SANCHAR NIGAM EXECUTIVES' ASSOCIATION

CENTRAL HEAD QUARTERS

All Communications to the General Secretary

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To,

Shri. A. Robert J. Ravi ji,
Chairman and Managing Director, BSNL,
3rd Floor, Bharat Sanchar Bhavan,
Janpath, New Delhi 110001.

No. SNEA CHQ/Corr/CMD BSNL/2025-28 **Dated 23rd January 2026.**

Sub: Request for keeping on hold the proposal for closure of 3G BTS and its AMC till 4G services fully stabilised.

Ref: 1. Letter No. BSNLCO-NGSM/16(11)/3/2021-NWP-GSM-II Dated 10/12/2025.
2. Letter No. BSNLCO-NGSM/17(11)/26/2020-NWP-GSM-1 Dated 10/12/2025.
3. Letter No. BSNLCO-COMN/17(11)/27/2024-NWO CM II Dated 21/10/2025.

Respected Sir,

With reference to the above subject and letters under reference above, we would like to draw your kind attention on the instructions issued by CM unit BSNL Corporate Office, which are creating negative impact on growth and development of BSNL and we fear that if these instructions are implemented then there are chances that customer base of BSNL will come down. The details are as follows.

a. Vide letter under reference 1, BSNL Corporate office has issued instructions for shutdown of 3G Services. In this letter the guidelines Dated 30/6/2023 have been referred to by the Corporate office and only part of these guidelines is reiterated for issuing the instructions of Closure of 3G services in 2100 MHz Band.

b. Vide letter under reference 2, the BSNL Corporate Office has issued instructions to discontinue the AMC for 3G Node B and RNC.

These are big policy decisions and surely, these decisions are taken with due approval of BSNL management and it seems that these decisions are taken without checking the actual position of BSNL 4G services in field units.

We believe that management has some good intentions in issuing these instructions for force closure of well stabilised 3G services, but by analysing the situation in the field units and actual feedback from officers working in field units, it is to inform that force implementation of these decisions with immediate effect will have adverse impact on overall Mobile services of BSNL.

It is a fact that many customers are using BSNL services for its best Voice quality which is available from 2G/3G services and there are still issues in voice quality of 4G (VoLTE) Services. Though the data speed with 4G is improved, it is not improved everywhere and issues need to be taken care before closure of 3G Sites and before closure of AMC of 3G services.

Till today 4G services are not stabilised and we cannot close the stabilised 3G services before stabilisation of 4G services.

We wish to draw your kind attention towards the issues with the current 4G network which needs to be addressed at top priority before shutdown of the trusted 3G services.

It is observed that when the Nokia 3G BTS are shut down then only TCS 4G Mobile network is available for BSNL customers and there is Traffic loss of approximately 15-20% resulting in the following.

a. Significant increase in the customer complaints.

b. Significant decrease in voice traffic about 20%

c. Significant loss in data traffic about 15%.

d. Significant revenue loss

This has been observed in about all BAs and we are attaching a detailed case study of a Cluster of Nagpur BA, MH Circle as **Annexure-I** for ready reference.

We have analysed that these degradation of service is mainly due to:

1. **256 QAM technology not available in TCS 4G Network:** The TCS 4G network supports up to 64 QAM whereas Nokia 3G provides up to 256 QAM. The major advantage of 256 QAM is that it carries data at 8 carrier per symbol which is significantly high as compared to the 64 QAM which provides data rate at 6 carrier per symbol. Thus the customer experience in 256 QAM is much better compared with 64 QAM. TCS is till date not able to provide data service of 256QAM.
2. **RRH Power issues - RRH radiating at low power:** It is expected RRH should be radiated at 46dBm (40 watts) level, however it is observed that many cells are radiated at very low power. As per letter under reference 3, BSNL Corporate office has written to TCS regarding radiation of RRH at low power and over one lakh thirty two thousand (1,32,000) cells are transmitting power less than 35 dBm and out of these 1,32,000 cells about 67,000 cells no transmission power data reported. Thus it can be clearly seen that there is significant low transmit power RRH which in turn implies significantly less coverage than the expected coverage. 3dBM less Power approximates to half coverage, here it is 10 dBm less power. The reduced Tx (transmit) power levels are causing a range of operational and customer-facing issues, including limited coverage footprint, latching difficulties for user equipment, poor signal quality and interference, reduced data throughput and access, higher call drop and handover failure rates. Though after taking up this issue by BSNL with TCS, there is improvement in all other bands, but the issues in band 2100 MHz needs immediate corrective action.
3. **Poor Codec Range resulting in poor voice quality:** For a full HD Voice quality experience to the customers 23.85 Codec is required. The TCS have implemented AMR-WB Codec which supports only up to 12.65 Kbps Codec which is almost half the value of the desired codec. The other proven 4G Technologies provide Voice Codec method called Enhanced Voice Services (EVS) which supports 23.85 Kbps.

