राष्ट्र हित विभाग हित अधिकारी हित
All India Graduate Engineers & Telecom Officers Association
Central Headquarter, New Delhi
(The Recognised Association of BSNL)
(Affiliated to BMS)
Regn. no. HR/019/2018/02138

President
G Veerabhadra Rao
9440648648

General Secretary
Ravi Shil Verma
8373967633

Finance Secretary
Yogendra Jharwal
9414000877

All communication at E-mail - "chqaigetoa@gmail.com" only

GS / AIGETOA / 2025-26 / 90 **Dated 31.12.2025**

To,
Shri A Robert J Ravi,
Chairman and Managing Director,
Bharat Sanchar Nigam Limited (BSNL),
Janpath, New Delhi – 110001.

Subject: Serious concerns regarding premature shutdown of 3G network amid unresolved critical issues in indigenous 4G network.

Reference:

1. GS/AIGETOA/2025-26/80 dated 02.12.2025.
2. BSNLCOP-NGSM/16(11)/3/2021-NWP-GSM-II dated 10.12.2025.
3. BSNLCO-NPCM/17(11)/26/2020-NWP-GSM-I dated 10.12.2025.

Respected Sir,

This is in continuation of our earlier communication vide letter No. GS/AIGETOA/2025-26/80 dated 02.12.2025 (Copy enclosed herewith for ready reference), wherein we had referred to the article published in *The Economic Times* on 26 November 2025 highlighting serious deficiencies in the quality and performance of radio equipment supplied under the Aatmanirbhar 4G/5G rollout. **With the objective of safeguarding BSNL's credibility, public image and long-term interests, AIGETOA had submitted specific and constructive suggestions for technical verification and corrective action.**

It is extremely concerning to note that, instead of addressing these critical observations and providing us with the desired information for countering the propaganda by other operators, in another very surprising decision, BSNL Management has issued directions for complete shutdown of the legacy 3G network vide letter No. BSNLCOP-NGSM/16(11)/3/2021-NWP-GSM-II dated 10.12.2025. Further, the Annual Maintenance Contract (AMC) for 3G Node-B and RNC equipment across all phases (Phase-V, VII, VII+, VIII.4, etc.) has also been discontinued vide letter No. BSNLCO-NPCM/17(11)/26/2020-NWP-GSM-I dated 10.12.2025 and that too without ensuring the reliability/stability of the alternative new 4G network through written certification from the circle heads.

The above communication states that the 2100 MHz spectrum, earlier used for 3G, will be utilised for 4G services only after stabilisation of the 4G network, and further claims that the 4G network has stabilised in all circles. This assertion is apparently inconsistent with the ground realities being continuously reported by our members from field units across various circles and going by the feedback, we have many miles to go before our network attains this position.

Despite repeated representations, several serious and persistent issues in the 4G network remain unresolved, adversely impacting service quality and subscriber experience. The ire of the customers for the same is faced by the field officers and executives, to the extent that even verbally abusive and derogatory words are being used against them for no fault on the part of employees.

Though we have been raising the issues time and again both in person as well as through written representations, but the issues largely remain unaddressed which is resulting not only into a bad name for BSNL but also is adversely impacting the prestigious government initiative of Aatmanirbhar Bharat in Telecom. Hence, we once again are submitting the critical issues faced by Network for your kind information and needful corrective action as below:

1. **Frequent and unacceptable failures of RRHs supplied by M/s Tejas Networks**, largely attributed to low-power design and performance deficiencies.
2. **Non-availability of emergency call facilities at saturation sites,** which is a serious violation of basic service obligations and poses grave public safety concerns.
3. **Non-demonstration, non-activation and lack of stabilization of critical functionalities such as LBS, CBC and NB-IoT etc,** despite repeated assurances.
4. **Complete non-responsiveness of M/s TCS and M/s Tejas in fault restoration and optimization activities, particularly in Punjab and Himachal Pradesh circles**, reportedly due to payment-related issues. Repeated failures of critical cards such as RAC, CEF and RRH are severely impacting network availability and performance.
5. **Lack of Proper IMS:** As 2G BTSs are running on extended life, lack of voice services through IMS node at 4G network of TCS/CDoT consortium is affecting the experience of voice services of the customers. **Interzone VoLTE roaming is also not working**, So customers are facing problems in Saturation sites**. IMS- Circle node (Nokia) capacity is already exhausted**. IM-MGW loading is around 100.25%, which is highest peak hour loading recorded. **Need CDOT IMS or Expansion of Nokia IMS.**
6. **Non-availability of VoWiFi services:** VoWiFi services over TWAG node has not been commercialized. The service extends the mobile services at the indoors over existing WiFi signals, is crucial use case for BSNL that is having low number of BTSs over its competitors.
7. **Critical Technical Non-Compliance with Tender and QA Provisions:**

