

S.Table 9.8-1-j Expansion Plan of Spur Network (Area-01)

Link	Traffic				Base*		Plan				Procurement	Remarks
	05	10	15	20	(8th D Pro)	STM-1	Backbone**	Region		Type		
<South & East>												
Addis Ababa												-
Mt.Furi	63	16	18	22	64	2						-
(Mt.Furi) Akaki Beseka	33	8	9	12		1		4				Cable
(Mt.Furi) Dukem	3	1	1	1	3			4				Cable
Adama West	27	7	8	9	32	2						-
(Adama West) Bijo	27	7	8	9		1						
(Adama West) Debre Zeit	25	6	7	8	40			4				Cable
(Adama West) Dukem					8							
(Adama West) (Bijo) Gafat					2							
(Adama West) (Bijo) Mojo	2	1	1	1	6							
(Adama West) Mojo					2							Cable
(Adama West) Ejerer (Ajere)	2	1	1	1					2			New
(Adama West) (Bijo) Alem Tena												
(Adama West) Melela												
(Adama West) Abomsa												
(Adama West) Dera												02 Area
Addis Ababa (Kirkos)												
Entoto					16							
(Entoto) Akaki Beseka					16							
(Entoto) Debre Zeit	0	0	0	0	4							Cable
<North & NEast>												
Addis Ababa												-
(Addis Ababa) Sendafa(P1)												
Mt.Furi	11	6	7	20		1	2					-
(Mt.Furi) Sendafa	2	1	1	1	2							
Sheno South	17	11	12	25	4	1	2					-
(Sheno S) Sheno Town	1	1	1	2	4							
(Sheno S) Aleltu	1	1	1	1					1			New
(Sheno S) Chacha	1	1	1	1					1			New
(Sheno S) Mendida	1	1	1	1					1			New
Ankober North	17	11	12	21	4	1	1					-
(Ankober North) Ankober (Gorebela)	1	1	1	1					1			New
(Ankober North) Debre Birhan	33	25	26	29	4	1						
(Ankober North) Alem Amba	7	6	6	7	7							
(Ankober North) Kuyesa	7	6	6	7	7							
(Ankober North) Deneba (Shewa)	1	1	1	1					1			New
(Ankober North) (Kuyesa) Inewari	1	1	1	2	1				1			Exp
(Ankober North) (Kuyesa) Jubur	1	1	1	1					1			New
(Ankober North) (Kuyesa) Mehal Meda	4	3	3	3	4							
(Ankober North) Debre Sina	6	5	5	9	1				8			Exp
(Ankober North) Debre Sina	2	1	1	1								
(Ankober North) (Debre Sina) Armania	1	1	1	1					1			New
(Ankober North) (Debre Sina) Mezezo	1	1	1	1					1			New
(Ankober North) (Debre Sina) Molale	1	1	1	1					1			New
(Ankober North) (Debre Sina) Sala Dingay	1	1	1	1					1			New
(Ankober North) Gewane												02 Area
(Ankober North) Aliyu Amba	1	1	1	1					1			New
Ambalay South						1	1					-
<South>												
<South West>												
Addis Ababa												-
Mt.Furi	23	8	9	15		1	1					-
(Mt.Furi) Alem Gena	3	1	1	1	3							
(Mt.Furi) Tulu Bolo	2	1	1	2	2							
(Mt.Furi) Tefki	1	1	1	1					1			New
(Mt.Furi) Teji	2	1	1	1					2			New
Welisso North	31	12	13	18		1	1					-
(Welisso North) Weliso Town	34	20	21	23	2		1					
(Welisso North) Welkite												
(Welisso North) Tolay												
(Welisso North) Dillela	1	1	1	1					1			New
Welikite MW	14	7	7	8		1						-
(Welikite MW) Welkite	8	2	2	3	2				6			Exp
(Welikite MW) Endibir	2	1	1	1					2			New
(Welikite MW) Gubro	1	1	1	1					1			New

(Welikite MW)	Gunchire	1	1	1	1					1		New	
Fofa									1			-	
<West>													
Addis Ababa													
Mt.Furi													
	Addis Alem												
(Mt.Furi)	Sebeta											3	
Gelessa												4	
	Ambo											4	
Addis Ababa													
Gara Menagesha		23	18	19	23	16	1						-
	Menagesha	1	1	1	1							1	New
(G Menagesha)	Sebeta	7	2	2	2							7	New
(G Menagesha)	Holeta Genet	5	2	2	2	2						3	Exp
(G Menagesha)	Addis Alem	3	1	1	1	3							
(G Menagesha)	Ghinch	3	4	4	4	4							
	Ghinch	2	1	1	1							2	Exp
	(Ghinch)	1	1	1	1							1	New
	(Ghinch)	1	1	1	1	1							
Galessa		17	15	16	20	16	1						-
Wenchi		17	15	16	20	16	1						-
	Ambo	29	15	16	16		1						-
	Ambo	30	16	17	17	1	1						-
	(Ambo)					1							
						1							
(Wenchi)	Kemet Gebrel	5	9	9	9	9							
	Inchini	2	1	1	1	2							
	(Kemet Gebrel)												
	(Kemet Gebrel)	2	7	7	7	7							
	Gendeberet	1	5	5	5	5							
(Wenchi)	Guder	2	1	1	1	2							
(Wenchi)	Meti	1	1	1	1						1		New
Tibebilo		4	5	5	9	16	1						-
	Ghedo	2	1	1	1	2							
(Tibebilo)	Ijaji	0	2	2	2	2							
(Tibebilo)	Bako					1							
(Tibebilo)	Fincha					2							
(Tibebilo)	Shambu					4							
(Tibebilo)	Arjo MW					16							
(Tibebilo)	Kara Legashi					1							
	Sugar Factory					1							
(Tibebilo)	Shenen	1	1	1	1						1		New
(Tibebilo)	Babichu	1	1	1	1						1		New
Gara Gordomo						16							-
<North West>													
Addis Ababa													
	Fitche(P1)	2	1	1	4	2							-
	Kuyu	2	1	1	1						2		New
Entoto		8	8	8	15	4	3						-
	Sululta	1	3	3	3	3							
(Entoto)	Chancho	4	2	2	2	4							
	Chancho	3	1	1	1								-
	(Chancho)	1	1	1	1						1		New
Gara Guda		13	9	9	16	4	3						-
	Debre Tsige	5	4	4	4	4					1		Exp
	Debre Tsige	1	1	1	1								-
	(Debre Tsige)	1	1	1	1						1		New
	(Debre Tsige)	2	1	1	1						2		New
	(Debre Tsige)	1	1	1	1						1		New
(Gara Guda)	Fitche	20	13	13	17	8			1				
	Fitche	25	16	16	16								-
	(Fitche)	4	3	3	3	4							
	(Fitche)	1	1	1	1						1		New
	(Fitche)	1	1	1	1						1		New
(Gara Guda)	Gebre Guracha	2	4	4	7	4					3		Exp
	Gebre Guracha												
	(G. Guracha)	1	1	1	1						1		New
	(G. Guracha)	1	1	1	1						1		New
(Gara Guda)	Muger					4							
(Gara Guda)	Robit												
(Gara Guda)	Abafelase												
	Gunde Wein												
	Debre Tabor Rep.												

