INDEX

1 INDUSTRY DRIVEN TRANSFORMATION

1.1 LEARNING OBJECTIVES:

At the end of this session, participants will be able to:

1. Telecom Business Environment
2. Evolution of current telecom business environment since1991
3. Industry Growth & Market share
4. BSNL status
5. Meeting Challenges of environment
6. Industry Driven Transformation in BSNL
7. Change methodology in BSNL
8. Project Shikhar
9. Key pilot activities under Project Shikhar
10. Restructuring in BSNL

1.2 OVERVIEW

All businesses operate in a mix of dynamically changing environment. This environment gets influenced by many factors such as political, legal, competitive, regulatory, economic, technology etc. Every organization strives to perform better than the other by meeting the competitive challenges, by overcoming internal resistance and by adjusting appropriately to other controllable and beyond its control factors. In this regard, Jack Welch, ex CEO of General Electric has said beautifully: **"When the speed of change outside the organization exceeds the speed of change within The end is insight!"**

This session discusses the telecom business environment in India, need for change in BSNL and strategy adopted by BSNL for meeting the challenges.

1.3 TELECOM BUSINESS ENVIRONMENT

Since 1991, Indian Telecom sector has seen unprecedented growth. From a monopoly to multi operator, multi services, multi technology, multi vendor scenario, the journey has been very fast paced. Department of telecom making over its function of regulation to TRAI (1997), dispute resolution to TDSAT (2000) and service provider role to BSNL (2000), the path has been adventurous. DoT had to introduce a technology neutral regime by offering UASL (Unified access Service License). The tele density growth isunprecedented, exceeding the projections of NTP.

Since its inception BSNL adopted a Vision and Mission statement which was revised from time to time based on ground realities. Up to 2007, the Vision & Mission statement of BSNL was:

Vision: To become the largest telecom Service Provider in Asia.

Mission:

I. To provide world class State-of-art technology telecom services on demand at competitiveprices.

II. To Provide world class telecom infrastructure in its area of operation and to contribute to the growth of the country'seconomy

While efforts were certainly made to realize the vision, the external & internal environment of BSNL has resulted in an altogether different scenario. This necessitated the need to have a relook on vision and mission statement itself. Just have a look at the statistics given below:

1.3.1 MARKET SHARE OF BSNL VIZ ALL AS ON 31ST JANUARY 2021 AS PER TRAI REPORT

1.3.2 WIRELESS SECTOR:

Total wireless subscribers increased from 1,153.77 million at the end of December-20 to 1,163.41 million at the end of January-21, thereby registering a 1000 Total Wireless Subscribers (in Million) 1200 1,153.77 monthly growth rate of 0.84%. Wireless subscription in urban areas increased from 629.67 million at the end of December-20 to 634.97 million at the end of January-21 and wireless subscription in rural areas also increased from 524. 11 million to 528.44 million during the same period. Monthly growth rates of urban and rural wireless subscription were 0.84% and 0.83% respectively. The Wireless Tele-density in India increased from 84.90 at the end of December-20 to 85.53 at the end of January-21. The Urban Wireless Tele-density increased from 134.44 at the end of December-20 to 135.35 at the end of January-21 and Rural Tele-density also increased from 58.85 to 59.31 during the same period. The share of urban and rural wireless subscribers m total number of wireless subscribers was 54.58% and 45.42% respectively at the end of January-21.

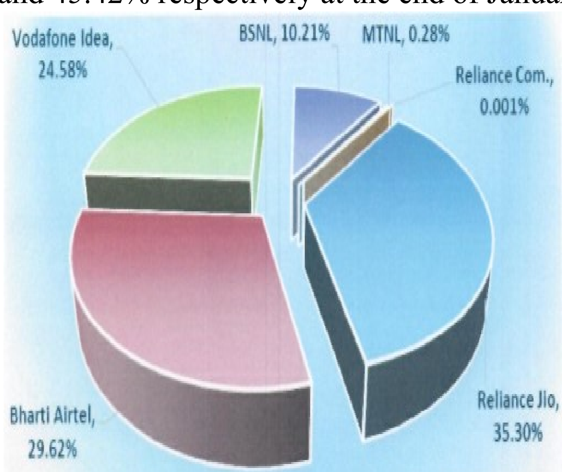


Figure 1: Market share of different operators in Wireless sector as per TRAI report

1.3.3 WIRELINE SECTOR:

As per TRAI report Wireline subscribers increased from 20.05 million at the end of December-20 to 20.08 million at the end of January-21. Net increase in the wireline subscriber base was 0.03 million with a monthly growth rate of 0.13%. The share of urban and rural subscribers m total wireline subscribers were 91.27% and 8. 73% respectively at the end of January, 2021. The Overall Wireline Tele-density in January-21 remained same i.e. 1.48% as it was in the month of December-20. Urban and Rural Wireline Tele-density were 3.91 % and 0.20% respectively during the same period. BSNL holds 34.64% of the wireline market share as on 31st January 2021.

