

D.Table 9.8-5 Circuit Plan of International Telecommunications

SATELLITE ROUTES

Voice

ROUTES	Proposed system	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
USA(ATT)		74	80	87	95	103	113	123	134	146	158	171	185	199	213	228	243	258	273	288
	IDR	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2M x 2	-	-	-
	DCME+(LRE)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1+(1)	1+(1)
USA(MCI)		104	113	123	134	147	160	175	191	208	228	247	267	287	308	329	350	372	394	415
	IDR	2M x1	-	-	-	-	-	-	-	-	-	2M x 2	-	-	-	-	-	-	-	-
	DCME+(LRE)	1	1	1	1	1	1	1	1	1	1	1	1	1+(1)	2	2	2	2	2	2
USA(SPRINT)		30	30	30	30	30	30	30	31	34	38	41	44	48	51	55	58	62	66	69
	IDR	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DCME+(LRE)							(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	1	1
UK		78	86	95	102	111	121	131	144	157	171	185	200	215	231	247	263	279	295	311
	IDR	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	2M x 2	-	-	-	-
	DCME+(LRE)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1+(1)	1+(1)	2
GERMANY		43	47	50	55	59	64	70	76	82	89	96	104	112	120	128	137	145	154	162
	IDR	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DCME+(LRE)	(1)	(1)	(1)	(1)	(1)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
UAE		32	34	37	40	43	46	50	54	59	64	69	75	80	86	92	98	104	111	117
	IDR	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DCME+(LRE)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	1	1	1	1	1	1	1	1	1
S.AFRICA		12	13	13	14	15	16	17	19	20	21	23	25	26	28	30	32	34	36	38
	IDR	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	(LRE)																(1)	(1)	(1)	(1)
SWEDEN		20	21	23	25	27	29	31	33	36	39	42	46	49	53	56	60	64	67	71
	IDR	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DCME+(LRE)							(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	1	1
CANADA		27	29	31	34	36	39	43	46	50	54	58	63	68	73	78	83	88	93	98
	IDR	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DCME+(LRE)			(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	1	1	1	1	1	1	1
BELGIUM		8	9	9	10	10	11	11	12	13	14	15	16	18	19	20	22	23	24	26
	IDR	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JAPAN		8	8	9	9	10	10	11	11	12	13	14	15	16	18	19	20	21	22	24
	IDR	512k x1	-	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHINA		9	10	10	11	11	12	13	14	15	16	17	17	18	19	20	21	22	23	24
	IDR	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NORWAY		6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	8	8	9	9
	IDR	512k x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2M x1	-
NETHERLANDS		8	8	9	9	10	10	11	11	12	13	14	14	15	15	16	17	18	19	20
	IDR	512k x1	-	2M x1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

GREECE	TDMA	6	6	6	8	8	8	8	8	8	8	8	9	9	9	10	10	11	11	12
DENMARK	TDMA	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	8	8	9	9
S.KOREA	TDMA	6	6	6	6	6	6	6	7	7	7	7	8	8	8	9	9	10	10	11
SWITZERLAND	TDMA	8	8	8	9	9	10	11	11	12	13	14	14	15	15	16	17	18	19	20
2M Capacity		15	15	15	15	15	15	16	16	16	16	17	17	17	17	18	19	19	19	19
DCME		3	3	3	3	3	4	4	4	4	5	5	6	6	7	7	7	9	9	10
LRE		2	2	3	3	3	2	3	4	4	3	3	2	3	2	2	3	2	3	2

B. Digital Data Network

American Carriers (Satellite)		512Kb/s	1x2Mb/s	1x2Mb/s	1x3Mb/s	1x3Mb/s	1x3Mb/s	2x2Mb/s	2x2Mb/s	2x2Mb/s	2x2Mb/s									
		8	30	30	45	45	45	60	60	60	60	67	75	82	90	98	106	113	120	127
	2M	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	4	4	5
European Carriers (SEMEWE-2)		512Kb/s	1024Kb/s	1024Kb/s	1x2Mb/s	1x2Mb/s	1x2Mb/s	1x2Mb/s	2x2Mb/s	2x2Mb/s										
		8	15	15	30	30	30	30	60	60	67	75	82	90	98	106	113	120	127	
	2M	1	1	1	1	1	1	1	2	2	3	3	3	3	4	4	4	4	4	5
2M Capacity		1	2	2	3	3	3	3	3	4	4	6	6	6	6	8	8	8	8	10

C. SEMEWE-2 + Djibuti

FRANCE **		37	40	43	46	50	54	59	64	69	75	81	88	94	101	108	115	122	129	137
	2M	2	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5
ITALY **		48	52	57	61	67	72	79	85	93	101	109	118	127	136	146	155	165	174	184
	2M	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5	6	6	6	7
SINGAPORE **		5	5	6	6	6	7	7	7	8	8	9	9	10	11	12	12	13	14	15
	2M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
S. ARABIA **		42	45	49	53	57	62	68	73	80	87	94	102	109	117	125	134	142	150	158
	2M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
INDIA **		8	9	9	10	10	11	11	12	13	14	15	16	18	19	20	22	23	24	26
	2M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
DJIBOUTI ***		34	37	40	43	47	51	55	60	65	70	76	82	88	94	101	108	114	121	128
	2M	2	2	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5
EYGPT**		7	7	8	8	9	9	10	10	11	12	13	14	15	16	17	18	20	21	22
	2M	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
YEMEN	(TDMA)	6	7	7	7	8	8	8	9	9	10	10	11	11	12	12	13	14	14	15
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ISRAEL	(TDMA)	6	6	6	6	6	7	7	7	7	7	7	8	8	8	9	9	10	10	11
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2M Capacity		12	12	12	13	13	13	13	14	16	16	16	16	18	19	20	21	22	23	24

D. PANAFTEL (Kenya)

KENYA	PANAFTEL	27	29	31	34	36	39	43	46	50	54	58	63	68	73	78	83	88	93	98
2M		1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	4	4
ZAMBIA	PANAFTEL	5	5	6	6	6	7	7	7	8	8	9	9	10	11	12	12	13	14	15
2M		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2M Capacity		2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	5	5

E. Sudan

SUDAN		34	37	40	43	47	51	55	60	65	70	76	82	88	94	101	108	114	121	128
2M		2	2	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5

F. TOTAL by ROUTE

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
INTELSAT		493	550	588	648	692	742	813	874	943	1,018	1,102	1,189	1,278	1,371	1,465	1,561	1,658	1,754	1,851
2M		16	16	16	17	17	17	18	18	18	18	20	20	20	20	22	23	23	23	24
SEMEWE2		193	216	240	255	290	311	334	357	415	444	482	522	563	605	648	691	735	778	821
2M		12	13	13	14	14	14	14	15	18	18	19	19	21	22	24	25	26	27	29
SUDAN		34	37	40	43	47	51	55	60	65	70	76	82	88	94	101	108	114	121	128
2M		2	2	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5
KENYA		32	34	37	40	42	46	50	53	58	62	67	72	78	84	89	95	101	107	113
2M		2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	5	5
Total		752	837	905	986	1,071	1,150	1,252	1,344	1,481	1,594	1,727	1,865	2,007	2,154	2,303	2,455	2,608	2,761	2,912
2M		32	33	34	36	36	36	37	38	42	42	45	46	48	50	54	56	57	60	63