   As per **Tender Clause 12.5.5**, each eNodeB is required to provide **40 W transmit power per port (4 × 40 W with 4×4 MIMO)** at the antenna port, with receiver sensitivity better than limits prescribed under **3GPP TS 36.141, Clause 7.2 (10 MHz bandwidth)**. However, field observations clearly indicate that the **TCS-supplied eNodeBs have failed to maintain uniform transmit power across sectors**. It has been consistently observed that an increase in transmit power in one sector leads to a corresponding reduction in another sector within the same RRH, indicating **power-sharing constraints and design limitations**, in direct violation of tender conditions. Also, it is observed that coverage in both bands reduced to unacceptable levels within 200-300m aerial distance from the site while coverage of existing 3G network remains available.

   Further, against **Tender Clause 12.12.4**, the supplied **HUBER+SUHNER antennas (Model: 10P65T#T-1718DD)** have been measured in the field to deliver **antenna gain significantly below the specified 16.7/18 dBi**, resulting in degraded coverage footprint and compromised network quality. This is despite the antennas having been accorded **QA clearance**, which appears to be contrary to the explicit tender and Purchase Order provisions.

   It is understood that in our Testing Schedule, the benchmark of the downlink throughput of **>4 Mbps has been categorised as "Best."** This benchmark is inconsistent with prevailing regulatory and technical norms as per our best understanding of the network. As per **TRAI benchmarks**, a downlink throughput of **≥10 Mbps is considered "good."** Further, theoretical peak throughputs with **2×2 MIMO** are approximately **35–40 Mbps (5 MHz)** and **70–80 Mbps (10 MHz)**, while realistic average user throughputs should be in the range of **6–12 Mbps (5 MHz)** and **12–25 Mbps (10 MHz)** respectively.

These relaxed benchmarks combined with the **sub-optimal antenna gain and RRH power deficiencies**, have severely impacted the **in-building coverage**, and in several swap locations, have even resulted in **reduction of existing 2G coverage**, adversely affecting service continuity and subscriber experience.

Demands

In view of the above, AIGETOA strongly and unequivocally demands that:

1. **3G services be continued** until the 4G network is verifiably stable, fully compliant with tender conditions, and functionally complete in all respects. The revenue earned vis-a-vis investment made towards launching of 4G services by BSNL should also be thoroughly analysed. **Before deciding to shut down the existing 3G services, a revenue impact assessment should be made vis a vis saving on AMC charges.**
2. **The GSM equipment installed under phase 8.4 has still not completed its life and the same should be gainfully utilised in the overall interest of BSNL and its customers.**
3. If shutdown of 3G is unavoidable, it must be implemented **strictly in a phased manner**, circle-wise or BA-wise, only after obtaining **written certification from respective Circle Heads** confirming full stabilisation and availability of all mandated services and also the assessment of revenue impact circle wise.
4. The CDOT IMS may immediately be provided or Expansion of Nokia IMS may be thought upon till fully functional CDOT IMS is made available.
5. **QA may be asked to revisit antenna datasheets and field performance vis-à-vis tender specifications** and issue a **revised QA Certificate**, with clear directions to **M/s TCS to replace all non-compliant antennas and under-powered RRHs**.
6. **QA may be asked to issue a revised eNodeB Test Schedule**, aligned with tender provisions, 3GPP standards and realistic service benchmarks, in the larger interest of BSNL.