Tik Giorgis						3						-	
(Ambo) Toke	1	1	1	1						1		New	
(Debre Birhan) Beke Mariam	1	1	1	1						1		New	
(Debre Birhan) Ginager	1	1	1	1						1		New	
(Debre Birhan) Shola Gebeya	1	1	1	1						1		New	
(Fitcha) Alidoro	1	1	1	1						1		New	
(Fitcha) Meragna	2	1	1	1						2		New	
(Weliso Town) Agena	1	1	1	1						1		New	
(Weliso Town) Amaya	1	1	1	1						1		New	
(Weliso Town) Arbu Chululae	1	1	1	1						1		New	
(Weliso Town) Arekit	1	1	1	1						1		New	
(Weliso Town) Bussa	1	1	1	1						1		New	
(Weliso Town) Cheza Sefer	1	1	1	1						1		New	
(Weliso Town) Chitu	1	1	1	1						1		New	
(Weliso Town) Mehal Amba	1	1	1	1						1		New	

* Equipment Capacity at completion of 8th Development Programme

** Quantity of STM-1

	Link	System
Newly Construction	47	59
STM1	0	0
PDH	47	59
Expansion	7	24
STM1	0	0
PDH	6	22
MUX	1	2

S.Table 9.8-1-j

Expansion Plan of Spur Network (Area-02)

Link	Traffic				Base*		Plan					
	05	10	15	20	(8th D Pro)		Backbone**		Region		Procurement	
	2M				2M	STM-1	MW	Cable	MW	Cable	Type	Remarks
Mt.Furi	73	89	95	112	64	2		4			-	
Adama West	73	89	95	112	32	2		4			-	
	Nazreth	101	95	99	127	64	3	1	3			-
	(Nazreth)	101	94	101	128	6	3		3			Cable
(Adama West)	Wonji	6	2	2	3	2				4		Exp
	Wonji	3	1	1	2							-
	Wonji Shewa	3	1	1	1	2				1		Exp
(Adama West)	Melkassa	1	1	1	1					1		New
(Adama West)	Bijo	8	2	3	4							Cable
	(Bijo)											
	(Bijo)	8	2	3	4	2						01 Area
(Adama West)	Melela	1	1	1	7	1				6		Exp
	Abomsa	1	1	1	5	1				4		Exp
(Adama West)	Dera(P1)											
(Adama West)	Koka Negewo	1	1	1	1					1		New
Mt.Kubi		48	54	57	71	32	2	1				-
	Arerti	1	1	1	1	1						
(Mt.Kubi)	Balchi	1	1	1	1	1						
(Mt.Kubi)	Metehara	2	1	1	1	6						
(Mt.Kubi)	Wolenchiti	2	1	1	1	4						
Awash Rep.		42	50	53	64	32	2	1				-
	Awash Town	4	3	4	5	4				1		Exp
(Awash Rep.)	Awash North	2	2	2	2	2						
	Kerensa	2	2	2	2	2						
	(Kerensa)											
	Melka Sedi	1	1	1	1	1						
	Melka Werer	1	1	1	1	1						
Dalecha						32	2	-				
Adama West(P1)		17	9	7	10							
Iteya North		22	14	12	16	32		-				-
	Huruta											
(Iteya North)	Diskis West											
	(Diskis West)											
	Robe											
	(Robe)											
(Iteya North)	Ticho	2	1	1	1	2						
	Nazreth											
(Iteya North)	Sire											
(Iteya North)	Dera											
Asela		38	21	20	26	32	1					-
	Asela	40	21	20	23	32	1					-
(Asela)	Gondie	1	1	1	1					1		New
Chebi		14	8	9	12	14						
	Kersa	2	1	1	1	2						
Meraro North		12	7	8	11	12						
	Sagure	2	1	1	1	2						
(Bursa)	Bekoj	4	1	2	2	4						
Meraro South		6	5	5	8	6				2		Exp
	Meraro	2	1	1	1					2		New
Sebshibe Washa		4	4	4	7	4				3		Exp
Mt.Furi(P1)		1	2	2	2							
Addis Ababa		1	2	2	2							
Mt.Furi		1	2	2	2		1	1				
Sheno South		1	2	2	2	4	1	1				03 Area
Ankober		1	2	2	2	4	1	1				03 Area
	Gewane	1	2	2	2	2						
Mt.Furi(P2)		5	3	4	4		1	1				
Meki		5	3	4	4		1	1				
	Meki	4	1	2	2	2						
(Meki)	Alem Tena	1	1	1	1					1		New
Ziway West		0	1	1	1		1	1				
Arsi Negela		0	1	1	1		1	1				
Shashemene (P1)		1	4	4	7	4	1	1				
	Shashemene					25	1					06 Area
(Shashemene)	Kersa	1	3	3	6	4		1				-
	(Kersa)					4						
	Kofele					4						

Sebshibe Wash(P1)		5	5	5	8		1						***
Dodola													
Dodola													
Ardaita													
(S Wash)	Gobessa	2	1	1	1	2							***
(S Wash)	Adaba	1	1	1	1	5							***
(S Wash)	Asassa	2	1	1	1	2							***
Gasera							1						***
Adama West (P2)		12	6	6	8	12							
(Adama West)	Sire	2	1	1	1	2							
(Adama West)	Dera	3	1	1	3	3							
(Adama West)	Huruta	2	1	1	1	2							
(Adama West)	Bolo Mihale	5	3	3	3	5							
Choyo Abo		5	3	3	3	5							
Diskis		2	1	1	1	2							
Arsi Robe		3	2	2	2	3							
Robe		2	1	1	1	2							
Ticho		1	1	1	1	1							
Ticho		1	1	1	1	1							
Gobesa													
(Nazareth)	Boffa	1	1	1	1					1			New
(Nazareth)	Bole	1	1	1	1					1			New
(Nazareth)	Bulala	1	1	1	1					1			New
(Nazareth)	Doni	1	0	1	0					1			New
(Asela)	Ogolcho	1	0	1	0					1			New

* Equipment Capacity at completion of 8th Development Programme

** Quantity of STM-1

*** Please see the following, where the total of 02 and 06 areas are added.

(Shashemene)	Kersa	26	23	23	39	4		1					
Kofele		2	3	3	3	4							
Sebshibe Wash(P1)		27	21	21	37		1						
Dodola		4	2	2	2	4							
Dodola		3	1	1	1	3							
(Dodol Herrero)		1	1	1	1	1							
Ardaita													
(S Wash)	Gobessa	2	1	1	1	2							
(S Wash)	Adaba	5	4	4	6	5				1			Exp
(S Wash)	Asassa	2	1	1	1	2							
Gasera		14	11	11	22		1						

	Link	System
Newly Construction	10	11
STM1	0	0
PDH	10	11
Expansion	7	22
STM1	0	0
PDH	7	22

S.Table 9.8-1-j Expansion Plan of Spur Network (Area-03)

