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No. F.NO MOB-14/NWO-CM-III/QoS(Structural Revamp)/2014-15/5 Dated: 28-01-2015

Sub: Norms for Staff and Vehicle at SSA/Area/Circle Level - CM Vertical

Ref: 1) MOB-14/NWO-CM-III/QoS(Structural Revamp)/2014-15/55

2) MOB-14/NWO-CM-III/QoS(Structural Revamp)/2014-15/56

3) No 4-2/2014-Restg.

Dated: 02-12-2014 Dated: 19-01-2015

Dated 23-01-15

Vide Ref 1 instructions were issued for implementing CMTS network maintenance procedure in ERP for CM vertical and vide Ref 2 detailed guidelines were issued for uniform implementation the duidelines across all circles. In order to deliver the QoS desired by Mobile Customers the following norms are proposed to be followed for Staffs and vehicles for CMTS network maintenance at SSA, Proposed Area/Circle level. Number of Executives and Non-Executives required for CM vertical at SSA and Area/Circle level is calculated based on Dir/CM's DO letter dated 16-05-2014 and initial suggestions received from few Circles. It will be finalized after receiving feedbacks from Circles and final numbers will be communicated shortly after the approval of competent authority.

1. Norms for Staffs and Vehicles at SSA Level

- a. BTS Infra Maintenance Jobs at SSA level: Day-to-Day repair/maintenance works of BTS Infra Items and associated works like payment for electricity, rent, diesel, house-keeping and security is the responsibility of BTS Infra Teams. It is envisaged that BTS Infra maintenance which includes activities such as O&M of BTY/PP, DG, A/C, filling of Diesel, etc for non-exchange BTS sites will be out sourced. For out sourced activities BTS Infra team will be responsible to ensure that the out sourced agency is giving service as per SLA contracts. The contracts should invariably contain relevant clauses so as to protect BSNL in the event contractor fails to deliver some of the contractual obligations which may affect BTS availability. As an example, the contract should be made in such a way that if agency fails to achieve the desired up time, the BTS Infra team will be responsible to maintain the uptime on their own or by engaging third party vendor at the risk and cost of the agency with whom contract is signed. Replacement/Upgrade, scrapping and handing over the old/obsolete materials (e.g. BTY/PP) to the store In-charge at SSA/Circle and A/T of Infra items (e.g. BTY/PP) is the responsibility of BTS Infra Team.
 - Staffs proposed for maintenance of Infra for around 100 BTSs are i) 1 executives at the level of JTO/SDE/AGM, and ii) 2-3 TTA/PM (to be posted with science/engineering background); 50% extra provision is made for Circles with difficult terrain (e.g. NE Region Circles). One vehicle per team is proposed.
- b. BSS Maintenance Jobs at SSA level: Day-to-Day repair/maintenance works of BSS Items and associated works including rectification of H/W and S/W faults, regular site checks such as VSWR measurement/rectification, clock calibration, handover verification, antenna azimuth/orientation check, activities related to EMF compliance, measurement and submission of reports as per requirement of TERM/TRAI, etc is the responsibility of BSS Teams.
 - Mini-Link and M/W System maintenance jobs like Day-to-Day repair/maintenance works of Mini-Link Systems and associated works including rectification of H/W and S/W faults, antenna azimuth/orientation check, etc are to be done by respective BSS team.
 - Replacement/Upgrade, scrapping and handing over the old/obsolete materials (e.g. BTS/BSC, Mini-Link) to the store In-charge at SSA/Circle, A/T of BSS items is the responsibility of BSS Team.
 - RF Optimisation, works like drive testing, giving day-to-day feedback to RF Planning Team at Circle level, and taking appropriate actions as per guidance of RF Planning Team (e.g. antenna orientation change), etc is the responsibility of RF Oftimisation Team. RF planning Team at Circle level will analyse the Drive Test results in post processing tools like Gladiator/Actix (already procured by all circles of BSNL) and suggest subsequent actions (e.g. power optimization/frequency planning) which will be undertaken by RF Optimisation Team. One Optimisation Team per 500 BTS/NodeB is proposed. Therefore one RF optimisation team can be responsible for two three small SSAs with

combined BTS/NodeB count of around 500.Staffs proposed for all BSS jobs including RF Optimisation for around 100 BTS/NodeBs are i) 2-3 executives at the level of JTO/SDE/AGM, and ii) 2-3 TTA/PM (to be posted with science/engineering background); 50% extra provision is made for Circles with difficult terrain (e.g. NE Region Circles). One vehicle per team is proposed.