The repeated non-consideration of the issues being faced by the BSNL network is not only causing irreparable damage to the brand image of BSNL but also is creating a very annoying and uncomfortable situation of BSNL employees where they are being made subject to the unnecessary abuse and unparliamentary verbatim by the customers for no fault of them. BSNL employees have been doing their best to provide a proper and hassle-free service but such constraints on the part of the SI and the vendor makes them helpless.

Hence, we request your immediate attention on the issues raised vide this letter and also on the previous letters. **We wish to submit that the responsibility for such consequences must be fixed squarely on the concerned decision-makers to protect the best interests of BSNL as well as the prestigious initiative of Aatmanirbhar Bharat in Telecom in the form of Swadesh 4G (5G ready) Technology.**

With Regards

(Ravi Shil Verma)
General Secretary

Copy to:

1. Shri Ravindra Himte Ji, General Secretary, Bharatiya Mazdoor Sangh, New Delhi for kind information.
2. Shri Sandeep Govil, Director (CM), BSNL Board, New Delhi for kind information and request for necessary action in this regard.

Annexure-1

राष्ट्र हित अधिकारी हित

All India Graduate Engineers & Telecom Officers Association

Central Headquarter, New Delhi

(The Recognised Association of BSNL)

(Affiliated to BMS)

Regn. no. HR/019/2018/02138

President
G Veerabhadra Rao
9440648648

General Secretary
Ravi Shil Verma
8373967633

Finance Secretary
Yogendra Jharwal
9414000877

All communication at E-mail - "chqaigetoa@gmail.com" only

GS / AIGETOA / 2025-26 / 80 **Dated 02.12.2025**

To,
Shri A Robert J Ravi,
Chairman and Managing Director,
Bharat Sanchar Nigam Limited (BSNL),
Janpath, New Delhi - 110001.

Subject: Concerns arising out of media reports on Tejas Networks Radio Equipment and related performance issues of BSNL 4G network.

Respected Sir,

This is to bring to your kind notice a recent article published in the Economic Times on 26 November 2025 that raises serious concerns about the quality and performance of radio equipment supplied by Tejas Networks and deployed by BSNL as part of the Aatmanirbhar 4G/5G rollout.

As per the report, Bharti Airtel has alleged that Tejas equipment deployed by BSNL in the 850 MHz band is causing interference to its 900 MHz uplink, claiming that the equipment is radiating beyond permissible limits and is sub-standard. Tejas Networks has refuted the allegations and attributed the issue to site-related constraints.

We are not commenting on the accuracy of the claims made by either party. However, such narratives in mainstream media can harm BSNL's reputation at a critical juncture when indigenous 4G/5G deployment under the Government of India's Aatmanirbhar Bharat vision is progressing. *Any public perception of poor-quality equipment weakens BSNL's competitive standing and undermines the credibility of indigenous telecom capabilities and hence the same must be countered proactively with facts and evidences.*

Another issue of critical importance are the concerns regarding low transmit power and reduced coverage from Tejas RRHs. Multiple sites are reportedly operating below expected power levels, resulting in degraded indoor coverage and increased call drops. Similar observations have surfaced on social platforms, where it has been mentioned that more than 1.32 lakh sites are transmitting at lower than required power. The above issue was also reported in telecom talk e magazine.

Above concerns need urgent examination, not only to safeguard BSNL's reputation but also to ensure that the deployed equipment meets tender specifications and network performance requirements.

Key Concerns Raised

1. **Reputational Impact** - Such public statements branding BSNL's equipment as sub-standard can weaken customer trust and tarnish BSNL's position in the market.
2. **Technical Credibility** - Allegations of non-compliance with spectrum norms raise doubts regarding the robustness and regulatory adherence of BSNL's network.
3. **Field Performance Issues (as received from units)**
    - Low RRH transmit power has led to shrinkage of coverage area.
    - Inadequate indoor penetration is resulting in increased customer complaints.
    - Field units are being asked to switch off some towers few of which are active sites for the coverage perspective situated on Highways/Railway Lines.

