भारत संचार निगम लिमिटेड
(भारत सरकार का उपक्रम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)

No. 4-1/2010-Restg/Vol. IV   Dated: 07th, Mar, 2016

To

Chief General Manager

Gujarat / Karnataka / Uttrakhand / Chhattisgarh/MP/Assam
BSNL

**Subject:-Deployment   details,   Job   description   and
recommendation   on strength of TTA Reg.**

Reference: - This office letter dated 07.12.2015

The reports received from your circle on the subject cited above have
been examined and it is found that

(i)   Number of TTAs worked out in Format-A is not as per
positional norms given by this cell. Any deviation, if
suggested, may be given with justification.

(ii)   Number of TTAs worked out in Format-B has not been
substantiated by detailed workload calculations, only final
figures are mentioned. Basic data also may be shown.

(iii)   Though detailed calculations have been provided only by
Assam circle, there are some mistakes. The same may be
corrected by the circle & resubmitted.
For example no of DSLAM=13636
(Norms- 1 TTA upto 4000 DSLAM capacity in SSA &
            1 additional TTA for every 5000 DSLAM)
So no of TTA for first 4000 DSLAM=1,
For remaining 9636 DSLAM=9636/5000=1.92 ~2
Total TTA required in this case=3

Notwithstanding the mistakes in calculation, the calculation sheets of
Assam are being enclosed to other circles for guidance to submit in a
detailed manner as done by Assam circle.

In view of above, it is requested to kindly arrange to send the detail of
TTAs with detailed calculation sheet (in Excel) based on positional
norms (Format-A) & workload based (Format-B) by 15/3/2016.

Being time bound activity, this may be treated as 'Urgent'.

(A.M.Gupta)
GM (Corp Restg/WS&I)

Positional Data – SSA Office in plain areas – TTA Cadre

FORMAT 'A'

Head		PGM Headed	GM Headed	TDM Headed	Circle Office
Supporting Staff	Supporting staff to SSA Head		7x1=7		
	Support staff to SAG level officer other than SSA head				4
	Support staff to JAG level officer other than SSA head				11
	Support staff to STS level officer				14
	Support staff to PIO/Appelate authority for RTI cases				1
	Support staff to SDE(Public dealing) officer				1
Operation	PG				1
	Parliamentary Questions				1
	Telephone Adalat				1
	Telephone Advisory Committee				1
	MIS				
	Network Monitoring		7x1=7		1
Planning & IT	SW & IT				1
	TX		7x2=14		1
	CMTS, WLL, Broadband and NT				1
	MM-Procurement				3
	MM-Stores				1
HR & Admn	Dak Receive and Dispatch		7x2=14		1
	Legal				
	SR/Personal Claims/Welfare				
	Performance & ACR				
	Promotions				
	Recruitment				
	Training				
	Establishment			1	
Sales	Non executive required only for inventory management viz SIM, Recharge Coupon etc. apart from it only supporting staff is justified				2
Vigilance	Vigilance				
	Enquiry				1
Finance	Cashier				1
	Personal bills and loans		7x1=7		
	Budget				
	Audit				
	Taxation				
	Pension cases				
	DOT Claim/Misc Schedule				
	Fixed Asset and WIP				
	TR (Wired, Wireless and non conventional)				
	TR computer work (no norm is defined as outsourcing will be economical				
	Outstanding pursuit cell				
	EMC, insurance and Refund				
Business Development and Telegraph Traffic	Business Development				
	CTO/DTO (Considering WTMS to be launched shortly, no norms are prescribed to be merged with CSC for which norms has already been defined. The DTO/TC which can not be merged, one SrTOA per such centre may be provided. For all merged and non-merged CTO/DTO/TC one Telegraph Messanger for every 20 'C' message per day. Average number of C message should be calculated on basis of total message in a year and more than one message addressed to firm/individual and delivered at time should be counted as one message. The 'C' message delivered on phone/telex/windows/other means should be excluded.			2	
				49	50

