CORE COMMITTEE SUGGESTIONS

ACTION TO BE TAKEN AT SSA LEVEL

BY

SNEA (I)

Tamilnadu Circle

CONSUMER MOBILITY

Consumer Mobility Sales & Marketting

- As for as Port In cases are concerned, continued persuasion of each cases only yielded the desired end result. As for as Port Out cases are concerned, case by case continual persuasion, co-ordination of IMPCS wing in solving the subscriber's problem yielded good result. Co-operation of IMPCS wing is required to settle the poor coverage cases by re orientation or by optimization. Customers are ready to retain, if they get reliable and quality service and a channel for addressing their grievances. In total, Team work of Consumer Mobility wing together with co-ordination with other sections is required to retain the port out cases.
- Conducting separate Road show / Melas by External sections and Consumer Mobility section in co-ordination with Franchisee shall be conducted which will yield excellent result in SIM sales.
- Immediately after the commissioning of new BTSs, Melas / Road shows shall be conducted in these locations. Perfect co-ordination is required between Planning / IMPCS / NWOP-CM wing to achieve this.
- Special Melas / Road shows shall be conducted at the locations where BTS traffic is low and also especially at Temples / Churches / Mosques etc. during festival seasons.
- Franchisee network has to be concentrated in all SSAs for sale of GSM products.
 Franchisee manager / RM / RMC should work effectively and check availability of stock of BSNL products.
- Retail Managers feed back reports are to be analyzed suitably by the RMC and it is
 to be intimated to FM on weekly basis. So that FM can have periodical discussion
 with Franchisees for the improvement of sales.
- FOS of franchisees to be properly monitored and retailers POS shall be visited often to get better output.
- Stock position of all type of cards with validity period should be known to concerned in charges to avoid last minute stress.
- Periodical meeting with Franchisees / Retailers / DSA / OSS shall be conducted which will pave path for redressing their genuine problems. In turn our business will also improve.
- VAS services are to be known to Each and every JTO/SDEs for marketing the services.
- BSNL Franchisees should appoint sufficient number of FoS as per S&D policy and ensure supply of BSNL products to the Retailers under them. In rural areas our product availability in the retail outlets should be ensured Suitable action should be taken when the set target has not been achieved by Franchisees / Retailers / DSA / OSS by nodal officer concerned.
- The Retailer incentives can be paid in the form of RCV / Topup.

• As much as possible Trade Schemes shall be announced to motivate the private distribution channels viz. Franchisee and retailer for the promotion of sales.

CDMA WLL

- All SSAs are provided with Optimization tool with laptop. Regular and periodic Drive tests have to be carried out
- We should analyze, which PN offset is making the interference. Accordingly we can
 take some corrective measures through MSC or by field staff by fixing the FWT
 Patch Panel Antenna in the sub premises in the respective direction.
- Inadvertently or knowingly, the BTS tower Antenna locations should not be disturbed without the knowledge of MSC and should get guidelines from respective MSC or respective circle RF planning team. Antenna disturbance leads to many problems to the connections that have been working better otherwise.
- Working condition of BTS shall be checked. Procedure uploaded in www.sneatn.com.
 We can easily detect the faults.
- Optical-E1 stream faults should be attended immediately to reduce the fault rate.
- Frequent switch off of the BTS manually due to local reasons should be avoided.
- BTS failures are daily uploaded in circle intranet under CM folder.
- Zero loading BTS should be loaded or redeployed as per requirement.
- All concerned officials should be made familiar with programming different type of FWT which is available in our website sneatn.com, so that customer needs and queries can be easily attended.
- Routing / charging and new short code creations / level creations shall be monitored effectively.
- All of our service mobile phones should be in a position to contact easily to convey any BTS / MSC failures. This leads to quick restoration of system.
- Marketing of RUIM cards are not done properly. In Some SSAs RUIM cards are kept idle. Awareness of RUIM should be made.
- CDMA WLL recharging problem is there. Availability of WLL prepaid recharge and top ups should be ensured.
- OFC Streams Tx/Rx pairs: During the provision of E1 stream to our systems, ensure that correct Tx/Rx pairs are identified and wired. Whenever necessary inter change Tx/Rx pairs in either distant end or local end to avoid delay in putting through the E1 stream.
- USO fund -No USO fund is provided for zero meter reading VPTs. The incidence of zero metering in VPT connections can be reduced by visiting the VPTs and check the working condition by at least making one OG call. (10 OG calls - free for 1 VPT every month)
- VPT can be converted as WLL prepaid as per circle office instructions. Quick action is required. WLL prepaid usage details can be viewed at http://218.248.69.126/cdmaprepaid. Username: query, p/w - query123.

- All VPT connection has been converted as WLL Prepaid. First Recharge with a value of Rs.69/-. Bonus amount Rs.10/- will be added every month through which we can make 10 O/G calls free to test the VPT working condition and to avoid Zero Meter Reading.
- CDMA external cases to be attended by CFA wing only. JTOs / TTAs / TMs should invariably visit the sub offices at least once in two months. After full migration of VPT connection into WLL Prepaid, concerned section JTO / TTA / TM shall ensure the functionality of VPT and also regular top-up / Recharge.
- The DNP list pertaining to the WLL subscribers has to be segregated exchange area wise, and then local area wise, further into Street and Door Number wise along with the bill details (bill no with date) and the details of the number of outstanding cases with the amount of each bill. In the villages, most of the subscribers would be available either in the morning up to 09.00 hours or after 17.00 hours in the evening. A flexible time schedule has to be fixed and most of the customers can be met after 17.00 hours. A team of personnel with the section Telecom mechanic shall visit the customers, equipped with a list of details of outstanding dues, Good working WLL FWTs, SMPS, Mini chargers, Landline Telephone instruments, Line Jacks, Antenna feeder cables, Patch Panel Antenna (PPA) etc. One or more teams shall visit the customers in different streets for outstanding dues collections. For the subscribers who complaints of SMPS problem, it could be replaced instantly. For faulty FWTs, the instrument which is faulty could be replaced by another FWT with separate ESN number and programmed there itself. For coverage problem, if necessary, the antenna cable could be replaced and put PPA in proper direction, if there is any deviation from the existing direction due to external factors. The outstanding amount could be collected from the customers along with the requisite preprinted reconnection form. The money collected from the customers shall be paid the very next day. The bill receipt should reach the subscriber at the earliest. The number shall be put through in co-ordination with WLL section for reconnection. For subscribers complaining of land line fault, the drop wires shall be replaced there itself if found faulty, the EPBT instrument shall also replaced if needed. The complaints received from the landline customers shall also be registered manually for segregating the faults as equipment or cable fault and to take follow-up action. Marketing done in the field during this process for new landline connections, identifying the new potential customers, getting the NPC forms duly filled with necessary documents, collecting the deposit money and paying the same the very next day. This process is done during closed holidays and even during Sundays also.
- WII Prepaid CDR can be checked through the following URL http://218.248.69.125.
- Telecom Mechanics can sell RCVs / TUs and C Topups also. (<u>Already Tanjore SSA</u> implemented)
- Each SDE / JTO section shall be provided with FWT WLL phone connection for testing purpose as well as checking of BTS working condition.
- Each SSA shall be provided with staff for exclusive WLL BTS maintenance or BTS maintenance can be taken by GSM-BSS wing in the respective SSA.

