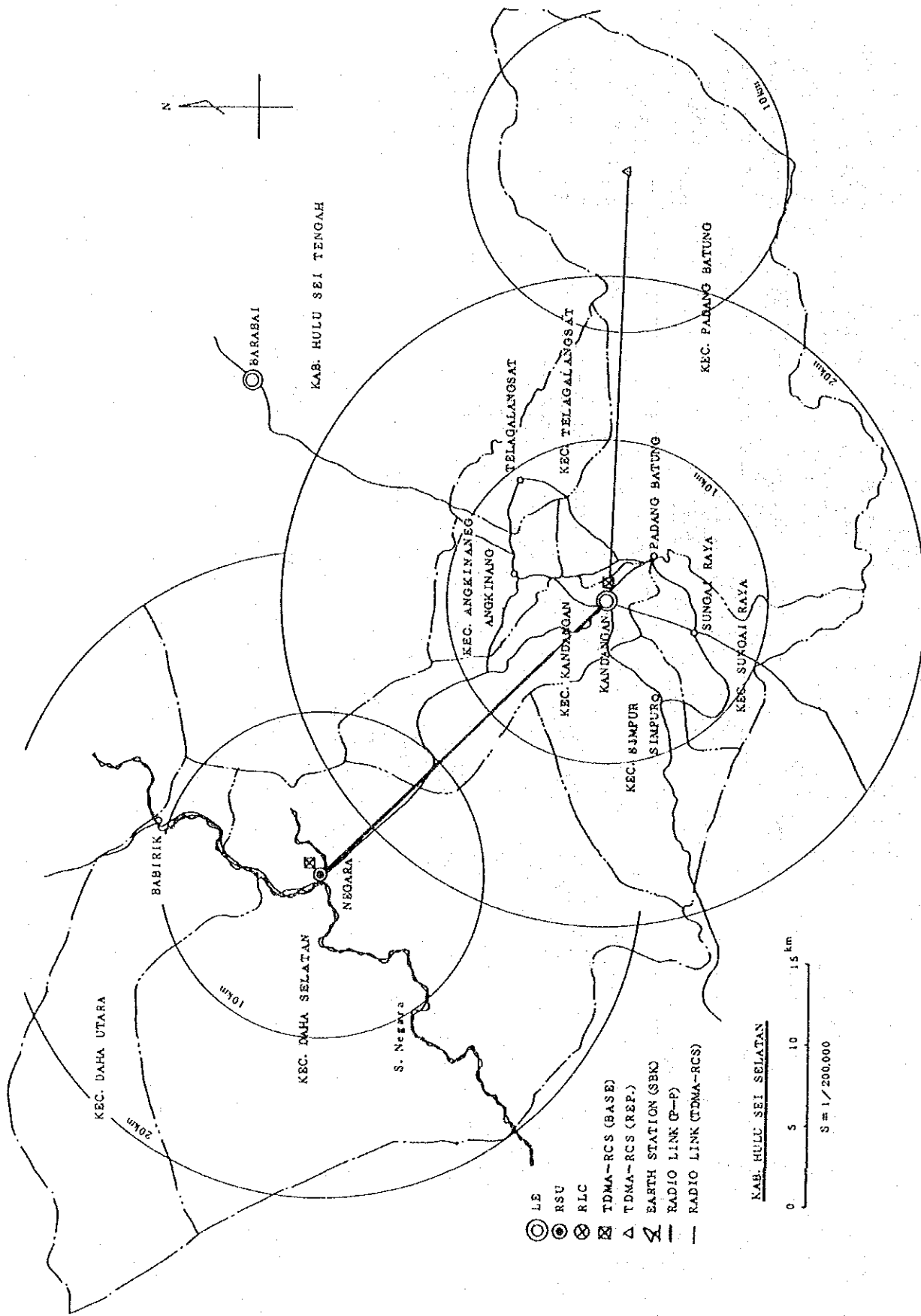


図 AN5-5-11 サンプル地域の T.D.M.A.-R.C.S. (KAB. HULU SEI SELATAN)

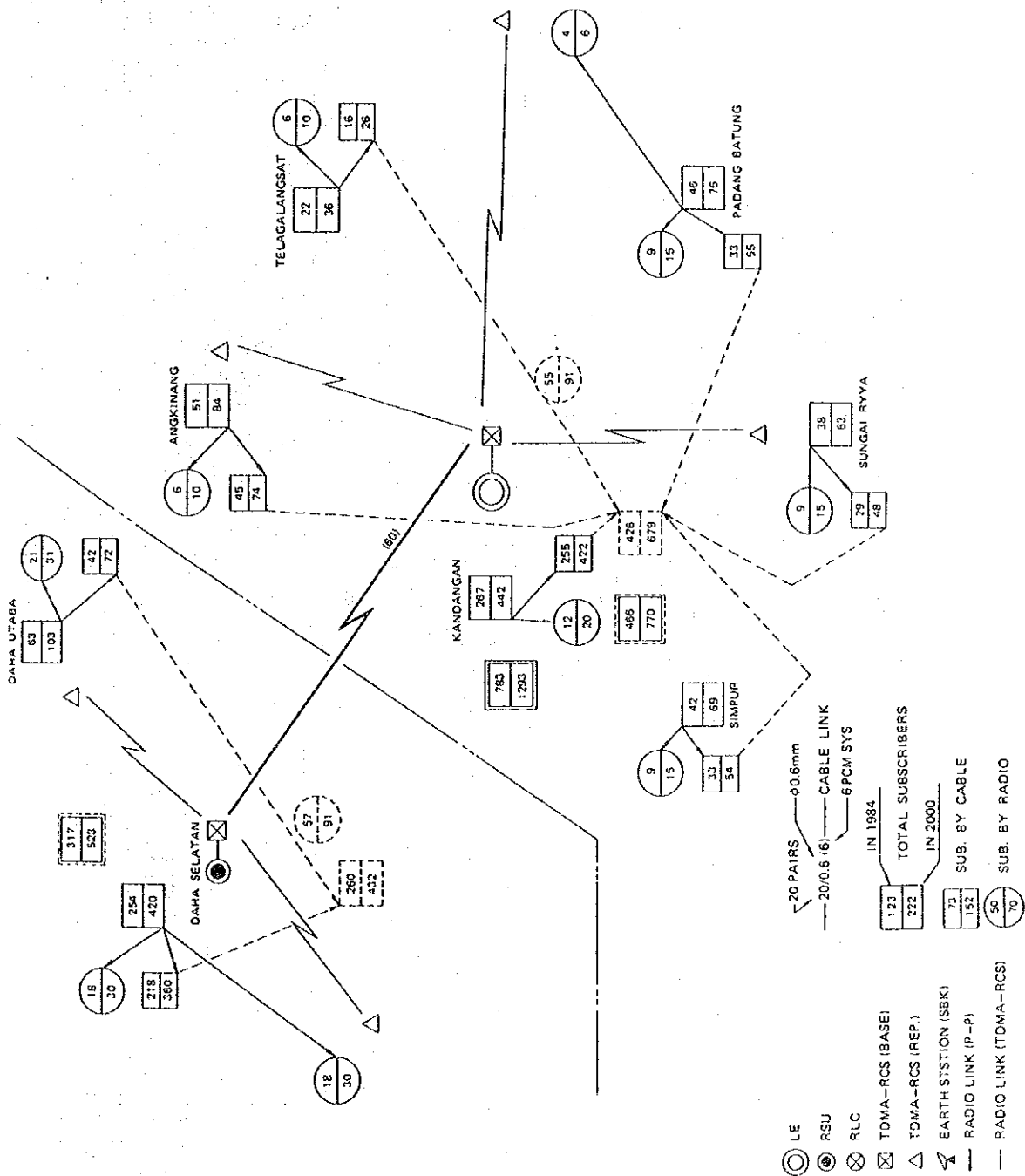
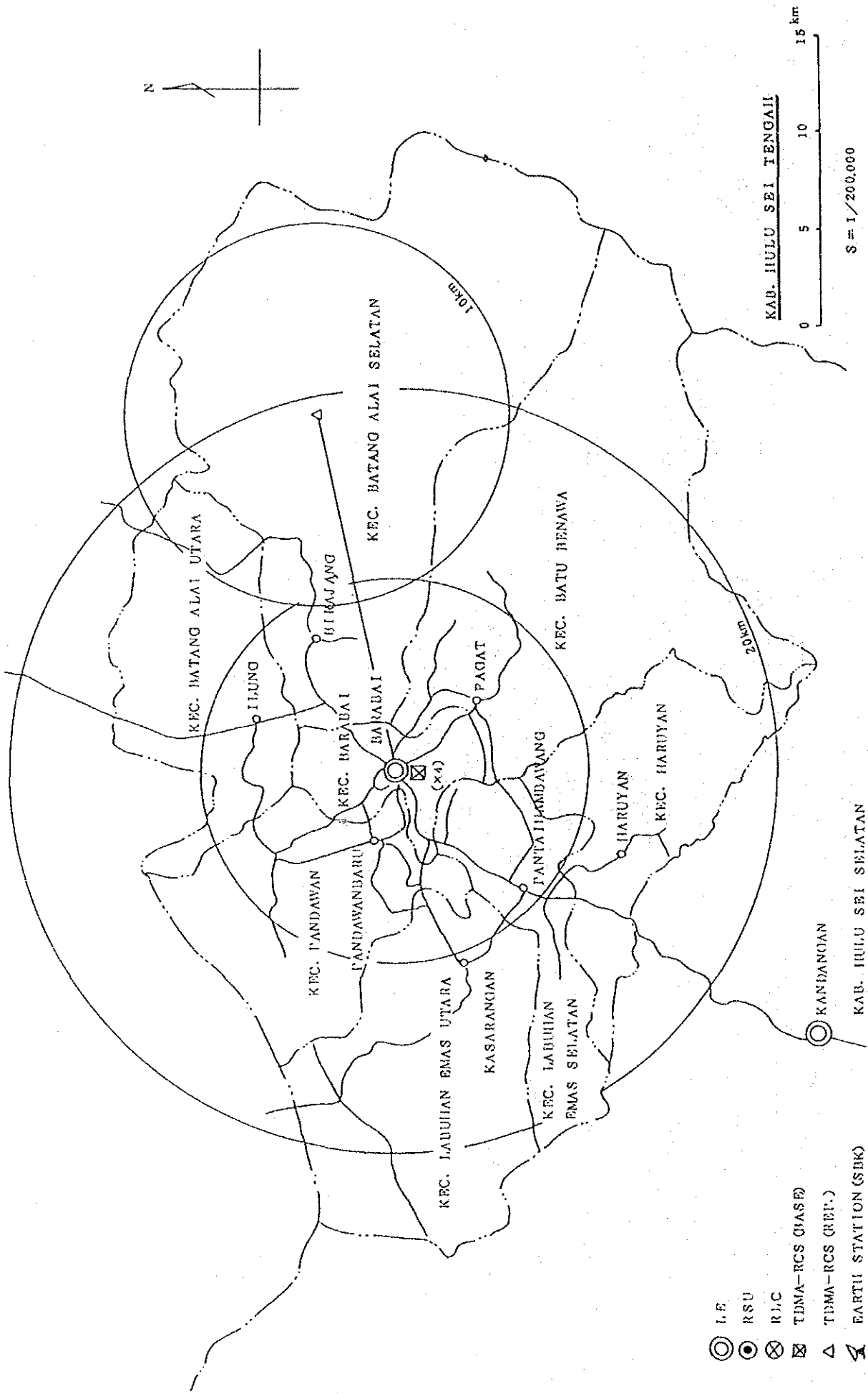


図 AN5-5-12 サンプル地域のシステム設計 (KAB. HULU SEI SELATAN)