4. **Carrier Aggregation not possible in TCS 4G:** Carrier Aggregation (CA) in 4G (LTE-Advanced) combines multiple frequency channels (carriers) into a single, wider pipe, boosting bandwidth to deliver significantly higher speeds, lower latency, and better capacity, allowing devices to use fragmented spectrum efficiently. Carrier aggregation is used in Nokia and other 3G technologies for better utilization of Spectrum Bandwidth but it is not yet possible in TCS 4G.
5. **Cell Edge improvement feature not available:** 4G cell edge improvement focuses on tackling low Signal-to-Interference-plus-Noise Ratio (SINR) using techniques like Coordinated Multipoint (CoMP), smart scheduling (Frequency Selective Scheduling), power control, and Fractional Frequency Reuse (FFR) to boost data rates by managing interference and optimally allocating resources, alongside advanced features in LTE-Advanced such as MIMO and Carrier Aggregation for better spatial/frequency utilization. These methods aim to minimize interference from neighbouring cells, enhancing throughput and fairness for users far from the base station. This feature is not available in TCS 4G.
6. **Core Network and Structural Issues:**
   a. **MME/Core Failures:** There have been reports of sudden drops in IMSI (International Mobile Subscriber Identity) attachments across Mobility Management Entities (MME), causing network disconnections.
   b. **Security and Configuration Concerns:** A critical security issue was highlighted where a single IP was configured for both Operations & Maintenance (O&M) and the Control plane, allowing potential access to the control plane from the O&M network.
   c. **Limited Capacity:** The 2100MHz spectrum band being used in some areas has limited capacity, leading to network congestion, especially in high-traffic scenarios.
7. **Network Architecture Gaps:** Single link associations with core BSNL network elements (like SGs, DSC/DRA) and pending IPDR server installations in certain zones create bottlenecks.
8. **Other issues:** In addition to above major issues certain issues about 4G services are noted below which also needs consideration before shutting down the 3G services.
   a. Time stamp not available in advance reports
   b. Dump not reflecting the actual values
   c. Modulation vise traffic report not available
   d. Issues related to X2 interface
   e. Quality of CPRI cable and issues related to Swap cells
   f. Hardware Shortages/Delays
   g. The network experienced difficulties in managing handover failures and in integrating the indigenous core with existing RAN.
   h. The process of upgrading old 3G/2G towers to 4G while attempting to maintain legacy services simultaneously has caused temporary service interruptions.

i. Specific locations require better antenna alignment and activation of multiple frequency bands (like 700MHz & 2100MHz) for broader coverage, especially in hilly terrains (4G Saturation locations).

j. Inability to Support NB-IoT Services.

Apart from the above points, the following points add weightage to our request for not closing 3G BTS and its AMC before stabilisation of 4G services.