- During failure of BTS and attending specific sub complaints vehicle facility shall be extended.
- 12V SMPS charger unit should be replaced with portable SMPS adopter.
- Redeployment of WLL BTS can be made from low usage areas and can be installed in the vicinity of educational institutions so that sale of NIC & EVDO Cards can be promoted.
- Mostly HUAWEI & AIRTONE make FWTs are available in the field. For replacement
 of faulty items, SMPS with internal batteries and adapters are required.
- EVDO card is not available. Sufficient cards are to be made available. NO spares available for replacement of faulty EVDOs. EVDO CDMA backup routers for BANKS is not available. (1000 EVDO cards diverted to TN Circle)
- When landline goes faulty, immediately WLL connection to be provided to avoid rent rebate claim.
- Adequate in service training to be given to the staff dealing with WLL to know the new trends and technologies in BSNL.
- WLL prepaid portal to be introduced for CSC's. Plan Migration module in CCM is not working. (Now CDMA portal for Recharge and Topup introduced)
- With AMC people, BSNL staff should take earnest efforts to learn the process and procedures for carrying modification/patch up-gradations.

Consumer Mobility NWOP

- <u>USO site maintenance</u> <u>Maintenance by Electrical wing</u>. <u>Proper co-ordination</u> with SSA maintenance to be ensured to minimize the BTS outage.
- <u>CMTS-IMPCS</u> and <u>NWOP-CM</u> wing's co-ordination is must to address cases of no coverage and poor coverage problems.
- In Free Cooling System in IMPCS sites after power failure if the EA has not started within the set time the battery will discharge and the GSM equipment will get switch off at say 44V. But still after that the Free cooling Fan is working will the low battery supply and further drain the battery till the power comes. This will discharge the battery heavily and the cells get weak and it will not get recharge. So a cut off mechanism is to be devised for free cooling fan also to prevent over drain of the battery. (Electrical Division says cut off mechanism is there). FREE cooling system has to be done as per the specification of Electrical wing. Free cooling system along with AC units has to be done to maintain temperature in selected sites where there are more than one BTS. In city BTS sites where more than one BTS (one 900+one 1800 + Node B) is housed, the required temperature is to be maintained to avoid BTS outage. In these sites Free cooling should be avoided for better performance of BTSs.
- Many problems are being faced due to non maintenance of Temperature in the BTS sites.
 GSM sites are not delivering proper service due to High temperature.
- Getting spares for Nortel equipments and for servicing Huwei OF modem, field units are facing difficulty. (<u>Now guide lines issued for repairing Cards</u>)

- Most of the BTS failures are infra related issues like PP, BTY,E/A. Weak Battery cells
 /sets are to be replaced & Power plant module faults are to be attended then and there
 for proper charging of Batteries.
- All 3G BTSs shall be upgraded to 14.4 Mbps.
- Most of the E/As installed in the field has to be utilized. (At present E/As are kept idle since there is no staff to operate.).
- For reducing the electricity charges we can go for Out Door BTS for new sites and slowly the existing room sites may be converted to Out Door BTS sites.
- Spare Cards availability for GSM Equipments must be ensured for less outage of service.
- Quality of the Infra materials should be ensured.
- CM Wing must be strengthened. Transmission wings of SSAs shall be strengthened to reduce the outages of the BTSs. All BTS shall be brought under the transmission rings.
- Before any tender implementation especially in BTS's a model site must be put by the vendor as per the tender specification and all the infra items must be tested rigidly for quality to have smooth maintenance in future.
- Network congestion should be avoided.

IP sites

- Several IP sites are working in unimportant and unwanted areas. These should be identified and further extension shall be stopped. Also possibility of closing IP sites which is earning meager revenue which is not sufficient for operating cost itself must be analysed. Selection of IP Sites in remote rural areas is non-profitable. For an IP site, in rural area, we are paying at least Rs.40, 000/- to Rs.45000/-. whereas revenue generated from rural IP is very much less. If possible these loss making IP sites shall be closed and an alternative method to cover this area may be explored (like repeaters / boosters from other nearby site). In future IP sites may be planned only in urban areas where we can earn revenue. IP sites after one year, if there is no additional entrant is not there, then also the rent should be reduced. Tender clause should be implemented to avoid revenue leakage.
- In semi urban and urban areas, if we are unable to fix NBSNL site we shall go for IP sites. Because any deviation from the reference location (Lat/Long) will affect our network, which leads to coverage problems and also affect revenue generation.
- Energy model submitted by TAIPA (circulated for comments in the field) should not be accepted (which is in higher side)
- Where ever BSNL alone is having the tower (like BHEL campus Trichy, Valparai CBE SSA etc) and BSNL gets more revenue, in those places infra sharing should not be given.
 Some of the officers recently retired from BSNL and presently working in private operator's company are trying to influence and change these BSNL towers as IP sites.
 We should be more vigilant. Such officers are to be exposed and there pension should be stopped as per the prevailing rules.

- <u>IP sites energy bills are to be passed after visiting each site by verifying the correctness of EB reading and Diesel consumption. (Most of the IPs are charging more than the actual)</u>
- IP outage penalty deduction has to be done in the field itself.

Consumer Fixed Access

SSA:

Repositioning the landline tariff:

- Various plans are quite confusing.
- Customers feel, it is difficult to choose the best.
- Calling pattern are not uniform continuously for any customer
- Due to the multiplicity of plans BSNL staff & officers themselves are not familiar with the plans, features, advantages and are not in a position to guide the customers

At present the tariff for the landline calls are very high compared to mobile phone tariff. Even though CDMA Tech is spectrum efficient, less SAR value and good coverage etc the public perception is CDMA is inferior to GSM. Similarly the sub do not takes into account the 3 minute per call throughout India but calculates the rate for a call made to his relative / friend's mobile. The landline to landline calls are very minimum. Public feels that the tariff of land line is very high and so nobody uses landline and only keeps for number/sentiment/ office purpose etc that too for incoming purpose only. So in order to make people feel comfortable to speak in land line the tariff has to be rearranged.