- c. Core Network Maintenance Jobs at SSA/ Area/Circle level: Day-to-Day repair/maintenance works of Core Network Items and associated works including report generation, compliance to TERM/TRAI/LEAs, rectification of H/W and S/W faults for improving Key QoS parameters for the Circle is the responsibility of Core Network Teams.

 Replacement/Upgrade, scrapping and handing over the old/obsolete materials (e.g. MSC/BTY/PP) to the store In-charge at SSA/Circle is the responsibility of Core Network Team.
 - Staffs proposed for all Core Network Jobs of around 500 BTS/NodeBs are i) 2 executives at the level of JTO/SDE/AGM, and ii) 2-3 TTA/PM (to be posted with science/engineering background); Minimum one executive and two non-executive is proposed per SSA. Additional manpower is proposed at Area/Circle level to combine the maintenance activities of 2-3 small SSAs. Core Network Team at CO/AO will be responsible for maintenance of common equipments like SGSN, MPBN nodes, etc. The vehicles for Core Teams are to be provided as per existing norms for maintenance of MSCs/exchanges.
- d. Sales Activities for CMTS at SSA level: Every SSA is proposed to have dedicated Sales Teams for CMTS vertical. For small SSAs the SSA teams may report to DGM Sales at Area/Circle level. DGM Sales at Area/Circle level can be responsible for the Sales of all verticals i.e. CM, CFA and Enterprise). In addition to jobs/functions as per existing responsibilities issued by S&M Units of BSNL Co, O&M activities of CCNs are the responsibility of Sales Team at SSA level. Exclusive staffs proposed for all Sales activities in CMTS for around 100 BTS sites are i) 2 executives at the level of JTO/SDE/AGM, and ii) 2-3 TTA/PM (to be posted with marketing Science background). The vehicles for Sales Teams are to be provided as per existing norms of S&M units of BSNL Co.

2. Norms for Staffs at Area/Circle Level in CM Vertical

- a. Jobs of CMTS Units at Circle level: All work executions (i.e. O&M for Infra, BSS and Core, and S&M) for CM vertical is the responsibility of respective CM units at SSA level. Planning, Procurement, Tender and other common works for CM vertical is the responsibility of CMTS Teams at Circle Level. Additional staffs are proposed to be engaged for Project Roll Out as and when major expansion/upgrade works will be undertaken (e.g. Ph-7 expansion projects). Numbers of Executives with appropriate numbers of DGMs/GMs for Project monitoring is to be posted depending on volume of works of the Project. Provision of Staff is to be made in the project estimates and the expenditure is to be booked in CAPEX of the respective project (e.g. Ph-7 expansion Project, LWE Project, etc).
- b. The executives under CM vertical at Circle level are responsible for: (i) 24X7 OMCR works; (ii) regular update of RF data in Planning tool, (iii) analyzing drive test data and giving directions of RF Optimisation Teams at SSA level; (iv) short term-long term planning for circle wise network upgrade/expansion e.g. decision on number of new BTS/NodeB and their locations; (v) operation and monitoring of Circle level NoC (already in place or going to be established); and (vi) misc common works (e.g. timely signing of agreement for AMC) for CMTS assets located in all SSA and Circle level. Executives under CM Vertical at Circle level will also be responsible for customer care and redressing the grievances of the customers who booked complaint (related to network issues) through call centre. Complaint related to S&M issues will be dealt by Sales & Marketing Teams at Area/Circle level. Around 30-100 executives per circle are proposed for the above jobs.
 - Executives under BTS Infra, BSS, Sales and Core Networks proposed at Area/Circle level are responsible for planning, procurement, coordination and monitoring the activities for respective job functions including:
 - BTS Infra related common works like planning for replacement/upgrade of Infra Items (e.g. BTY, PP, A/C, etc), tender for Infra O&M outsourcing, Infra Sales, hiring of IP Sites, report collection from all SSAs and submission, etc are the responsibility of BTS Infra Team at Area/Circle level. Staffs proposed for all BTS Infra related works for CMTS at Area/Circle level for around 500 BTS sites are i) one executive at the level of JTO/SDE/AGM, and ii) 2 TTA/PM (to be posted with Science/Engineering background).
 - BSS related common works like planning for replacement/upgrade of BSS Items (e.g. BTS, NodeB, BSC, RNC, Mini-Link, etc), tender for RF Optimisation (if required to be outsourced for a

SSA or for a group of SSA), engagement of agency for compliance to TERM/TRAI, report collection from all SSAs and submission, etc are the responsibility of BSS Team at Area/Circle level. Staffs proposed for all BSS works for CM Vertical at Area/Circle level for around 500 BTS/NodeB are i) 1-2 executives at the level of JTO/SDE/AGM, and ii) 2-3 TTA/PM (to be posted with Science/Engineering background).