TOTAL= 99

11/c

DEPUTY GENERAL MANAGER (ADMN.)
O/O CHIEF GENERAL MANAGER
BHARAT SANCHAR NIGAM LTD.
ASSAM TELECOM CIRCLE
GUWAHATI-781 001

06/01/16

Functional Area		Criteria	Calculation					No of TTA's required
Broadband O & M	Broadband Switch	1 TTA upto 4000 DSLAM capacity in SSA and 1 additional TTA for every 5000 DSLAM capacity	SSA Name	Total DSLAM capacity	No of TTAs (1 TTA upto 4000 DSLAM)	No of TTAs (1 Additional TTA for every 5000 DSLAM)		27+23=50
			BGN	13636	13636/4000=3.4 ≈ 3	13636/5000 ≈ 3		
			Dibrugarh	13524	13524/4000=3.3 ≈ 3	13524/5000≈3		
			Jorhat	12816	12816/4000=3.2 ≈ 3	12816/5000≈3		
			Kamrup	35484	35484/4000=8.8 ≈ 9	35484/5000≈7		
			Nagaon	10896	10896/4000=2.7 ≈ 3	10896/5000≈2		
			Silchar	13924	13924/4000=3.4 ≈ 3	13924/5000≈3		
			Tezpur	11608	11608/4000=2.9 ≈ 3	11608/5000≈2		
	Broadband Service	*1 TTA for every 5000 broadband connections or part thereof for operation and maintenance	SSA Name	Working Cxns	No of TTAs (1 TTA for every 5000 Broadband cxn)			9
			BGN	6653	6653/5000=1.33≈1			
			Dibrugrah	6549	6549/5000=1.30≈1			
			Jorhat	4333	4333/5000=0.86≈1			
			Kamrup	14293	14293/5000=2.85≈3			
			Nagaon	4633	4633/5000=0.92≈1			
			Silchar	7198	7198/5000=1.43≈1			
			Tezpur	4593	4593/5000=0.91≈1			

TOTAL = 59

* 1 TTA may not be sufficient for every 5000 broadband connections unless outsourcing is done and hence the criteria may be considered as 1 TTA for every 500 broadband connections. The no of TTAs required in that case will be (13+13+9+29+9+14+9) = 96 instead of 9.

DEPUTY GENERAL MANAGER (ADMN.)
O/O CHIEF GENERAL MANAGER
BHARAT SANCHAR NIGAM LTD.
ASSAM TELECOM CIRCLE
GUWAHATI-781 001

Functional Area		Criteria	Calculation					No of TTA's required
Customer Care	Commercial and CSC	1 TTA per 20,000 customers (mobile+WLL+broadband+leased line) subject to min 2 and max 10 in SSA for the work	SSA Name	Customers	No of TTA (1 TTA per 20,000)			62
			BGN	214080	214080/20000=10.7 ≈ 10			
			Dibrugarh	138102	138102/20000=6.9 ≈ 7			
			Jorhat	140538	140538/20000=7.02 ≈ 7			
			Kamrup	192198	192198/20000=9.6 ≈ 10			
			Nagaon	199547	199547/20000=9.9 ≈ 10			
			Silchar	177007	177007/20000=8.85 ≈ 9			
			Tezpur	181295	181295/20000=9.06 ≈9			
	Call Centre	1 TTA per 1 lakh customers subject to min 1 for call centre and PG activity	SSA Name	Customers	No of TTAs (1 TTA per 1 lakh customers)	For utilization in SSA	For Call centre and PG activity	12
			BGN	214080	214080/10000=2.14 ≈ 2	1	1	
			Dibrugarh	138102	138102/10000=1.38 ≈1	_	1	
			Jorhat	140538	140538/10000=1.4 ≈ 1	_	1	
			Kamrup	192198	192198/10000=1.9 ≈ 2	1	1	
			Nagaon	199547	199547/10000=1.99 ≈ 2	1	1	
			Silchar	177007	177007/10000=1.77 ≈ 2	1	1	
			Tezpur	181295	181295/10000=1.8 ≈ 2	1	1	
	Enterprise Segment	1 TTA per 50 key accounts customers (individual/firm/Govt bodies) giving annual revenue of Rs 1 Lakh and above but less than Rs 5 Lakhs subject to minimum of 1 per SSA	SSA Name	No of Key accounts customers between 1 L to 5 L)	No of TTAs	For Enterprise Segment	For SSA	16
			I	II	III	IV	V	
			BGN				1	
			Dibrugarh				1	
			Jorhat				1	
			Kamrup	270+110*+100+25*=505	505/50=10.1≈ 10	4	6	
			Nagaon				1	
			Silchar				1	
			Tezpur				1	