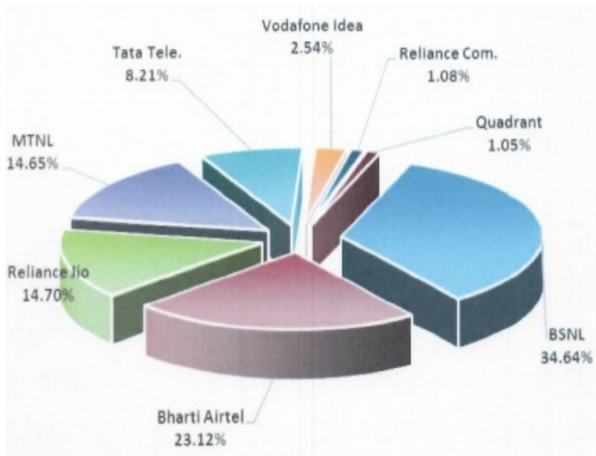


Figure 2: Market share of different operators in Wireline sector as per TRAI report

As can be seen above, the erosion of BSNL‘s number one position is gradual with steep gradient. This status has necessitated the company to look at certain fundamental questions such as:

- Are all the employees motivated to deliver betterresults?
- Are management practices conducive to growth and challengingcompetition?
- Is the Vision statement aligned toreality?
- Do all the employees know and believe in the Vision ofBSNL?
- What fate is expected in next five years?
- What makes other operators grow in spite of little technology & tariff differences withBSNL?
- Is organization structure within BSNL too bureaucratic to deliverresults?

Solution to reversal of present situation is possible only if answer to above questions is known in a sincere manner reflecting the truth. The solution to such situation is the Change in the way we think, interact, behave and work.

1.4 TRANSFORMATION EXERCISE IN BSNL

Based on above, a massive transformation exercise has been taken up in BSNL. As can be seen from market scenario, while private operators revenue and customer base has increased tremendously, BSNL‘s market share as well as profitability is on the decline. Fear and worry of management as well as the employees is obvious. In order to regain its lost glory, a root cause analysis was must to assess the underlying issues and address them. BSNL management appointed a consultant and in a country wide survey conducted by the consultant, some of the identified factors were:

- Lack of shared vision among employees: In general, employees performed their duties from morning till evening without knowing what they all were trying to achieve for thecompany.
- Inability to see big picture: Employees were not aware how their contributions fit into the overall goals of BSNL. In general no clarity on BSNL‘s corporate vision andobjectives.
- Too broad structure: Broad structure having multiple responsibilities lead to dilution of focus on key growth areas and also made it difficult to identify and assess the impact of performance of various services offered byBSNL.
- Lack of documented role, responsibilities and accountability matrix left to individuals to define it as per past experience, practices and theirwisdom.
- Legacy processes: The way work got processed through legacy processes lead to inefficiencies and delays.

Taking clues from above factors, A detailed SWOT analysis of BSNL was carried out by interviewing many employees at various levels in BSNL. SWOT stands for Strength, Weakness, Opportunities and Threat analysis. Brief on SWOT analysis is given below:

1. **Strengths**—Strengths are the products, services, resources, and capabilities of the company that promote an increase in sales. In other words, strengths enable the company to increase its marketshare.

   Strengths are internal elements, for example, good customer relationships; well-planned, efficient departments; clear business objectives and adequate financial, technological, and human resources.
2. **Weaknesses**—Weaknesses are the shortcomings in any products, services, resources, or capabilities of the company that cause it to show a decrease in business. Weaknesses cause a decrease in market share. Weaknesses are internal elements, for example, internal production problems, an unclear business strategy, high employee turnover, and a poor market image or deteriorating marketposition.
3. **Opportunities**—Opportunities are factors that a company can develop due to outside circumstances. Opportunities are the situations that have a potentially positive impact on thecompany.

   Opportunities are external elements, for example, new markets emerging for new products being developed, economic recovery, expanding overseas markets, brand loyalty from long-standing customers, and industry association conventions and tradeshows.
4. **Threats**—Threats are problems or sets of circumstances outside the company that can

potentially have a negative impact on thecompany.

Threats are external elements, for example, economic recessions, changing customer needs and wants, new competition entering the market, changing customer demographics, and a lack of materials to manufacture the product.

Based on SWOT analysis and after identifying various issues it was decided to launch **Industry driven transformation** process in 2008 titled as Shikhar‘ This activity was divided in two phases, Phase-I and Phase-II.

PHASE-I of Shikhar

- Developed a shared Industry for BSNL‘sfuture.
- Articulated a well-defined strategy to take BSNL back on the path of growth and profitability.
- Created a 5-year business plan outlining a range of potentialoutcomes.
- Develop a thorough sales & marketing strategy for each of the core businesses (Landline, Mobile, Broadband, enterpriseetc.)
- Outline key implications on operations and customer service to support various businesses. (Business Processreengineering)
- Define the right organizational model to achieve the strategic objectives, along with critical changes needed in HR policies.(Restructuring)
- Initiate implementation of initiatives in the form of Pilots – Vijay (Improving sales & distribution for mobile business to capture more market share), Dosti (Tap and strengthen PCO business), Udaan(Improve landline and broadbandbusiness), Sanchay (save money) and Kuber (focus on revenue assurance and key customers) with detailed design and on-the-ground implementation.

Vision of BSNL under this shared Industry for BSNL is:

- Be the leading telecom service provider in India with globalpresence.
- Create a customer focused organization with excellence in sales, marketing and customercare
- Leverage technology to provide affordable and innovative products, / services across customer segments including end to end convergedservices.