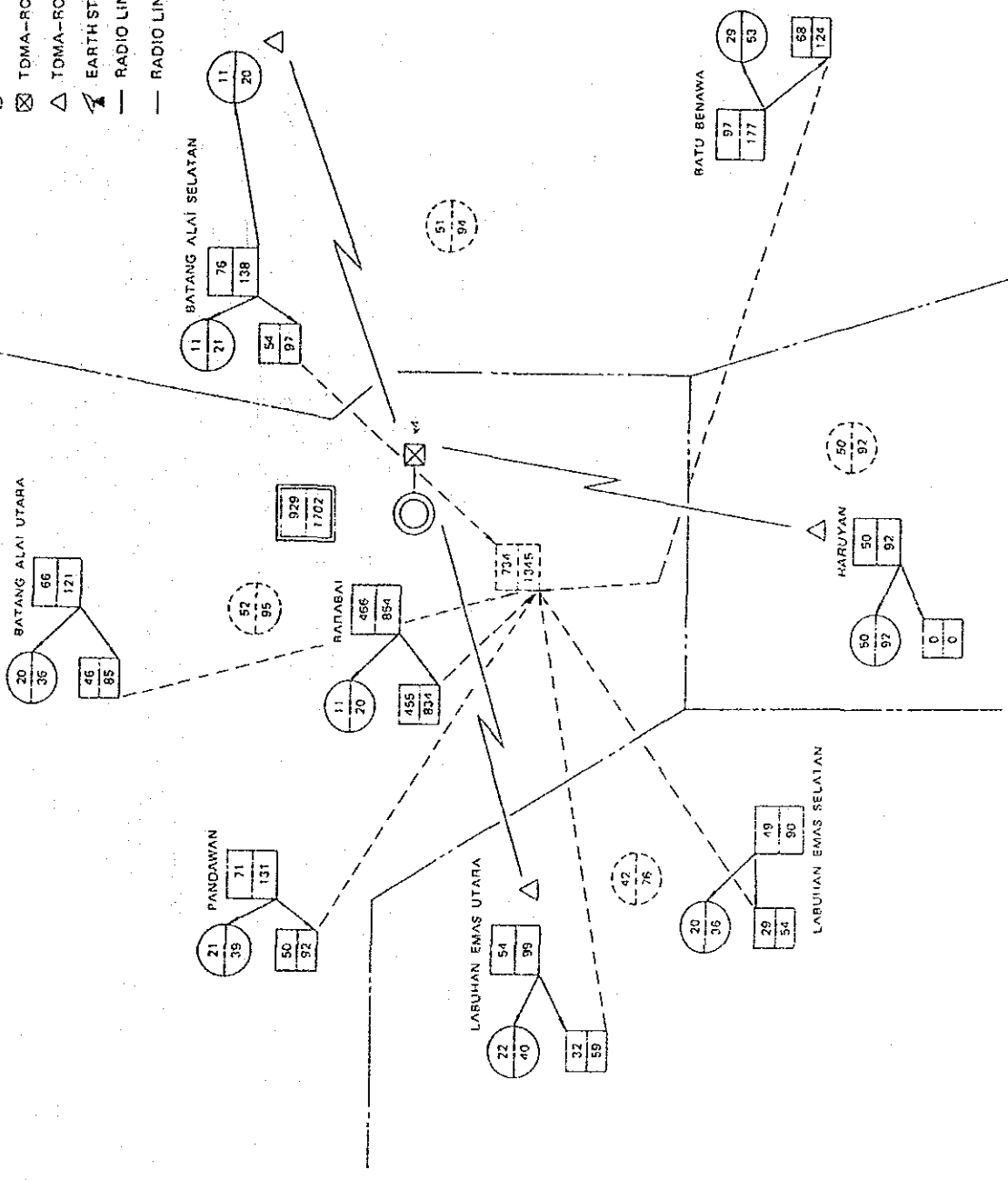
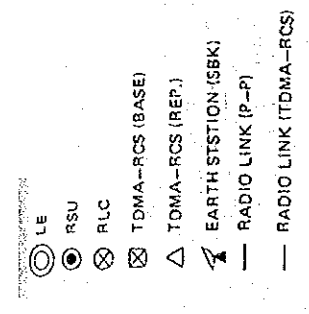
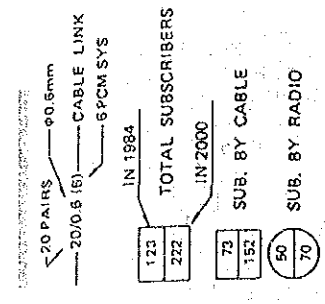


- L.F.
- RSU
- ⊗ R/C
- ⊠ TDMA-RCS (CHASE)
- ⊞ TDMA-RCS (REP.)
- △ EARTH STATION (SBK)
- ▬ RADIO LINK (G-T)
- RADIO LINK (TDMA-RCS)

KAB. HULU SEI TENGAH

S = 1/200,000

図 A N 5 - 5 - 1 3 サンプル地域の T.D.M.A. - R.C.S. (KAB. HULU SEI TENGAH)



KABUPATEN HULU SEI TENGAH

図AN5-5-14 サンプル地域のシステム設計 (KAB. HULU SEI TENGAH)

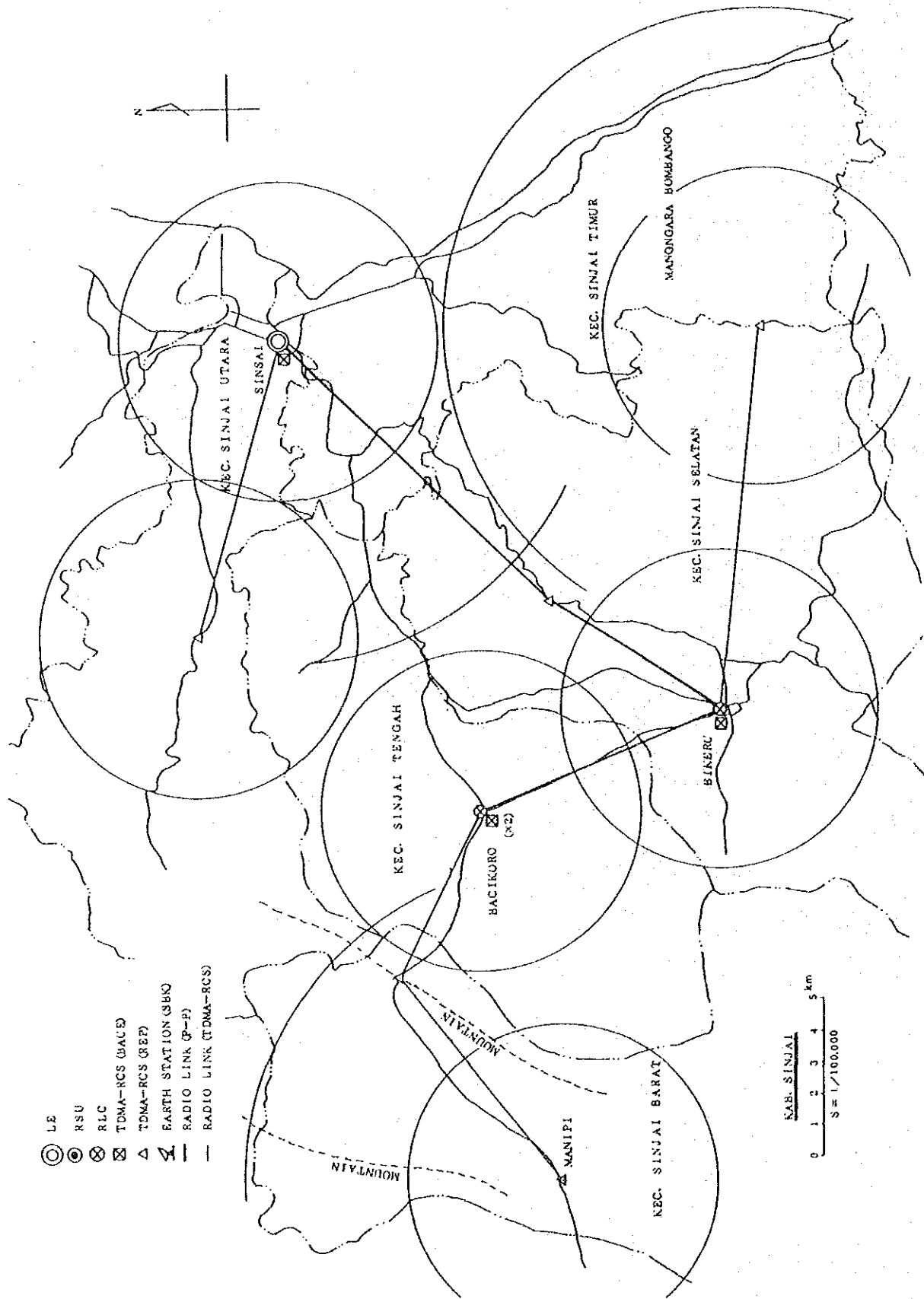
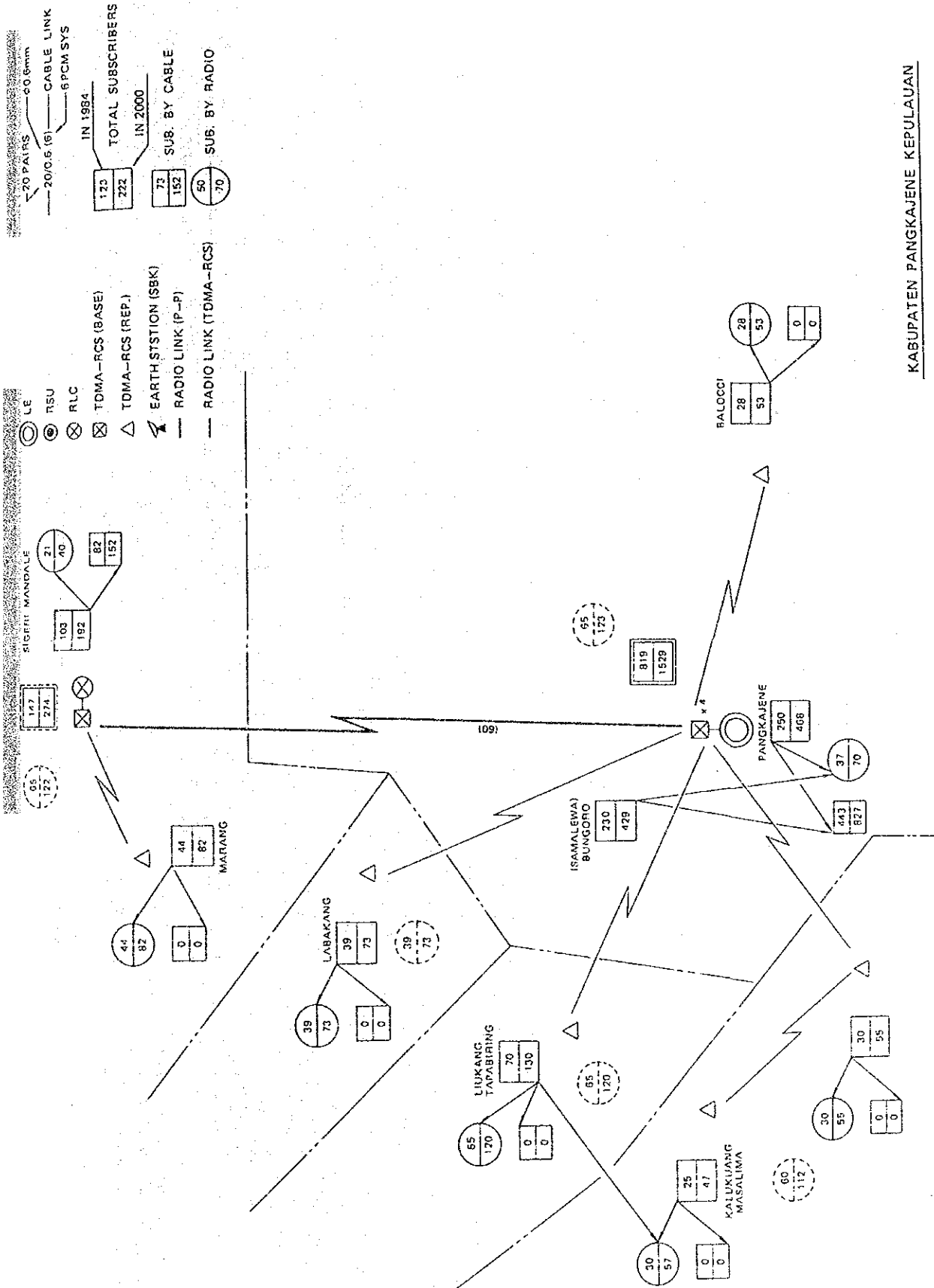


図 AN5-5-15 サンプル地域の T.D.M.A-R.C.S. (KAB. SINJAI)