*Kamrup Group/CIC having more than 2400 individual subscription among them

TOTAL= 90

DEPUTY GENERAL MANAGER (ADMN.)
O/O CHIEF GENERAL MANAGER
BHARAT SANCHAR NIGAM LTD.
ASSAM TELECOM CIRCLE
GUWAHATI-781 001

Functional Area	Criteria	Calculation				No of TTA's required
Sales		1 TTA in each sales team (1 Sales team for each 10000 DELS and min 1 for each SDCA	SSA Name	DELs	No of TTA	33
			BGN	45600	45600/10000=4.56≈5	
			Dibrugarh	26628	26628/10000=2.66≈3	
			Jorhat	30714	30714/10000=3.07≈3	
			Kamrup	56563	56563/10000=5.65≈6	
			Nagaon	41644	41644/10000=4.16≈4	
			Silchar	32904	32904/10000=3.29≈3	
			Tezpur	181295	181295/20000=9.06 ≈9	
Marketing		1 TTA in each marketing team (1 in each frenchisee area)	SSA Name	Frenchise area	No of TTA	35
			BGN	7	7X1=7	
			Dibrugarh	5	5X1=5	
			Jorhat	3	3X1=3	
			Kamrup	5	5X1=5	
			Nagaon	5	5X1=5	
			Silchar	5	5X1=5	
			Tezpur	5	5X1=5	

TOTAL = 68

06/01/16

DEPUTY GENERAL MANAGER (ADMN.)
O/O CHIEF GENERAL MANAGER
BHARAT SANCHAR NIGAM LTD.
ASSAM TELECOM CIRCLE
GUWAHATI-781 001

Functional Area		Criteria	Calculation			No of TTA's required
Transmission	TX network	One TTA for every 580 PCM streams (The same will also look after microwave/radio till scrapping)	SSA Name	No of TTAs		25
			BGN	2		
			Dibrugarh	3		
			Jorhat	2		
			Kamrup	977/580=1.68≈2		
			Nagaon	2		
			Silchar	2		
			Tezpur	7056/580=12		
	Route	1 TTA for every 200Km OFC route in district	SSA Name	OFC RKM	No of TTA s	36
			BGN	1572.94	1572.94/200=7.86≈8	
			Dibrugarh	489.257	489.257/200=2.44≈2	
			Jorhat	681.842	681.842/200=3.4≈3	
			Kamrup	1529.417	1529.417/200=7.6≈8	
			Nagaon	1356.9	1356.9/200=6.78≈7	
			Silchar	787.41	787.41/200=3.93≈4	
			Tezpur	722.78	722.78/200=3.61≈4	
	Leased Circuit	1 TTA for every 200 leased circuit ending in SSA, below 200 minimum 1 if at least 100 circuits are ending	SSA Name	No of leased circuits	No of TTA s	18
			BGN	398	398/200=1.99≈2	
			Dibrugarh	328	328/200=1.64≈2	
			Jorhat	464	464/200=2.32≈2	
			Kamrup	1408	1408/200=7.04≈7	
			Nagaon	215	215/200=1.075≈1	
			Silchar	351	351/200=1.755≈2	
			Tezpur	318	318/200=1.59≈2	
	CMTS mtce	1 TTA per BSC location subject 1 TTA per SSA	SSA Name	No of BSC	No of TTA s	15
			BGN	3	3X1 = 3	
			Dibrugarh	2	2X1 = 2	
			Jorhat	1	1X1 = 1	
			Kamrup	3	1X3 = 3	
			Nagaon	2	2X1 = 2	
			Silchar	2	2X1 = 2	
			Tezpur	2	2X1 = 2	

TOTAL = 94

06/01/16

DEPUTY GENERAL MANAGER (ADMN.)
O/O CHIEF GENERAL MANAGER
BHARAT SANCHAR NIGAM LTD.
ASSAM TELECOM CIRCLE
GUWAHATI-781 001

Functional Area	Criteria	Calculation					No of TTA's required
Battery & Power	One TTA for each main exchange (and its RSU/RLUs)/MSC/TAX	SSA Name	No of main Exchange (and its RSU/RLUs)	No of MSC	NO of TAX	No of TTAs	42
		BGN	8	NIL	1	9	
		Dibrugarh	2	1	1	4	
		Jorhat	3	NIL	1	4	
		Kamrup	2	4	2	8	
		Nagaon	3	1	NIL	4	
		Silchar	4	1	1	6	
		Tezpur	5	1	1	7	
Internal Maintenance	3 TTAs for internal mtce of electronic exchange/MSC/TAX between 5 K to 30 K (Below 5K, TTA for battery & power plant will look after)	SSA Name	Electronic exchange between 5K to 30K	MSC between 5K to 30K	TAX between 5K to 30K	No of TTAs	93
		BGN	1	NIL	NIL	1X3=3	
		Dibrugarh	4	1	1	6X3=18	
		Jorhat	1	NIL	1	2X3=6	
		Kamrup	6	4	2	12X3=36	
		Nagaon	2	1	NIL	3X3=9	
		Silchar	2	1	1	4X3=12	
		Tezpur	1	1	1	3X3=9	
FRS	One TTA for every SSA for server mtce (commercial and FRS	7 TTAs for 7 SSAs @ 1 TTA for every SSA					7
Non Operative	One TTA per SSA for non operative function	7 TTAs for 7 SSAs @ 1 TTA per SSA					7