1. **BSNL instructions on the said subject:** It is important that the earlier instructions dated 30/6/2023, it is already mentioned that the 3G services will be stopped after stabilization of 4G services. As the 4G services are not stabilised till today, the fresh instructions for closure of 3G BTS and its AMC is not correct.
2. **No additional eNode after Phase IX.:** Other operators have almost 4-5 times more eNodes for proper coverage. Instead of closure of 3G services we can use it for coverage expansion and capacity enhancement. Other operators have almost 4-5 times more eNodes for proper coverage. Instead of closure of 3G services we can use it for coverage expansion and capacity enhancement.
3. **Less towers, less coverage giving scope to grey area in High Revenue areas:** Limited tower in BSNL operational around lakhs but in private operators have about Four lakhs so many high revenue areas are grey zone as per our reach is concerned. Out of these limited resources, many sites are forced closed due owner dispute, power supply issues, connectivity issues and need to be reviewed by the BSNL Corporate Office as the high power committees at most of the circles are idle as either not taking decisions or decisions taken are not adequate to meet current requirements.
4. **Comparison of revenue loss Vs expenditure on AMC:** With reference to the attached Annexure - I it can be seen that the AMC Cost Saver is approximated to Rs 1206 per node per month whereas the revenue loss is approximately Rs 3321 per node per month if the existing 3G node is closed. Thus it can be implied that the revenue loss is almost three times the cost saved.
5. **Reduced range of 4G BTS:** It is seen that the range of 4G BTS is less than the 3G BTS and hence for covering the same area of 3G BTS, more 4G BTS sites are required for which BSNL has no immediate plan and we are not aware of its reasons. Thus on closure of 3G BTS more number of 4G BTS are required for covering the same area and we have constraints for immediate addition of 4G BTS.
6. **Experience on earlier action to close 3G BTS in similar manner:** It is to further inform that earlier also similar actions were taken in many BAs of BSNL to close 3G BTS, but later this action was revoked as stable 4G service was available and customer complaints were very high. This fact is well known to all BA Heads and many have shared such filling with the executives working in field units but are closing all 3G BTS just to follow the binding instructions of BSNL Corporate office and avoid annoyance thereof. We have to learn from the past experience, but the same is not followed here even from recent past experience and observations thereof and action is being taken for force closure of all 3G BTS sites and it may create further serious issues for growth and development of BSNL.

From all above facts, it is crystal clear that there are certain critical issues in 4G services and we know that efforts are being done at a higher level for clearing these

issues, but it surely needs some more time. The closure of existing 3G services will be a premature step before addressing the above issues and hence we request to revisit our concern and to take appropriate decisions which will ultimately benefit BSNL.

Hence shutting down 3G BTS before stabilisation and going ahead with full and sole dependency on 4G before stabilization of 4G services should not happen and these orders need to be withdrawn.

If Management forcefully closes 3G BTS, then there will be sudden downfall in the number of BSNL customers and it will be an irreparable loss to BSNL. This will also have an adverse impact on the revenue of BSNL, that to be in these crucial Months of the financial year, when you have proposed to open war room to meet revenue targets.

If it is firmly decided by Management to go ahead with closure of all 3G BTS firmly believing that 4G services are stabilised, then please issue orders that each and every officer from BSNL including BSNL management should use only BSNL 4G service and not that of other private service operators so as to give clear and firm signal to all the customers that we are using these stable 4G services mandatorily and we promote customers also to use only 4G BSNL services.

In view of above we request for kind intervention and review the decision of Closure of 3G BTS and its AMC with immediate effect and to:

A. Keep on hold the instructions for closure of 3G BTS and stopping its AMC.
B. Give top most priority to resolve the issues at least to the extent that we get equally good Voice services from 4G BTSs.
C. Take proposal for addition of new 4G BTS at least in the areas having high user subscriber base so that full coverage continues only on 4G services.
D. **OR** issue strict orders for use of only BSNL 4G services by each and every officer including all officers in BSNL Management.

We are hopeful that our suggestions will be given due and timely consideration to avoid damage of Mobile customer base of BSNL and to safeguard interest of BSNL.

With Warm Regards,

Sincerely Yours,

Encl: AA

23/01/2026

M. S. Adasul
General Secretary
SNEA CHQ

Copy to:

1. Honourable Minister of Communications for kind information please
2. Honourable Minister of State Communications for kind information please
3. Respected Secretary DoT and Chairman DCC for kind information please.
4. Respected AS Telecom for kind information please.
5. Director CM for kind information please.
6. Circle Heads of all Telecom Circles through CS SNEA concerned for kind information and n/a please.