(Taking in to consideration of the latest market trends, for Repositioning of fixed line segment, Corprate office has issued instructions on 03-08-2011 to all Circle to forward the suggestions. All suggestions regarding this shall be sent through proper channel to Circle office)

STDPT segment

- In spite of high commission, market share and revenue is in declining trend
- Inadequate advertisement and publicity about BSNL STDPTs and its commission structure
- High revenue STDPTs running Call Conference business have migrated to private operators
- Low revenue STDPTs are unable to remit the minimum guarantee amount

Suggestions to improve the STDPT operators base and revenue

- Minimum Guarantee amount shall be reduced to 180 per month or at par with residential connections
- High Revenue STDPTs running call conference business shall be provided with higher commission or the slab of 42.5%, 45% & 47.5% shall be reduced to 10000units, 20000 units & 30000 units respectively
- Providing Call conference facility to STDPTs on LL
- Door to door canvassing is essential like pvt operators
- Bundling offer with Coin Box instruments is must. (Now M/s. Navitel introduced)

CFA General:

- Cable route diagram is to be maintained / prepared at all Exchanges
- All U/G cable pair terminated at the MDF should be tested at both ends. Missing cables should be identified. Action should be taken to find out all missing cables.
- For providing Broadband only good pair should be used. All subscribers cannot be treated as same. Since Broad band connection is yielding higher ARPU priority should be given to BB and high calling subscribers.
- Cable fault locator can be purchased at all SSA's for identifying the cable route.
 There is difficulty in finding the route of the cable in many areas due to road
 widening, filling of gravel, etc., The Cable locator will easily find the route of cable
 and can be purchase by floating tender.
- Higher level coordination and action with other departments is required to prevent damage to cable system.
- Since majority of the faults are cable faults separate task force to be earmarked to attend cable faults.
- Pending cable damage claims from private operator's is not being realized. The private operator cable damage claims were previously adjusted in the POI amount. Now it is not possible to adjust the damage claims in the POI amount, since it was challenged by M/s. Reliance. Huge amount is yet to be collected. This issue is to be addressed.
- External unit should be a vibrant unit since it is the delivery Point for customer after CSC.
- Since our TMs are the front end employee, they should be motivated to meet the customer often and especially at the time of attending faults. They should create the impression that customers are being cared.
- During his visit the TM can also function as an marketing person and ascertain the
 customer's requirements if any, and become a lead generator. Some incentive points
 can be given if the lead materializes subsequently. The line staff can also be
 compensated in the form of basic reimbursements. Broadband /BB VAS /data card
 etc. can be promoted during his visit.
- As already instructed by the Corporate office, each land line connection should be mapped with a mobile number. Top priority is to be given in the field for completing this mapping. In case of fault of LL indicator, the possibility of giving call diversion at free of cost of faulty indicator to the mapped mobile indicator may be explored. The status of fault clearance and monthly billed amount etc. shall be forwarded through SMS.

- Each unit should work for churn management / analysis of 'zero' meter reading cases of VPTs / Telephone Lines and especially BB connections.
- Fault booking of BB / clearance should be closely monitored and should be escalated.
- For all BB customers all BSNL marketing information can be sent through e mail. As
 per corporate office instruction e mail id of each sub is to be mapped in CDR.
 Telephone bills can be sent through e mail thus we can save the amount being spent
 for postage. Field units of SSA's has to complete the job at the earliest.
- A separate task force for clearance of BB fault in urban areas to be formed so that the fault can be rectified within an hour.
- As per corporate office instruction to clear cable fault a separate task force at SDCA H/Q level is to be formed under JTO/SDE.
- Prompt delivery of Telephone bills is to be ensured which causes huge voluntary closures.
- In the field units display boards depicting clearly the contact numbers of staff addressing and attending customer grievance shall be displayed in all offices and Exchange premises.
- Phone mechanics has to perform the jointing work and as per requirement arrangements shall be made for assistance. Supervision slackness should be avoided at all levels.
- Existing cable faults should attend and also recovery of cable can also be done if it is cost-effective.
- Educating the staff & officers about various plans, features and the advantages.
- Motivating the staff & officers for a better customer interface
- Add On services like Caller ID, Electronic locking, shall be provided on phonic / internet request from the customer
- Public feels that BSNL is having Poor customer interface. Attitude of staff and executives towards the customers are to be made more friendly and result oriented.
- Inadequate publicity of the advantages of BSNL BFone among the public.

CSC / CSR / CCC

SSA:

Requirements for the improvement of CSC:

- Earlier CSC's and franchisees were supplied with UNIFIED SIMs, which can be
 activated within seconds. Now RECON sims are being supplied. Activations procedure
 consumes 20 to 30 minutes. Hence procedure for activation of RECON SIMs should
 be made easy. (Now Procedure for pairing SIMs for Melas intimated by Circle
 office)
- Mobile and WLL bills paid through CDR PMS module. Delay noticed in updation of payments from CDR server to Kenen FX server.
- Availability and sale of SIM cards, RCV's and TOPUP in all CSCs / CCCs / CSRs should be ensured. Still there are CSCs in which only Bill collection alone is being carried out.

- All CSC should be given access to Pay-One FX module for accepting Mobile / WLL bills online. By extending this facility re connection problems will also be solved.
- Tamilnadu Circle with 17 SSAs consisting of 122 SDCAs is catered by only around 200 CSCs and 80 extension counter(s). More number of CSCs is to be opened to serve/redress our customer grievances. As a first step, the extension counters are to be upgraded to the level of CSCs and sufficient number of CSCs should be opened so that customers should walk-in to the CSCs and get the BSNL Services & complaints redressed.
- ALL CSC / CCC / CSR working hours should be 8 am to 8pm.
- Continued motivational classes to be conducted by SSAs to the staff working CSCs. The staffs working in CSCs are to be provided with all the instructions / guidelines given by Circle / Corporate Level and updated knowledge about all revision / changes made now and then.
- For better performance and to address customer needs properly, CSC / CSR shall be manned by newly recruited TTA's and JTO's in the front end.

CSC / CSR (Resolving GSM related operational issues at CSR)

Public are in the opinion that, many of our CSRs not handling the technical complaints related to mobiles properly. They have to run from pillar to post for addressing their complaints. In fact almost 95% of the complaint can be resolved in the CSC / CSR by our staff themselves if they know the GSM operational issue. In some places for handling PIN & PUK complaints, they have to depend on some selected personnel. Though most of the personnel are trained by our Training centre faculties, the actual requirement is they should be trained to resolve the complaints related to operational issues which is not dealt in the training session. At this juncture, we can arrange for training on GSM operational issues and complaint handling for our CSR staffs and front line executives by a team of executives who are daily dealing with operational issues at CSRs and MSCs. To avoid expenditure, this team can visit every SSA for imparting training or training can be arranged for selected personnel from each SSA at a common place like Coimbatore. In turn these trained personnel should train other front end personnel of the respective SSA. (Time being we can arrange for training on GSM operational issues and complaint handling for our CSR staffs and front line executives by a team of personnel available in SSAs)

- Validity of IN Prepaid cards should be checked and extension of validity period shall be carried out well in advance.
- Stock position with validity period should be known to the concerned Incharge.
- It is the primary duty of each and ever front end personnel to familiarize with the
 products, up to date tariff, product comparison with private operator, availability of
 products etc. Since they are the front end personnel representing BSNL, it is their
 prime responsibility to acquaint them selves with up to date information.

SSA:

Service Tax is now being levied for ABF (Amount billed for) and not for the amount realized. Hence utmost care is required in the front end while entering data at the time of booking NPC and also after the provision of NPC.

Broadband, Leased Line etc.