TOTAL= 149

DEPUTY GENERAL MANAGER (ADMN.)
O/O CHIEF GENERAL MANAGER
BHARAT SANCHAR NIGAM LTD.
ASSAM TELECOM CIRCLE
GUWAHATI-781 001

Functional Area		Criteria	Calculation				No of TTA's required
BTS (WLL/GSM)	BTS (O&M)	1 TTA for every 30 BTS in urban and for every 15 BTS in rural subject to minimum 1 per SSA	SSA Name	BTS in urban area	BTS in rural area	No of TTAs earmarked for SSAs	133
			BGN	182/30≈6	268/15≈18	24	
			Dibrugarh	161/30≈5	142/15≈9	14	
			Jorhat	175/30≈6	200/15≈13	19	
			Kamrup	356/30≈12	139/15≈9	21	
			Nagaon	154/30≈5	225/15≈15	20	
			Silchar	141/30≈5	195/15≈13	18	
			Tezpur	129/30≈4	189/15≈13	17	
	Drive test and radio optimization	1 TTA for every 60 BTS subject to minimum of 1 TTA in SSA	SSA Name	No of BTS	No of TTA	No of TTAs earmarked for SSAs	44
			BGN	450	450/60≈8	8	
			Dibrugarh	303	303/60≈5	5	
			Jorhat	375	375/60≈6	6	
			Kamrup	495	495/60≈8	8	
			Nagaon	379	379/60≈6	6	
			Silchar	336	336/60≈6	6	
			Tezpur	318	318/60≈5	5	

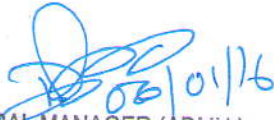**TOTAL = 177**

DEPUTY GENERAL MANAGER (ADMN.)
O/O CHIEF GENERAL MANAGER
BHARAT SANCHAR NIGAM LTD.
ASSAM TELECOM CIRCLE
GUWAHATI-781 001

nal Area		Criteria	Calculation					No of TTA's required
BSC and MSC (WLL & GSM)	BSC & RNC	4 TTA per BSC & RNC location	Name of SSA	No of BSC	No of TTAs in BSC	No of RNC	No of TTAs in RNC	60+16 = 76
			BGN	3	12	NIL	0	
			Dibrugarh	2	8	1	4	
			Jorhat	1	4	NIL	0	
			Kamrup	3	12	1	4	
			Nagaon	2	8	1	4	
			Silchar	2	8	1	4	
			Tezpur	2	8	NIL	0	
	MSC-HLR	4 TTA per location for round the clock operation	Name of SSA	No of MSC-HLR		No of TTAs		8
			BGN	NIL		0		
			Dibrugarh	1		4		
			Jorhat	NIL		0		
			Kamrup	1		4		
			Nagaon	NIL		0		
			Silchar	NIL		0		
			Tezpur	NIL		0		
	MSC - Server	4 TTA per location for round the clock	NIL					0
	MSC lawful interceptio	1 TTA per location	NIL					0
	MSC – Media Gateway	4 TTA per location for round the clock operation	Name of SSA	No of MSC - Media Gateway		No of TTAs		26
			BGN	1		4		
			Dibrugarh	1		4		
			Jorhat	NIL		0		
			Kamrup	3		6		
			Nagaon	1		4		
			Silchar	1		4		
			Tezpur	1		4		
	MSC - MPBN	4 TTA per location for round the clock operation	Name of SSA	No of MSC-MPBN		No of TTAs		22
			BGN	1		4		
			Dibrugarh	NIL		0		
			Jorhat	NIL		0		
			Kamrup	3		6		
			Nagaon	1		4		
			Silchar	1		4		
			Tezpur	1		4		
	MSC – Signalling Gateway	4 TTA per location for round the clock operation	Name of SSA	No of MSC-Signalling		No of TTAs		8
			BGN	NIL		0		
			Dibrugarh	1		4		
			Jorhat	NIL		0		
			Kamrup	1		4		
			Nagaon	NIL		0		
			Silchar	NIL		0		
			Tezpur	NIL		0		
	In case of collocated cases 2 TTA instead of 4 per case where round the clock operation is required may be assumed							
	O&M of CCN Node	1 TTA per SSA including IT	7 TTAs for 7 SSAs @1 TTA per SSA					7

TOTAL = 147

DEPUTY GENERAL MANAGER (ADMN.)
O/O CHIEF GENERAL MANAGER
BHARAT SANCHAR NIGAM LTD.
ASSAM TELECOM CIRCLE
GUWAHATI-781 001