Annexure-I

Case Study: Nagpur BA (3G Closer & Restore Report

Part A: - Closing activities

- Three clusters were closed and their performance is as below

Data in GB/Day										
Clusters	Date of 3G Closer	**Nov-**	**Oct-**	**Sept**	**AUG**	**July**	**JUNE**	**MAY**	**APRIL**	**March**
CL10 (10 sites)	25-06-2025	836	851	948	893	853	997	1049	1119	1114
CL8&11 (17 Sites)	25-07-2025	1515	1488	1570	1571	1783	1838	1766	1698	1612
Kalmeshwar (3 Sites)	01-05-2025	230	226	255	226	239	264	238	327	334
Total		**2581**	**2565**	**2773**	**2690**	2875	3099	3053	**3144**	**3060**
VOICE in Erl/Day										
Clusters	Date of 3G Closer	**Nov**	**Oct**	**Sept**	**AUG**	**July**	**JUNE**	**MAY**	**APRIL**	**March**
CL10	25-06-2025	1064	1059	1136	1066	1092	1187	1257	1350	1360
CL8&11	25-07-2025	1678	1649	1770	1704	1833	1917	1946	2118	2193
Kalmeshwar	01-05-2025	278	242	262	234	270	292	302	346	361
Total		**3020**	**2950**	**3168**	**3004**	3195	3396	3505	**3814**	**3914**

- Comparison of Data & Voice traffic is as below

Ave Data in GB/Day		**Ave VOICE Erl/Day**	
Pre Closer months March & April-25	Post closer months August to Nov-25	Pre Closer months March & April-25	Post closer months August to Nov-25
3102	2652	3864	3035
% Reduction is **14.5**		**% Reduction is 21.5**	

It is observed that **32 out of 82 PG complaints** belong to the **3G-closed clusters** mentioned above.

The degradation in Traffic and customer experience may be attributed to the following factors:

1. **TCS 2100 band coverage** is observed to be **less than Nokia 2100 band coverage**.
2. **Non-availability of the 700 MHz band** in most of the customer handsets.
3. **VoLTE call quality** and **data speed issues** were observed on the new technology platform.

4. **Frequently failure of TCS/Tejas Hardware**
5. After RF drive test and optimisation activity M/S TCS report confirmed the requirement of **planned 87 city sites**, also recommended the **5 additional sites** for proper coverage in the city