Link	Traffic				Base*		Plan		Region		Procurement		
	05	10	15	20	(8th D	Pro)	Backbone**	MW	Cable	MW	Cable	Type	Remarks
Ankober North	81	101	104	117	4	1	1					-	
Ambalay South	81	101	104	117		1	1					-	
Shoa Robit	2	1	1	1	4								
(Ambalay South) Ataye (Effeson)	2	1	1	1	4								
(Ambalay South) Jewha	1	1	1	1						1		New	
(Ambalay South) Senbete	1	1	1	1						1		New	
Karakore MW	87	105	108	135		1	2					-	
Kara Kore	1	1	1	1	4								
(Karakore MW) Kefela	1	1	1	1						1		New	
Irgofet	89	107	110	137		1	2					-	
Tita South	56	72	66	93		2						-	
Tita	1	1	1	1						1		New	
Dessie	78	87	80	111		2	1					-	
Dessie	119	124	123	160	25	1	1			9		Exp	MUX
(Dessie) Adjibar (Saint)	1	1	1	1						1		New	
(Dessie) Akesta	1	1	1	1						1		New	
(Dessie) Amba Mariam	1	1	1	1						1		New	
(Dessie) Feres Bet	1	1	1	1						1		New	
(Dessie) Kabe	1	1	1	1						1		New	
(Dessie) Mekdela (Mash)	1	1	1	1						1		New	
(Dessie) Tenta	1	1	1	1						1		New	
(Dessie) Bistima	1	1	1	1						1		New	
(Dessie) Kutaber	1	1	1	1						1		New	
(Dessie) Sulula	1	1	1	1						1		New	
(Dessie) Wegel Tena	1	1	1	1						1		New	
Tossa	35	35	33	44	20	1						-	
Kombolcha	7	2	3	4	4					3		Exp	
(Tossa) Korke (P1)	23	30	27	33	32	1							
Gara Yewel	5	3	3	7	4					3		Exp	
Mekane Selam (Wello)	1	1	1	1						1		New	
Wele Ilu	4	2	2	5	4					1		Exp	
Wele Ilu	2	1	1	1								-	
(Wele Ilu) Jamma (Degolo)	2	1	1	1						2		New	
(Irgofet) Chefa Robit	1	1	1	1	1								
(Irgofet) Harbu	1	3	3	3	3								
(Irgofet) Mekoy South	10	7	7	7	4					6		Exp	
Mekoy (Antsokia)	1	1	1	1						1		New	
Kemisse	11	7	7	7	4					7		Exp	
(Irgofet) Kemisse Rep	2	2	2	2	2								
(Kemisse) Wegede	1	1	1	1						1		New	
Chile	1	1	1	1	1								
Majete	1	1	1	1	1								
Korke	56	72	76	88			2					-	
Kombolcha													
(Korke) Hayk	2	1	1	1	2								
(Korke) Degan	1	1	1	1						1		New	
(Korke) Tita South	21	14	13	15		1							
Woldia West (Weldia, Gebriel)	79	87	90	102	32	1	1					-	
Weldia Ex	16	8	8	10	16								
(Weldia, Gebriel) Sirinka	1	1	1	1						1		New	
(Weldia, Gebriel) Idari Mersa	5	5	5	7						7		New	
Mertsa (Merssa)	2	1	1	1						2		New	
(Idari Mersa) Wurgesa	1	1	1	1						1		New	
(Idari Mersa) Wuchale	2	1	1	1						2		New	
(Weldia, Gebriel) Flakit (Mekit)	2	1	1	1						2		New	
(Weldia, Gebriel) Kon (Kon Abo)	1	1	1	1						1		New	
(Weldia, Gebriel) Lalibela	3	1	1	2						3		New	
Kobo East	65	77	80	89	16	1	1					-	
Kobo Town	2	3	3	3	4								
(Kobo East) Kobo Robit	1	1	1	1						1		New	
(Kobo East) Sendedo Ber	2	1	1	1	4								
Korem					4								
Sekota Rep.	2	1	1	1	2								
Sekota	2	1	1	1	2								
(Kobo East) Alamata					2								
Maichew North	37	46	52	59	16	1	1					-	
Dessie (P1)													
Hara	29	28	28	28		1						-	
Bati	29	28	28	28		1						-	
Bati Town	3	1	1	1	4								
(Bati) Eliwoha	1	1	1	1	2								

Mille		25	26	26	26		1								
	Mille Town	0	1	1	1	2									
	Adaltu (Aditu)	1	1	1	1	2									
Tendaho		24	24	24	24		1								
	Tendaho (TV)	17	17	17	17	17									
	(Tendaho) Tendaho Town	1	1	1	1	2									
	(Tendaho) Dupti	7	6	6	6	8									
	Logia	1	1	1	1	2									
	(Tendaho) Semera	3	1	1	2	16									
	(Tendaho) Assaita(P1)														
Serdo		1	2	0	19		1								
	Serdo Town					2									
	(Serdo) Detbahri					2									
	(Serdo) Assaita	1	1	0	1	4									
	(Serdo) Deceotto (Dicha Otto)					2									
Paradizo		0	1	0	1		1								
	Paradizo Town					2									
	(Paradizo) Elidar	0	1	0	1	2									
Lofele							1								
Musari															
	Manda					2									
Bure						2									
Serdo		10	8	8	9	10									
	(Serdo) Detbahri	1	1	1	1	1									
	Detbahri	1	1	1	1	1									
	Assaita	4	2	2	3	4									
	(Serdo) Deceotto (Dicha Otto)	1	1	1	1	1									
Deceotto West		4	4	4	4	4									
Paradizo Town		4	4	4	4	4									
	Paradizo Town	1	1	1	1	1									
	(Paradizo T) Galafi														
Musari		3	3	3	3	3									
	Manda														
	(Musari) Elidar	2	2	2	2	2									
Bure		1	1	1	1	1									
(Dessie)	Arbaya	1	1	1	1					1	New				
(Dessie)	Betabahari	1	1	1	1					1	New				
(Dessie)	Weinamba	1	1	1	1					1	New				
(Dessie)	Chifra	1	1	1	1					1	New				
(Dessie)	Chefa Woledi	1	1	1	1					1	New				
(Dessie)	Geshen Mariam	1	1	1	1					1	New				
(Dessie)	Muja	1	1	1	1					1	New				
(Kemisse)	Rassa	2	1	1	1					2	New				
(Weldia Ex)	Waja	2	1	1	1					2	New				
(Weldia Ex)	Gobyee	1	1	1	1					1	New				

* Equipment Capacity at completion of 8th Development Programme

** Quantity of STM-1

	Link	System
Newly Construction	45	53
STM1	0	0
PDH	39	53
*** Sub-Trunk	6	-
Expansion	6	29
STM1	0	0
PDH	5	20
MUX	1	9

180km, 4 links + 70km, 2 links

S.Table 9.8-1-j

Expansion Plan of Spur Network (Area-04)

Link	Traffic				Base*		Plan				Procurement	Remarks
	05	10	15	20	(8th D Pro)	STM-	Backbone**	Region	MW	Cable		
Kobo East	60	72	75	84	16	1	1					-
(Kobo East) Kobo Town					4							
(Kobo East) Kobo Robit												
(Kobo East) Sendedo Ber	2	1	1	1	4							
(Kobo East) Korem	2	1	1	1	2							
(Kobo East) Korem	2	1	1	1	4							-
(Kobo East) Sekota Rep.												
(Kobo East) Sekota												
(Kobo East) Alamata	5	5	5	6	2			4				Exp
Maichew North	67	78	81	95	16	1	1					-
(Maichew N.) Bolenta Giorgis	19	9	10	11	4		1					
(Maichew N.) Maichew Town	24	12	13	14	4		1					
(Maichew N.) Meswaet	2	1	1	1				2				New
Adi Shehu	76	83	87	100	16	1	1					-
(Adi Shehu) Adi Shehu	2	1	1	1								-
Ambalagie	74	82	86	99	16	1	1					-
(Ambalagie) Dela	1	1	1	1				1				New
Mossobo	73	81	85	98	16	1	1					-
(Mossobo) Mekele	111	113	120	149	80	2						-
(Mossobo) Mekele	114	117	124	153	80	2						-
(Mossobo) Imbaradom												
(Mossobo) Imbaradom	1	1	1	1				1				New
(Mossobo) Imbaradom	10	12	12	12	12							
(Mossobo) Adigudom	1	1	1	1	1							
(Mossobo) Imbaradom	1	1	1	1				1				New
(Mossobo) Imbaradom	1	0	0	0				1				New
(Mossobo) Imbaradom	1	1	1	1				1				New
(Mossobo) Adi Shehu Pass Rep.	8	7	7	7	8							
(Mossobo) May Nebri	8	7	7	7	8							
(Mossobo) May Nebri	1	1	1	1								-
(Mossobo) Hiwane Town	7	6	6	6	7							
(Mossobo) Hiwane Town	2	1	1	1								-
(Mossobo) Hiwane T.)	2	1	1	1				2				New
(Mossobo) Hiwane T.)	1	1	1	1				1				New
(Mossobo) Quiha	2	1	1	1	2							
(Mossobo) Adidewhy	3	3	3	4	3			1				Exp
(Mossobo) Temben Rep.	3	3	3	4	3			1				Exp
(Mossobo) Temben	3	1	1	1	3							
(Mossobo) Temben Rep.)												
(Mossobo) Atebes	0	0	12	0	16							
Inkotamba	37	26	17	44		1						-
(Inkotamba) Wukro	5	4	4	5	5							
(Inkotamba) Sinkata	2	1	1	1	2							
(Inkotamba) Negash	2	1	1	1	2							
(Inkotamba) Tsigereda	2	1	1	1				2				New
(Inkotamba) Battiero	2	1	1	1				2				New
(Inkotamba) Atsbi	2	1	1	1				2				New
(Inkotamba) Selat	2	2	2	2				2				New
(Inkotamba) Haik Mesahil	1	1	1	1				1				New
(Inkotamba) Agulae	1	1	1	1				1				New
(Inkotamba) Debre Birhan												
Hawzen Rep.	48	28	19	47		1						-
(Hawzen Rep.) Hawzen	2	1	1	1				2				New
(Hawzen Rep.) Adi Ahiferom	1	1	1	1				1				New
(Hawzen Rep.) Edaga Hamus	2	1	1	1	2							
Atebes	51	29	32	48		1						-
(Atebes) Kesharat	25	13	14	16	4		1					-
(Atebes) Adigrat	27	14	15	17	4		1					-
(Atebes) Fekiya Keshi North	2	1	1	1	2							
(Atebes) Tsahwa	2	1	1	1	2							
(Atebes) Zalanbessa	2	1	1	1	2							
(Atebes) Gerhu Sernay	1	0	0	0				1				New
(Atebes) Bizet	1	1	1	1				1				New
Adi Abeyito	28	17	19	33	4	1						-
(Adi Abeyito) Inticho	2	1	1	3	2			1				Exp
(Adi Abeyito) Feresmay	1	1	1	1				1				New
Morer	29	17	19	31	4	1						-
(Morer) Adwa	33	18	19	20	4		1					-
(Morer) Axum	10	5	6	9	10							
(Morer) Adet	2	1	1	1	2							
(Morer) Adi Abun	2	1	1	1				2				New