Mission statement of BSNL under this shared Industry for BSNL to be, is:

1. Be the leading telecom service provider in India with globalpresence
2. Maintaining a high rate of growth to protect and increase its market share in all segments ofoperations
3. Generating value for all stakeholders-business associates,vendors, shareholders &employees

4. Maximizing return on existing assets with sustained focus on profitability
5. Becoming most trusted, preferred and admired telecom brand
6. To explore international markets for Global presence
7. Create a customer focused organization with excellence in sales, marketing and customer care
8. Developing a marketing & sales culture that is responsive to customer needs
9. Excellence in customer service-friendly, reliable, time bound convenient and courteous service
10. Leverage technology to provide affordable and innovative products / services cross customer segments
11. Offering differentiated products/services tailored to different segments
12. Providing reliable telecom services that are value for money.
13. Provide a conducive work environment with strong focus on performance
14. Attracting talent and keeping them motivated
15. Enhancing employee skills and utilizing them effectively
16. Encouraging & rewarding individual and team/group performance
17. Establish efficient business processes enabled by IT
18. Changing policies and processes to enable transparent, quick and efficient decision making
19. Building effective IT systems and tools

Key Priorities Identified For Phase II

Phase II is the implementation phase of Project SHIKHAR. Several critical areas are addressed during this phase to make the transformation truly effective and impactful. After considerable deliberations in multiple forums, the following key priorities for our organization have been identified:

1. **Accelerating growth of mobile business by focusing on critical areas**
   - Building extensive and strong distribution and retail footprint
   - Innovation in pricing
   - Acceleration of 3G sales to capitalize on first mover advantage
   - Improving effectiveness of VAS

2. **Leading and shaping the fixed access business by focusing on critical areas**
   - Addressing gaps in sales &distribution
   - Innovation in product and pricing
   - Building capabilities and offering on content and VAS
   - Improvement in service delivery and provisioning times

3. **Growing the enterprise business and becoming provider of choice by**
   - Establishing key account management
   - Innovation in products and solutions

- Strengthening service delivery and service assurance

4. **Expanding into new businesses**
   - Developing the infrastructure sharing business
   - Monetise other embedded assets

5. **Focusing on financial assurance**
   - Fixing billing leakages and improving collection
   - Reducing operating costs

6. **Improving customer service levels across different interface points**
   - Improving effectiveness of call center and CSC
   - Building new areas such as online

7. **Implementing operations improvement initiatives**
   - Increasing service levels by reducing downtime and improving turn-around times
   - Reducing operating costs where feasible

8. **Focusing on implementing critical HR priorities**
   - Recruitment at DGM, MT and JTO/JAO levels
   - Capability development
   - Defining appropriate incentive management program

9. **Implementing new organization structure across the organization – head office, circle office and regional office**
   - Defining roles & responsibilities and key performance indicators in the new structure
   - Enhance effectiveness of new structure by appropriate top-management MIS and planning and budgeting

Dedicated Teams To Drive Each Priority Area

With a view to provide sustained focus and thrust to various initiatives, dedicated teams have been constituted in the Corporate Office to drive each of the priority areas. Each implementation initiative has the following ―Core‖ team structure:

Project Sponsor: Director/Executive Director in the Corporate Office responsible for providing overall guidance and direction, monitoring overall execution results, providing policy inputs and resolving key issues that need senior management attention

Project Champion: CGM/PGM/GM level officer in the Corporate Office responsible for driving implementation of the project/initiative on a country-wide basis, monitoring overall execution results, preparing policy guidance, resolving key issues on a day-to-day basis and communicating on all projected related issues.

Project Coaches : GM/DGM level officers in the Corporate Office responsible for day-to-day execution of the project/initiative, working with Circle and SSA level implementation teams (including training them on new ways of working), monitoring results at Circle/SSA level, trouble-shooting issues on a day-to-day basis and supporting Project Sponsors and Project Champions take the right policy decisions.

Transformation Management Office

A Transformation Management Office has been set up under GM (Corporate Restructuring) at BSNL corporate office. The TMO will be the overall coordinating node for the implementation phase.

Table 1. Brief on activities undertaken as part of Project Shikhar:

Project Vijay (Mobile)	
Market retailer survey	Map existing telecom retail universe; measure BSNL's reach and extraction
Wireless market potential modeland target setting	Assess future evolution of market for BSNL and dynamically fix targets for SSA and sub-district (gross adds, net adds, retailer coverage etc)
Channel management team and structure	Franchisee channel structure Roles definition and create channel management teams Training for channel management team
Channel norms	Allocate areas to external and internal sales channels/representatives Prioritize retailer coverage based on volume potential Incentives structure for channel management team Day-to-day tracking and reporting
Table 2. Project Udaan (Landline & Broadband)	
Product, Pricing &Analytics	Identify customer segments Map competitions' offers – tariff plans & product features Analyze present subscribers' usage pattern & attrition rates of various plans Develop economic models for testing and ensuring feasibility of all plans

Sales & Alliances	Structure of sales team - both BSNL own team and DSAs and define roles & responsibilities Develop detailed sales process, sales incentives & allowances / awards Sales force training modules through external professional agency
SD / SA (Network Operations)	New processes for advance feasibility checking & reporting Process improvements to ensure fast delivery
Customer Service	Process modifications for Customer service interfaces and for supporting sales team Lead generation mechanism and processes to capture leads and pass to Sales team

Table 3. Project Dosti

Billing and Collections, Service delivery and complaint handling, Improve market share	Improved processes New Plans More interaction with PCO franchisees

Table 4. Project Kuber

billing and Collections	Ensure timely billing of circuits Processes for bad debt recovery

Table 5. Project Sanchay

Savings	Security Cost Fuel cost Inventory management

Table 6. Project Smile

Customer Care	Improved ambience of CSC, multimode payment of bills, Shop in Shop concept, Training to CSC staff etc.