SSAs:

- Steps should be taken to remove all the converters working for DSLAM and direct Ethernet connectivity can be provided wherever MADM rings are available and this will increase the connectivity speed of the customers and thereby the quality of service can be increased and due to ring connectivity of MADM uninterrupted service can be given to users.
- MLLN modems are not available. VPNoBB is recommended instead of MLLN. But sub
 is insisting for MLLN connections only. (Now 1000 MLLN Modems diverted from
 MTNL to TN Circle)
- All the P3 ports supplied in the 3 Million project have been provided with splitters at MDF. No spare splitters supplied for maintenance. Since the splitters are imported item and also not available in the open market several ports are kept idle. Till recent time faulty splitters were duly replaced by the vendors but now vendors are not replacing faulty ones. They are reporting that splitters are consumables and not covered under warranty/AMC. Spare MDF splitters should be arranged for maintenance purpose.
- DSLAMS can be installed at the BTS site.
- Type II modems (Wireless) scarcity is there. (Now TN Circle has arranged Franchisees to sell Type-I and Type-II modems in CSCs at BSNL rate.)
- One MPLS PE Router is to be installed at Tirunelveli to reduce the traffic at Madurai MPLS Node and to provide spare E1 ports for Madurai. NGC,TTN,TVL SSAs BB & MPLS VPN traffic may be routed to the newly installed Router at Tirunelveli.
- ILL customers can be given connection from the Customer's nearest DSLAMs or OCLANs. Hence ILL customers connected on MPLS VPN Router may be diverted to OCLANs to make that E1 ports available for VPN circuits.
- Gateway Port utilization report, contacts list, and other reports may be hosted in Dashboard site
- FTP Server may be installed in MPLS NOC to facilitate the speed test measurement for ILL customers
- All sorts of reports like RPR Levels, DSLAM loading is to be put up in intranet. bsnl.co.in server
- EMS client shall be given some rights.

- Rural DSLAMs of higher capacity can be replaced with lower capacity which can be re-deployed at urban areas to meet the demand.
- We are having Exchanges within every 9 or 10 KM throughout the country. Connections can be given to any customer by building up BB service on RF for high end Business plans not less than BB 4999 with annual payment option & commitment. BB modem will be at our MDF. Output will be build up on RF to customer where he will have a mast & receive the data. For uninterrupted continuous service ADSL modem is to be provided with 230 V inverter supply or 0.5 KVA standalone UPS supplied by the customer
- Adequate supply of GSM data cards with national roaming diretly by BSNL & not through visiontek like companies
- Continuation of the present free netone offer.
- Automatic testing every 15 minutes of all DSALMs and fault reporting to the concerned In charges of the DSLAMS through SMS by installing a server at circle level / SSA level.
- Bringing all the exchanges under Ring and centralized monitoring the Ring system at SSA HQ.
- Problem caused by overload of DNS makes lot of inconvenience to the customers.
- Annual bills for renewal of ILL should be checked for payments
- Every month NMEICT connections are being disconnected for non payment, even though annual payment collected by BSNL.
- Provision of BB KIOSKs under USOF scheme will earn Rs. 20,000 per quarter. This area is to be concentrated more. But the BB KIOSK subscriber feels that the charge per hour is less and this is a non profitable business.

Leased Line

- All leased line circuits are to be checked for proper realization of bills. Especially for NMECIT projects it is to be checked.
- Broadband KIOSK is to be provided. Working Browsing centers may also be converted as Broadband KOISK centers.
- Ensure realization of payment for all BB plans.
- It is necessary to enhance the employee's potential in the field of Broad band and NIB.
- http://smsnoc.bsnl.co.in url is hosted by DNW Bangalore. All Node in charges are requested to register their phone numbers and concerned DSLM in charge Nos and IP addresses of the DSLAMs.
- P2 DSLAMS can be converted into P3 Multiply Network wherever we are unable to provide ULD BB plans in P2.
- P2 accounts can now be deleted. Options are available in Itellian server.

- Time delay in attending fault should be reduced since BB connections are earning more ARPU. We have to concentrate on Land line, Broadband and leased lines which are yielding high ARPU.
- Rural Broadband connections working in rural areas should be converted to USO plans.
- Applications of BB, like running SAP, ERP, CCTV, Webcasting, IP surveillance are to be made familiar for staff and also among common public.
- Prepaid CUG connections can be promoted in institutions and Organizations.
- Special drive can be done for promoting services like web hosting, Wi-Fi Connectivity, VPN over BB for institutions/ students. When compared to private agencies web hosting charges are very high for higher web space.
- In colleges for NMICET projects where already OF connectivity is available for leased lines instead of providing direct connections from exchange install a DSLAM of 8/16 port and extend the connections from there.
- Long duration payment BB scheme should be given importance and it can be promoted since this plan is yielding 28% interest. Option should be there for changing this option before the validity of commitment period or for changing to some other plan within commitment period.
- After BB disconnection spare jumpers shall be removed periodically. Working
 BB connection is to be reckoned on regular basis. Spare ports are to be
 identified by In charges and intimated to CSCs and other sales wing on
 regular basis.
- Broadband disconnection is on of the important aspect, which needs to be addressed.
 Reasons for which almost leads to poor maintenance of last mile copper leads, Faulty
 CPE etc. Customer is expecting quality service.

Enterprises Business

SSA:

Service Assurance:

- It is easy to get the business even by competing with other Service providers but difficult to maintain the business.
- The long down time especially in the leased line / MPLS / Internet leased line circuits leads to the customer's dissatisfaction.
- Special task force may be formed at SSA's level to bring down the down time to attend the faults in the late hours / night hours like other SPs.

PRI connectivity through GSM:

- PRI connectivity can be given through GSM also EB wing of SSA may be asked to use it and generate revenue
- Periodical verification of bill payments and renewal of leased circuits and hot lines to be done.
- Leased line tariff should be at par with other operators to provide 1Mbps / 2Mbps.

(What we need to do?

- Learn About BSNL Services & Offers of BSNL.
- Educate the Officers concerned. (Commercial Officers, Account Officers, Data Group, Marketing & EB, and Sales EAM)
- Educate The Customers with your services.
- Make them thirst to consume More Data
- Identify the potential customers
- Assess the requirements
- Work out the Solutions & proposals.
- Provide Service wise SOLUTIONS if not Total Solutions.
- Take care of the Customers. (Meeting them frequently, Informing the status of circuits, Updating them with the latest in BSNL).
- Identify the requirements of the customers.
- Work out the solution.
- Know about the prevailing competitive scenario.
- Tell the +S, Premiums of BSNL.
- Start with Technical Discussion and Close the deal with commercials.
- Business Nothing But Relationship
- You make the impact of BSNL and You on Customer
- You are the face of BSNL from the customer's view.

What we should not do?

- Don't count your business by Discounts
- Pricing alone is not the winning factor
- Special Pricing is always extended based on the customer's profile and the volume of the business. Don't share the special pricing of the one customer to another.
- Don't give up at any stage till the realization of the business.
- The efforts and hard work are the same for both winning and losing the business.