Additional concerns with respect to the Technical Deviations Noticed as per the feedback received from members across field units:

1] **Non-compliance with Tender Specifications**

- The tender (Clause 12.5.5) mandates that eNodeBs must have a transmit power of 40W [4 x 40W with 4x4 MIMO], configurable at the antenna port, with receiver sensitivity better than the 3GPP 36.141 Clause 7.2 reference level in a 10 MHz channel bandwidth. However:
- TCS-supplied eNodeBs, even when configured to 40W, transmit only 30-35 W. Increasing the transmit power in one sector results in a reduction in another sector's power within the same Remote Radio Head (RRH).
- Despite repeated communications, TCS has failed to implement 256 QAM in 4x4 MIMO configurations in TDD band 4G network, further compromising network performance.

2] **Substandard Antennas** Supply - The tender specified that antennas must have a gain of 18.5/20.5 dBi for Dual Band (698–960 MHz & 1710–2690 MHz) and 18.5/20.5 dBi for 1710–2690 MHz. However, the antennas supplied by TCS have a gain of less than 17 dBi, significantly reducing network coverage and quality.

3] **Non-Implementation of Carrier aggregation:**

Carrier aggregation is an important feature to augment the capacity of radios. Despite more than two years having elapsed since commissioning, TCS has failed to deliver Carrier aggregation at least in FDD bands. This is further compromising the network capacity and impacting service quality.

4] **Interference issues in 1800 MHz band in Delhi**

It has also come to notice that BSNL is not able to use 1800 MHz band allocated in Delhi License area. The issues are being observed in the filed for long time as it has been given that interference in 1800 Band is caused due one of the Private TSP. The matter has not been resolved yet and capacity of Delhi is almost unutilised.

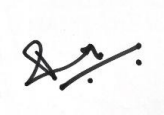
In view of the above and in the interest of protecting BSNL's brand integrity and ensuring the success of the indigenous telecom ecosystem, we request the following actions:

1. **Technical Verification** - Conduct independent tests of the deployed Tejas equipment to verify compliance with spectrum, output power, antenna gain and performance metrics vis-à-vis other vendors.
2. **Vendor Accountability** - Seek a comprehensive and documented response from M/s Tejas Networks and M/s TCS addressing each allegation and field observation and facts.
3. **Public Communication** - After obtaining vendor clarification, counter the negative publicity suitably in the media to protect BSNL's brand equity.
4. **Immediate Rectification** - Direct the vendors to address RRH power issues, coverage gaps and implement pending features as per the tender.
5. **IMS Stabilization** - Prioritize resolution of IMS-related issues to ensure smooth handling of increasing call volumes.

Sir, BSNL has taken a pioneering step by adopting indigenous 4G/5G technology, a matter of national pride and strategic importance. Any narrative that undermines this achievement must be addressed promptly and countered decisively with to maintain BSNL's standing and uphold the credibility of the national telecom mission.

We request your urgent intervention in the matter. As a responsible association, we consider ourselves duty bound to defend the image of BSNL as well as to counter any negative propaganda against Swadeshi 4G (5G READY) across social media and electronic media. Therefore, we also seek a formal reply from the concerned team so that any negative campaign against BSNL and Swadeshi 4G (5G ready) can effectively be countered by the employees of BSNL across various platforms.

With warm regards,



(Ravi Shil Verma)
General Secretary

Copy to:

1. **Shri Jyotiraditya M. Scindia Ji,** Hon'ble Minister of Communications & DoNER, Government of India, Sanchar Bhawan, 20 Ashoka Road New Delhi for kind information please.
2. **Dr. Pemmasani Chandra Sekhar Ji,** Hon'ble Minister of State for Communications and RD, Government of India, 301, Dak Bhavan, New Delhi for kind information please.
3. **Dr Neeraj Mittal Ji,** Secretary DoT, Sanchar Bhawan, Ashoka Road New Delhi for kind information and please.
4. **Shri Ravindra Himte Ji,** General Secretary, Bharatiya Mazdoor Sangh, New Delhi for kind information please.
5. **Shri Sandeep Govil Ji,** Director (CM), BSNL Board, New Delhi, for kind information and necessary action please.