1.5 CONCLUSION

BSNL is at a decisive juncture in the transformation journey. Starting year of implementation is very crucial for making substantial progress across the areas that have been identified for implementation. A lot needs to be accomplished and the passage is not going to be easy, but perseverance and commitment to the task of transformation on the part of BSNL employees will definitely help in achieving our common objectives. Continued enthusiasm and support of every BSNL member is essential for this endeavor to succeed. All employees of BSNL need to dedicate themselves to the transformation Endeavour and thereby to shaping a robust future for BSNL.

2 ISO 9001:2015 QUALITY MANAGEMENT SYSTEM

2.1 LEARNING OBJECTIVES:

At the end of this session, participants will be able to:

- Explain what is ISO 9001 standard
- Explain benefits of obtaining ISO 9001: 2015 certification
- Define Quality and understand ISO9001: 2015 quality principles
- Understand BSNL approach to ISO 9001 certification

2.2 INTRODUCTION:

Everyone wants to achieve profits. Profits can come by more sales with some profit margin and by cutting down costs. While good quality can lead to more sales, yet the poor processes can increase the cost to achieve that quality level thereby reducing profits. Cost cutting is possible through better processes while ensuring quality output. Quality cannot be compromised at any cost, as it dents the company image and paves the path for demise of company. Many techniques for improving the processes are available to modern managers. ISO 9001 is one such technique, widely accepted across the world being an international standard and is applicable to all types of industries, business and organizations. Latest version of this standard is ISO 9001:2015. In today's scenario, many organizations decide to buy products/services (including Telecom solutions) only from ISO 9001 certified suppliers. Therefore, ISO 9001 certification for BSNL is necessary.

2.3 WHAT IS ISO 9001 STANDARD?

ISO stands for international organization for standardization. Across the world, page A4 is of same size, size 40 of a shirt is expected to be of same size irrespective of the place of purchase. All such things require adherence to certain standards by the manufacturers. ISO headquartered at Geneva defines standard for almost all the items being sold in the market. In fact, ISO in Greek means equal. ISO has come up with product standards as well as process standards. In India Bureau of Indian Standards (BIS) defines the product standards [ISI mark], which are based on international standard. The process standard of ISO for ensuring quality is called as ISO 9001. At present 2015 version is in effect commonly known as ISO 9001:2015.This standard helps the organizations to develop, establish, implement and maintain a quality management system capable of delivering consistent quality output with focus on continual improvements.

2.4 BENEFITS OF OBTAINING ISO 9001:2015 CERTIFICATION:

Implementing a quality management system brings internal benefits to most Organizations, as well as opening up opportunities vis-à-vis the outside world.

Internal benefits to the company include:

- improved customer focus and process orientation within the company;
- improved management commitment and decision-making;
- better working conditions for employees;
- increased motivation of employees;
- reduced cost of internal failures (lower rates of rework, rejection, etc.) and
- external failures (fewer customer returns, replacements, etc.); and last but not least,
- continual improvement of the quality management system.

The following external benefits are generated:

- customers are more confident that they will receive products conforming to their requirements, which in turn results in higher customer satisfaction;
- an improved image of the company;
- more aggressive publicity, as customers can be informed of the benefits of their doing business with a company that manages the quality of its outputs;
- more confidence that the company's products meet relevant regulatory requirements;
- better objective evidence to defend product liability charges if such are brought by customers.

2.4.1 QUALITY:

Quality is not absolute, unique, static and by chance. It must be defined, be measurable, achieve able and link to customer satisfaction. As per ISO standard, “quality is defined as the ‘degree to which, a set of inherent characteristic fulfils requirements of a process, product or system”. There are ten quality management principles on which the quality management system standards of the ISO 9001:2015 are based. The ten quality management principles, Quality management systems Guidelines for performance improvements are detailed.

2.5 TEN QUALITY MANAGEMENT CLAUSES IN ISO 9001:2015:

ISO 9001:2015 has ten clauses instead of eight. The following table shows the relationship of the ISO 9001:2008 clauses to those in ISO 9001:2015

Table 7. Quality management clauses

S.N.	ISO 9001:2008	ISO 9001:2015
1.	Scope	Scope
2.	Normative Reference	Normative Reference
3.	Terms & Conditions	Terms & Conditions
4.	Quality Management System	Context of the organisation
5.	Management responsibility	Leadership
6.	Resource management	Planning
7.	Product realisation	Support
8.	Measurement, analysis and improvement	Operation
9.	-	Performance evaluation
10.	-	Improvement

The first three clauses in ISO 9001:2015 are the same as those in ISO 9001:2008, but there are considerable differences between ISO 9001:2008 and ISO 9001:2015 from the fourth clause onwards.

2.5.1 SCOPE (FIRST CLAUSE):

This Quality Manual specifies requirements for a quality management system:

a) Needs to demonstrate its ability to consistently provide product and services that meet customer and applicable statutory and regulatory requirements, and

b) Aims to enhance customer satisfaction through the effective application of the system, including processes for improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

All the requirements of this ISO 9001:2015 are generic and are intended to be applicable to any organization, regardless of its type or size, or the products and services it provides;

2.5.2 NORMATIVE REFERENCES (SECOND CLAUSE):

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 9001:2015, Quality management systems — Fundamentals and vocabulary

2.5.3 TERMS AND DEFINITIONS (THIRD CLAUSE):

The terms and definitions given in ISO 9001:2015 apply.

Context of the organization(Fourth Clause):

- **Understanding the Organization and its Context:**

It has determined external and internal issues that are relevant to its purpose and its strategic direction and that affect its ability to achieve the intended result(s) of its quality management system.