- CMTS Sales and Marketing related common works like planning for replacement/upgrade of networks for Sales& Marketing activities (e.g. CCN, Sanchar Soft, etc), Tender/EOI for Sales and Marketing activities (e.g. campaign for promotional schemes, provisioning/change of SIM, CAF management, etc), allocation of IMSI numbers, report collection from all SSAs and submission, CAF compliance to TERM/LEAs, etc are the responsibility of Sales and Marketing Teams at Area/Circle level. Staffs proposed for all Sales and Marketing activities for CM Vertical at Area/Circle level for around 500 BTS sites are i) 5 executives at the level of JTO/SDE/AGM, and ii) 5 TTA/PM (to be posted with marketing Science background).
- Core Network related common works like planning for replacement/upgrade of Core Network Items (e.g. MSC, SGSN, MPBN, etc), coordination with teams at SSA for compliance to TERM/TRAI/LEAs, report collection from all SSA and submission, etc are the responsibility of Core Network Team at CO. Staffs proposed for all Core Network Works for CMTS at Area/Circle level for around 500 BTS/NodeB are i) two executives at the level of JTO/SDE/AGM, and ii) three TTA/PM (to be posted with Science/Engineering background).
- c. Tender for procurement of small capacity Battery (400AH &600AH) and small capacity PP (up to 200A) for BTS sites is the responsibility of the executives of CM Vertical at Circle level. The activities will be monitored by CM vertical head; installation, replacement and returning of old materials to the store is to be done as a turnkey projects and A/T of these items is to be done by BTS Infra team at SSA level. CM vertical head will collect the requirement of small capacity BTY &PP from CFA vertical head at Circle level for exchange BTS sites for combined tender twice in a year.

3. Norms for Staffs at SSA, Area/Circle Level for all Verticals

- a. Works which are common for CM, CFA and EB e.g. compliance to labour enforcement authorities, ESI, etc are to be done at Circle level for all CM, CFA and EB activities. **Norms for staffs are to be decided by CFA Vertical.**
- b. Renting of sites for new BTS/NodeB locations and rent revision of existing BTS sites are to be done by SSA. One unit at Circle level will be responsible for monitoring the renting related activities for all sites. Norms for staffs are to be decided by CFA Vertical.
- c. Jobs at Customer Service Centres (CSCs) (e.g. receiving payment for Post Paid Bills, giving new connections, resolving customer's problems, etc) are to be done by SSA for CM, CFA and EB Verticals. One unit at Area/Circle level will be responsible for monitoring these activities of CM vertical through CSCs for all SSA. Norms for staffs are to be decided by CFA Vertical.
- d. Tender for procurement of large capacity Battery (>600AH) and large capacity PP (>200A) for BSC and Core Networks is to be done at Circle level by CFA vertical head. A/T of these items is to be done as per existing norms. CM vertical head at Circle level will submit the requirement of such BTY &PP to CFA vertical head at Circle level for combined tender twice in a year. Norms for staffs are to be decided by CFA Vertical.
- e. Store will be common at Circle/SSA level for CM, CFA and EB verticals. All new materials for CMTS networks (even for replacement) are expected to be delivered at site under turnkey project and hence not to be kept in BSNL store. The materials will be notionally received and immediately handed over to the agency by the respective units at Circle/SSA level. Scrapping is to be done by the unit head (e.g. BTS Infra Team head) at SSA and Circle level. After scrapping the materials will be handed over to the store in-charge at Circle/SSA level and disposal will be the responsibility of the respective store in-charge. Norms for staffs are to be decided by CFA Vertical.

4. Norms for Staffs and Vehicles at Zonal Centres in CM Vertical

a. Zonal Network Maintenance Jobs: Planning & procurement for upgrade/replacement, installation/commissioning, Day-to-Day repair/maintenance works of Zonal Network Items and associated works including rectification of H/W and S/W faults, coordination with Circles, MPLS Node In-charges, etc for improving Key QoS parameters (e.g. Data throughput) in the Zone is the responsibility of the Zonal Centre Teams.