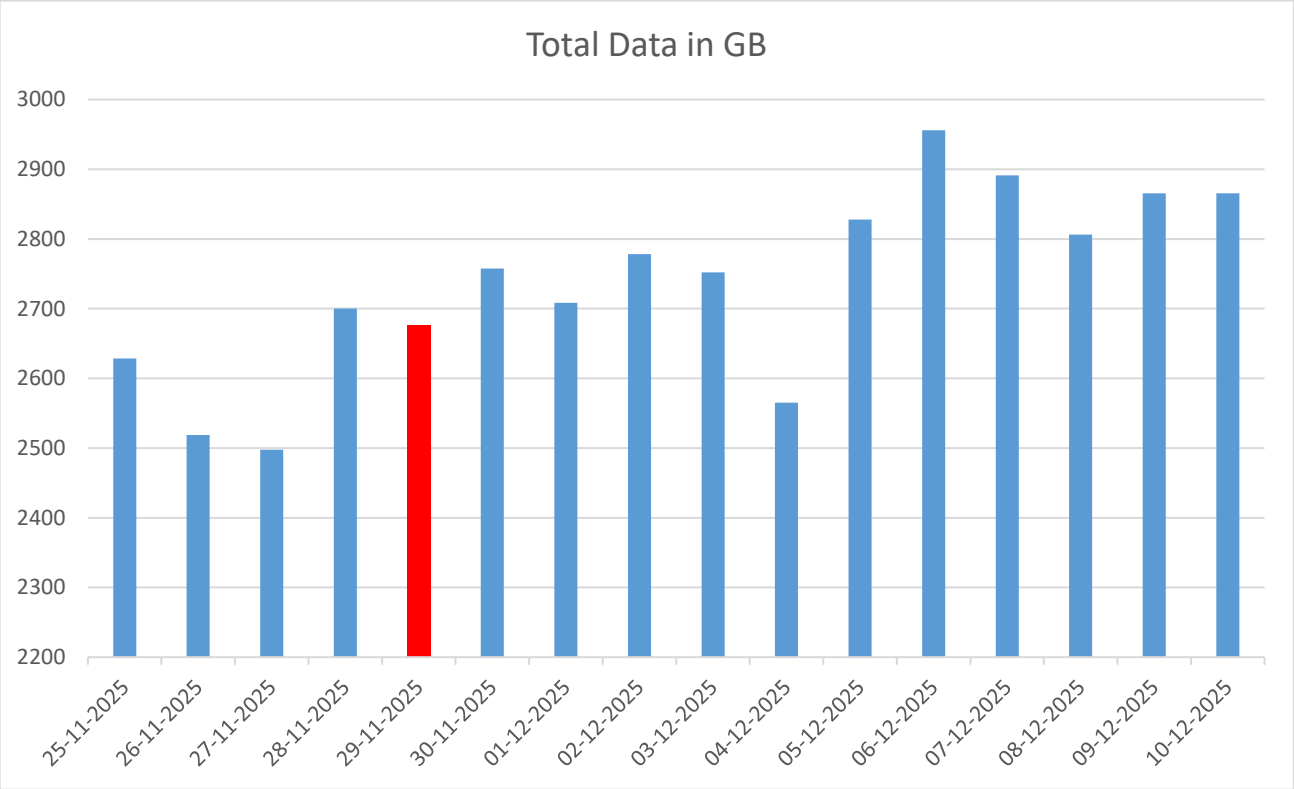
Based on above with the approval from CGMT MH circle restoration activity done on 29/11/2025.