Please remember:

- Let us have positive mindset of our services.
- Our services are premium services and our rates are competitive.

- QoS and other service level attributes are key factors for the decision making from the customer's point of view.
- APPLE to APPLE Comparison Industry Trend)

TO IMPROVE USO REVENUE

- Ten MCUs free per month per VPT can be best utilized by SSAs, by making vide publicity of this 10 free calls concept to all VPT custodians and ensure at least one call is made per VPT per month, and ascertain the meter reading every month and thus per Quarter to claim full/maximum subsidy without any loss.
- DNP VPTs >3months should be restored by relocation. Outstanding dues should be collected at least in easy installments from custodians without fail.
- Post paid CDMA VPTs should be converted to prepaid CDMA VPTs and thereby no data, ZMR (Zero meter reading), DNP etc are avoided and 100% functionality of VPT shall be ensured by field staff by frequent visits. ARPU of VPT also can be increased as targeted by Corporate Office and subsidy also can also be assured for these VPTs.
- New VPTs provided as per New VPT agreement and census 2001 should be maintained very scrupulously, because Rs.25,000/- FLS (front loaded subsidy) we have received per VPT and Rs.790/- EAS (Equated Annual Subsidy) per VPT should be ascertained /assured by SSAs. (Eligible for 5 Years from Date of Installation). All New VPTs should be moved to commercial location (even in less than 100 population villages) as far as possible ultimately, to maintain agreement conditions and functioning of SPV panel to WLL VPTs should be monitored carefully since we have received Rs.6,250/-per SPV per WLL VPT (included in Front loaded subsidy).
- Among New VPTs, DSPT VPTs working in Salem SSA and Dharmapuri SSA should be carefully maintained for another 5 years from the date Of Installation, since we have claimed Rs.1 Lakh FLS (Front Loaded subsidy) per DSPT VPT. Total 2 Lakhs received this year (EAS Rs.2,735 per Quarterly for 5 years).
- For all VPTs USO Compensation is to be claimed. No VPT is to be left with Zero meter reading.
- Regarding Rural Broad Band provision the target was fixed by Corporate Office this year, for connection, Nova Pcs and kiosk provision. All SSAs should try to achieve the target in full so that maximum subsidy component can be achieved in full on respect of Rural Broad Band agreement. For a connection, we get (4500 Fls +850 modem) Rs.5350/- on provision and maintenance subsidy of Rs.200/- approximately per Quarter for 2 years from Date Of Installation,. For one kiosk we get Rs.20,000/- equated quarterly subsidy per Quarter and we continue to receive for 3 years from Date of Installation for maintaining. Kiosk should be kept opened between 0800 AM to 0400 PM and wherever provided in Rural Exchanges, leakage of revenue should be avoided and monitored closely by viewing CDR billing every month. Nova PCs closure should be intimated to vendor every month by BSNL local authorities 15

and Pcs should be recovered from closure connections and provided to NPCs every month since PCs are claimed on net addition basis. Otherwise vender has to lose the amount already claimed, for closure connections with Pcs.' Corporate Office also should Co-operate and coordinate regarding the issues/clarification raised by Circle and in clearing the dues/claim from DOT Cell in coordination with USOF (A) for quick settlement of subsidy claimed by circle.

 100% USO fund realization is to be ensured in each Rural DSLAM site. Each working connection is to be converted in such a way that no working BB connection is exempted from USO fund claim.

Regulation wing - To curb leakage of revenue

SSA:

1. IOBAS migration to CDR Platform

- Attend the IOBAS TIME GAPs which is issued twice in a month in IOBAS Web Portal (22nd and 3rd) by POI-in-charges without fail. Non verification of IOBAS time gaps will lead to loss of revenue to BSNL and **delay in raising** INVOICES by **Data Centre**, **Hydrebad**.
- Run the CDRAS Software on 2nd of every month and enter the Call Count / MOU in 'MOU details' of CDR Portal on the same day itself.
- Compare the Pre-Estimate invoices issued by IOBAS with CDRAS output every month. Any discrepancy should be brought to the notice of IOBAS wing to avoid supplementary invoices.
- The final Invoice of all OLOs should verified with previous month invoice and any short fall must analysed to arrest revenue leakage.
- Two certificates in respect of attending the IOBAS TIME GAPs and Running of CDRAS should reach DGM (Regulation) office on 5th of every month.
- The TGP particulars of OLO (both I/C & O/G) available at IOBAS web portal should be verified to avoid revenue leakage.

II. Port and Infra charges

The details of Port availability of OLOs with DOC/DOS is required for updating and for raising the Annual Rental Claim. In most of the SSAs there was short billing by clubbing of Ports taken by the Pvt. Oprs. This should be verified and if any detected, the same may be billed immediately and recovered under intimation to Regulation wing to avoid loss in revenue.

III. Equipment details and Duct Sharing by OLOs

 In most of the field, the actual consumption is reported as the rated power supply and also claim raised only for this. Charges are different based on Amps. Upto 16 10Amps -Single: 10>20Amps it is doubled; the charges are to be claimed for maximum capacity of the equipment. The same has to be verified and any short billed, n/a action should take to raise and recover the Miscellaneous Charges for the maximum capacity of the equipment.

• The equipment details of OLOs ,Duct sharing for both active and passive links, No. Of Bays used in the System, and Leased Line details are to verified and updated for raising the annual rental claims to avoid any loss to BSNL.

IV. Cable damages caused by Private Operators.

• In most of the cases, where the BSNL cables were damaged by the Contractors of the OLOs the cable damages claim were raised, acceptance certificate from the contractor had not received. There was a dispute in number of cuts. For a single cut of OF cable, the claim is RS.1,50,000. Hence, the certificate from the Contractor is very much essential and the same must be received on the occurrence itself.

V. <u>POSTING OF SDEs (Nodal Officers) EXCLUSIVELY FOR NC / IOBAS</u> ACTIVITIES.

One SDE may be posted at each SSA Heads exclusively to Co-ordinate with POI-in Charges and TR Wing to Co-ordinate the above activities thereby to avoid revenue leakage and at the same time to realize the revenue in time.

- VI. Signalling Charges which has raised against OLOs. The case is under subjudice. Since the outstanding amount is very huge, action may be taken at corporate office level to speed up the cases.
- VII. UASLs are using our expensive CCS7 resources for SMS services. For this claims are yet to be raised.

Billing and Collection:

- Monthly / Bimonthly bills may be served in the first week of every month in order to improve the collection efficiency.
- Before pay date and also after pay by date BSNL personnel should contact subscriber over phone and remind about the pending bill.
- Section TM should be empowered to collect bill amount.
- Repetitive trials will improve collection efficiency.
- Separate Reconnection Melas can be conducted in each exchange area.
- Billing problems in Video on Demand services. Facility is provided by default to Broad Band customers. Procedure for canceling this service by customers is very cumbersome.
- ATD for leased ccts to be raised without fail for all ccts.
- In each SDCA head quarters one JAO or AO shall be posted to settle the customer

- billing complaints. Accounts officers shall be posted in Level 1 CSCs to settle the WLL Billing (CDMA) problems.
- Action should be taken to collect the outstanding dues instead of simply waiving off by HPC to achieve the target.