(Morer)	Mai Kintile	1	1	1	1					1	New	
(Morer)	Maheberedegu	1	1	1	1					1	New	
(Morer)	Tabia Nebela	2	1	1	1	2						
	Rama	2	1	1	1	2						
Koyetsa		16	12	12	20	4	1	1			-	
	Enda Selasie	12	5	5	7	4				8	Exp	
(Koyetsa)	Shire	0	0	0	2	4						
(Koyetsa)	Wukero Maray											
(Koyetsa)	Adi Dairo	1	1	1	3	1				2	Exp	
(Koyetsa)	Adi Awala	1	1	1	1					1	New	
(Koyetsa)	Badme	1	1	1	1					1	New	
(Koyetsa)	Selekleka	2	1	1	1					2	New	
(Koyetsa)	Adi Dairo West	2	3	3	3	3						
	Sheraro	2	3	3	3	3						
Azemachi Reday		2	3	3	5	3				2	Exp	
Adiguna		2	3	3	5	3				2	Exp	
Indabaguna		2	3	3	5	3				2	Exp	
	Indabaguna	2	3	3	5	3				2	Exp	
(Mekele)	Aynalem	1	1	1	1					1	New	
(Mekele)	Dengolat	1	0	0	0					1	New	
(Adwa)	Adi Gheburu	2	1	1	1					2	New	
(Adwa)	Adi Hagerai	1	1	1	1					1	New	
(Adwa)	Adi Nebri-Id	1	1	1	1					1	New	
(Adwa)	Edaga Arbi	1	0	0	0					1	New	
(Adwa)	Merha Senay	1	1	1	1					1	New	
(Adwa)	Work Amba	1	0	0	0					1	New	
(Axum)	Chila	1	1	1	1					1	New	
(Enda Selasie)	Zana	1	1	1	1					1	New	
(Maichew Town)	Bora	1	1	1	1					1	New	
(Maichew Town)	Mehoni	2	1	1	1					2	New	

* Equipment Capacity at completion of 8th Development Programme

** Quantity of STM-1

	Link	System
Newly Construction	37	48
STM1	0	0
PDH	37	48
Expansion	10	25
STM1	0	0
PDH	10	25

S.Table 9.8-1-j

Expansion Plan of Spur Network (Area-05)

Link	Traffic				Base*		Plan		Region		Procurement		
	05	10	15	20	(8th D Pro)	STM-1	Backbone**	MW	Cable	MW	Cable	Type	Remarks
Awash Rep.	65	78	84	96	32	2	1					-	
Dalecha	65	78	84	97	32	2						-	
(Dalecha) Asebot	1	1	1	1	4								
(Dalecha) Mieso	1	1	1	1	4								
(Dalecha) Asebe Teferi Rep.	11	6	7	16	4		1						
(A T Rep) Asebe Teferi	22	16	17	26	4		1						
(A T Rep) Mechara	1	1	1	1						1		New	
(A T Rep) Boke Tiko	1	1	1	1						1		New	
(A T Rep) Arba	2	1	1	1						2		New	
(A T Rep) Belbeliti	1	1	1	1						1		New	
(A T Rep) Debesso	1	1	1	1						1		New	
(A T Rep) Doba	1	1	1	1						1		New	
(A T Rep) Kara Kurkura	1	1	1	1						1		New	
(A T Rep) Kuni	1	1	1	1						1		New	
(A T Rep) Mecheta	1	1	1	1						1		New	
(A T Rep) Wachoo	1	1	1	1						1		New	
(Dalecha) Asebe Teferi					2								
(Dalecha) Asebe Teferi					2								
(Dalecha) Meisso													
(Dalecha) Afdem													
(Dalecha) Muktar Terrara	4	2	2	2						4		New	
(Dalecha) Bedessa	2	1	1	1						2		New	
(Dalecha) Gelemso	2	1	1	1						2		New	
Ades	74	83	90	112	32	2						-	
Ades					4								
Kulubi West	80	87	94	117	32	2						-	
(Kulubi West) Chelenko	4	3	3	5	4					1		Exp	
(Kulubi West) Errer	1	2	2	2	4								
(Kulubi West) Hurso	1	1	1	1	4								
(Kulubi West) Deder													
(Kulubi West) Gara Wube													
(Kulubi West) Kobo (Harerge)													
(Kulubi West) Gara Kufa													
(Kulubi West) Hirna													
Dire Dawa	74	79	82	100	48	2						-	
Dire Dawa	127	109	116	151	23	2							
(Dire Dawa) Harar(PI)													
(Dire Dawa) Melka Jebdu	2	1	1	1	4								
(Dire Dawa) Hurso													
(Dire Dawa) Shinile	2	2	2	2						2		New	
(Dire Dawa) Kersa (Harerge)	1	1	1	1						1		New	
(Dire Dawa) Langie	1	1	1	1						1		New	
Dengego	64	42	46	63	16	2						-	
(Dengego) Alemaya	2	3	3	3	4								
(Dengego) Alemaya University													
(Dengego) Watter (Tebele)	1	1	1	1						1		New	
(Dengego) Kurfachele	1	1	1	5						5		New	
Hakim Gara	68	43	47	60	16	2						-	
Hakim Gara	52	39	41	44	16	1							
(Hakim Gara) Harar	1	1	1	3	4								
(Hakim Gara) Gursum	1	1	1	3	4								
(Hakim Gara) Girawa	2	2	2	4	4								
(Hakim Gara) Girawa	1	1	1	1						1		Exp	MUX
(Hakim Gara) Bedeno	1	1	1	1						1		New	
(Hakim Gara) Kombolcha	3	3	3	5	4					1		Exp	
(Hakim Gara) Kombolcha	2	2	2	2								-	
(Hakim Gara) Ejersa Goro	1	1	1	1						1		New	
(Hakim Gara) Aweday	2	1	1	1	4								
(Hakim Gara) Amaressa	2	1	1	1						2		New	
(Hakim Gara) Bisidimo	1	1	1	1						1		New	
(Hakim Gara) Bocco (Feddis)	1	1	1	1						1		New	
(Hakim Gara) Burka (Meyu Burka)	1	1	1	1						1		New	
(Hakim Gara) Babile	4	2	2	3	4								
(Hakim Gara) Babile	1	1	1	1								-	
(Hakim Gara) Fiq	3	1	1	1						3		New	
Mardepass	25	13	15	18		1						-	
(Mardapass) Jijiga	16	8	9	9		1						-	
(Mardapass) Kebri Beyah	14	9	10	10	4		1						
(Mardapass) Kebri Beyah	3	4	4	4								-	
(Mardapass) Aware	1	1	1	1						1		New	
(Mardapass) Geladin	2	1	1	1						2		New	
(Mardapass) Harti Shek	2	1	1	1	4								

