

## TERMS OF REFERENCE

Gap Analysis and Solution development in Phase 1 is structured to be delivered in seven modules, outlined below.

### A. Quality of Service (QoS) module.

BSNL lags other telecom operators on key network QoS parameters, for EB, CFA and CM. Improvement is required in Network Availability, BTS downtime, Call-drop rate (QSD), VLR %, CFA fault (per 100 subs/ month), **MTTR less than 4 hours**, and other QoS parameters such that leading industry standards are met. Therefore, the consultant will:

- a) Study the QoS parameters of the existing network of eleven circles i.e., Kerala, Tamil Nadu, Karnataka, Punjab, Gujarat, UP West, UP East, West Bengal and Rajasthan & CNTX South/North circles.
- b) Compare them to leading industry standards.
- c) Develop a comprehensive plan to achieve the benchmarks/standards with a mix of in-house & outsourced strategy, detailed proposals for centralization of monitoring of all network elements, SLA based operations, sharing of links with other service providers, IoT-based solutions and other digital tools **taking into consideration the existing NOCs/NMSs in place or in the process of procurement as well as the roadmap for enhancing the capability.**
- d) Projection of resources, expenditure shall be indicated upfront in the Quick Win module and fast-track implementation plan shall also be provided. **Regular input maintenance cost for achieving the benchmarks to be spelt out, including criteria for SLA based maintenance of optical fiber cable.**
- e) Strategy/approach taking into consideration the existing network management systems in place that would enable BSNL to effectively manage its network infrastructure, optimize operational processes, and deliver superior services to its customers.
- f) Reduce operational & infrastructural expenses and assure Operation & Maintenance activities around Alarm Monitoring, Fault Management, Trouble Ticket Management and Support for Resolution which may include service Monitoring dashboards and Incident tracking and performance measurable indicators, Monitoring/ analysis metrics for NOC level and device level performance and transformation of processes for attending faults, fiber cuts and escalation matrix.
- g) Robust timelines for MTTR (Mean Time to Repair) with focus on Dense & Critical areas for timely resolution of network complaints may also be reviewed along with auto ticket generation and work-flow management. SLAs and KPI's for vendors for all processes with external vendor involvement
- h) Continuous Development on Root Cause of faults and maintenance of a knowledge base with appropriate solutions. Maintain and comply with standard SLAs and KPIs agreed with Managed Service Partners. Proactive End-User Performance Monitoring for appropriate utilization & bandwidth availability.

BSNL's share of Network O&M manpower is significantly higher than other leading telecom operators. **Optimal deployment of manpower following centralization/consolidation of network management may also be recommended with due consideration to the fact that another mass VRS is not in the offing.**

## **B. Customer Centricity Module.**

BSNL is determined to become a customer-centric organization with a loyal customer base and high levels of customer retention. The consultant shall study the customer complaint resolution processes eight circles, Haryana, MP, Karnataka, Orissa, Kerala, Maharashtra, UP east circles and Kolkata Metro District and come up with a comprehensive proposal that shall include solutions for Digital Led customer Discovery, Acquisition and Retention, which may include:

- a) Implementation of digital tools, apps or platforms, taking into consideration the existing systems in place or in the process of procurement for customer discovery and acquisition.
- b) Re-engineering of operational processes related to customer Discovery, Acquisition and Retention.
- c) Partnership with payment partner and Logistics partner.
- d) Recommendations on how to use BSNL CSCs more efficiently in resolving customer grievance which may include using latest technology tools to monitor the BSNL CSC Vendor.