Training Centre

Training centre:

- Power off the model exchanges and AC units whenever there is no training programme.
- Publishing eNews letter for various technologies.

Scrapping of un serviceable stores

SSA:

Scrapping of unserviceable stores shall be done in a war footing manner. Separate special drive team should be formed at each SSA level and the task is to be completed within 3 months.

CFA-NWOP

Circle:

- Frequent failure of GSM Net work Elements (NEs) due to the poor planning of transmission media connectivity: GSM Net work Elements (NE) like MGWs (Media Gate ways) are connected to the core N/W via active and standby connectivity. But it seems that in some cases both active and standby connection is extended through the same route and same equipment, which leads to total blackout during transmission failures. Transmission media connectivity route audit shall be done to settle this problem.
- It is observed that there is short supply of OF Cables. But lot of PLB pipes is laid along roads and are now idle. In Nagercoil SSA itself more than 60 KM pipe laid and waiting for OF Cable allotment. But still Circle is giving PLB pipes for laying and they are not giving Cables. Recently 32 KM of PLB pipes are allotted to NGC SSA and asked to lay the pipes without giving Cables. Laying of 1KM of PLB pipe makes an expenditure of approx 1.5 Lakhs. Without giving Cable why the PLB laying was done. This should be stopped or sufficient OF Cable is to be supplied.
- There is no co ordination with SSA, STR and STP in allotting fibre and laying cable. At several places where dark fibre is available with STR, SSA or STP is laying cable. In some other places SSA and STP are laying cable in the same route. Thus huge amount of money is wasted just due to lack of co-ordination.
- NH, PWD, SH is asking Track rent for the Cables. This should be dealt at higher level and payment of Track rent should be avoided. Also NH authorities are not giving 18 SNEA(I), TN Circle - Core Committee report - Action to be taken at SSA level.

permission for digging. This creates difficulty in commissioning of new BB DSLAM's and new IMPCS sites. The Central Ministry has given instructions to permit the OF laying in NH routes. This should be taken with the NH authorities and should be solved. As directed by CMD periodical meetings at higher level are to be conducted with NH / PWD / SH authorities.

<u>General</u>

- 3G and GPRS facility is to be provided for all executives in service mobile numbers.
 (Orders issued by Circle office under trial basis for 6 months).
- GSM FWP instrument is worth full. To promote this GSM FWP, it can be supplied to BSNL employees on payment basis. (<u>TN Circle has decided to supply on concessional rate in installments</u>)
- AMC for the maintenance of C Dot MBM, OCB and other new tech switches shall be stopped immediately. It can be well maintained by our staff.
- Since IP Tax already commissioned in most of the places Vendor training is must for better maintenance.
- Vellore SSA is already having a C-DOT card repair centre and now they are
 extending the facility of repairing ADSL modems also. This may be followed in other
 SSAs also. Similarly to attend P/P module faults, AC Unit fault, AFD faults, instead
 of outsourcing a team has to be formed at SSA level to rectify the same to curtail
 expenditure.
- Instead of scrapping all cells of life expired batteries, good cells has to be preserved to replace the faulty one at needy places.
- WI-Max has to be commissioned at the earliest.
- Project Sanjay is to be implemented in true spirit. In several SSAs it is not implemented in the right sense. Case by case before implementation (Physical / Expenditure) of the project and after implementation is to be verified. Several SSAs are merely diverting funds for payment. Responsibility shall be fixed and action shall be initiated for completion within the time frame. This is the main area which is consuming un necessary expenditure.
- To avoid expenditure, process for ISO recertification / renewal and all ISO related activities are to be stopped, as per the instruction of the Corporate office.

- An executive alone by changing his attitude, can not bring out optimum result. Attitudinal changes should take place from lowest level to highest level. Since we are middle level managers, we can conduct staff meetings or inter action meetings at regular intervals at Divisional / Sub Divisional level and motivate our staff. Our first duty is to make them aware of the real situation. Team work with good leadership can only solve all problems. Indecisiveness and shirking mentality all levels should be stopped.
- We should be aware of what we are having in our stores. According to that only we
 can do business. Within the SSA level or Divisional level or Sub divisional level we
 should take a decision to divert materials as per requirement and necessity.
- Responsibility is only collective and not individual.
- Everyone should work willingly with a positive approach in co ordination with others, superiors, colleagues and subordinates, which would help to utilize the available human and material resources to the optimum level.
- Work study has to be carried out. Redeployment of staff (Preferably without changing head quarters) is to be done. Potential areas like sales / marketing / Data section / BB / MPLS area should be given importance. Right person in the right section is the need of the hour.

Electrical

I) Energy saving opportunities from SMPS power plant and Packaged Air conditioners:

Based on the Energy audit study conducted in various BSNL exchanges the following initiatives are proposed for optimizing the energy consumption in the building.

- By way of switching OFF the excess modules in the Power plant
- Replacing of faulty thermostat and Maintaining the conditioned area temperature at 23°C

Switching OFF the excess modules in the Power plant:

- Four power plants are working for various Exchange in this building
- The total load of the power plant is 400 KW. This is 25.4% of total connected load
- In some power plants modules are working in excess than the justified level
- By way of switching of Excess modules the expected energy saving per year is 30240 units. (Calculation sheet enclosed)
- Demand will reduce by another 3.52KVA.
- The expected savings in amount is Rs.1, 75,392 / year.
- Since it is a no cost measure it can be implemented immediately

Package AC Units - Maintaining 23°C by using proper thermostat:

- In most of the Exchanges Package AC units are operated below 23°C. In some Exchanges it is operated even at 18°C.
- As per Corporate office guide lines the Temperature shall be maintained not below 23°C.
- Readings taken at one exchange and cost benefit analysis for operating it 23°C is enclosed here with.
- In order to maintain the Temperature at 23°C proper thermostat setting is required.
- By way of providing electronic thermostat this problem can be easily addressed.
- Life of compressors will be increased.
- By providing Electronic thermostat and maintaining temperature at 23°C expected saving for a Package Ac units is given in table.

Recommendations: -

- Excess modules in SMPS may be switched off to avoid no load losses.
- These modules may be put into circuit in cyclic operation.
- This may increase the life of the Module.
- Frequent failure of modules thus avoided.
- Maintaining the temperature of switch room 23°C.
- Providing Electronic Thermostat for maintaining proper temperature.

<u>Conclusion: -</u> Since Power plant and Package Ac units contributes major load in Telephone Exchange These Equipment may be maintained properly.