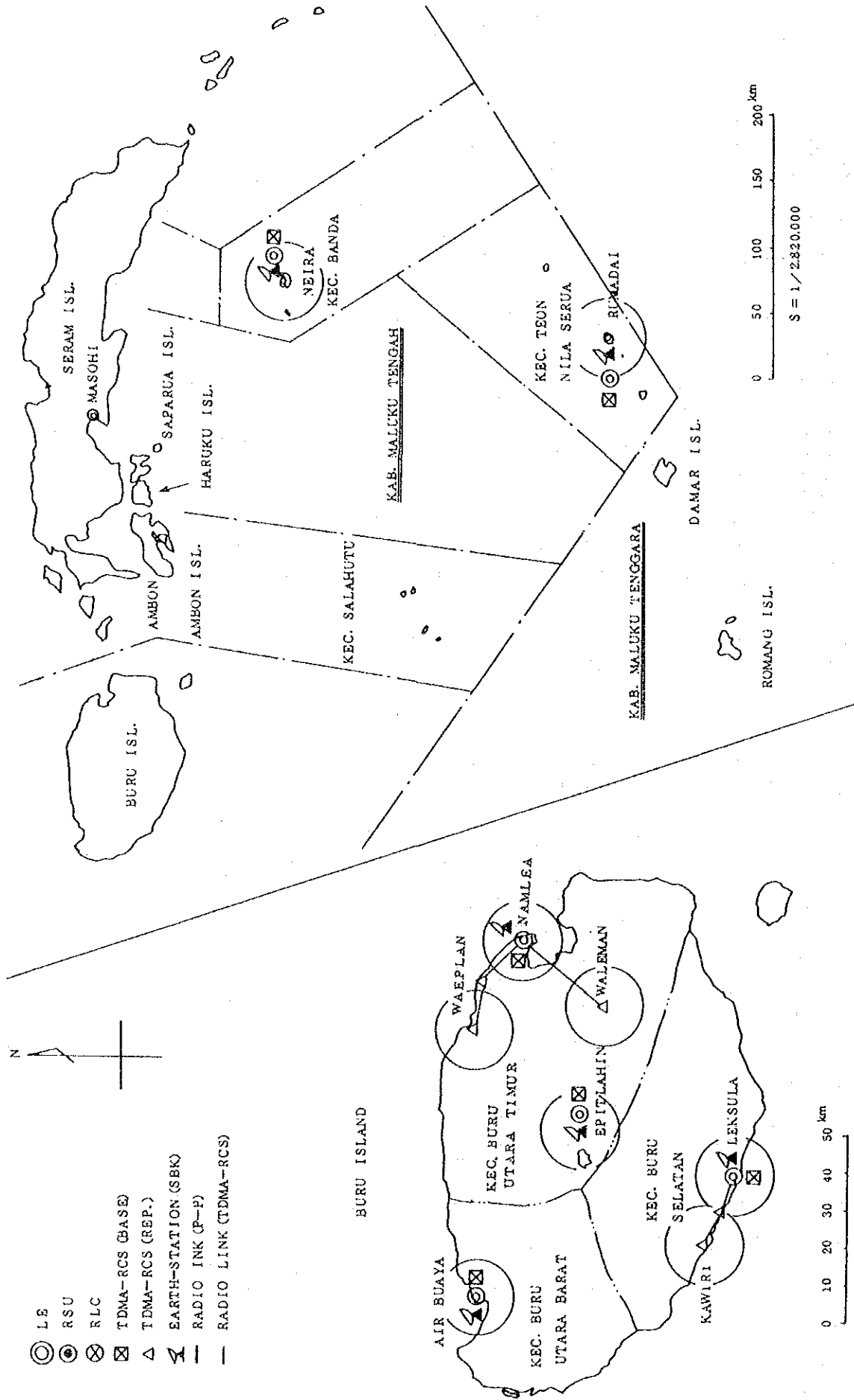




KABUPATEN PANGKAJENE KEPULAUAN

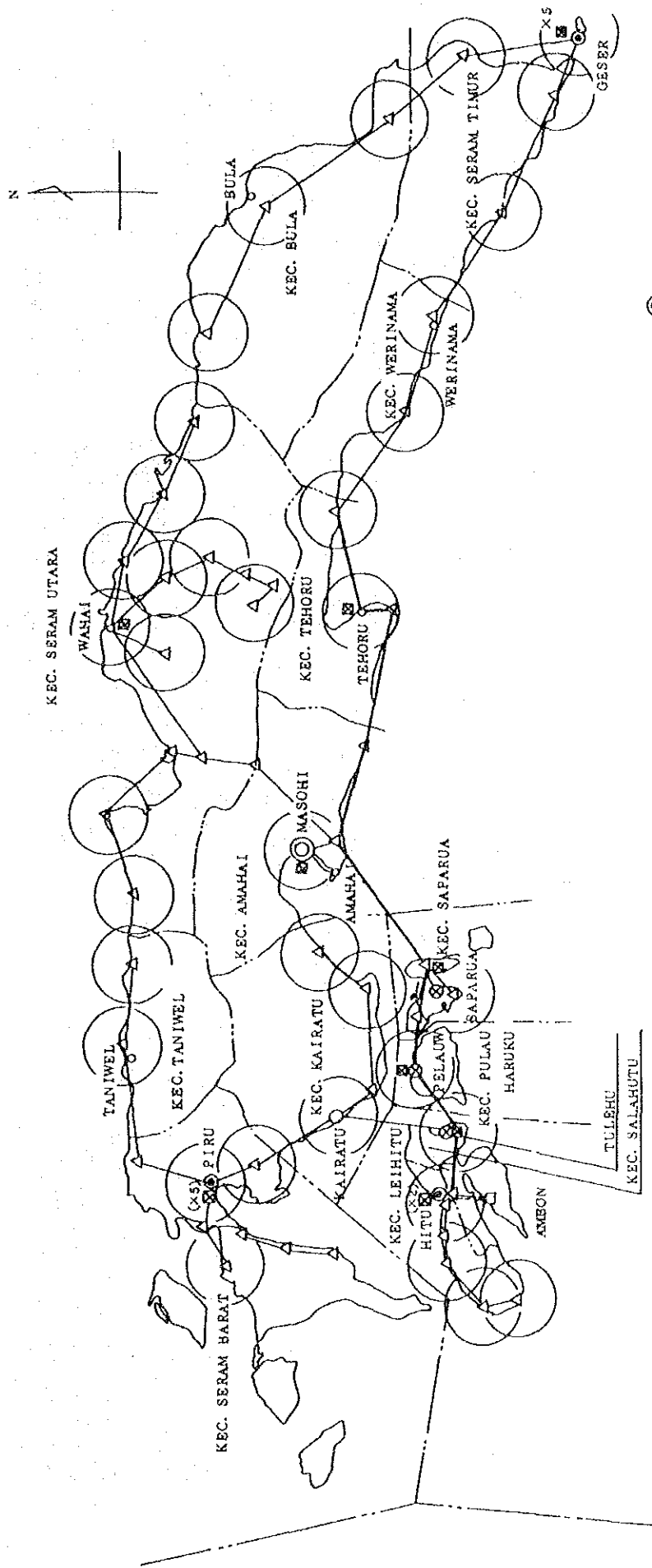
図 AN5-5-18 サンプル地域のシステム設計 (KAB. PANGKEP)





- L.S.
- ⊙ RSU
- ⊗ RLC
- ⊠ TDMA-RCS (BASE)
- △ TDMA-RCS (REP.)
- ⚡ EARTH-STATION (SBK)
- RADIO LINK (P-P)
- RADIO LINK (TDMA-RCS)

図 AN5-5-19 (1/2) サンプル地域の T.D.M.A.-R.C.S. (KAB. MALUKU TENGAH)



- ⊙ LE
- ⊙ RSU
- ⊗ RLC
- ⊠ TDMA-RCS (BASE)
- △ TDMA-RCS (REP.)
- ⚡ EARTH STATION (SBO)
- RADIO LINK (P-F)
- RADIO LINK (TDMA-RCS)

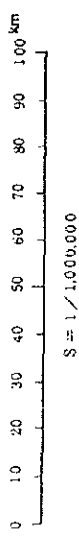
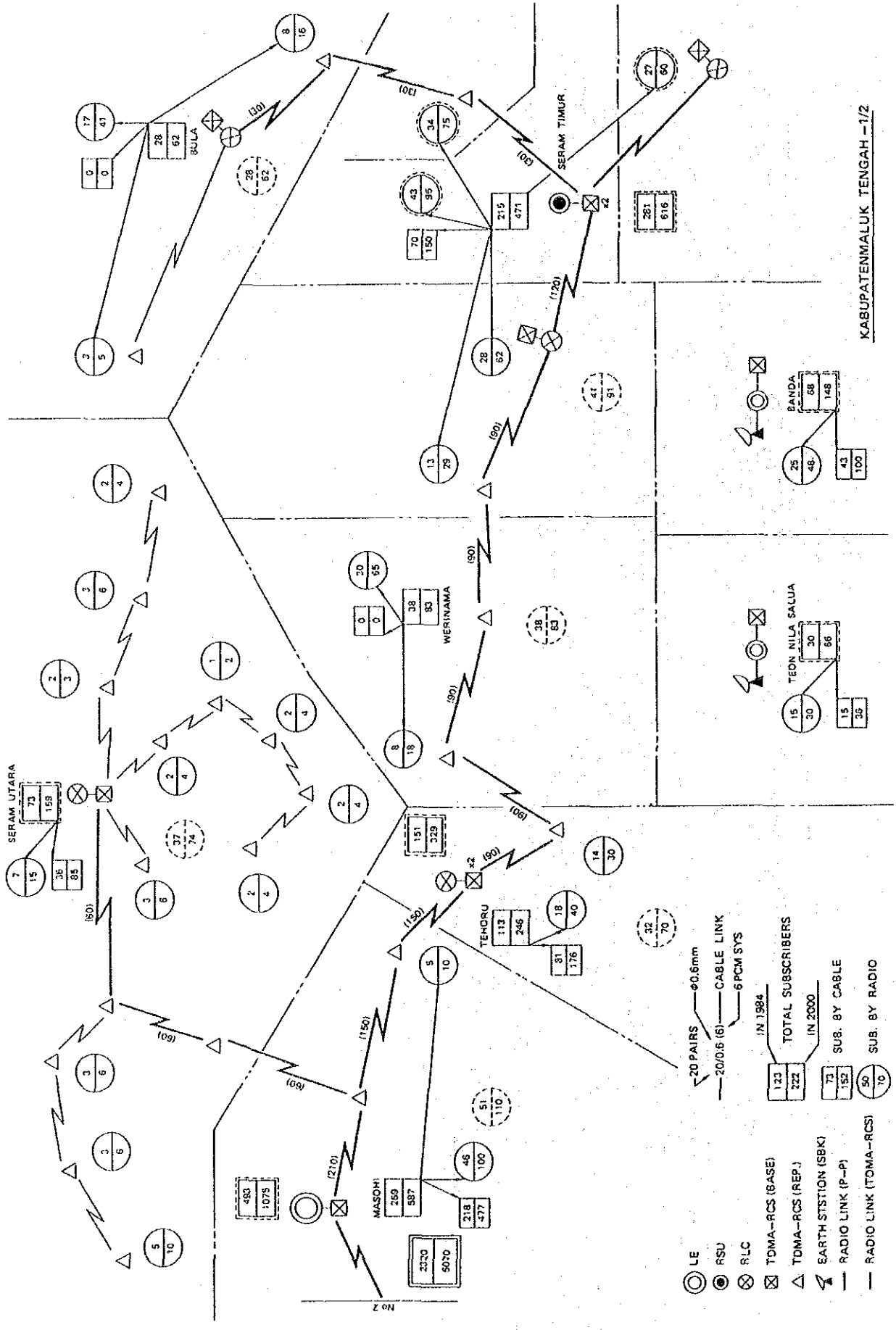
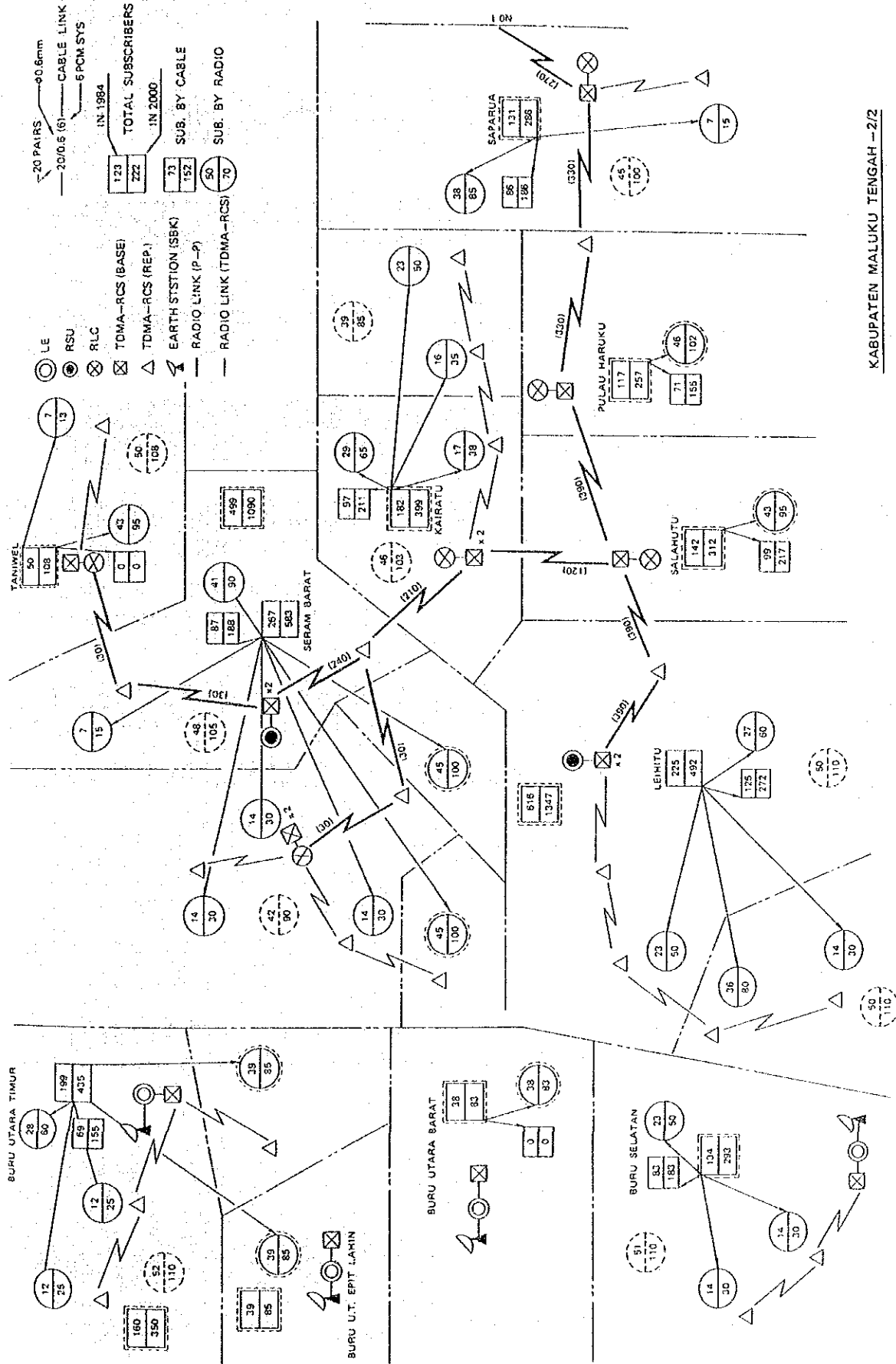