## **C. Sales and Distribution module.**

BSNL is investing considerable CAPEX in network infrastructure and indigenous 4G services. Therefore, the sales and marketing infrastructure has to be up scaled many times to capture new customers and increase market share. Emphasis on Digital Sales and Marketing techniques has to be at the top of the agenda as online platforms are being used to generate leads and also to promote products. Therefore, the consultant will study the sales and distribution network of six circles, i.e. Kerala, Maharashtra, UP East, Andhra Pradesh, Himachal Pradesh, Uttarakhand and develop a comprehensive sales and marketing strategy plus implementation plan that includes the products/packages, customer segments, channel, advertising & promotion. The solution may seek to:

- a) Assess BSNL's sales and marketing strategy including the products/packages, customer segments, channel, advertising & promotion strategy and approach. This will include benchmarking with the competition and best practices.
- b) Design and development of a new S&D policy with 25% reduction in total outgo on commissions and incentives.
- c) Assess BSNL's customer acquisition and retention performance.
- d) Review the current organisation, structure, processes & systems for identifying areas for improvements in sales & marketing.
- e) Based on the review, recommend changes required to the structure, processes and systems to enhance customer acquisition, management and retention performance for various customer segments. BSNL's approach with respect to enterprise segment business, managed services and other value added services and their marketing may be dealt separately and in detail.
- f) Design an integrated customer churn management program for fixed line, mobile and data services.
- g) Identify changes to support processes that may be required, i.e., Finance, Operations, HR etc.
- h) Identify required competencies and capabilities versus those available within BSNL and those that can be acquired, with associated cost-benefit
- i) Prepare an implementation plan and monitoring mechanisms for the above

recommendations.

#### **D. Cost Reduction.**

BSNL would like to implement an immediate and long-term plan for reduction on the operating expenses (in Rs crores) projected in Table 2 below, by 5% annually, in line with industry best practices.

**Table 2 – Cost Reduction Targets**

		<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
<b>Financial Year</b>	2023-24	2024-25	2025-26	2026-27	2027-28
<b>Operating expenses</b>	9550	10323	11597	12380	12838

The consultant will be required to:

- a) Study the cost structure of four selected circles and come up with recommendations that benchmark BSNL costs to global and Indian companies, identify opportunities to reduce costs by 5% of the projected spend, for every year.
- b) Frame strategy for overall cost minimization and the implementation plan.
- c) The strategy may include proposals on leveraging digital tools and ‘Shared service setup’ to enable greater economies of scale and decrease duplication of efforts.
- d) Suggest customer profile based solutions to customize collections process.

#### **E. Performance Management.**

BSNL has implemented an online IPMS system in ERP. The consultant shall understand the roles and responsibilities of the key functions/departments within BSNL, and their interdependencies and review the existing online IPMS system and suggest enhancements and features in line with industry best practices. Revamping the performance management system to build high performance organization by skillset upgradation, KPI based measurement or/and other interventions. Weekly performance of the individuals against targets assigned may be made available to individuals through mobile app.

#### **F. Leveraging Emerging Technologies/new areas of business/new revenue streams that may include solo or joint ventures with partners.**

##### **i) Developing a Cloud Business Strategy and Onboarding the Partners thereof.**

The consultant need to give a strategy on how BSNL can engage in the cloud business by leveraging infrastructure, expertise, customer base, and brand image. By integrating cloud services into our portfolio, we can unlock new revenue streams, enhance customer experience, and improve operational efficiency, positioning ourselves as comprehensive providers of telecom and cloud solutions.

The outcome/ net deliverable may be through partners who will offer the cloud services through BSNL sales and customer onboarding process through onsite / off-site offerings. The consultant will also be responsible for the entire partner-engagement process and implementation of the solution.

The solutions will effectively provide for:

- a. Engaging in the cloud business by leveraging BSNL's existing infrastructure, expertise, and customer base, the integration of cloud services into BSNL offerings shall be designed to provide a range of benefits, including
    - increased revenue streams / asset leveraging
    - enhanced customer experience, and
    - improved operational efficiency (in house services moving to on-premises Cloud)
  - b. Utilizing BSNL's extensive network infrastructure, existing data centers locations, and connectivity to build and deploy cloud services.
  - c. Leveraging existing fiber optic networks, mobile towers, and data centers to establish a robust and reliable cloud infrastructure.
  - d. Using this infrastructure to offer services such as Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), and Software-as-a-Service (SaaS) to customers.
  - e. Onboarding of SaaS partners or SaaS aggregator.
  - f. Giving a emailing solution, cloud PBX and basic ERP / CRM along with internet leased lines.
  - g. Offer managed cloud services, using BSNL's expertise in managing complex networks and providing connectivity services where the BSNL takes care of the day-to-day management and maintenance of cloud resources for businesses – allowing the customers to focus on their core competencies while relying on the BSNL's expertise in delivering secure and reliable cloud solutions.
  - h. Plan for tapping into BSNL's existing customer base to promote and offer cloud services. We can bundle cloud offerings with their existing telecom services, providing customers with integrated solutions. This bundling approach not only increases customer loyalty but also creates cross-selling and upselling opportunities.
  - i. BSNL shall differentiate itself in the cloud market by prioritizing data privacy and security. With the increasing concerns about data breaches and privacy regulations, BSNL can leverage its trusted brand image to assure customers that their data is secure and compliant.
- ii) **New Data Center Business in** partnership with large operators in the data center market to deliver data center services to the customers.
  - iii) **Data Monetization in** partnership with third party vendors.
  - iv) **5G Captive Networks.**
  - v) **IoT based solutions.**
  - vi) **Any other new technology/revenue stream.**
  - vii) **Any other infrastructure sharing partnership.**

#### **G. Brand Strengthening and Growth:**

**The consultant shall frame a strategy to** strengthen BSNL's existing brand image in the telecom sector with a positive perception on the revival measures and strategic role as a market

balancer. Also, to design solutions to grow the brand based on progress made in terms of service delivery to customers and stakeholders, by transparent and confidence building dissemination of information.

#### H. Interim report – Phase I (Quick-wins).

The consultant will identify areas of quick improvements in the seven modules to be delivered and suggest a plan on which implementation can begin immediately, e.g. **Data Monetisation from the Leveraging New Technologies module or any area of business/revenue streams** in partnership with other providers. The consultant in this module will give recommendations on how BSNL can reap significant improvements with limited modifications for early implementation as Quick-wins.

**CAPEX requirements/procurement that may be integral to the solutions to be recommended in Phase I for all modules shall also be flagged in this module such that there are no time delays/constraints in the implementation phase.**

#### G. Final Report – Phase 1

The seven modules shall be undertaken in a staggered manner in three stages from the date of Award of Work (AoW), as below:

**Table – Stages of Phase 1**

	Stages	Modules	Commencement date	Delivery of Report
1	Stage 1	QoS, Customer Centricity, Sales and Distribution.	AoW	AoW+ 6 months
2	Stage 2	Leveraging new Technologies, Performance Management.	AoW+ 6 months	AoW+ 8 months
3	Stage 3	Cost Reduction, Brand strengthening.	AoW+ 8 months	AoW+ 10 months

#### H. Implementation Preparation Period.

A preparatory period of 2 months, extendable to 4 months as decided by BSNL management, shall lie/act as a buffer between Phase 1 and Phase 2 in order to provision for the CAPEX requirement/procurement projected in Quick Win module as well as to finalize the detailed project implementation plan for Phase 2.

#### I. Special Conditions.

- a) **The entire Consultancy Project (Phase 1 and Phase 2) shall be headed by a Project Director.**
- b) **There shall be a Project Manager for each of the seven modules to be delivered in Phase 1.** The project managers shall be exclusive with 100% resource commitment for

Phase 1 - **in terms of ownership of the module activities, day-to-day involvement and guidance to the team members and presence in all meetings with BSNL management/senior officers.** Deployment of project managers/teams may be different from Phase 1 and shall depend on the proposed implementation plan and approach. However, continuity of the resources across phases is considered to be a desirable feature.

- c) It is mandatory that the resource proposed for the Project Director and Project Managers position should not be changed until successful delivery/implementation of the phase, unless otherwise approved/required by BSNL. Continuity of resources across phases, however, is considered to be a desirable feature.