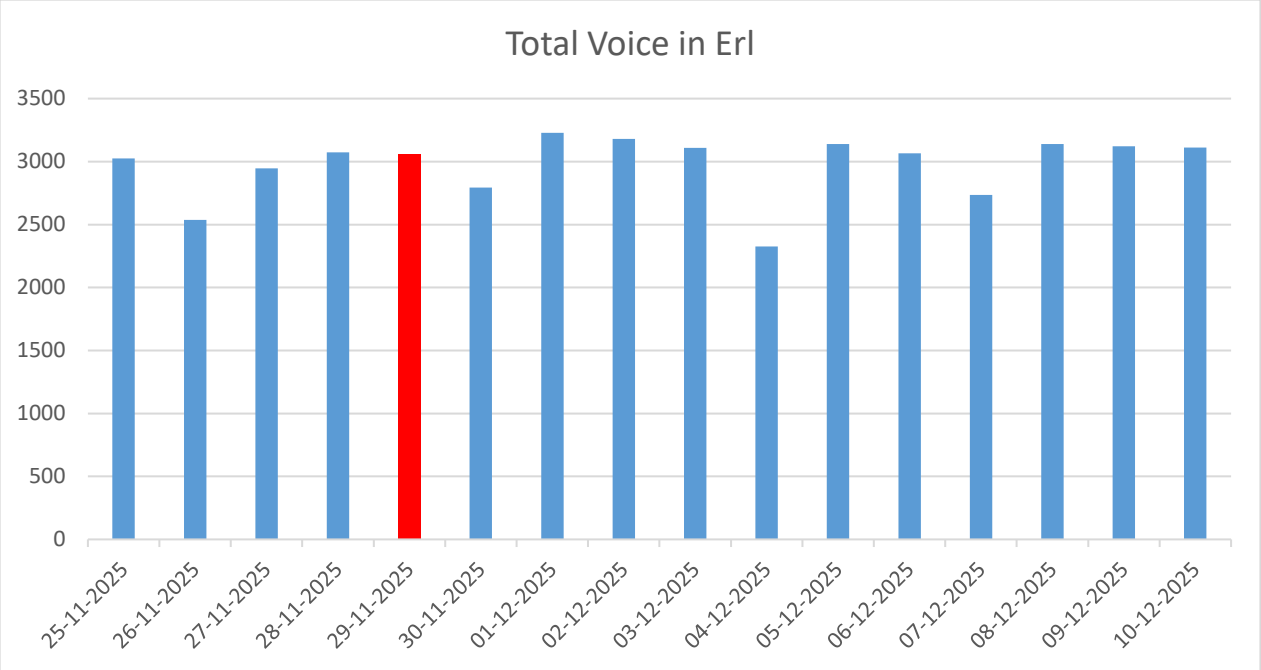
Part B: - Restoration Activity

3G Node-B in cluster 10, 8 &11 and Kalmeshwar city were restored on 29/11/2025. Two 3G node-b could not be restored are NAG495 Kalmeshwar NP & NAG086 Bhilgaon due to some hardware issues. It is planned to restore theses BTS next week.

After the restoration of 3G Nodes data and traffic observed from 25th Nov to 10th Dec. observation are as below

1. **Improvement in Both Data and Voice traffic:-**
   Comparing to a week before restoration to lasted week it is found that **Data** is increased by **10.5%** (2604GB to 2876 GB per day) and **Voice traffic** improved by **3.62 %**.
   Daily voice and data track is as below in graph





2. **Reduction the Network complaints: -**
   - Network complaint reduction is observed through complaint portal and same is confirmed from staff working in ITWARI Exchange/ CSCs
   - Form Sept-25 to Nov-25, we received 37 PG complaints out of this 8 Complaint were from 3G closed sites they got resolved after restoration of 3G.

3. **Drive test Optimisation report:-** M/S TCS conducted the optimisation all 17 clusters in Nagpur city, details are as in note sheet no 53, it concluded that city **required the 92 more sites for proper coverage in city**

4. **PRB Utilization Report:** PRB utilisation report is as below

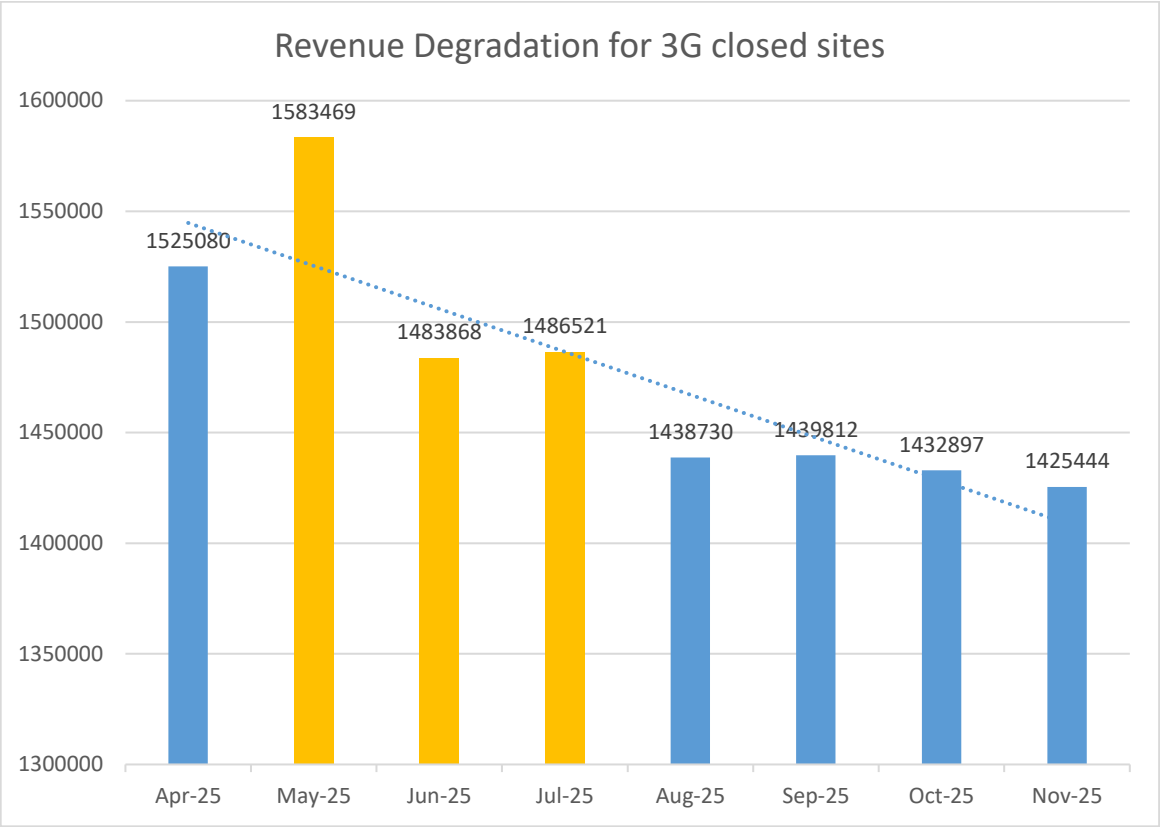
	PRB Utilisation DL (%) with 10Mhz	**PRB Utilisation DL (%) with 5Mhz**
Overall Utilisation	10.9	11.0