図 AN5-5-19 (2/2) サンプル地域の T.D.M.A.-R.C.S. (KAB. MALUKU TENGAH)



KABUPATENMALUKU TENGAH -1/2

図AN5-5-20 (1/2) サンプル地域のシステム設計 (KAB. MALUKU TENGAH)



KABUPATEN MALUKU TENGAH - 2/2

図AN5-5-20 (2/2) サンプル地域のシステム設計 (KAB. MALUKU TENGAH)

表AN5-5-21 (1/7) 県別工事費の内訳

CODE NAME (KAB. PROP.)	DEMAND/ AREA (/sq. Km)	TOTAL DEMAND (2000)	IKK DEMAND (2000)	KECAMATAN DEMAND (2000)	DESA DEMAND (2000)	TOTAL COST PER SUB. (MIL. Rp)	TOTAL COST (MIL. Rp)	TRANSFER COST (MIL. Rp)	SWITCHING COST (MIL. Rp)	DISTRIBUTION COST (MIL. Rp)	ENGINEERING COST (MIL. Rp)
1101 ACEH SELATAN	0.421	3,914	1,590	1,204	1,120	6.65	26,011	4,096	3,566	17,111	1,239
1102 ACEH TENGGARA	0.620	2,246	1,007	632	607	6.30	14,143	1,892	2,207	9,370	673
1103 ACEH TIMUR	0.890	8,074	3,175	2,878	2,021	5.70	46,042	5,990	6,223	31,637	2,192
1104 ACEH TENGAH	0.244	1,311	358	558	395	6.57	8,615	881	1,347	5,977	410
1105 ACEH BARAT	0.648	4,350	1,746	1,438	1,166	6.77	29,440	6,122	3,888	18,028	1,402
1106 ACEH BESAR	0.973	3,175	1,553	846	776	5.54	17,586	1,552	2,989	12,207	837
1107 PIDIE	1.174	4,848	2,378	1,350	1,120	5.32	25,801	2,519	4,242	17,811	1,229
1108 ACEH UTARA	2.865	13,728	6,912	4,810	2,006	4.09	56,096	9,392	8,848	35,195	2,671
1201 NIAS	1.180	5,616	2,023	2,297	1,296	5.46	30,681	3,856	4,760	20,604	1,461
1202 TAPANULI SELATAN	1.219	11,772	4,478	4,607	2,687	5.48	64,522	10,613	8,023	42,814	3,072
1203 TAPANULI TENGAH	0.654	1,580	610	547	423	6.22	9,826	1,217	1,603	6,538	468
1204 TAPANULI UTARA	0.536	8,395	2,999	3,072	2,324	6.02	50,541	6,022	6,395	35,717	2,407
1205 LABUHAN BATU	1.187	8,572	2,869	3,729	1,974	5.32	45,616	5,559	6,489	31,395	2,172
1206 ASAHAN	2.934	13,809	5,348	6,468	1,993	4.08	56,291	9,668	8,881	35,062	2,681
1207 SIMALUNGUN	2.352	11,602	5,100	4,556	1,947	4.36	50,629	7,197	7,948	33,073	2,411
1208 DAIRI	0.731	2,508	977	875	657	5.84	14,658	1,331	2,435	10,194	698
1209 KARO	1.411	2,035	1,132	463	440	5.19	10,563	950	2,020	7,090	503
1210 DELI SERDANG	4.659	20,586	7,318	11,237	1,971	3.31	68,103	14,842	11,408	38,610	3,243
1211 LANGKAT	2.072	12,448	5,427	4,771	2,250	4.59	57,112	8,470	8,316	37,607	2,720
1301 RESISIR SELATAN	0.378	2,175	789	756	630	6.50	14,129	1,707	2,145	9,604	673
1302 SOLOK	0.331	2,359	632	1,034	692	6.22	10,482	1,142	2,306	10,333	699
1303 SAWAH LUNTO/SIJUNJUN	0.268	1,607	452	675	480	6.52	10,482	1,070	1,628	7,285	499
1304 TANAH DATAR	1.414	1,986	946	611	429	5.12	10,171	795	1,976	6,916	484
1305 PADANG PARIAMAN	0.391	2,605	1,222	632	752	6.86	17,864	3,027	2,518	11,489	851
1306 AGAM	1.233	2,489	1,165	759	566	5.37	13,356	1,278	2,418	9,023	636
1307 LIMAPULUH KOTA	0.413	1,476	555	398	423	6.29	9,277	867	1,505	6,454	442
1308 PASAMAN	0.295	2,820	900	1,034	836	6.50	18,339	2,068	2,698	12,659	873
1401 INDRAGIRI HULU	0.125	1,986	410	957	619	7.31	14,522	2,539	1,976	9,316	692
1402 INDRAGIRI HILIR	0.429	4,983	1,716	1,845	1,422	6.32	31,517	3,942	4,336	21,739	1,501
1403 KEPULAUAN RIAU	0.517	4,188	1,462	1,561	1,165	5.52	35,695	12,328	3,770	17,897	1,700
1404 KAMPAR	0.137	3,867	1,145	1,521	1,201	7.31	28,251	5,286	3,530	18,089	1,345
1405 BENGKALIS	0.241	7,380	1,618	3,338	2,224	6.99	51,619	9,653	5,836	33,672	2,458
1501 KERINCI	0.378	1,588	592	536	460	6.20	9,853	761	1,610	7,012	469
1502 SARKO	0.142	2,010	422	965	623	6.84	13,752	1,708	1,997	9,392	655
1503 BATANG HARI	0.159	1,776	450	778	548	6.85	12,159	1,531	1,785	8,264	579
1504 TANJUNG JABUNG	0.256	2,610	741	1,086	783	6.89	17,971	2,728	2,522	11,865	856
1505 BUNGO TEBO	0.177	2,392	433	1,225	734	6.84	16,357	2,162	2,335	11,081	779
1601 OGAN KOMERING ULU	1.220	16,068	3,200	9,203	3,666	5.30	85,162	12,927	9,763	58,416	4,055
1602 OGAN KOMERING ILIR	0.352	9,081	2,517	3,914	2,650	6.20	56,340	6,559	6,753	40,346	2,683
1603 LEMATANG ILIR OGAN I	0.541	5,359	1,541	2,337	1,481	6.29	33,719	4,752	4,590	22,770	1,606
1604 LAHAT	1.508	7,233	2,638	3,071	1,524	5.16	37,354	5,153	5,752	24,670	1,779
1605 MUISTRANAS	0.440	5,772	2,615	1,515	1,642	6.34	36,606	4,885	4,861	25,117	1,743
1606 MUSI BANYU ASIN	0.690	11,128	2,225	5,956	2,947	6.16	68,541	11,877	7,735	45,665	3,264
1607 BANGKA	0.539	5,646	1,603	2,482	1,561	6.58	37,137	6,588	4,779	24,002	1,768
1608 BELITUNG	0.230	1,831	842	436	553	6.69	12,254	1,460	1,835	8,376	584
1701 BENGKULU SELATAN	0.548	1,848	900	439	510	6.39	11,808	1,555	1,851	7,840	562
1702 REJANG LEDONG	0.876	2,329	991	753	585	5.90	13,735	1,645	2,280	9,156	654
1801 BENGKULU UTARA	0.360	1,443	471	552	420	7.00	10,103	1,749	1,473	6,399	481
1802 LAMPUNG SELATAN	2.666	17,649	6,380	8,540	2,729	4.31	76,008	14,806	10,352	47,231	3,619
1803 LAMPUNG TENGAH	2.080	18,543	6,712	8,467	3,344	4.14	82,415	11,889	10,678	55,924	3,925
1804 LAMPUNG UTARA	0.424	8,170	2,746	3,068	2,935	6.38	52,142	7,696	6,275	35,688	2,487

表 A N 5 - 5 - 2 1 ( 2 / 7 )

## 県 別 工 事 費 の 内 訳

CODE NAME (KAB. PROP.)	DEMAND/ AREA (/sq. Km.)	TOTAL DEMAND (2000)	IKK DEMAND (2000)	KECAMATAN DEMAND (2000)	DESA DEMAND (2000)	TOTAL COST PER SUB. (MIL.Rp.)	TOTAL COST (MIL.Rp.)	TRANSFER COST (MIL.Rp.)	SWITCHING COST (MIL.Rp.)	DISTRIBU- TION COST (MIL.Rp.)	ENGINE- RING COST (MIL.Rp.)
3201 PANDEGLANG	2,814	7,367	3,502	2,769	1,096	4.23	31,174	4,714	5,829	19,146	1,484
3202 LEBAK	2,239	7,018	3,294	2,511	1,213	4.45	31,247	3,655	5,627	20,477	1,488
3203 BOGOR	16,416	51,315	22,343	27,355	1,617	1.98	101,816	27,330	23,009	46,478	4,848
3204 SUKABUMI	5,222	22,355	8,360	12,098	1,897	2.98	66,532	12,824	12,032	38,508	3,168
3205 CIANJUR	5,260	18,848	8,750	8,511	1,587	3.02	56,970	11,182	10,788	32,287	2,713
3206 BANDUNG	15,171	53,813	20,686	31,391	1,736	1.99	106,967	28,093	24,042	49,738	5,094
3207 GARUT	7,264	21,617	10,470	9,882	1,264	2.56	55,301	11,922	11,773	28,973	2,633
3208 TASIK MALAYA	7,350	24,065	11,362	11,314	1,389	2.52	60,711	13,213	12,633	31,974	2,891
3209 CIAMIS	6,205	16,587	7,153	8,273	1,161	2.86	47,489	10,228	9,959	25,041	2,281
3210 KUNINGAN	7,371	7,998	4,001	3,537	460	2.68	21,452	3,645	6,181	10,604	1,022
3211 CIREBON	15,189	16,845	7,970	8,332	543	2.08	35,114	7,822	10,055	15,565	1,672
3212 MAJALENGKA	8,909	9,221	4,151	4,638	432	2.50	23,073	4,429	6,824	10,722	1,099
3213 SUMEDANG	4,502	6,892	3,298	2,911	683	3.33	22,981	3,082	5,553	13,252	1,094
3214 INDRAMAYU	7,063	14,952	6,225	7,824	903	2.64	39,405	7,732	9,335	20,462	1,876
3215 SUBANG	6,377	12,492	4,968	6,676	848	2.87	35,862	7,350	8,334	18,470	1,708
3216 PURWAKARTA	4,082	4,070	2,251	1,375	444	3.60	14,642	1,875	3,683	8,387	697
3217 KARAWANG	8,976	15,402	7,491	7,196	715	2.40	36,905	7,814	9,509	17,824	1,757
3218 BEKASI	9,590	14,366	6,857	6,884	625	2.37	34,047	7,359	9,104	15,963	1,621
3219 TANGERANG	16,757	23,108	11,201	11,183	725	2.01	46,440	10,957	12,297	20,975	2,211
3220 SERANG	7,257	13,433	6,105	6,541	787	2.59	34,786	6,386	8,728	18,016	1,656
3221 CILACAP	5,115	11,959	5,048	5,874	1,038	3.25	38,920	8,020	8,105	20,924	1,852
3222 BANYUMAS	7,240	9,485	4,922	4,006	557	2.65	25,112	4,218	6,956	12,743	1,196
3223 PURBALINGGA	5,293	4,049	2,089	1,622	339	3.15	12,760	1,582	3,667	6,904	608
3224 BANJAR NEGARA	3,796	4,305	1,898	1,905	502	3.72	15,995	2,057	3,856	9,321	762
3225 KEBUMEN	5,194	7,105	3,439	3,059	606	3.13	22,274	3,247	5,678	12,289	1,061
3226 PURWOREJO	3,862	4,302	2,093	1,714	494	3.63	15,618	1,813	3,853	9,208	744
3227 WONOSOBO	4,020	3,871	1,953	1,489	428	3.59	13,883	1,626	3,533	8,053	661
3228 MAGELANG	5,761	6,579	3,228	2,850	501	3.22	19,645	2,829	3,365	10,515	935
3229 BOYOLALI	4,688	5,171	2,454	2,226	492	3.37	17,418	2,471	4,464	9,653	829
3230 KLATEN	11,116	7,748	3,840	3,612	297	2.32	17,960	3,103	6,044	7,958	855
3231 SUKOHARJO	7,819	3,800	1,861	1,735	205	2.70	10,262	1,466	3,479	4,828	489
3232 WONOGIRI	3,100	5,946	2,604	2,519	823	4.03	23,942	3,206	4,973	14,623	1,140
3233 KARANG ANYAR	2,629	3,922	1,875	1,435	612	4.24	16,618	1,681	3,572	10,573	797
3234 SRAGEN	5,379	5,384	2,684	2,257	442	3.11	16,728	2,255	4,607	9,069	1,355
3235 GROBOGAN	3,950	7,951	3,525	3,532	895	3.58	28,451	4,180	6,155	16,761	1,355
3236 BLORA	1,767	4,636	2,008	1,718	425	4.85	22,484	2,375	4,053	14,945	1,071
3237 REMBANG	2,630	2,722	1,356	1,191	941	4.32	11,767	1,254	2,616	7,336	560
3238 PATI	4,324	7,402	3,536	3,102	784	3.39	25,105	3,410	5,849	14,651	1,195
3239 KUDUS	8,347	3,389	2,014	1,205	170	2.63	8,923	1,224	3,160	4,114	425
3240 JEPARA	4,557	4,721	2,306	1,953	462	3.39	15,995	2,082	4,153	8,998	762
3241 DEMAK	4,246	4,509	2,090	1,946	474	3.49	15,719	1,923	4,003	9,040	749
3242 SEMARANG	4,256	4,230	1,951	1,889	450	3.51	15,062	1,913	3,845	8,587	717
3243 TEMANGGUN	4,384	3,652	1,795	1,485	372	3.49	12,754	1,624	3,366	7,157	607
3244 KENDAL	5,091	4,485	2,169	1,925	391	3.26	14,641	2,083	3,986	7,875	697
3245 BATANG	4,324	3,252	1,765	1,152	336	3.60	11,694	1,650	3,051	6,436	557
3246 PEKALONGAN	4,405	4,405	2,058	1,740	388	3.28	14,695	2,122	3,986	7,828	700
3247 PEMALANG	6,509	6,815	3,243	3,120	452	2.89	19,688	3,323	5,507	9,920	938
3248 TUNJAIL	9,062	8,577	4,258	3,859	360	2.98	20,401	4,614	6,492	9,324	971
3249 IKHRES	6,198	10,394	4,476	5,189	729	3.00	31,188	6,601	7,396	15,706	1,485