	Degeh Bur	6	2	3	3					6	New
	Degehabur	4	1	2	2						-
	Kebri Dehar	2	1	1	1					2	New
(Mardapass)	Subul Chaf	4	2	2	4	4					
	Teferi Ber	3	1	1	2	4					
	(Subul Chaf) Togo Wuchale										
	Chinaksen	1	1	1	2	4					
(Mardapass)	Leffisa	2	1	1	0					2	New
	Dire Dawa (P1)	2	2	2	3						-
	Kulubi West (P1)	16	20	24	32						-
	Kedirare	16	20	24	32	16		1			-
	Worji	16	20	24	32	16		1			-
	Gara Gewril	16	20	24	32	16		1			-
	Gewril Rep.	16	20	24	32	16		1			-
	Kash	16	20	24	32	16		1			-
	Aysha	16	20	24	32	16		1			-
	Aysha	1	1	1	2	2					
	Arrey	15	19	23	30	16		1			-
	Dewale	1	1	1	1	4					
	Arta	14	18	22	29	16		1			-
	Halda										
	Alisabie										
	Djibouti	14	18	22	29	16		1			-
	Dalecha (P1)										
	(Dalecha) Gara Kufa	2	1	1	1	2					
	Hirna	2	1	1	1	2					
	Ades (P1)	2	1	1	1						-
	Kobo	77	85	92	114			2			
	Kobo	1	1	1	1	1					
(Kobo)	Deder	2	3	3	3					3	New
	Gara Webe										
	Kulbi West (P3)										
	(Kulbi W) Karamile										
(Harar)	Dawe (Tebo)	1	1	1	1					1	New
(Jijiga)	Hamer Hadid	1	1	1	1					1	New

* Equipment Capacity at completion of 8th Development Programme

** Quantity of STM-1

	Link	System
Newly Construction	40	57
STM1	0	0
PDH	33	57
*** Sub-Trunk	7	-
Expansion	3	3
STM1	0	0
PDH	2	2
MUX	1	1

*** Kebri Dehar new Micro System
290km, 7 links for new portion

S.Table 9.8-1-j Expansion Plan of Spur Network (Area-06)

Link	Traffic				Base*		Plan		Region		Procurement	
	05	10	15	20	(8th D Pro)		Backbone**		MW	Cable	Type	Remarks
	2M				2M	STM-1	MW	Cable	MW	Cable		
Addis Ababa												
Mt.Furi	70	79	82	88		1	1					
Meki	70	79	82	88		1	1					
Ziway West	70	79	82	88		1	1					
Ziway	9	4	4	5	16							
(Ziway West) Midre Kebd	4	3	3	7	2				5		Exp	
Butajira	2	1	1	3	2				1		Exp	
Butajira	4	3	3	3								
(Butajira) Kibet	1	1	1	1					1		New	
(Butajira) Buie	1	1	1	1					1		New	
(Ziway West) Adami Tulu	2	1	1	1	2							
(Ziway West) Dalocha	1	1	1	1					1		New	
(Ziway West) Koshie	1	1	1	1					1		New	
(Ziway West) Wulbareg	1	1	1	1					1		New	
(Ziway West) Enseno	2	1	1	1					2		New	
Arsi Negela	86	89	92	103		1	1					
Arsi Negela	4	1	1	2	4							
(Arsi Negela) Bulbula	1	1	1	1					1		New	
(Arsi Negela) Langano	1	1	1	1					1		New	
Shashemene	92	93	96	110		1	1					
Shashemene	195	177	183	251	21	2	2					
(Shashemene) Kersa	25	20	20	33	4		1					
Kofele	2	3	3	3	4							
(Kersa) Korie	1	1	1	1					1		New	
Sebshibe Wash	22	16	16	29								***
Dodola	4	2	2	2	4							***
Dodola	3	1	1	1	3							***
(Dodola) Herrero	1	1	1	1	1							***
(S Wash) Ardaita												***
(S Wash) Gobessa												***
(S Wash) Adaba	4	3	3	5								***
(S Wash) Asassa												***
Gasera	14	11	11	22								***
Gasera	1	1	1	1								
(Gasera) Mt.Welenchiso	1	1	1	5	1				4		Exp	
(Gasera) Goro	1	1	1	5	1				4		Exp	
(Gasera) Agarfa												
Bale Goba	13	10	10	17		1						
Goba	10	5	6	9		1						
(Bale Goba) Agarfa Town												
(Bale Goba) Agarfa Training Center												
(Bale Goba) Dinsho	1	1	1	1					1		New	
(Bale Goba) Robe	7	4	5	7	2				5		Exp	
Robe	6	3	4	4								
(Robe) Alli	1	1	1	1					1		New	
Sanete	9	6	6	8	4				5		Exp	
Sanete					2							
(Sanete) Ghinir	7	5	5	7	2				5		Exp	
Ghinir	2	1	1	1								
(Ghinir) Jara	1	1	1	1					1		New	
Imi	2	1	1	1					2		New	
El Kere	2	1	1	1					2		New	
Tulu Dimtu	2	1	1	1	6							
Meslo					4							
Dolomena	2	1	1	1	2							
(Shashemene) Kuyera	1	1	1	1					1		New	
(Shashemene) Amba	1	1	1	1					1		New	
(Shashemene) Wondbasha												
(Shashemene) Mt. Fende	20	24	24	45		1						
Alaba Kulito	4	5	5	6	5				1		Exp	
Hadero	2	1	1	1					2		New	
(Mt. Fende) Shone	1	1	1	1	1							
(Mt. Fende) Adjie	1	1	1	1					1		New	
Delbo Wegene Rep.	31	34	34	54		1						
Boditi												
Humbo Abo Rep.	31	34	34	54		1						
Abaro	64	46	50	71	4	1	1					
Awassa	32	12	13	17	4		1					
(Abaro) Leku	4	3	3	3	4							
(Abaro) Hossaina	13	9	9	9	4				9		Exp	
Hossaina	17	12	12	12								
(Hossaina) Ginbichu	1	1	1	1					1		New	
(Hossaina) Angacha	2	1	1	1					2		New	
(Hossaina) Homecho	1	1	1	1					1		New	