	PERFORMANCE EVALUATION OF POWER PLANT											
SI.No	Description	Make	Туре	Capacity	Total No. of Modules	No. of modules working at a time	INPUT	OUTPUT		- Efficiency	Bettern	
							Power in KW	Voltage (in DC)	Current (in DC)	consumption in KW	in(%)	Battery capacity
1	TXM,BB,DLC	Himachal Exicom	SMPS	1800A	14 Nos	11 nos	17.06	53.4	288	15.38	90.1%	2x3000AH
2	OCB MSU	ІТІ	SMPS	1600 A	16 Nos	16 nos	47.27	52.5	827	43.42	91.9%	2x4000 AH
3	GSM	Himachal Exicom	SMPS	3000A	30 Nos	27 nos	43.46	53.2	664	35.32	81.3%	2x5000AH
4	AXE	Ericsson	SMPS	1400 A	14 Nos	7 nos	4.47	54	71	3.83	85.8%	2x2000AH

Calculation of Energy saving by way of switching OFF Excess modules

Description	TXM,BB DLC	OCB MSU	GSM	AXE
DC Current for Switch	288 A	827 A	664 A	71 A
DC current for Battery charging	600 A	800 A	1000 A	400 A
Total DC current required	888 A	1627 A	1664 A	471 A
Capacity of Each Module	100 A	100 A	100 A	100 A
Total no. of Module Justified	9 Nos.	16 Nos.	17 Nos.	5 Nos.
No. of Modules working at present	11 nos	16 Nos.	27 Nos.	7 Nos.
Excess Module available	2 nos	0 nos	10 nos	2 nos
Energy loss in individual modules	0.15 KW	0.24 KW	0.30 KW	0.09 KW
Expected energy saving by way of switching off the modules/hr	0.31 Kwh	0.00 Kwh	3.01 Kwh	0.18 Kwh
Expected units saving/day	7.33 Kwh	0.00 Kwh	72.31 Kwh	4.36 Kwh
Expected units saving/month	220 Kwh	0 Kwh	2169 Kwh	131 Kwh
Expected units saving/year	2640 Kwh	0 Kwh	26028 Kwh	1572 Kwh

Total Energy Savings/year	30240 Kwh
Expected amount of saving /year (@ Rs.5.80)	Rs. 175392
Total Energy Savings/year	30240 Kwh
Expected amount of saving /year (@ Rs.5.80)	Rs. 175392

		Performance		
Description	Performance	expected after		
	at present	rectification		
No of Ac units working	3 nos	3.0 nos		
Average Total TR Delivered	24 TR	21 TR		
Average Total Power Consumption	42 KW	42 KW		
Total Running hrs /day	24 hrs	20 hrs		
Total No.of units consumption/hr	42 units	42 units		
Total No.of units consumption/day	1003 units	840 units		
Total No.of units consumption/month	30089 units	25200 units		
Total No.of units consumption/year	361066			
	units	302400 units		
Total cost of Energy @ Rs. 5.8/unit/year	Rs.2094180	Rs.1753920		
Expected total Units saving/year	58666 units			
Expected total amount saving/year	Rs.340260			
Expenditure for Electronic Thermostat for 8				
nos @ Rs.2000/each	Rs.16000			
Pay back period	0.56Months			

Cost- Benefit Analysis

Average Tonnage delivery of these units are 8 TR

If the Units are working properly 2 nos. Ac units are sufficient

Thermostat are not functioning and Room Temp is 18.9°C

If the thermostat is set right and conditioned area temperature is maintained at 23°C the savings will be expected as below.

II) ENERGY CONSERVATION AT GSM SITES

Sample Energy audits were conducted for more than 25 GSM sites to arrive the efficiency of GSM power plant and to identify the energy saving opportunities.

Observation on Power plants

- It is observed that in some places GSM switches are co-located with WLL / RSU exchange.
- In these sites GSM is provided with a separate single phase power plant with a capacity of 8x25 A with 4-5 modules in working condition.
- The Co-located WLL / RSU exchange is also catered with 4x50A three phase power plants with 2-3 modules in working condition.
- GSM exchange is provided with 2sets 400 AH batteries
- Similarly WLL / RSU exchange is also provided with 2sets of 400 / 600AH batteries.
- The current consumption of GSM is between 19Amps to 40Amps.
- The current consumption of WLL / RSU is between 5Amps to 15 Amps.
- The single phase power plant provided for GSM is either Amararaja or XL telecom in most of the places.
- Efficiency of these power plants is between 88-98%
- Whereas three phase power plants are provided for WLL Exchange which is DACS
 / ITI
- Efficiency of these power plants are between 60-75%.
- In most of the rural areas two phase supply is available for 12-16 hrs, three phase supply is available for 6-8 hrs. Total power cut for 2 to 4 hrs.
- The WLL exch. Power plant will not switch on during two phase supply.
- Engine is switched on during this time.
- The maximum current consumption put together (GSM+WLL/RSU) is around 40 to 50A DC
- The charging current will be maximum 80A (40A for each set)
- Total current is around 130 A (DC)
- So 6 modules of 25A capacity may be provided in GSM power plant to cater both GSM and WLL load.

- Since the batteries are 2x400AH capacity, they have to with stand minimum 20 hrs.
- So Engine need not be required to switch ON because Total power shut down will not be more than 4 hrs.

Observation on Air-Conditioning System:

- Most of the BTS sites are provided with 2 nos. 1.5 TR S/T W/T AC units.
- Generally these AC units are working satisfactorily barring minor defects such as filter cleaning, Low CFM, Low gas.
- Most of the sites are maintained between 23°C 25°C.
- It is inferred that when the temperature of the rack goes above 40°C, the GSM rack automatically switches OFF and when the temperature comes normal level it automatically switches ON.
- Based on this observation it is concluded that generally cards are not becoming faulty because of rise in temperature.
- As per corporate office guide lines these sites can be maintained at 30°C.
- In most of these sites Thermostats are not working otherwise it has kept in low range thus compressor is not tripping.

Recommendations

- In co-located site three phase power plant catering for WLL / RSU may be removed and the load may be transferred to GSM power plant. Which is single phase
- As these sites are having 4 nos.400AH Battery sets, Two sets of 400 AH capacity battery set may be removed.
- If the efficiency of the battery is doubtful 3sets of 400AH battery may be provided and 1 set of 400 AH may be removed and reinstalled in some other site.
- The GSM Power plant (Single phase) may be connected in good / healthy phase. (I.e. this phase will be always available during two phase/three phase)
- Co-located sites are provided with 2 nos.15 KVA EA sets. As the total load of co-located site is less than 9 KVA, One EA set is sufficient to cater the entire load. So all the loads may be transferred to one EA set to reduce diesel consumption.
- Thermostat may be set right kept in working condition and the temperature range may be set at maximum. So that Energy savings can be achieved and compressor may come for a longer life.
- Life Expired AC units may be scrapped as it is consuming more energy and delivering less output.
- New energy efficient AC units may be provided.
- Installation of Free cooling system as per corporate office guidelines

Benefits expected

- One power plant can be dispensed.
- The energy consumption of that power plant is absolute saving
- One/Two sets of battery can be dispensed and it can be used in other sites there by resource s can be utilized effectively.