It monitors and reviews information about these external and internal issues.

- **Understanding the Needs and Expectations of Interested Parties:**

Due to their effect or potential effect on its ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements, it determined:

a) The interested parties that relevant to the quality management system;

b) The requirements of these interested parties that are relevant to the quality management system.

It monitors and reviews the information about these interested parties and their relevant requirements.

- **Determining the Scope of the Quality Management System:**

It has determined the boundaries and applicability of the quality management system to establish its scope. When determining this scope, it considered:

a) The external and internal issues.

b) The requirements of relevant interested parties.

c) The products and services.

It applies all the requirements of this International Standard if they are applicable within the determined scope of its quality management system.

The scope of its quality management system is available and maintained as documented information. The scope states the types of products and services covered, and provides justification for any requirements that it has determined is not applicable to the scope of its quality management system.

Conformity to ISO 9001 is only claimed if the requirements determined as not being applicable do not affect its ability to ensure the conformity of its product and services and the enhancement of customer satisfaction.

2.6 LEADERSHIP (FIFTH CLAUSE):

2.6.1 LEADERSHIP AND COMMITMENT

- **General**

Top management demonstrates leadership and commitment with respect to the quality management system by:

a) Taking accountability for the effectiveness of the quality management system;

b) Ensuring that the quality policy and quality objectiveness are established for the quality management system and are compatible with the context and strategic direction of It;

c) Ensuring the integration of the quality management system requirements into its business process;

d) Promoting the use of the process approach and risk-based thinking;

e) Ensuring that the resources needed for the quality management system are available;

f) Communicating the importance of effective quality management and of conforming to the quality management system requirements;

g) Ensuring that the quality management system achieves its intended results;

h) Engaging, directing and supporting persons to contribute to the effectiveness of the quality management system;

i) Promoting improvement; and

j) Supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

- **Customer Focus:**

Top management demonstrates leadership and commitment with respect to customer focus by ensuring that:

a) Customer and applicable statutory and regulatory requirements are determined, understood and consistently met;

b) The risks and opportunities that can affect conformity of products and services and the ability to enhance customer satisfaction are determined and addressed; and

c) The focus on enhancing customer satisfaction is maintained.

2.6.2 POLICY:

- **Developing the Quality Policy:**

Top management has established, implemented and maintains a quality policy that:

a) Is appropriate to the purpose and context of It and supports its strategic direction;

b) Provides a framework for setting quality objectives;

c) Includes a commitment to satisfy applicable requirements; and

d) Includes a commitment to continual improvement of the quality management system.

- **Communicating the Quality Policy:**

The Quality Policy:

a) is available and maintained as documented information;

b) is communicated, understood and applied within the organization; and

c) is available to relevant interested parties, as appropriate.

2.6.3 ORGANIZATIONAL ROLES, RESPONSIBILITIES, AND AUTHORITIES:

Top management ensures that the responsibilities and authorities for relevant roles are assigned, communicated and understood within it.

Top management assigns the responsibility and authority for:

a) Ensuring that the quality management system conforms to the requirements of this International Standard;

b) Ensuring that the processes are delivering their intended outputs;

c) Reporting on the performance of the quality management system and on opportunities for improvement, in particular to top management;

d) Ensuring the promotion of customer focus throughout It; and

e) Ensuring that the integrity of the quality management system is maintained when changes to the quality management system are planned and implemented.

2.7 PLANNING (SIXTH CLAUSE):

2.7.1 ACTIONS TO ADDRESS RISKS AND OPPORTUNITIES

- When planning for the quality management system, it considered the issues referred to in quality management system and its process and determined the risks and opportunities that need to be addressed to:

a) Give assurance that the quality management system can achieve its intended results.

b) Enhance desirable effects.

c) Prevent, or reduce, undesired effects; and

d) Achieve improvement.

- **It plans:**

  a) Actions to address these risks and opportunities;

  b) How to:

  1. Integrate and implement the actions into its quality management system processes.
  2. Evaluate the effectiveness of these actions.

Actions taken to address risks and opportunities are proportionate to the potential impact on the conformity of products and services.

2.7.2 QUALITY OBJECTIVES AND PLANNING TO ACHIEVE THEM:

- It has established quality objectives at relevant functions, levels and processes needed for the quality management system.

The quality objectives are:

a) Consistent with the quality policy;

b) Measurable;

c) Taken into account applicable requirements;

d) Relevant to conformity of products and services and to enhancement of customer satisfaction;

e) Monitored;

f) Communicated; and

g) Updated as appropriate.

It maintains documented information on the quality objectives.

- When planning how to achieve its quality objectives, it has determined:

a) What will be done;
b) What resources will be required;
c) Who will be responsible;
d) When it will be completed; and
e) How the results will be evaluated.

2.7.3 PLANNING OF CHANGES:

When it determines the need for changes to the quality management system, the changes are carried out in a planned manner.

It considers:

a) The purpose of the changes and their potential consequences;
b) The integrity of the quality management system;
c) The availability of resources; and
d) The allocation or reallocation of responsibilities and authorities.

2.8 SUPPORT (SEVENTH CLAUSE):

2.8.1 RESOURCES:

- **General:**

It determines and provides the resources needed for the establishment, implementation, maintenance and continual improvement of the quality management system.

It considers:

a) The capabilities of, and constraints on, existing internal resources; and
b) What needs to be obtained from the external providers?