(Abaro)	Aleta Wondo	0	4	4	6	8								
	Aleta Wondo	0	4	4	6	8								
	Chuko													
(Abaro)	Children's Village													
(Abaro)	Basha	1	1	1	1					1			New	
(Abaro)	Tulla	1	1	1	1					1			New	
Waragelama		28	23	26	43	4	1						-	
	Yirgalem	5	1	2	2	4				1			Exp	
	Yirgalem	5	1	2	2	4							-	
	Leku(P1)													
(Waragelama)	Chuko	2	1	1	1	4								
(Waragelama)	Aleta Wondo(P1)					4								
(Waragelama)	Banko	22	13	14	21	4			1				-	
	Banko													
	(Banko) Wenago	1	1	1	1					1			New	
	(Banko) Hagere Selam	1	1	1	1					1			New	
	Dilla	24	13	14	17	4			1				-	
	Dilla	30	17	18	19	4			1				-	
	(Dilla) Bule	1	1	1	1					1			New	
	(Dilla) Kebado	2	1	1	1					2			New	
(Waragelama)	Dilla													
	Dilla													
	Dilla													
	Weleita Sodo					4								
Kurumi		17	16	17	27		1		-				-	
	Yirga Chefe	2	3	3	3	4								
(Kurumi)	Chelelektu	1	1	1	1					1			New	
(Kurumi)	Fisha Ghenet	1	1	1	1					1			New	
Hagere Mariam Rep.		13	11	12	20		1		-				-	
	Hagere Mariam Town	2	2	2	2	4								
(H.Mariam Rep.)	Legedenbi North	5	2	2	5					5			New	
	Shakiso	2	1	1	3					3			New	
	(Legedenbi N) Kibre Mengist	3	1	1	2					3			New	
	(Legedenbi N) Harekello													
	(Legedenbi N) Negele Bolena													
	(Legedenbi N) Legedenbi													
Denbela Fura		6	7	8	12		1		-				-	
	Yabelo Rep.					4								
	Yabelo					4								
Tule Bera		6	7	8	11		1		-				-	
Mega Rep.		6	7	8	10		1		-				-	
	Mega	1	1	1	1					1			New	
Tuka		5	6	7	9		1		-				-	
	Moyale	2	3	3	4	4								
Marza		3	3	4	5		1		-				-	
Areka		2	2	2	2	2								
	Areka	2	1	1	1	2							-	
(Areka)	Soyama	1	1	1	1					1			New	
Zamine North Rep.		5	6	6	9	6				3			Exp	
	Weleita Sodo	2	3	3	3	3								
	Weleita Sodo	10	4	4	4					8			Exp	MUX
	(Sodo) Zefene													
Humbo Abo Rep. (P1)		31	32	32	50		1						-	
Birbir		23	25	25	40		1						-	
	Birbir	1	1	1	1					1			Exp	MUX
(Birbir)	Ezo	1	1	1	1					1			New	
Koyite		25	27	27	42		1						-	
Bekele Mola		25	27	27	42		1						-	
	Arba Minch	42	38	38	44		1						-	
(Bekele Mola)	Lante	1	1	1	1	1								
(Bekele Mola)	Dorze Lake	3	2	2	4	3				1			Exp	
	Dorzie	1	1	1	1					1			New	
	Chencha	2	1	1	3	2				1			Exp	
Haybena Mt.		1	1	1	5	1				4			Exp	
Konso		1	1	1	5	1				4			Exp	
Kurumi (P1)														
Arba Minch West		4	4	4	9					9			New	
	Arba Minch (P1)	16	11	11	16	16								
(Arba Minch W)	Geresse	1	1	1	1					1			New	
Gidole		15	10	10	12	16								
	Ghidole	2	1	1	1	1							-	
Karamercha		13	9	9	11	16								
	Mindore	7	5	5	5	4				3			Exp	
	Mindore	2	1	1	1								-	
(Mindore)	Bulki	1	1	1	1					1			New	
	Sawla	4	3	3	3	4								
Key Afer		6	4	4	4	16								
Jinka		6	4	4	4	16								

Jinka		3	1	1	1	16						
(Jinka) Gazer (Bako Gazer)		1	1	1	1					1	New	
Bale Goba (P1)		1	1	1	1	1						
All West		1	1	1	1	1						
Agarfa		1	1	1	1	1						
Selka South												
Meliyu West												
Gore												
(Shashemene) Solomo		2	1	1	1					2	New	
(Shashemene) Wondo (Wondo Kela)		1	1	1	1					1	New	
(Shashemene) Shinshicho		2	1	1	1					2	New	
(Shashemene) Alem Tena		1	1	1	1					1	New	
(Dilla) Gerba (South)		2	1	1	1					2	New	
(Dilla) Amarokelle		1	1	1	1					1	New	
(Dilla) Gedeb		1	1	1	1					1	New	
(Dilla) Filtu		1	1	1	1					1	New	
(Hossaina) Bonesha		1	1	1	1					1	New	
(Hossaina) Mudula		1	1	1	1					1	New	
(Weleita Sodo) Durame		3	1	1	1					3	New	

* Equipment Capacity at completion of 8th Development Programme

** Quantity of STM-1

*** Please see Area 02

	Link	System
Newly Construction	55	78
STM1	0	0
PDH	51	78
**** Sub-Trunk	4	-
Expansion	18	65
STM1	0	0
PDH	16	56
MUX	2	9

**** El Kere new PDH Micro
210km, 4 links for new portion

S.Table 9.8-1-j

Expansion Plan of Spur Network (Area-07)

Link	Traffic				Base*		Plan				Procurement	
	05	10	15	20	(8th D Pro)		Backbone**		Region		Type	Remarks
	2M				2M	STM-1	MW	Cable	MW	Cable		
<Jimma>												
Welisso North	43	48	48	51		1	1					-
Weliso Town					2							
(Welisso North) Welkite												
Tolay												
Welikite MW	43	48	48	51		1						-
Welkite					2							
Fofa	43	48	48	51		1						-
Fofa	1	1	1	1					1		Exp	MUX
(Fofa) Assendabo	1	1	1	1					1		New	
(Fofa) Deneba (Keffa)	1	1	1	1					1		New	
Muja	46	55	55	73		1	1					-
Jimma	98	87	90	97	16	2						-
Jimma	105	93	96	103	34	1			8		Exp	MUX
(Jimma) Agaro(P1)	2	1	1	1	8							
Limu Kosa	2	1	1	1	1				1		Exp	
Limu Genet	2	1	1	1	1				1		Exp	
(Jimma) Dedo (Sheki)	1	1	1	1					1		New	
(Jimma) Seka	1	1	1	1					1		New	
(Muja) Ambuye	1	1	1	1					1		New	
(Muja) Atnago	1	1	1	1					1		New	
(Muja) Billida	1	1	1	1					1		New	
(Muja) Chiena	1	1	1	1					1		New	
(Muja) Choche	1	1	1	1					1		New	
(Muja) Gembie	2	1	1	1					2		New	
(Muja) Harro	1	1	1	1					1		New	
(Muja) Limu Seka	1	1	1	1					1		New	
(Muja) Omonada	1	1	1	1					1		New	
(Muja) Serbo	1	1	1	1					1		New	
(Muja) Shay	1	1	1	1					1		New	
(Muja) Tobba	1	1	1	1					1		New	
(Muja) Yebu	1	1	1	1					1		New	
Sembo West	14	8	8	18	16		1					
Gimbo	2	2	2	5	16							
Gimbo	1	1	1	1								-
Bonga	1	1	1	2	16							
(Sembo W) Shebie	1	1	1	1					1		New	
Shebita	11	5	5	9	4				7		Exp	
Walla	11	5	5	9	4				7		Exp	
Mizan Teferi	7	3	3	3	2				5		Exp	
Mizan Teferi	5	2	2	2	2							-
Aman	2	1	1	1	2							
(Walla) Majji (Tem)	1	1	1	1					1		New	
Tepi	3	1	1	5	2				3		Exp	
Muja(P1)	24	15	18	34		1						-
Dembi North	24	15	18	34		1						-
Dembi	0	2	2	4	4							
(Dembi North) Agaro	4	1	2	2					4		New	
(Dembi North) Beshasha	1	1	1	1					1		New	
(Dembi North) Gatera	1	1	1	1					1		New	
(Dembi North) Sigmo (Sigamo)	1	1	1	1					1		New	
Arjo MW	25	33	35	68		1	1					-
Chora	22	21	23	35		1						-
Chora	1	1	1	1					1		New	
(Chora) Bedele	1	1	2	6	4				2		Exp	
Gore Rep.	22	19	20	28	4	1						-
Gore	3	1	1	1	4							
(Gore Rep.) Mettu	29	20	20	21	20		1					
(Gore Rep.) Hurumu	1	1	1	1	4							
(Gore Rep.) Yayu	2	3	3	3	4							
(Gore Rep.) Masha	2	1	1	1	4							
(Gore Rep.) Algie	1	1	1	1					1		New	
(Gore Rep.) Dega	1	1	1	1					1		New	
(Gore Rep.) Noppa	1	1	1	1					1		New	
(Gore Rep.) Supe	1	1	1	1					1		New	
Awete	13	9	10	15		1						
Bure (Illubabour)	1	1	1	1					1		New	
Gara Humbi	12	8	9	12		1						
Dembi Dollo(P1)	5	1	2	2					5		New	