表AN5-5-21(3/7) 県別工事費の内訳

CODE NAME (KAB. PROP.)	DEMAND/ AREA (/sq. Km)	TOTAL DEMAND (2000)	IKK DEMAND (2000)	KECAMATAN DEMAND (2000)	DESA DEMAND (2000)	TOTAL COST PER SUB. (MIL.Rp)	TOTAL COST (MIL.Rp)	TRANSFER COST (MIL.Rp)	SWITCHING COST (MIL.Rp)	DISTRIBU- TION COST (MIL.Rp)	ENGINEE- RING COST (MIL.Rp)
3401 KULON PROGO	3.939	2,143	1,096	805	242	3.69	7,917	898	2,116	4,526	377
3402 BANTUL	9.338	4,445	2,259	1,988	188	2.52	11,208	1,698	3,957	5,019	534
3403 GUNUNG KIDUL	0.723	4,656	2,003	1,432	1,221	5.68	26,426	2,099	4,108	15,961	1,258
3404 SLEMAN	9.265	4,921	2,349	2,351	221	2.49	12,234	1,783	4,293	5,576	583
3501 PACITAN	2.305	3,172	1,497	1,136	539	4.56	14,474	1,668	2,987	9,130	689
3502 PONOROGO	4.239	6,164	3,126	2,390	648	3.45	21,242	2,749	5,110	12,372	1,012
3503 TRENGGALEK	4.295	4,720	2,247	1,982	490	3.53	16,639	2,308	4,153	9,387	792
3504 TULUNG AGUNG	7.055	7,662	4,012	3,186	463	2.70	20,674	3,200	5,596	10,494	984
3505 BLITAR	6.724	10,731	4,646	5,399	686	2.30	29,524	5,325	7,553	15,239	1,406
3506 KEDIRI	10.438	14,613	6,621	7,403	589	2.30	33,632	7,342	9,202	15,487	1,602
3507 MALANG	10.672	33,478	13,445	18,709	1,324	2.25	75,229	20,561	16,008	35,078	3,582
3508 LUMAJANG	6.958	8,927	4,164	4,214	548	2.71	24,205	4,025	6,674	12,354	1,153
3509 JEMBER	10.013	26,555	11,068	14,378	1,110	2.19	58,245	13,178	13,510	28,784	2,774
3510 BANYUWANGI	7.109	18,575	9,221	8,241	1,113	2.70	50,100	11,727	10,689	25,298	2,386
3511 BONDOWOSO	4.963	5,057	2,617	1,987	453	3.23	16,340	2,125	3,386	9,051	778
3512 SITUBONDO	2.606	4,099	2,076	1,379	644	4.41	18,083	2,417	3,704	11,101	861
3513 PROBOLINGGO	5.258	8,544	3,998	3,826	720	3.17	27,053	4,649	6,474	14,641	1,288
3514 PASURUAN	9.089	12,107	5,308	6,243	555	2.53	30,636	7,108	8,169	13,960	1,459
3515 SIDOARJO	15.273	9,683	4,585	4,787	312	2.19	21,174	4,175	7,054	8,937	1,008
3516 MOJOKERTO	8.916	6,830	3,383	3,128	319	2.54	17,324	3,046	5,516	7,938	825
3517 JOMBANG	10.776	10,194	5,063	4,731	400	2.29	23,337	4,295	7,301	10,629	1,111
3518 NGANJUK	7.559	8,912	4,431	3,983	498	2.61	23,296	3,919	6,666	11,601	1,109
3519 MADIUN	5.063	5,402	2,527	2,401	474	3.24	17,485	2,508	4,619	9,525	833
3520 MAGETAN	6.284	5,021	2,505	2,170	347	2.91	14,613	2,048	4,362	7,507	696
3521 NGAWI	5.248	7,300	2,868	3,816	616	3.18	23,198	3,775	5,790	12,527	1,105
3522 BOJONEGORO	4.988	11,267	5,471	4,792	1,004	3.18	35,778	6,186	7,798	20,090	1,704
3523 TUBAN	4.672	8,998	4,578	3,561	859	3.35	30,113	5,128	6,710	16,841	1,434
3524 LAMONGAN	6.511	11,701	5,333	5,593	775	2.76	32,261	5,706	7,992	17,027	1,536
3525 GRESIK	4.313	5,421	2,398	2,462	561	3.47	18,814	2,537	4,632	10,749	896
3526 BANGKALAN	4.583	5,775	2,791	2,422	552	3.43	19,810	3,043	4,863	10,961	943
3527 SAMPAK	4.108	5,069	2,413	2,106	550	3.58	18,124	2,466	4,395	10,401	863
3528 PAMEKASAN	6.043	4,683	2,519	1,826	338	3.00	14,072	2,059	4,127	7,216	670
3529 SUMENEP	3.250	7,790	3,351	3,400	1,038	4.00	31,140	4,966	6,067	18,624	1,483

表AN5-5-21 (4/7)

## 県別工事費の内訳

CODE NAME (KAB. PROP.)	DEMAND /AREA (/sq. Km)	TOTAL DEMAND (2000)	IKK DEMAND (2000)	KECAMATAN DEMAND (2000)	DESA DEMAND (2000)	TOTAL COST PER SUB. (MIL. Rp)	TOTAL COST (MIL. Rp)	TRANSFER COST (MIL. Rp)	SWITCHING COST (MIL. Rp)	DISTRIBUTION COST (MIL. Rp)	ENGINEERING COST (MIL. Rp)
5101 JEMBRANA	2.822	1,614	934	440	240	4.26	6,878	728	1,635	4,188	328
5102 TABARAN	3.283	2,613	1,343	924	345	3.97	10,373	1,146	2,524	6,209	494
5103 BADUNG	10.510	5,213	3,758	1,247	209	2.46	12,810	2,203	4,492	5,505	610
5104 GIANJAR	5.525	2,304	1,199	921	184	3.19	7,350	940	2,258	3,802	350
5105 KIJUNGRUNG	2.883	908	577	199	133	4.23	3,845	381	952	2,328	183
5106 BANGLI	2.351	1,065	611	275	179	4.48	4,769	398	1,108	3,037	227
5107 KARANG ASEM	2.714	2,196	1,150	710	335	4.31	9,456	1,022	2,163	5,820	450
5108 BULELENG	4.931	4,788	2,570	1,786	432	3.37	16,150	2,570	4,200	8,611	769
5201 LOMBOK BARAT	2.083	3,554	2,166	748	640	4.63	16,444	1,659	3,290	10,712	783
5202 LOMBOK TENGAH	2.058	2,939	1,374	1,031	533	4.62	13,588	1,238	2,797	8,905	647
5203 LOMBOK TIMUR	2.386	3,834	1,792	1,404	638	4.43	16,987	1,818	3,505	10,855	809
5204 SUMBAWA	0.201	1,706	585	601	520	6.70	11,422	1,299	1,720	7,859	544
5205 DOMPU	0.238	553	346	41	167	6.40	3,537	253	590	2,525	168
5206 BIMA	0.412	1,894	867	484	543	6.29	11,915	1,159	1,893	8,297	567
5301 SUMBAWA BARAT	0.297	1,232	433	433	365	6.43	7,921	726	1,271	5,547	377
5302 SUMBA TIMUR	0.112	653	317	132	204	6.80	4,440	463	693	3,073	211
5303 KUPANG	0.302	2,216	1,342	218	656	6.96	15,424	2,545	2,181	9,964	794
5304 TIMOR TENGAH SELATAN	0.371	1,489	636	421	432	6.34	9,435	882	1,517	6,587	449
5305 TIMOR TENGAH UTARA	0.251	689	310	172	207	6.56	4,518	437	730	3,136	215
5306 BELU	0.363	914	391	257	266	6.35	5,803	519	958	4,050	276
5307 ALOR	0.193	577	264	137	176	6.68	3,856	395	615	2,663	184
5308 FLORES TIMUR	0.411	1,265	486	416	363	6.69	8,457	1,209	1,303	5,543	403
5309 SIKKA	0.585	1,036	489	264	283	6.05	6,268	533	1,079	4,357	298
5310 ENDEH	0.428	931	455	211	266	6.24	5,807	493	975	4,063	277
5311 NGADA	0.292	900	402	231	267	6.42	5,774	499	944	4,057	275
5312 MANGGARAI	0.302	2,248	707	875	666	6.38	14,343	1,342	2,209	10,109	683
5401 COVALINA	0.082	113	68	10	36	10.01	1,131	88	185	803	54
5402 AINARO	0.130	156	71	36	49	9.79	1,527	103	255	1,096	73
5403 MANUFAHII (SAME)	0.098	111	67	10	35	10.03	1,114	93	182	786	53
5404 VIQUE QUE	0.103	191	79	52	60	10.17	1,943	188	311	1,351	93
5405 LAUTEM	0.074	147	66	35	46	9.99	1,469	112	240	1,047	70
5406 BAUCAU	0.160	227	113	44	70	9.90	2,247	187	369	1,584	107
5407 MANA TUTU	0.050	99	43	24	32	10.11	1,001	82	162	709	48
5408 DILI	0.412	196	118	22	56	9.23	1,809	115	319	1,288	86
5409 AILEU	0.102	77	43	10	24	9.95	766	58	126	545	36
5410 LIKUICA	0.176	107	55	19	33	9.70	1,038	70	175	744	40
5411 ERNERA	0.264	177	103	21	53	9.55	1,690	116	289	1,205	80



表AN5-5-21 (5/7)

## 県別工事費の内訳

CODE NAME (KAB.PROP.)	DEMAND /AREA (/sq.km)	TOTAL DEMAND (2000)	INK DEMAND (2000)	KECAMATAN DEMAND (2000)	DESA DEMAND (2000)	TOTAL COST PER SUB. (MIL.Rp)	TOTAL COST TOTAL. COST (MIL.Rp)	TRANSFER COST (MIL.Rp)	SWITCHING COST (MIL.Rp)	DISTRIBUTION COST (MIL.Rp)	ENGINEERING COST (MIL.Rp)
6101 SAMBAS	0.430	6,558	2,170	2,517	1,871	6.29	41,281	5,356	5,353	28,606	1,966
6102 PONTIANAK	0.289	7,013	1,940	2,989	2,084	6.60	46,264	6,805	5,624	31,632	2,203
6103 KETAGAU	0.114	3,081	609	1,509	963	6.98	21,502	3,073	2,913	14,492	1,024
6104 KETAPANG	0.084	2,412	640	1,012	761	7.32	17,654	3,033	2,352	11,428	841
6105 SINTANG	0.077	2,450	479	1,197	774	7.32	17,943	3,078	2,385	11,625	854
6106 KAPUAS HULU	0.049	1,078	375	359	343	7.99	8,614	1,933	1,120	5,150	410
6201 KOTAWARINGIN BARAT	0.051	1,070	269	400	341	7.64	8,177	1,565	1,113	5,110	389
6202 KOTAWARINGIN TIMUR	0.058	1,919	144	1,165	610	7.30	14,012	2,281	1,915	9,148	667
6203 KOTINGAN	0.044	789	222	315	252	7.51	5,923	1,035	832	3,774	282
6204 KAPUAS	0.120	3,281	1,241	1,016	1,024	7.21	23,641	4,030	3,074	15,411	1,126
6205 BARITO SELATAN	0.089	784	261	276	247	6.94	5,438	642	827	3,710	259
6206 BARITO TIMUR	0.141	575	206	191	178	6.51	3,741	263	613	2,687	178
6207 BARITO UTARA	0.092	762	292	231	240	7.06	5,379	715	604	3,603	256
6208 KAHAYAN HULU/G.MAS	0.045	603	162	249	192	6.99	4,213	487	642	2,884	201
6209 MURUNG RAYA	0.020	468	168	149	150	7.22	3,380	466	501	2,262	161
6301 TANAH LAUT	0.623	1,339	593	384	362	6.24	8,355	1,002	1,374	5,582	398
6302 KOTA BARU	0.211	2,715	988	902	825	7.01	19,029	3,038	2,611	12,475	906
6303 SANJAR	0.260	1,617	655	478	485	6.40	10,349	874	1,637	7,345	493
6304 BARITO KUALA	0.293	961	301	375	285	6.48	6,223	591	1,005	4,831	296
6305 TAPIN	0.006	1,493	189	823	481	6.68	9,973	770	1,521	7,207	475
6306 HULU SEI SELATAN	0.759	1,293	631	326	336	5.75	7,440	534	1,330	5,222	354
6307 HULU SEI TENGAH	1.240	1,702	910	406	386	5.24	8,919	617	1,716	6,161	425
6308 TABALONG	0.315	873	411	204	257	6.48	5,653	554	917	3,913	269
6309 PASIR	0.948	4,027	1,468	1,568	991	5.60	22,550	2,256	3,650	15,570	1,074
6401 KUTAI	0.076	1,525	419	625	482	6.84	10,439	1,152	1,551	7,239	497
6402 BERAU	0.150	12,140	2,833	5,561	3,755	7.35	89,277	20,232	8,183	56,610	4,251
6403 BERAU	0.023	768	513	9	246	7.25	5,568	800	811	3,682	265
6404 BULONGAN	0.069	4,395	611	2,392	1,392	7.83	34,420	7,962	3,821	20,899	1,639