- Since the GSM power plant is having higher efficiency the energy consumption for whole exchange will be considerably reduced. (These power plants are designed for operating for a Wide range of voltage.)
- If the battery is in good condition running the Engine can be avoided. Which is in turn reduces the diesel consumption and related issues.
- By setting thermostats to maximum range minimum of 3-5% savings in existing energy consumption is expected in each site.

Challenges to be faced

- ? In most of the sites though 2 sets of 400 AH batteries are provided these batteries are expected to cater the load for minimum 20 hrs. But these batteries are not withstanding for even half an hour.
- ? Maintenance of AC units

Crux of the problem

- ✓ It shall be ensured that battery sets has to deliver it output as per the standards.
- ✓ Connecting the single phase power plant in good/healthy phase
- ✓ Maintenance of AC units at 26°C. Keeping thermostat at working condition.

Recommendations on Electrical Wing Issues:

- Honourable Prime Minister of India has set a target for energy conservation of 10 % and BSNL has set a target of 20% which is practically achievable.
- Energy Conservation Measures implementation on a larger extent.
- No cost measures
- Low cost measures
- High cost measures
- Contract demand rationalization of Substations
- Power factor improvement
- Switch OFF stand by Transformer
- Maintaining 23 Degree temperature in switch room. BSNL HQ/DoT has instructed to maintain 23 ± 3 degree in switch rooms and to maintain 30 degree in BTS rooms. For every rise in one degree, there will be 3 percent reduction in EB expenditure. Electronic thermostat which has high accuracy can be used for setting temperature in Package AC units for effective control.
- Since the AC units and Power plants constitute more than 65 % of the exchange loads, the concentration should be on these major components.
- Only Star rated AC units should be used whenever the old units are replaced.
- Free cooling system: 100 % implementation for BTS sites wherever outdoor temperature
 is less than 30 Deg throughout the year and for other BTS site 25 % implementation.
 The cost of the Microprocessor based free cooling system is about Rs.40,000 with the
 monthly saving of minimum Rs.5,000 per BTS.
- Switching OFF excess modules in SMPS can result in to a significant saving since the

power plant load is nearly 45% of the total exchange load. The modules required for working DC load current and for battery charging alone can be considered.

- External Works: External construction works along with Civil wing can be undertaken in a larger way especially in Govt/PSU sectors. Energy auditing of buildings of other organizations such as State Govt, Central Govt, PSUs etc can be undertaken as is being done in Kerala Circle.
- Conversion of EB tariff from commercial to Industrial tariff as in Maharashtra Circle.
- Conversion of Conventional bulb into CFL Lamp.
- Replacement of Electronic Choke wherever necessary
- CFL lamps shall be used to replace conventional lamps.
- Electricity bill contributes to the major part of our expenditure. WIND FARM shall be consulted for wind energy production which will bring down the Electricity Bill to bearest minimum.
- Exchange working connections shall be concentrated on required minimum racks. Power supply to balance racks shall be switched off. Space shall be saved by reducing the switch room space. Merger of MBMs, convertion as RSUs, Re-arrangement of TUs., LM / BM as per working connections will also save Electrical consumption charges.
- To minimize the current consumption, all working connections in the indicators working in different BMs shall be shifted to a Single BM so that after re arrangement BMs having no connection can be switched off. The difference between working connection and equipped capacity should not be more than 10% to avoid huge AMC for idle equipments.

Civil

SSA:

- Commercial utilization of Vacant lands
- All our recreation clubs, conference halls may be given for outsiders for conducting meetings on rental basis.
- MOU should be signed with more banks to install ATMs in the prominent Exchange / Office locations where we can gain major revenue through high rent.
- Free space to be rented out to state central govt / PSUs.

SPACE AUDIT (Tuticorin SSA)

At Tuticorin the GMT office is functioning in a rented building for which app. two lakes rupees is paid as rent. Sufficient space is available in Telephone exchange and Telegraph office. Hence the rented office of GMT shall be shifted to departmental building. This is to be implemented within the stipulated target.

(<u>Committee formed by GMT / TT SSA to discuss and submit the suggestions</u> regarding shifting)

Space Audit : (Kumbakonam SSA)

SDE offices working in rented buildings at Sembanarkoil, Kuttalam & Thirupanandal shall be shifted to the Departmental Building available at these places itself. Thiruvengadu SDE office was already shifted to departmental building but the rented building is yet to be made over to the building owner. The General Manager Office itself is functioning in rented Building which expenses about 1.5Lakhs / month as Rent.

Nearly about 10 (Ten) IQs are available at Kumbakonam alone. (Tansi Site - 4, MBM Premises - 2 IQs (one at MBM building & 2nd at Old Tk Xge Building), Swamimalai - 2 Nos

Old Telecom Quarters (Bhakthapuri Street) - 2 Nos. Actual requirement of IQs are to be analyzed keeping in mind the expenses being carried out for IQs in the name of electricity bills, care taker salary etc. The STR equipments already shifted to MBM Main Exchange along with Indoor staff office. The Remaining staff are utilizing the entire first floor of STR building for which EB bill is being paid by SSA.

Space audit shall be conducted with a separate team and with mutual consultation, un wanted IQs can be closed and office accommodation can be re arranged. By doing this recurring expenditure can be reduced.

Space Audit : (Trichy SSA)

Old Call centre of Tamilnadu at Trichy shall be merged with the new Call centre at Chennai without dealy. This merger will help BSNL to get a large accommodation in DATX building and there by many CMTS projects which were diverted from TRICHY can be brought to TRICHY. TRICHY BILLING section is functioning in a rented building, which is incurring app Rs 1 lakh per month. This section shall be shifted to DTax building after the closure of Call centre.

Space Audit : (Cuddalore SSA)

The vacant quarters can be given to other PSU / Central / State Government employees. Our retired staffs are also willing to occupy our vacant quarters. But the modalities / guidelines are not clear.

Lending our vacant sites: In Cuddalore SSA enormous space is available in Cuddalore Sipcot Exchange, Marakanam - in coastal area and also in ECR road. Now days vacant places are given for rent for keeping container transport. We can also lend our vacant spaces for rent.

In CDL SSA, we are paying nearly RS. 30,000/- per month as rent to the warehouse for keeping our stores, mostly obsolete ones. Per year we are spending app Rs. 3,60,000/- . If we construct a closed shelter with light metal sheets in a low cost budget, all the stores which are essential to kept away from water, can be put inside the shelter.

Property Tax:

DGM (P&EF), TN Circle office has given instruction on 16-07-2011, to pay property tax, where ever claims are raised by local bodies. The instructions are given referring Corporate office letters dated 14-08-2001, 16-05-2005 and 26-07-2005. But Kerala High court judgment dated 01-12-2007 favours BSNL. Further Supreme court order on Civil 9458-63 / 2003 / Rajkot municipal Corporation verses UOI and others, instructs to pay service charges on par with local state govt. (ie.) To pay service charges only that too like state govt pays it to local body. OM of Ministry of UD, GOI dated 17-12-2009 also instructs to SC order. OM of MOC dated 6th Jan 2010 also endorses the Min of UD order. Hence payment of property tax is to be analysed once again.