(Gara Humbi)	Gambela																		
Shebel South		7	7	7	10			1											
	Abobo	1	3	3	4	4													
Gambela		8	6	6	8			1											
	Gambela	7	5	5	5	8													
(Gambela)	Itang	3	3	3	5	4				1									Exp
	Wategch Rep.	1	1	1	3	4													
	Jikawo	1	1	1	3	4													
<Nekemte>																			
Tibebilo		30	33	33	34	16		1											-
	Gedo	2	1	1	1	2													
(Tibebilo)	Ijaji																		
(Tibebilo)	Bako	7	3	3	3	1				6									Exp
(Tibebilo)	Fincha	3	1	1	1	2				1									Exp
(Tibebilo)	Shambu	2	1	1	1	4													
(Tibebilo)	Arjo MW					16													
(Tibebilo)	Kara Legashi					1													
	Sugar Factory					1													
Gara Gordomo		40	37	37	38	16		1											-
	Sira (Sire Wellega)	2	1	1	1	2													
(Gara Gordomo)	Gida Ayana	1	1	1	1					1									New
Nekemte		39	37	37	38	16		1											-
	Nekemte	84	101	101	141	16		2	1										
(Nekemte)	Ghera (Gelila)	2	1	1	1					2									New
(Nekemte)	Guyi	1	1	1	1					1									New
(Nekemte)	Ayna South																		
	Ayna																		
Arjo MW		39	57	57	95	16		2											-
	Arjo Town	1	1	1	1					1									New
(Arjo MW)	Getema	1	1	1	1					1									New
(Arjo MW)	Arjo Gudetu	1	1	1	1					1									New
Ventiotto (Gimbi-Entoto)		25	26	26	32			2											-
	Gimbi	5	6	6	7	4													Exp
(Ventiotto)	Inango	2	1	1	1					2									New
Billa South		18	19	19	24			2											-
	Billa Town	1	1	1	1	4													-
(Billa South)	Guliso	2	1	1	1	4													
(Billa South)	Nejo	3	3	3	3	4													
(Billa South)	Jarso	1	1	1	1					1									New
Mendi		9	11	11	12			1											
	Mendi	2	1	1	1	4													
Assossa		7	6	6	7			1											
	Assossa	7	6	6	7	14													
Billa South (P1)		2	2	2	4			1											-
Gara Kucho		2	2	2	4			1											
	Alem Teferi	1	1	1	1					1									New
(Gara Kucho)	Yubdo	1	1	1	1					1									New
Chanka		0	0	0	0			1											
	Chanka	1	1	1	1					1									Exp
(Chanka)	Gidame	1	1	1	1					1									New
(Chanka)	Kakie	2	1	1	1					2									New
Mojo West		4	3	3	3			1											
Dembi Dolo		4	3	3	3			1											
	Dembi Dolo	9	7	7	7	8				1									Exp
(Dembi Dolo)	Rob Gebeya	1	1	1	1					1									New
Rep.1		3	2	2	2					3									New
	Ashu	1	1	1	1					1									New
Rep.2		2	1	1	1					2									New
Muggi		2	1	1	1					2									New
(Jimma)	Babu	1	1	1	1					1									New
(Jimma)	Dimtu	1	1	1	1					1									New
(Jimma)	Shinshida	1	1	1	1					1									New
(Mettu)	Becho	1	1	1	1					1									New
(Mettu)	Darimu (Dipa)	1	1	1	1					1									New
(Mettu)	Fogleka (Leka)	1	1	1	1					1									New
(Mettu)	Ouka	1	1	1	1					1									New
(Dembi Dolo)	Lalokile (Lolo)	1	1	1	1					1									New
(Nekemte)	Dongoro	1	1	1	1					1									New
(Nekemte)	Gutin	1	1	1	1					1									New
(Nekemte)	Homma	1	1	1	1					1									New
(Nekemte)	Nole Kaba	1	1	1	1					1									New
(Nekemte)	Werejiru	1	1	1	1					1									New

* Equipment Capacity at completion of 8th Development Programme

** Quantity of STM-1

	Link	System
Newly Construction	60	75
STM1	0	0
PDH	57	75
*** Sub-Trunk	3	-
Expansion	15	48
STM1	0	0
PDH	11	37
MUX	4	11

*** Including new PDH Micro connecting Dembi Dolo, Ashu and Muggi
3 links

S.Table 9.8-1-j

Expansion Plan of Spur Network (Area-08)

Link	Traffic				Base*		Plan		Region		Procurement		
	05	10	15	20	(8th D Pro)	2M	STM-	MW	Cable	MW	Cable	Type	Remarks
Tik Giorgis	56	80	86	99			3					-	
Dejen	2	3	3	7	4					3		Exp	
(Tik Giorgis) Bichena	2	1	1	1	4								
(Tik Giorgis) Aba Falassie	5	4	4	10						10		New	
Aba Falassie													
(Aba Falassie) Felege Birhan	1	1	1	1						1		New	
Debre Work	4	3	3	7	4					3		Exp	
(Tik Giorgis) Kuyi	1	1	1	1						1		New	
Robit	64	85	91	104	4	3						-	
Robit					4								
Debre Markos	64	85	91	109	4	3						-	
Debre Markos	47	22	24	33	4	1							
(Debre Markos) Gemjabet Mariam	1	1	1	1	2								
(Debre Markos) Engibara(Kosso Ber)(P1)													
(Debre Markos) Lumane	1	1	1	1						1		New	
(Debre Markos) Yejube	1	1	1	1						1		New	
Amanuel North	90	94	102	128	16	3						-	
Amanuel	1	3	3	3	4								
(Amanuel North) Dembecha	5	2	2	3	4					1		Exp	
Dembecha	3	1	1	2									
(Dembecha) Jiga	2	1	1	1						2		New	
Gara Jobel	84	97	105	132	16	3						-	
Bure	3	3	3	4	8								
(Gara Jobel) Finote Selam	4	3	4	4	8								
Gara Beteria	79	101	108	140	4	3						-	
Kosober (Injibara)	3	1	1	2	8								
(Gara Beteria) Gara Kar	7	8	8	13	16	1							
Chagni	5	3	3	6	4					2		Exp	
(Gara Kar) Gilgel Beles					4								
(Gara Kar) Pawe	2	5	5	7	4					3		Exp	
(Gara Kar) Metekel					4								
(Gara Kar) Alemu Town					4								
(Gara Beteria) Kessa	1	1	1	1						1		New	
Merawi North	84	111	118	160	16	3						-	
Merawi	4	3	3	3	4								
(Merawi North) Dangla	7	8	8	11	8					3		Exp	
Dangla	12	8	8	9								-	
(Dangla) Abechekli (Durbete)	1	1	1	1						1		New	
(Dangla) Addis Kidame	1	1	1	1						1		New	
(Merawi North) Adet North	6	4	4	10	4					6		Exp	
Adet	4	3	3	7	4					3		Exp	
Tis Abay	2	1	1	1						2		New	
(Merawi North) Debre Mewi (Adet North)	5	2	2	3	1					4		Exp	
Motta	5	2	2	3	1					4		Exp	
(Merawi North) Gilgel Abay (Wetet)	1	1	1	1						1		New	
(Merawi North) Hamsuit East(P1)	1	1	1	1	16								
Hamsuit	1	1	1	1						1		New	
(Hamsuit East) Ambassame (Dera)	1	1	1	1						1		New	
Addis Zemen(P1)					4								
Bahir Dar	100	143	150	209	17	3	1					-	
Bahir Dar	142	159	169	239	1	4							
(Bahir Dar) Debre Work													
(Bahir Dar) Meketel													
(Bahir Dar) Kunzla	1	1	1	1						1		New	
(Bahir Dar) Meshenti	1	1	1	1						1		New	
Wash Indrias	73	70	70	95		1	1					-	
Debre Tabor	11	5	6	7	4					7		Exp	
(Wash Indrias) Woreta	4	6	6	6	4					2		Exp	
Wereta	2	1	1	1								-	
Addis Zemen	2	3	3	3	4								
(Wash Indrias) Debre Tabor Rep.	7	16	16	18	8		1						
Ibnet	1	7	7	7	4					3		Exp	
(D Tabor Rep.) Hudad	2	2	2	2	4								
Iste	2	2	2	2	4								
(D Tabor Rep.) Arga	3	6	6	8	4					4		Exp	
Nefas Mewcha	3	6	6	8	4					4		Exp	
N Mewcha	2	1	1	1								-	
(N Mewcha) Semada	1	1	1	1						1		New	
(D Tabor Rep.) Hamsuit East	1	1	1	1	4								
Gomita	52	47	46	66		1	1					-	
Gondar	57	47	46	66		1	1					-	
Gondar	81	58	57	64	2	1	1						
Subnaber	2	1	1	1	2								
Azezo	2	1	1	1	2								