表AN5-5-21 (6/7) 県別工事費の内訳

CODE NAME (KAB. PROP.)	DEMAND /AREA (/sq. km)	TOTAL DEMAND (2000)	IKK DEMAND (2000)	KECAMATAN DEMAND (2000)	DESA DEMAND (2000)	TOTAL COST PER SUB. (MIL. Rp)	TOTAL COST (MIL. Rp)	TRANSFER COST (MIL. Rp)	SWICLING COST (MIL. Rp)	DISTRIBUTION COST (MIL. Rp)	ENGINEERING COST (MIL. Rp)
7101 GORONTALO	0.474	5737	2,234	1,887	1,616	6.38	36,626	5,278	4,839	24,766	1,744
7102 BALANG MANGONDOW	0.376	3173	1,708	546	920	6.54	20,743	2,748	2,988	14,020	988
7103 MINAHASA	2.193	10140	3,531	4,834	1,775	4.57	46,302	6,950	7,275	29,872	2,205
7201 SANGIHE TALAUT	0.769	1741	769	521	451	6.84	11,916	2,581	1,752	7,016	567
7201 LUWUK/BANGGAI	0.154	1925	630	700	595	7.07	13,619	2,083	1,921	8,967	649
7202 POSO	0.075	1874	628	654	592	7.51	14,074	2,633	1,874	8,897	670
7203 DONGGALA	0.205	4773	1,652	1,608	1,453	7.06	33,683	5,927	4,190	21,962	1,604
7204 BUAL TOLI TOLI	0.177	1266	389	488	389	7.02	8,891	1,298	1,304	5,865	423
7301 SELAYAR	0.302	586	299	114	173	7.27	4,257	796	624	2,635	203
7302 BULUKUMBA	1.531	2368	1,119	753	496	5.18	12,263	1,329	2,314	8,036	584
7303 BANTAENG	1.778	832	493	176	163	4.86	4,041	297	875	2,676	192
7304 JENEPONTO	1.728	1415	739	396	281	4.93	6,983	603	1,447	4,600	333
7305 TAKALAR	1.947	1131	591	328	211	4.78	5,411	472	1,173	3,509	258
7306 GOWA	1.192	2561	1,287	685	589	5.38	13,770	1,265	2,480	9,369	656
7307 SINJAI	1.207	1282	659	304	295	5.43	6,990	636	1,325	4,696	333
7308 BONE	1.161	5328	2,670	1,423	1,236	5.45	29,044	3,462	4,570	19,630	1,383
7309 MAROS	1.236	1382	818	250	314	5.52	7,625	840	1,415	5,006	363
7310 PANGKAJENE KEP	1.253	1529	820	364	345	5.44	8,317	855	1,555	5,511	396
7311 BARRU	0.513	780	345	218	217	6.14	4,792	404	823	3,337	228
7312 SOPPENG	1.019	1539	645	523	371	5.57	8,575	747	1,564	5,856	409
7313 WAJO	0.923	2408	1,143	668	597	5.64	13,570	1,210	2,349	9,366	646
7314 SINDERENG RAPPANG	0.586	1570	743	399	428	5.99	9,411	768	1,593	6,602	448
7315 PINRANG	0.766	1920	807	616	498	5.81	11,162	972	1,916	7,743	532
7316 ENREKANG	0.521	822	338	255	229	6.13	5,035	420	865	3,510	240
7317 LUWU	0.227	5187	2,051	1,567	1,569	6.77	35,138	5,243	4,475	23,747	1,673
7318 TANA TORAJA	0.604	2327	886	809	632	5.96	13,872	1,189	3,278	9,744	661
7319 POLEWALI MAMASA	0.386	3302	1,189	1,159	954	6.35	20,960	2,316	3,091	14,555	998
7320 MAJENE	0.601	1084	726	64	294	5.16	6,673	687	1,126	4,542	318
7321 MAMUJU	0.091	793	170	373	250	7.23	5,731	872	836	3,751	273
7401 BUTON	0.346	2239	862	723	654	6.98	15,638	2,731	2,201	9,962	745
7402 MUNA	0.271	1326	555	375	396	6.52	8,639	860	1,362	6,006	411
7403 KENDARI	0.167	2753	1,148	757	847	6.80	18,719	2,401	2,642	12,785	891
7404 KOLAKA	0.140	1440	408	585	447	6.86	9,882	1,210	1,471	6,731	471

表AN5-5-21 (7/7) 県別工事費の内訳

CODE NAME (KAB. PROP.)	DEMAND /AREA (/sq. Km)	TOTAL DEMAND (2000)	IKK DEMAND (2000)	KECAMATAN DEMAND (2000)	DESA DEMAND (2000)	TOTAL COST PER SUB. (MIL. Rp)	TOTAL COST (MIL. Rp)	TRANSFER COST (MIL. Rp)	SWITCHING COST (MIL. Rp)	DISTRIBUTION COST (MIL. Rp)	ENGINEERING COST (MIL. Rp)
8101 MALUKU TENGGARA	0.098	2,105	589	855	661	10.29	21,670	8,616	2,062	9,939	1,032
8102 MALUKU TENGAH	0.202	5,070	681	2,845	1,545	7.97	40,421	10,753	4,395	23,348	1,925
8103 HALMAHERA TENGAH	0.104	952	446	208	298	7.80	7,421	1,584	996	4,488	353
8104 MALUKU UTARA	0.241	5,005	2,673	824	1,508	9.11	45,590	16,233	4,351	22,835	2,171
8201 IERAIKE	0.025	3,110	425	1,687	997	9.53	29,631	10,339	2,937	14,944	1,411
8202 PEG-JAYA WIJAYA	1.122	9,851	2,134	5,407	2,310	6.18	60,851	14,204	7,136	36,614	2,898
8203 JAYAPURA	1.250	4,324	2,802	544	978	6.71	29,014	8,146	3,869	15,616	1,382
8204 PANAI	0.288	3,548	1,228	1,265	1,055	7.80	27,674	7,063	3,285	16,008	1,318
8205 FAK FAK	0.022	1,125	224	530	361	9.94	11,178	4,069	1,167	5,410	532
8206 SORONG	0.069	2,988	1,276	786	946	7.50	22,408	4,297	2,837	14,206	1,067
8207 MANOKWARI	0.043	1,718	618	552	548	8.04	13,810	3,201	1,731	8,220	658
8208 YAPEN WAROPEN	0.048	904	302	314	288	8.21	7,424	1,802	948	4,321	354
8209 TELUK CENDERAWASIH	0.421	1,092	658	132	312	6.90	7,536	1,269	1,134	4,773	359

## ANNEX 6-1-1 県別内部収益率の結果

県別需要予測、州別トラフィック、県別創設費の算出結果に基づいて3通りのネットワーク拡大方法について財務的内部収益率(F.I.R)を比較した。

拡大方法についての詳細は第6章を参照されたい。

「IRR METHOD 1」とはネットワーク拡大方法1に基く財務的内部収益率を意味する。

「RANKING OF IRR」とはネットワーク拡大方法1から3の中で、最も高い財務的内部収益率を示している。

例えばACEH SELATAN県では拡大方法1の場合の財務的内部収益率は2.8%と最も高い。従って#1の列に「1」と明記した。

地方電気通信網計画全体としての財務評価では、拡大方法2が選択されているが、今後県毎にFeasibility Studyを実施していく場合は、拡大方法1から3の中で最もF.I.R.Rが高い方法が選ばれるべきである。全国246県のうち、拡大方法1が最もF.I.R.Rが高い県の数84県、拡大方法2の県が89県、拡大方法3の県が73県となっている。



表AN6-1-1 (1/7) 県別内部収益率の結果

CODE	KAB. NAME	TOTAL DEMAND (2000)	TRAFFIC PER SUB. (2000)	TOTAL COST (Mil.Rp)	TOTAL COST PER SUB. (Mil.Rp)	IRR			RANKING OF NETWORK EXP. METHOD		
						METHOD 1	METHOD 2	METHOD 3	#1	#2	#3
1101	ACEH SELATAN	3,914	14,891	26,011	6,646	2.8%	2.3%	0.8%	1		
1102	ACEH TENGGARA	2,246	14,891	14,143	6,297	3.5%	3.4%	2.0%	1		
1103	ACEH TIMUR	8,074	14,891	46,042	5,703	4.7%	5.4%	4.3%		2	
1104	ACEH TENGAH	1,311	14,891	8,615	6,571	2.9%	2.7%	1.0%	1		
1105	ACEH BARAT	4,350	14,891	29,440	6,768	2.6%	1.9%	0.4%	1		
1106	ACEH BESAR	3,175	14,891	17,586	5,539	5.1%	6.1%	5.1%		2	
1107	PIDIE	4,848	14,891	25,801	5,322	5.6%	6.8%	6.2%		2	
1108	ACEH UTARA	13,728	14,891	56,096	4,086	9.2%	11.5%	13.4%		2	3
1201	NIAS	5,616	13,770	30,681	5,463	4.2%	4.6%	3.2%		2	
1202	TAPANULI SELATAN	11,772	13,770	64,522	5,481	4.2%	4.4%	3.2%		2	
1203	TAPANULI TENGAH	1,580	13,770	9,826	6,219	2.6%	2.0%	0.4%	1		
1204	TAPANULI UTARA	8,395	13,770	50,541	6,020	3.0%	2.8%	1.2%	1		
1205	LABUHAN BATU	8,572	13,770	45,616	5,321	4.5%	5.2%	3.7%		2	
1206	ASAHAN	13,809	13,770	56,291	4,076	8.0%	9.9%	9.9%		2	3
1207	SIMALUNGUN	11,602	13,770	50,529	4,364	7.1%	8.8%	8.8%		2	
1208	DAIRI	2,508	13,770	14,658	5,844	3.3%	3.3%	1.8%		2	
1209	KARO	2,035	13,770	10,563	5,191	4.9%	5.5%	4.6%		2	
1210	DELI SERDANG	20,586	13,770	68,103	3,308	10.9%	13.2%	14.4%		2	3
1211	LANGKAT	12,448	13,770	57,112	4,588	6.5%	7.9%	7.6%		2	
1301	PESISIR SELATAN	2,175	15,328	14,129	6,496	3.5%	3.4%	1.9%	1		
1302	SOLOK	2,359	15,328	14,680	6,223	4.0%	4.5%	2.7%		2	
1303	SAWAH LUNTO/SIJUNJUN	1,607	15,328	10,482	6,523	3.4%	3.4%	1.8%		2	
1304	TANAH DATAR	1,986	15,328	10,171	5,121	6.5%	8.1%	7.4%		2	
1305	PADANG PARTAMAN	2,605	15,328	17,864	6,858	2.8%	2.3%	0.8%	1		
1306	AGAM	2,489	15,328	13,356	5,366	5.9%	7.2%	6.3%		2	
1307	LIMAPULUH KOTA	1,476	15,328	9,277	6,285	3.9%	4.2%	2.7%		2	
1308	PASAMAN	2,820	15,328	18,339	6,503	3.4%	3.5%	1.9%		2	
1401	INDRAGIRI HULU	1,966	15,122	14,522	7,312	1.8%	0.9%	-0.7%	1		
1402	INDRAGIRI HILIR	4,983	15,122	31,517	6,325	3.6%	3.7%	2.2%		2	
1403	KEPULAUAN RIAU	4,188	15,122	35,695	8,523	-0.2%	-1.6%	-3.4%	1		
1404	KAMPAR	3,867	15,122	28,251	7,306	1.8%	0.9%	-0.7%	1		
1405	BENGKALIS	7,380	15,122	51,619	6,994	2.3%	1.7%	0.1%	1		
1501	KERINCI	1,588	16,084	9,853	6,204	4.7%	5.5%	4.0%		2	
1502	SARKO	2,010	16,084	13,752	6,842	3.5%	3.4%	1.7%	1		
1503	BATANG HARI	1,776	16,084	12,159	6,846	3.5%	3.4%	1.8%	1		
1504	TANJUNG JABUNG	2,610	16,084	17,971	6,885	3.4%	3.2%	1.7%	1		
1505	BUNGO TEDO	2,392	16,084	16,357	6,838	3.5%	3.4%	1.7%	1		