5. **Observation Summary**

Sr	**Activity / Issue**	**Result**
1	Closure of 3G and upgradation to 10 Mhz	Decrease in Data by 20 % and Decrease in Voice traffic by 17% on monthly basis
2	After restoration of 3G node on 29th Nov-25	Immediate Increase in Data by 10.5 % and increase in voice by 3.6%
3	PRB Utilization	No change in PRB utilization
4	Customer experience	Improved after restoration 3G ,PG cases resolved
5	RF Optimisation of Nagpur City	Required 92 sites for proper coverage in City

Part C: - Revenue Vs AMC Cost comparison for 3G closed Sites

Following fig shows the Revenue Degradation for the 3G closed sites on monthly basis with tend line



1. Compared to April -25 , in Nov-25 revenue drop by Rs 99637/Month **i.e. Rs 3321 per Node per Month**
2. As per AMC Cost for 3G Node is Rs 7239/six month **i.e. Rs 1206/Month**
   It can be concluded that cost of Nokia AMC is less than revenue lost by closing 3G nodes i.e. Rs 2115/ Node

Part D:- Technical & other issues for Stabilization in TCS 4G N/W

1. ***Non availability of LTE advance features in indigenous developed LTE system***

- **256-QAM:** Higher-order modulation, sending more data per symbol (8 bits vs. 6 in 64-QAM)
- **Heterogeneous Networks (HetNets):** Integrates small cells (pico, femto) & Boosters with macro cells for better coverage and offloading

In 3G services we have Micro Cell and boosters to resolve the coverage issues. This is very important for mobile network in Nagpur BA as we are serving many cooperate customers with this solution as below.

- **NTPC Mouda:** Three 3G Boosters in NTPC plants and 3G 4th sector in NTPC admin building is extended for better coverage
- **AIIMS Nagpur**: One 3G micro BTS is installed in Ground floor
- **POWER GRID**: Forth sector extended from Nari exchange

- 3G Booster are also installed in **WCL HQ, Airport Authority of India, and IAF Shivangaon** etc.

2. ***Instability of Tejas hardware special reference to RRH (Remote Radio Head)***

    - RRH is important part of 4G network, and they are getting faulty very frequently. For case study M/s Tejas replaced the 78 RRH in OCT -25 In Nagpur BA, but again during network optimisation for winter assembly session they need to replace 8 RRH in 25 site cluster.
    - There is frequent version updating activities done by vendor and many times it is not implanted correctly, for example RRH version updating from RFPC_REL_280824_V02_12_08_04 to RFPC_REL_280824_V02_15_02 was not in implanted in Alpha sector (Hybrid RRH) causing call issues in Network.
    - As per vendor mostly RRH get faulty due degradation of PAM (Power Amplifier module) leading to less Trans power over a period, which then lead to less coverage. And coupling this with is delay in replacement of these RRH by vendor is impacting the performance of TCS 4G network.

Part D: - Conclusion

Mobile network will be highly impacted if 3G services closed without resolving all issues in report