- b. Zonal Centre Network Items are classified in four Units: B&CCS; IN: VAS and Wireless Call Centre (WSCC)
- c. Staffing Norms for executives and non-executives under different units for day-to-day O&M activities are decided depending on number of Network elements and their capacity (e.g. SMSC, MMSC, OTA, CTOP UP Services, SDP, WAP Server, GGSN, etc), volume of CMTS networks (number of BTS/NodeB) and number of customers in the Zone.
- d. Foe Zones not handling Wireless Call Centres Operations, staffs proposed will be placed under the concerned DGM/GM looking after the WSCC activities.
- e. Additional manpower is proposed for planning, tender/procurement and misc administrative works.
- f. For effective coordination with all interconnecting units (e.g. MPLS, Circles, VAS Providers, Other CMTS Operators, etc) and monitoring, and ensuring uniformity in service delivery across the circles in the Zone, each Zonal Centre is proposed to be headed by one PGM level Officer. One DGM looking after the planning and administration for the Zonal Centre and GMs responsible for O&M activities of B&CCS, IN, VAS and WSCC will report to PGM.
- g. Vehicle for AGM, DGM, GM/SrGM and PGM is to be provided as per existing norms

5. Norms for DGM and Senior level Officer at SSA/Area/Circle Level for CM Vertical

- a. Norms for DGM at SSA level for all activities (under Infra, BSS, Core and Sales) is based on 2 DGM per 500 BTS/NodeB. SSAs with say 400 BTS and 100 NodeB will have 2 DGMs one for Sales and one for O&M activities related to Infra, BSS and Core. SSA which is having yearly revenue of 10 Crore will have one DGM irrespective of number of BTS/NodeB.
- b. Number of Executives for Accounting and Financial activities in the grade of DGM/GM is to be posted as per existing norms.
- c. Norms for SrGM/GM at SSA level for all activities (under Infra, BSS, Core and Sales) is based on one SrGM/GM per 1000 BTS/NodeB. SSA which is having yearly revenue of 50 Crore will have one SrGM/GM irrespective of number of BTS/NodeB.
- d. KolTD, CHTD and Circles having BTS and NodeB of 4000 and more or revenue of Rs 300 Crore and above is proposed to have one PGM at circle level.
- e. Vehicle for DGM, GM/SrGM and PGM is to be provided as per existing norms.

6. Norms for Support Staff and Staff for Accounting and Financial Activities in CM Vertical

- a. Support Staffs (i.e. PS/PA/Peon) for AGM/DGM/GM/SrGM/PGM is to be provided as per existing norms.
- b. Number of Executives for Accounting and Financial activities (i.e. JAO/AO/CAO) is to be provided as per existing norms.
- c. Vehicle for Accounting and Financial activities is to be provided as per existing norms.

Based on the above norms, the number of non-executives, the number of executives, the number of DGMs, the number of GM/SrGMs and the number of PGMs for Planning, O&M and Sales & Marketing activities in CM vertical at SSA and Area/Circle level for individual SSA, 26 Circles and four Zonal Centres is attached for information and necessary actions by all concerned.

CGMs of all Territorial Circles are requested to look into the proposal and send feedback if any changes are required. Any modification in the number of manpower need to be justified with detailed job/function wise break up. Comments and feedback if any must reach this office by 09-02-2015 positively so that the norms for Staff and Vehicle for CM vertical can be finalized and put up for approval of competent (A Verma) authority.

This is issued with the approval of SrGM/NWO-CM BSNL Co.

AGM (NWO-CM-III)

Copy to:

- 1) PPS to Dir (CM)/Dir (CFA)/ Dir (EB)/ Dir (HR)/ Dir (Fin) for kind information please.
- 2) CGMs All Circles for feedback and comments if any modification is required
- 3) SrGM/GM Zonal Centres for feedback and comments if any modification is required
- 4) SrGM (CIT/GM (ERP) BSNL Co for information please
- 5) SrGM(IS)/GM (PP-S&M)/ GM(NWP-GSM)/GM(VAS)/GM(Fin-CM) BSNL Co for feedback please
- 6) GM (Restg.) For consideration against letter No 4-2/2014-Restg. Dated 23-01-15