表AN6-1-1 (2/7) 県別内部収益率の結果

CODE	KAB. NAME	TOTAL DEMAND (2000)	TRAFFIC PER SUB. (2000)	TOTAL COST (Mil.Rp)	TOTAL COST PER SUB. (Mil.Rp)	IRR METHOD 1	IRR METHOD 2	IRR METHOD 3	RANKING OF NETWORK EXP. #1	RANKING OF NETWORK EXP. #2	IRR METHOD #3
1601	OGAN KOMERING ULU	16,068	14,277	85,162	5,300	5.1%	6.0%	4.3%		2	
1602	OGAN KOMERING ILIR	9,081	14,277	56,340	6,204	3.1%	3.0%	1.3%	1		
1603	LEMATANG ILIR OGAN T	5,359	14,277	33,719	6,292	2.9%	2.6%	1.0%	1		
1604	LAHAT	7,233	14,277	37,354	5,164	5.4%	6.3%	5.2%		2	
1605	MUSIRAWAS	5,772	14,277	36,606	6,342	2.8%	2.5%	0.9%	1		
1606	MUSI BANYU ASIN	11,128	14,277	68,541	6,159	3.2%	3.0%	1.3%	1		
1607	BANGKA	5,646	14,277	37,137	6,578	2.3%	1.7%	0.1%	1		
1608	BELITUNG	1,831	14,277	12,254	6,693	2.1%	1.4%	-0.3%	1		
1701	BENGKULU SELATAN	1,848	11,911	11,808	6,389	0.2%	-1.4%	-3.5%	1		
1702	REJANG LEBONG	2,329	11,911	13,735	5,897	1.2%	0.1%	-1.7%	1		
1703	BENGKULU UTARA	1,443	11,911	10,103	7,001	-0.9%	-3.0%	-4.9%	1		
1801	LAMPUNG SELATAN	17,649	16,073	76,008	4,307	9.6%	12.0%	12.8%			3
1802	LAMPUNG TENGAH	18,543	16,073	82,415	4,445	9.1%	12.1%	12.6%			3
1803	LAMPUNG UTARA	8,170	16,073	52,142	6,382	4.3%	4.8%	3.4%		2	
3201	PANDEGLANG	7,367	11,755	31,174	4,232	5.3%	5.9%	5.2%		2	
3202	LEBAK	7,018	11,755	31,247	4,452	4.6%	5.1%	4.1%		2	
3203	BOGOR	51,315	11,755	101,816	1,984	16.1%	18.0%	21.2%			3
3204	SUKABUMI	22,355	11,755	66,532	2,976	10.0%	12.0%	12.7%			3
3205	CIANJUR	18,848	11,755	56,970	3,023	9.8%	11.6%	12.9%			3
3206	BANDUNG	53,813	11,755	106,967	1,988	16.0%	18.0%	20.8%			3
3207	GARUT	21,617	11,755	55,301	2,558	12.2%	14.2%	16.6%			3
3208	TASIK MALAYA	24,065	11,755	60,711	2,523	12.4%	14.4%	16.9%			3
3209	CIAMIS	16,587	11,755	47,489	2,863	10.5%	12.2%	13.5%			3
3210	KUNINGAN	7,998	11,755	21,452	2,682	11.5%	13.0%	14.5%			3
3211	CIREBON	16,845	11,755	35,114	2,085	15.3%	16.9%	20.0%			3
3212	MAJALENGKA	9,221	11,755	23,073	2,502	12.5%	14.0%	15.4%			3
3213	SUMEDANG	6,892	11,755	22,981	3,334	8.4%	9.9%	10.2%			3
3214	INDRAMAYU	14,952	11,755	39,405	2,635	11.7%	13.6%	15.0%			3
3215	SUBANG	12,492	11,755	35,862	2,871	10.5%	12.0%	12.8%		2	
3216	PURWAKARTA	4,070	11,755	14,642	3,598	7.4%	8.5%	8.5%			3
3217	KARAWANG	15,402	11,755	36,905	2,396	13.1%	14.9%	17.5%			3
3218	BEKASI	14,366	11,755	34,047	2,370	13.3%	14.9%	17.4%			3
3219	TANGERANG	23,108	11,755	46,440	2,010	15.9%	17.7%	21.2%			3
3220	SERANG	13,433	11,755	34,786	2,590	12.0%	13.9%	15.7%			3

表 AN 6-1-1 (3/7) 県別内部収益率の結果

CODE	KAB. NAME	TOTAL DEMAND (2000)	TRAFFIC PER SUB. (2000)	TOTAL COST (Mil. Rp)	TOTAL COST PER SUB. (Mil. Rp)	IRR METHOD			RANKING OF NETWORK EXP. METHOD		
						1	2	3	#1	#2	#3
3301	CILACAP	11,959	12,303	38,902	3,253	9.5%	11.0%	11.7%			3
3302	BANYUMAS	9,485	12,303	25,112	2,648	12.4%	14.3%	16.6%			3
3303	PURBALINGGA	4,049	12,303	12,760	3,151	9.9%	11.6%	11.9%			3
3304	BANJAR NEGARA	4,305	12,303	15,995	3,715	7.6%	8.9%	8.5%		2	
3305	KEBUMEN	7,105	12,303	22,274	3,135	10.0%	11.7%	12.6%			3
3306	PURWOREJO	4,302	12,303	15,618	3,630	7.9%	9.4%	9.2%		2	
3307	WONOSOBO	3,871	12,303	13,883	3,586	8.1%	9.6%	9.4%		2	
3308	MAGELANG	6,579	12,303	19,645	2,986	10.7%	12.5%	13.4%			3
3309	BOYOLALI	5,171	12,303	17,418	3,368	9.0%	10.5%	10.7%			3
3310	KLATEN	7,748	12,303	17,960	2,318	14.4%	16.0%	18.1%			3
3311	SUKOHARJO	3,800	12,303	10,262	2,700	12.1%	13.6%	14.0%			3
3312	WONOGIRI	5,946	12,303	23,942	4,027	6.6%	7.7%	7.1%		2	
3313	KARANG ANYAR	3,922	12,303	16,618	4,237	5.9%	6.9%	6.1%		2	
3314	SRAGEN	5,384	12,303	16,728	3,107	10.1%	11.8%	12.4%			3
3315	GROBOGAN	7,951	12,303	28,451	3,578	8.1%	9.7%	9.8%			3
3316	BLORA	4,636	12,303	22,484	4,850	4.2%	4.5%	3.2%		2	
3317	REMBANG	2,722	12,303	11,767	4,323	5.6%	6.4%	5.6%		2	
3318	PATI	7,402	12,303	25,105	3,392	8.9%	10.6%	11.1%			3
3319	KUDUS	3,389	12,303	8,923	2,633	12.5%	14.0%	14.9%			3
3320	JEPARA	4,721	12,303	15,995	3,388	8.9%	10.4%	10.6%			3
3321	DEMOK	4,509	12,303	15,719	3,486	8.5%	10.0%	9.9%		2	
3322	SEMARANG	4,290	12,303	15,062	3,511	8.4%	9.9%	9.6%		2	
3323	TEMANGGUN	3,652	12,303	12,754	3,492	8.5%	9.9%	9.7%		2	
3324	KENDEL	4,485	12,303	14,641	3,264	9.4%	10.9%	11.1%			3
3325	BATANG	3,252	12,303	11,694	3,596	8.1%	9.3%	9.3%		2	
3326	PEKALONGAN	4,485	12,303	14,695	3,277	9.4%	10.8%	11.3%			3
3327	PEMALANG	6,815	12,303	19,688	2,889	11.1%	12.7%	13.8%			3
3328	TENGAL	8,577	12,303	20,401	2,379	14.0%	15.7%	18.1%			3
3329	BREBES	10,394	12,303	31,188	3,001	10.6%	12.1%	13.1%			3
3401	KULON PROGO	2,143	13,933	7,917	3,694	9.6%	11.5%	11.4%		2	
3402	BANTUL	4,445	13,933	11,208	2,521	15.2%	17.1%	18.7%			3
3403	GUNUNG KIDUL	4,656	13,933	26,426	5,676	3.9%	4.3%	2.8%		2	
3404	SLEMAN	4,921	13,933	12,234	2,486	15.4%	17.5%	19.0%			3



表AN6-1-1 (4/7) 県別内部収益率の結果

CODE	KAB. NAME	TOTAL DEMAND (2000)	TRAFFIC PER SUB. (2000)	TOTAL COST (Mil. Rp)	TOTAL COST PER SUB. (Mil. Rp)	IRR METHOD			RANKING OF NETWORK EXP. METHOD		
						1	2	3	#1	#2	#3
3501	PACITAN	3,172	12,597	14,474	4,563	5.3%	6.0%	5.0%		2	
3502	PONOROGO	6,164	12,597	21,242	3,446	9.0%	10.8%	11.4%			3
3503	TRENGGALEK	4,720	12,597	16,639	3,525	8.7%	10.2%	10.3%			3
3504	TULUNG AGUNG	7,662	12,597	20,674	2,698	12.5%	14.5%	16.6%			3
3505	BLITAR	10,731	12,597	29,524	2,751	12.2%	14.2%	15.8%			3
3506	KEDIRI	14,613	12,597	33,632	2,302	14.9%	16.8%	19.8%			3
3507	MALANG	33,478	12,597	75,229	2,247	15.3%	17.3%	20.4%			3
3508	LUMAJANG	8,927	12,597	24,205	2,711	12.4%	14.4%	16.2%			3
3509	JEMBER	26,555	12,597	58,245	2,193	15.7%	18.1%	21.4%			3
3510	BANYUWANGI	18,575	12,597	50,100	2,697	12.5%	14.4%	17.4%			3
3511	BONDOWOSO	5,057	12,597	16,340	3,231	9.9%	11.7%	12.4%			3
3512	SITUBONDO	4,099	12,597	18,083	4,411	5.7%	6.5%	5.9%		2	
3513	PROBOLINGGO	8,544	12,597	27,053	3,166	10.2%	11.9%	13.0%			3
3514	PASURUAN	12,107	12,597	30,636	2,530	13.5%	15.1%	17.3%			3
3515	SIDOARJO	9,683	12,597	21,174	2,187	15.7%	17.3%	20.0%			3
3516	MOJOKERTO	6,830	12,597	17,324	2,536	13.4%	15.1%	16.8%			3
3517	JOMBANG	10,194	12,597	23,337	2,289	15.0%	16.8%	19.8%			3
3518	NGANJUK	8,912	12,597	23,296	2,614	13.0%	14.9%	17.2%			3
3519	MADIUN	5,402	12,597	17,485	3,237	9.9%	11.6%	12.0%			3
3520	MAGETAN	7,300	12,597	14,613	2,910	11.4%	13.2%	14.0%			3
3521	NGAWI	11,267	12,597	23,198	3,178	10.1%	11.9%	12.1%			3
3522	BOJONEGORO	8,998	12,597	35,778	3,175	10.1%	12.1%	13.6%			3
3523	TUBAN	11,701	12,597	30,113	3,347	9.4%	11.1%	12.4%			3
3524	LAMONGAN	5,421	12,597	32,261	2,757	12.2%	14.3%	16.3%			3
3525	BANGKALAN	5,775	12,597	18,814	3,471	8.9%	10.6%	10.6%			3
3526	GRESIK	5,069	12,597	18,124	3,430	9.1%	10.6%	11.1%			3
3527	SAMPAN	4,683	12,597	14,072	3,576	8.5%	10.0%	10.1%			3
3528	PAMEKASAN	7,790	12,597	31,140	3,005	10.9%	12.6%	13.6%			3
3529	SUMENEP				3,997	7.0%	8.2%	7.9%		2	