- **People**

It determines and provides the persons necessary for the effective implementation of its quality management system and for the operation and control of its processes.

- **Infrastructure**

It determines, provides, and maintains the environment necessary for the operation of its processes and to achieve conformity of products and services.

a) Buildings and associated utilities;

b) Equipment, including hardware and software;

c) Transportation resources; and

d) Information and communication technology.

- **Environment for the Operation of Processes:**

It determines, provides and maintains the environment necessary for the operation of its processes and to achieve conformity of products and services.

a) Social (e.g. non-discriminatory, calm, non-confrontational);
b) Psychological (e.g. stress reducing, burnout prevention, emotionally protective);
c) Physical (e.g. temperature, heat, humidity, light, airflow, hygiene, noise).

These factors can differ substantially depending on the products and services provided.

- **Monitoring and Measuring Resources:**
  - **General:**

It determines and provides the resources needed to ensure valid and reliable results when monitoring or measuring is used to verify the conformity of products and services to requirements. It ensures that the resources provided:

a) Are suitable for the specific type of monitoring and measurement activities being undertaken; and
b) Are maintained to ensure their continuing fitness for their purpose.

It retains appropriate documented information as evidence of fitness for purpose of the monitoring and measurement resources.

- **Measurement Traceability:**

When measurement traceability is a requirement, or is considered by it to be an essential part of providing confidence in the validity of measurement results, measuring equipment are:

a) Calibrated or verified, or both, at specified intervals, or prior to use, againstmeasurement standards traceable to international or national measurement standards; when no such standard exist, the basis used for calibration or verification is retained as documented information;

b) Identified in order to determine their status; and

c) Safeguarded from adjustments, damage or deterioration that would invalidate the calibration status and subsequent measurement results.

It determines if the validity of previous measurement results has been adversely affected when measuring equipment is found to be unfit for its intended purpose, and takes appropriate action as necessary.

- **Organizational Knowledge:**

It determines the knowledge necessary for the operation of its processes and to achieve conformity of products and services.

This knowledge is maintained and made available to the extent necessary.

When addressing changing needs and trends, it considers its current knowledge and determines how to acquire or access any necessary additional knowledge and required updates.

2.8.2 DOCUMENTED INFORMATION:

- **General:**

It's quality management system includes:

a) Documented information required by ISO 9001:2015; and

b) Documented information determined by it as being necessary for the effectiveness of the quality management system.

Creating and Updating:

When creating an updating documented information, it ensures appropriate:

a) Identification and description (e.g. title, date, author, or reference number);
b) Format (e.g. language, software version, graphics) and media (e.g. paper, electronic); and
c) Review and approval for suitability and adequacy.

- **Control of Documented Information:**
  - Documented information required by the quality management system and by ISO 9001:2015 are controlled to ensure:

    a) Availability and suitable for use, where and when it is needed; and

    b) It is adequately protected (e.g., from loss of confidentiality, improper use, or loss of integrity).
  - For the control of documented information, it has addressed the following activities, as applicable.

    a) Distribution, access, retrieval and use;

b) Storage and preservation, including preservation of legibility;

c) Control of changes (e.g. version control); and

d) Retention and disposition.

Documented information of external origin determined by it to be necessary for the planning and operation of the quality management system is identified as appropriate and controlled. Documented information retained as evidence of conformity are protected from unintended alterations.

2.9 OPERATION (EIGHTH CLAUSE):

2.9.1 OPERATIONAL PLANNING AND CONTROL:

It planned, implemented and controls the processes needed to meet the requirements for the provision of products and services, and implemented the actions determined in Clause 6, by:

a) Determining the requirements for the products and services;

b) Establishing criteria for:

1. The processes;
2. The acceptance of products and services;

c) Determining the resources needed to achieve conformity to the product andservice requirements;

d) Implementing control of the processes in accordance with the criteria;

e) Determining and keeping documented information to the extent necessary:

1. To have confidence that the processes have been carried out as planned;
2. To demonstrate the conformity of products and services to their requirements.

The output of this planning is in a form suitable to its method of operations. It ensures that outsourced processes are controlled.

2.9.2 REQUIREMENTS FOR PRODUCTS AND SERVICES:

- **Customer Communication:**

Communication with Customers includes:

a) Providing information relating to products and services;
b) Handling inquiries, contracts or orders, including changes;
c) Obtaining customer feedback relating to products and services,

including customer complaints;

d) Handling or controlling customer property; and

e) Establishing specific requirements for contingency actions, when relevant.

- **Determining the Requirements Related to Products and Services:**

When determining the requirements for the product and services to be offered to customers, it ensures that:

a) The requirements for the product and services are defined, including:

  a) Any applicable statutory and regulatory requirements;

  b) Those considered necessary by It;

b) It can meet the claims for the product and services it offers.

- **Review of Requirements Related to Products and Services:**
  - It ensures that it has the ability to meet the requirements for products and services offered to customers. It conducts a review before committing to supply products and services to a customer, to include:
    a) Requirements specified by customer, including the requirements for delivery and post-delivery activities;
    b) Requirements not stated by the customer, but necessary for the specified intended use, when known;
    c) Requirements specified by It;
    d) Statutory and regulatory requirements applicable to the products and services; and
    e) Contract or order requirements differing from those previously expressed.

It ensures that the contract or order requirements differing from those previously defined are resolved. The customer's requirements are confirmed by it before acceptance, when the customer does not provide a documented statement of their requirements.