Gondar (P1)		28	26	27	41		1					-	
Girgi North		28	26	27	41		1					-	
Ambezo		8	7	7	18	8		1				-	
	Gedebghie	1	1	1	1					1		New	
Dabat West		7	6	6	17	7		1				-	
	Amba Giorgis	1	3	3	3	3							
(Dabat West)	Tekil Dingay	1	1	1	3	1				2		Exp	
Wekin		5	2	2	11	5		1				-	
	Wekin	0	0	0	2					2		Exp	MUX
(Wekin)	Dabat	2	1	1	3	2				1		Exp	
(Wekin)	Debark	3	1	1	3	3							
Shehazel		0	0	0	3					3		New	
Adi Arkay		0	0	0	3					3		New	
May Tsemri		0	0	0	1					1		New	
Adiguna													
	Adiguna												
(Adiguna)	Indabaguna												
Azemach Reday													
Koyetsa													
Girgi North (P1)		20	19	20	23		1						
	Delgi	4	3	3	3	4							
(Girgi North)	Goagora	1	1	1	1					1		New	
(Girgi North)	Fendiba	6	5	5	5	8							
		4	3	3	3	4							
	Kola Diba												
(Fendiba)	Infraz	1	1	1	1					1		New	
	Chewahit	1	1	1	1	4							
(Girgi North)	Maksegt	1	1	1	1					1		New	
(Girgi North)	Ambezo Rep.												
Chilga		8	9	10	13		1						
	Chilga	2	3	3	3	4							
Sebatu Terrara		6	6	7	10		1						
	Serba	1	1	1	1					1		New	
Shendi South		5	5	6	9		1						
	Shendi	2	1	1	1					2		New	
Mandefro Terara		3	4	5	8		1						
	Metema	1	1	1	3	4							
Dollar Hill		2	3	4	5		1						
(Bahir Dar)	M/Lemariam	1	1	1	1					1		New	
(Dangla)	Masnkusa	1	1	1	1					1		New	
(Dangla)	Tilile	2	1	1	1					2		New	
(Debre Markos)	Yechereka	1	1	1	1					1		New	
(Debre Markos)	Yitmen	1	1	1	1					1		New	
(Gondar)	Shawra	1	1	1	1					1		New	
(Gondar)	Stei	2	1	1	1					2		New	
(Gondar)	Teda	1	1	1	1					1		New	

* Equipment Capacity at completion of 8th Development Programme

** Quantity of STM-1

	Link	System
Newly Construction	33	51
STM1	0	0
PDH	33	51
Expansion	18	57
STM1	0	0
PDH	17	55
MUX	1	2

S.Table 9.8-1-j Expansion Plan of Spur Network (Summary)

	01	02	03	04	05	06	07	08	Total		
Newly Construction	47	10	45	37	40	55	60	33	327		
Micro STM1	0	0	0	0	0	0	0	0	0		
(2M)	0	0	0	0	0	0	0	0	0		
PDH	47	10	39	37	33	51	57	33	307		
(2M)	59	11	53	48	57	78	75	51	432		
PDH Sub-T	0	0	6	0	7	4	3	0	20		
Expansion	7	7	6	10	3	18	15	18	84		
Micro STM1	0	0	0	0	0	0	0	0	0		
PDH	6	7	5	10	2	16	11	17	74		
(2M)	22	22	20	25	2	56	37	55	239	SDH	PDH
MUX Station	1	0	1	0	1	2	4	1	10	2	8
System	2	0	9	0	1	9	11	2	34	17	17

PDH Sub-Trunk

- (03) New Micro connecting Kon Abo, Wegel Tene, Tenta, Aksta, Kabe, Were Ilu, (Alem Ketema, Dessie)
PDH 180km, 4 links + 70km, 2 links
- (05) Kebri Dehar new Micro System
PDH 290km 7 links for new portion
- (06) El Kere new Micro
PDH 210km 4 links for new portion
- (07) New PDH Micro connecting Dembi Dolo, Ashu and Muggi
3 links

Supplement to S.Table 9.8-1

In the tables of Chapter 8.8.1, 2 and 5 the microwave links are indicated in a format of table for convenience of calculation though the links have two dimensions.

It might be difficult for readers to find an actual configuration of link in the tables as it is too simplified.

This paper describes how to read the link configuration showing some examples.

Rule 1.	If the row has one station, the figures in the right-side columns of the row shows the data of <u>the link between the station of the row and the station of the same column in the one upper row.</u>
Rule 2.	If the station of the same column does not exist in the one upper column in Rule 1, the figures of the row shows the data of <u>the link between the station of the row and the station of the one left column in the one upper row.</u>
Rule 3.	If the station of either the same column or the one left column does not exist in the upper row in Rule 1 and 2, the figures of the row shows the data of _____ <u>closest upper row.</u>
Rule 4.	In case of the first row which has one station, the figures of the row shows the data of total capacity dropped into the station.
Rule 5.	If the row has two stations, the figures in the right-side columns of the row shows the data of the link between the two stations of the row.
Rule 6.	If the stations are same in Rule 2, the figures in the right-side columns of the row shows the data of total capacity dropped into the station.

Example 1

S.Table 9.8-1-j Expansion Plan of Spur Network (Area-01)

Link	05	10	15	20	(8th D Pro)		Backbone(S-1)	
	2M				2M	STM-1	MW	Cable
<South & East>								
1 Addis Ababa								
2 Mt.Furi	63	16	18	22	64	2		0
3 Akaki Beseka	33	8	9	12		1		4
4 Dukem	3	1	1	1	3			
5 Adama West	27	7	8	9	32	2		0
6 (Adama West) Bijo	27	7	8	9		1		
7 Debre Zeit	25	6	7	8	40			4

How to read:

Line 1	Rule 4	There is no link.
Line 2	Rule 1	Link of Addis Ababa-Mt.Furi
Line 3	Rule 2	Link of Mt.Furi-Akaki Beseka
Line 4	Rule 1	Link of Akaki Beseka-Dukem
Line 5	Rule 3	Link of Mt.Furi-Adama West
Line 6	Rule 5	Link of Adama West-Bijo
Line 7	Rule 2	Link of Bijo-Debre Zeit

Example 2

S.Table 9.8-1-j Expansion Plan of Spur Network (Area-01)

Link	05	10	15	20	(8th D Pro)		Backbone(S-1)	
	2M				2M	STM-1	MW	Cable
<North & NEast>								
7 (Ankober North) Debre Sina	6	5	5	9	1			
Debre Sina	2	1	1	1				
(Debre Sina) Armania	1	1	1	1				
(Debre Sina) Mezezo	1	1	1	1				
(Debre Sina) Molale	1	1	1	1				
(Debre Sina) Sala Dingay	1	1	1	1				
(Ankober North) Gewane								

How to read:

Line 7	Rule 6	There is no link.	Figure shows the transmission capacity Debre Sina receives from the links with Ankober North, Armania, Mezezo, Molale and Sala Dingay.
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