表AN6-1-1 (5/7) 県別内部収益率の結果

CODE	KAB. NAME	TOTAL DEMAND (2000)	TRAFFIC PER SUB. (2000)	TOTAL COST (Mil.Rp)	TOTAL COST PER SUB. (Mil.Rp)	IRR			RANKING OF NETWORK EXP. METHOD		
						METHOD 1	METHOD 2	METHOD 3	#1	#2	#3
5101	JEMBRANA	1,614	14,303	6,878	4,261	8.0%	9.7%	9.6%		2	
5102	TABANAN	2,613	14,303	10,373	3,970	9.0%	10.9%	11.0%			3
5103	BADUNG	5,213	14,303	12,810	2,457	16.1%	18.0%	22.7%			3
5104	GIANJAR	2,304	14,303	7,350	3,190	12.1%	14.1%	14.6%			3
5105	KLUNGKUNG	908	14,303	3,845	4,234	8.1%	9.7%	9.6%		2	
5106	BANGLI	1,065	14,303	4,769	4,478	7.3%	9.0%	8.5%		2	
5107	KARANG ASEM	2,196	14,303	9,456	4,306	7.9%	9.5%	9.3%		2	
5108	BULELENG	4,788	14,303	16,150	3,373	11.2%	13.3%	14.9%			3
5201	LOMBOK BARAT	3,554	14,447	16,444	4,627	7.0%	8.7%	9.1%		2	
5202	LOMBOK TENGAH	2,939	14,447	13,588	4,623	7.0%	8.7%	8.1%		2	
5203	LOMBOK TIMUR	3,834	14,447	16,987	4,431	7.6%	9.4%	9.1%		2	
5204	SUMBAWA	1,706	14,447	11,422	6,695	2.3%	1.7%	0.0%	1		
5205	DOMPU	553	14,447	3,537	6,395	2.9%	2.6%	1.1%	1		
5206	BIMA	1,894	14,447	11,915	6,291	3.1%	2.9%	1.4%	1		
5301	SUMBAWA BARAT	1,232	15,318	7,921	6,430	3.6%	3.7%	2.1%	1	2	
5302	SUMBA TIMUR	653	15,318	4,440	6,799	2.9%	2.6%	1.0%	1		
5303	KUPANG	2,216	15,318	15,424	6,960	2.6%	2.0%	0.6%	1		
5304	TIMOR TENGAH SELATAN	1,489	15,318	9,435	6,336	3.8%	4.0%	2.5%	1	2	
5305	TIMOR TENGAH UTARA	689	15,318	4,518	6,558	3.3%	3.3%	1.8%	1		
5306	BELU	914	15,318	5,803	6,349	3.7%	4.0%	2.5%	1	2	
5307	ALOR	577	15,318	3,856	6,683	3.1%	2.9%	1.4%	1		
5308	FLORES TIMUR	1,265	15,318	3,457	6,686	3.1%	2.8%	1.3%	1		
5309	SIKKA	1,036	15,318	6,268	6,050	4.4%	4.9%	3.6%		2	
5310	ENDEH	931	15,318	5,807	6,238	4.0%	4.3%	2.9%		2	
5311	NGADA	900	15,318	5,774	6,416	3.6%	3.8%	2.3%		2	
5312	MANGGARAI	2,248	15,318	14,343	6,380	3.7%	3.9%	2.2%		2	
5401	COVALIMA	113	16,916	1,131	10,006	-0.7%	-2.7%	-4.5%	1		
5402	AINARO	156	16,916	1,527	9,787	-0.4%	-1.9%	-3.8%	1		
5403	MANUFAHI (SAME)	111	16,916	1,114	10,033	-0.7%	-2.2%	-4.6%	1		
5404	VIQUE QUE	191	16,916	1,943	10,171	-0.9%	-2.4%	-4.4%	1		
5405	LAUTEM	147	16,916	1,469	9,991	-0.7%	-2.2%	-4.2%	1		
5406	BAUCAU	227	16,916	2,247	9,900	-0.5%	-2.0%	-4.1%	1		
5407	MANA TUTU	99	16,916	1,001	10,108	-0.8%	-2.3%	-4.3%	1		
5408	DILI	196	16,916	1,809	9,227	0.4%	-1.0%	-3.0%	1		
5409	AILEU	77	16,916	766	9,947	-0.6%	-2.1%	-4.3%	1		
5410	LIKUICA	107	16,916	1,038	9,705	-0.3%	-1.7%	-3.8%	1		
5411	ERMERA	177	16,916	1,690	9,548	-0.1%	-1.5%	-3.6%	1		
5412	BOBONARO	201	16,916	1,991	9,903	-0.5%	-2.0%	-4.0%	1		
5413	AMBENO	136	16,916	1,334	9,809	-0.4%	-1.9%	-4.1%	1		

表 AN6-1-1 (6/7) 県別内部収益率の結果

CODE	KAB. NAME	TOTAL DEMAND (2000)	TRAFFIC PER SUB. (2000)	TOTAL COST (Mil.Rp)	TOTAL COST PER SUB. (Mil.Rp)	IRR METHOD			RANKING OF NETWORK EXP. METHOD		
						1	2	3	#1	#2	#3
6101	SAMBAS	6,558	15,355	41,281	6,295	3.9%	4.1%	2.6%			2
6102	PONTIANAK	7,013	15,355	46,264	6,597	3.3%	3.2%	1.6%	1		
6103	SANGGAU	3,081	15,355	21,502	6,979	2.6%	2.1%	0.4%	1		
6104	KETAPANG	2,412	15,355	17,654	7,319	2.0%	1.1%	-0.4%	1		
6105	SINTANG	2,450	15,355	17,943	7,324	2.0%	1.1%	-0.4%	1		
6106	KAPUAS HULU	1,078	15,355	8,614	7,991	0.9%	-0.4%	-2.1%	1		
6201	KOTAWARINGIN BARAT	1,070	16,901	8,177	7,642	2.7%	2.2%	0.6%	1		
6202	KOTAWARINGIN TIMUR	1,919	16,901	14,012	7,302	3.3%	3.1%	1.4%	1		
6203	KOTINGAN	789	16,901	5,923	7,507	3.0%	2.5%	1.0%	1		
6204	KAPUAS	3,281	16,901	23,641	7,205	3.5%	3.3%	1.9%	1		
6205	BARITO SELATAN	784	16,901	5,438	6,936	4.0%	4.2%	2.6%			2
6206	BARITO TIMUR	575	16,901	3,741	6,506	4.8%	5.7%	4.1%			2
6207	BARITO UTARA	762	16,901	5,379	7,059	3.7%	3.8%	2.3%			2
6208	KAHAYAN HULU/G.MAS	603	16,901	4,213	6,986	3.9%	4.1%	2.4%			2
6209	MURUNG RAYA	468	16,901	3,380	7,222	3.4%	3.3%	1.8%	1		
6301	TANAH LAUT	1,339	15,739	8,355	6,240	4.3%	4.7%	3.4%			2
6302	KOTA BARU	2,715	15,739	19,029	7,009	2.9%	2.4%	0.9%	1		
6303	BANJAR	1,617	15,739	10,349	6,400	4.0%	4.4%	2.9%			2
6304	BARITO KUALA	961	15,739	6,223	6,476	3.9%	4.1%	2.5%			2
6305	TAPIN	1,493	15,739	9,973	6,680	3.5%	3.7%	1.7%			2
6306	HULU SEI SELATAN	1,293	15,739	7,440	5,754	5.4%	6.5%	5.5%			2
6307	HULU SEI TENGAH	1,702	15,739	8,919	5,240	6.6%	8.3%	7.8%			2
6308	HULU SEI UTARA	873	15,739	5,653	6,476	3.9%	4.1%	2.7%			2
6309	TABALONG	4,027	15,739	22,550	5,600	5.7%	7.0%	5.8%			2
6401	PASIR	1,525	16,115	10,439	6,845	3.5%	3.5%	1.9%			2
6402	KUTAI	12,140	16,115	89,277	7,354	2.6%	2.0%	0.4%	1		
6403	BERAU	768	16,115	5,568	7,249	2.8%	2.3%	0.9%	1		
6404	BULONGAN	4,395	16,115	34,420	7,832	1.8%	0.8%	-0.7%			2

表 AN 6-1-1 (7/7) 県別内部収益率の結果

CODE	KAB. NAME	TOTAL	TRAFFIC	TOTAL	TOTAL COST	IRR	IRR	IRR	IRR	RANKING OF	
		DEMAND (2000)	PER SUB. (2000)	COST (Mil.Rp)	PER SUB. (Mil.Rp)	METHOD 1	METHOD 2	METHOD 3	METHOD #1	NETWORK EXP. METHOD #2	IRR METHOD #3
7101	GORONTALO	5,737	14,487	36,628	6,384	2.9%	2.6%	1.1%	1	2	1.1%
7102	BALANG MANGENDOW	3,173	14,487	20,743	6,537	2.6%	2.2%	0.6%	1		0.6%
7103	MINAHASA	10,140	14,487	46,302	4,566	2.2%	8.9%	8.3%	1	2	8.3%
7104	SANGIHE TALAUT	1,741	14,487	11,916	6,845	2.0%	1.2%	-0.4%	1		-0.4%
7201	Luwuk/BANGGAI	1,925	16,090	13,619	7,075	3.0%	2.7%	1.2%	1		1.2%
7202	POSO	1,874	16,090	14,074	7,510	2.3%	1.6%	0.0%	1		0.0%
7203	DONGGALA	4,773	16,090	33,683	7,057	3.1%	2.7%	1.3%	1		1.3%
7204	BUAL TOLI TOLI	1,266	16,090	8,891	7,023	3.1%	2.9%	1.3%	1		1.3%
7301	SELAYAR	586	14,737	4,257	7,265	1.5%	0.5%	-1.2%	1		-1.2%
7302	BULUKUMBA	2,368	14,737	12,263	5,179	5.8%	6.9%	6.0%	2	2	6.0%
7303	BANTAENG	832	14,737	4,041	4,857	6.7%	8.2%	7.6%	2	2	7.6%
7304	JENEPONTO	1,415	14,737	6,983	4,935	6.5%	7.9%	7.2%	2	2	7.2%
7305	TAKALAR	1,131	14,737	5,411	4,784	6.9%	8.4%	7.7%	2	2	7.7%
7306	GOWA	2,561	14,737	13,770	5,377	5.3%	6.3%	5.5%	2	2	5.5%
7307	SINJAI	1,288	14,737	6,990	5,427	5.2%	6.1%	5.1%	2	2	5.1%
7308	BONE	5,328	14,737	29,044	5,451	5.2%	6.0%	5.3%	2	2	5.3%
7309	MAROS	1,382	14,737	7,625	5,517	5.0%	5.7%	4.9%	2	2	4.9%
7310	PANGKAJENE KEP	1,529	14,737	8,317	5,439	5.2%	6.0%	5.1%	2	2	5.1%
7311	BARRU	780	14,737	4,792	6,143	3.6%	3.8%	2.3%	2	2	2.3%
7312	SOPPENG	1,539	14,737	8,575	5,572	4.9%	5.6%	4.3%	2	2	4.3%
7313	WAJO	2,408	14,737	13,570	5,635	4.7%	5.5%	4.3%	2	2	4.3%
7314	SINDERENG RAPPANG	1,570	14,737	9,411	5,994	3.9%	4.3%	2.9%	2	2	2.9%
7315	PINRANG	1,920	14,737	11,162	5,814	4.3%	4.9%	3.5%	2	2	3.5%
7316	ENREKANG	822	14,737	5,035	6,125	3.7%	3.8%	2.3%	2	2	2.3%
7317	Luwu	5,187	14,737	35,138	6,774	2.4%	1.8%	0.2%	1		0.2%
7318	TANA TORAJA	2,327	14,737	13,872	5,961	4.0%	4.4%	2.9%	2	2	2.9%
7319	POLEWALI MAMASA	3,302	14,737	20,960	6,348	3.2%	3.1%	1.5%	1		1.5%
7320	MAJENE	1,084	14,737	6,673	6,156	3.6%	3.7%	2.6%	2	2	2.6%
7321	MAMUJU	793	14,737	5,731	7,227	1.6%	0.6%	-1.0%	1		-1.0%
7401	BUTON	2,239	16,334	15,638	6,984	3.4%	3.2%	1.8%	1		1.8%
7402	MUNA	1,326	16,334	8,639	6,515	4.3%	4.6%	3.4%	2	2	3.4%
7403	KENDARI	2,753	16,334	18,719	6,800	3.7%	3.9%	2.5%	2	2	2.5%
7404	KOLAKA	1,440	16,334	9,882	6,863	3.6%	3.7%	2.1%	2	2	2.1%
8101	MALUKU TENGGARA	2,105	15,779	21,670	10,294	-2.0%	-3.7%	-5.6%	1		-5.6%
8102	MALUKU TENGAH	5,070	15,779	40,421	7,973	1.3%	0.1%	-1.3%	1		-1.3%
8103	HALMAHERA TENGAH	952	15,779	7,421	7,796	1.6%	0.5%	-1.2%	1		-1.2%
8104	MALUKU UTARA	5,005	15,779	45,590	9,109	-0.4%	-1.9%	-4.3%	1		-4.3%
8201	MERAUKE	3,110	16,890	29,631	9,528	-0.1%	-1.5%	-2.9%	1		-2.9%
8202	REG-JAYA WIJAYA	9,851	16,890	60,851	6,177	5.4%	5.9%	4.6%	2	2	4.6%
8203	JAYAPURA	4,324	16,890	29,014	6,710	4.4%	4.1%	3.9%	1		3.9%
8204	PANTAI	3,546	16,890	27,674	7,800	2.5%	1.7%	0.3%	1		0.3%
8205	FAK FAK	1,125	16,890	11,178	9,936	-0.6%	-2.1%	-3.7%	1		-3.7%
8206	SORONG	2,988	16,890	22,408	7,499	3.0%	2.5%	-0.3%	1		-0.3%
8207	MANOKWARI	1,718	16,890	13,810	8,038	2.1%	1.2%	-0.7%	1		-0.7%
8208	YAPEN WAROPEN	904	16,890	7,424	8,212	1.8%	0.8%	-0.7%	1		-0.7%
8209	TELUK CENDERAWASIH	1,092	16,890	7,535	6,900	4.0%	4.0%	3.1%	1		3.1%
TOTAL (INDONESIA)		1,363,542	12,799	5,427,551	3,980				84	89	73



## ANNEX 6-2-1 地域優先順位の結果

第6章の図6-2-1「スコアのつけ方」に基き、各指標のスコアを算出した。

「WEIGHTED SCORE 1」はウェイト1に基き優先順位の指標を示すこれらのスコアが大きい程、優先順位が高いことを意味している。ジャワ島内の県のスコアが高く優先順位が高いことを示している。

「SUB-RD RAW SCORE」とは地域開発政策の各指標のスコアを合計したものである。

「SUB-RD SCORE」は「SUB-RD RAW SCORE」に基き6～0に分類し直した得点を示す。

「SUB-EI RAW SCORE」は社会経済効果の消費者余剰、カバー人口数のデータから9～0に県を分類し合計した得点である。

「SUB-EI SCORE」は「SUB-EI RAW SCORE」に基き6～0に分類し直した得点である。

「IRR-2 SCORE」とはネットワーク拡大方法2についての財務的内部収益率を6～0に分類した得点である。