  - It retains documented information, as applicable:

a) On the results of the review; and

b) On any new requirements for the products and services;

- **Changes to Requirements for Products and Services:**

It ensures that relevant documented information is amended, and that relevant persons are made aware of the changed requirements, when the requirements for products and services are changed.

2.9.3 CONTROL OF NONCONFORMING OUTPUTS:

- It ensures that outputs that do not conform to their requirements are identified and controlled to prevent their unintended use or delivery. It takes appropriate action based on the nature of the nonconformity and its effect on the conformity of products and services. This also applies to nonconforming products and services detected after delivery of products, during or after the provision of services. It deals with nonconforming outputs in one or more of the following ways:

Correction;

Segregation, containment, return or suspension of provision of products and services;

Informing the customer; and

Obtaining authorization for acceptance under concession.

Conformity to the requirements are verified when nonconforming outputs are corrected.

- It retains documented information that:

  a) Describes the nonconformity;

  b) Describes the actions taken;

  c) Describes any concessions obtained; and

  d) Identifies the authority deciding the action in respect of the nonconformity.

2.10 PERFORMANCE EVALUATION (NINTH CLAUSE):

2.10.1 MONITORING, MEASUREMENT, ANALYSIS AND EVALUATION:

- **General:**

It determines:

  a) What needs to be monitored and measured;
  b) The methods for monitoring, measurement, analysis and evaluation needed to measure valid results;
  c) When the monitoring and measuring is performed;
  d) When the results form monitoring and measurement are analysed and evaluated.

It evaluates the performance and the effectiveness of the quality management system. It retains appropriate documented information as evidence of the results.

- **Customer Satisfaction:**

It monitors customers' perceptions of the degree to which their needs and expectation have been fulfilled.It determines the methods for obtaining, monitoring and reviewing this information.

- **Analysis and Evaluation:**

It analyses and evaluates appropriate data and information arising form monitoring and measurement. The results of analysis are used to evaluate:

a) Conformity of products and services;

b) The degree of customer satisfaction;

c) The performance and effectiveness of the quality management system;

d) If planning has been implemented effectively;

e) The effectiveness of actions taken to address risks and opportunities;

f) The performance of external providers; and

g) The need for improvements to the quality management system.

2.10.2 INTERNAL AUDIT:

- It conducts internal audits at planned intervals to provide information on whether the quality management system:

  a) Conforms to:

  1. It's own requirements for its quality management system;
  2. The requirements of ISO 9001:2015

  b) Is effectively implemented and maintained.

- It has:

  a) Planned, established, implemented and maintains an audit program including the frequency, methods, responsibilities, planning requirements and reporting, which is taken into consideration the importance of the processes concerned, changes affecting It, and the results of previous audits;
  b) Defined the audit criteria and scope of each audit;
  c) Selected auditors and conducts audits to ensure objectively and the impartiality of the audit process;
  d) Ensured that the results of the audits are reported to relevant management;
  e) Take appropriate correction and corrective actions without undue delay; and
  f) Retain documented information as evidence of the implementation of the audit program and the audit results.

2.10.3 MANAGEMENT REVIEW:

- **General:**

Top management reviews its quality management system, at planned intervals, to ensure its continuing suitability, adequacy, effectiveness and alignment with the strategic direction of it.

- **Management Review Inputs:**

Management review is planned and carried out taking into consideration:

a) The status of actions from previous management reviews;

b) Changes in external and internal issues that are relevant to the quality management system;

1. Information on the performance and effectiveness of the quality management system, including trends in:
2. Customer satisfaction and feedback from relevant interested parties;
3. The extent to which quality objectives have been met;
4. Process performance and conformity of products and services;
5. Nonconformities and corrective actions;
6. Monitoring and measurement results;
7. Audit results;
8. The performance of external providers;

c) The adequacy of resources;

d) The effectiveness of actions taken to address risks and opportunities;

e) Opportunities for improvement

- **Management Review Outputs:**

The outputs of the management review include decisions and actions related to:

a) Opportunities for improvement;

b) Any need for changes to the quality management system; and

c) Resource needs.

It retains documented information as evidence of the results of management reviews.

2.11 IMPROVEMENT (TENTH CLAUSE):

2.11.1 GENERAL:

It determines and selects opportunities for improvement and implements any necessary actions to meet customer requirements and enhance customer satisfaction.

These include:

a) Improving products and services to meet requirements as well as to address future needs and expectations;

b) Correcting, preventing or reducing undesired effects; and

c) Improving the performance and effectiveness of the quality management system.

- **Nonconformity and Corrective Action**
  - When a nonconformity occurs, including any arising from complaints, It:

a) Reacts to the nonconformity and, as applicable:

1. Takes action to control and correct it;
2. Deals with the consequences;

b) Evaluates the need for action to eliminate the cause(s) of the nonconformity, in order that it does not recur or occur elsewhere, by:

1. Reviewing and analyzing the nonconformity;
2. Determining the causes of the nonconformity;
3. Determining if similar nonconformities exist, or could potentially occur;

c) Implements any action needed;

d) Reviews the effectiveness of any corrective action taken;

e) Updates risks and opportunities determined during planning, if necessary; and

f) Makes changes to the quality management system, if necessary.

Corrective actions are appropriate to the effects of the nonconformities encountered.

2.11.2 CONTINUAL IMPROVEMENT:

It continually improves the suitability, adequacy and effectiveness of the quality management system. It considers the results of analysis and evaluations, and the outputs from the management review, to determine if there are needs or opportunities that are addressed as part of the continual improvement.

2.12 CONCLUSION

ALTTC was the first unit of BSNL to obtain ISO 9001 certification in 2001. Since then BRBRAITT and other training centres, Maintenance regions & project circles, Civil and electrical wings, Telecom Factories have obtained this certificate. In 2007, BSNL corporate office directed Circles to obtain ISO 9001 certification for all SSAs. Apart from SSAs, circles have also been asked to obtain this certification for customer related sections such as

Enterprise Business, CS, Commercial, PG cell etc. Similarly at BSNL Corporate office, initially CS, EB, PG, Commercial and T&C sections have to get ISO 9001 certification.

Various training centers of BSNL are imparting training to BSNL executives for helping field units in obtaining ISO certification.

3 OUTSOURCING & CONTRACT MANAGEMENT

3.1 LEARNING OBJECTIVES:

At the end of the session, the trainees will be able to learn

- Outsourcing in BSNL.
- Levels of outsourcing
- Advantages of outsourcing
- Criteria for selecting an outsourcing vendor
- Key to outsourcing success

3.2 INTRODUCTION :

Outsourcing: It is shifting a company's essential operations to a third party vendor in order to gain various benefits including better services, low cost and speedy work. The company that chooses to outsource is known as the customer or buyer while the third party that provides outsourced services is known as the supplier or vendor.

The vendor may be a firm or a group of individuals, which is generally situated at a different physical location (sometimes even a different country). In outsourcing, the vendor has complete control over the process being outsourced as compared to contracting in which the customer has more control over the process beingcontracted.

3.3 LEVELS OF OUTSOURCING

Outsourcing has moved from tactical to strategic level and companies have started pursuing outsourcing as an important business strategy. Companies generally use the following three levels of outsourcing:

- **Project level:** Discrete aspects of a project areoutsourced
- **Program level:** Different projects in a program areoutsourced
- **Division level:** The entire operation of a division isoutsourced

There are various factors that govern the decision to outsource at a particular level by a customer. These factors include:

- Critical nature of the work: If the work is critical to a company's core business, the company will prefer to outsource as little as possible and in discreteparts.
- Faith of the customer in a vendor: The higher the faith a customer has in its vendor, the more it will outsource. In some cases, it will outsource even the operations of an entiredivision.

- Cost advantage: Cost efficiency is an important deciding criterion, with larger work being outsourced if cost savings arelarge.
- Proven track record of the vendor: A proven track record of the supplier inculcates a feeling of trust and the customer prefers to outsource larger work to the vendor.

Outsourcing at above-mentioned levels is achieved through various modes as detailed below. Each mode has its own specific advantages. Companies examine their core competencies and work out the right mix for outsourcing modes to maximize their returns. Modes of outsourcing are:

Outsourcing Mode	Description
On-shoring	Outsourcing to a vendor that is located at a destination domestic to the customer
Offshoring	Outsourcing to a vendor that is located in a far-off country
Near-shoring	Outsourcing to vendor in a nearby country
Home-sourcing	Outsourcing to workers who work from home

Companies are also resorting to the option of multi-sourcing where a combination of offshoring, on-shoring, near-shoring and home-shoring is used. For example, A small company may decide to outsource bookkeeping duties to an accounting firm, as doing so may be cheaper than retaining an in-house accountant. Other companies find outsourcing the functions of human resource departments, such as payroll and health insurance, as beneficial. When used properly, outsourcing is an effective strategy to reduce expenses, and can even provide a business with a competitive advantage over rivals.

3.4 ADVANTAGES OF OUTSOURCING

Outsourcing offers numerous advantages to the customers, some of which have been elaborated below:

3.4.1 FOCUS ON CORE COMPETENCIES:

Outsourcing enables customers to divert their attention from supplementary tasks and focus on their core functions. Customer care, documentation, IT up gradation and administrative tasks such as internal audit and payroll processing are the non-core tasks for many companies and consume the time of the management if handled in-house. When these tasks are outsourced, the company management can focus on the company’s core competency and bring better services and products into the market. For example Hero Honda Motors outsources its IT maintenance work so that its staff can focus on user requirements to deliver better services instead of spending time on routine complaints.

3.4.2 COST SAVINGS:

Cost savings is an important consideration in outsourcing decision. Outsourcing enables companies reduce their costs on resource management, labor, space, etc. According to Accenture, outsourcing leads to a cost saving of 25 percent to 30 percent. Outsource Partners International estimates the cost savings to reach up to 50 percent when the outsourced work isoffshored.

3.4.3 QUALITY:

Vendors have expert employees along with specialized processes and technology that ensure better quality of output for the customer. However, the customer has to carefully select a vendor that will provide it with the quality of services that itrequires.

3.4.4 FLEXIBILITY:

Outsourcing provides flexibility to the customer as the buyer can change a vendor if required. Changing a vendor in case of poor delivery is much easier than changing a full-time employee. Many outsourcing deals incorporate conditions for change in requirement or termination of contract ensuring flexibility.

3.4.5 TIME-TO-MARKET:

Offshore outsourcing offers round the clock work benefits and hence reduces the time-to-market. Both on-shore and offshore outsourcing may also result in time saving if the vendor has skills and expertise that are not internal to the customer organization. Outsourcing also enables faster start-up, development and scalability for new operations.

3.4.6 ACCESS TO DIVERSE TECHNOLOGIES:

Vendors have focus on particular services and play in volume. This enables them to keep themselves up-to-date with the technology required in these services. The customer can thus avoid technology obsolescence and leverage the vendor's access to diverse and advanced technologies.

In addition to the above advantages, outsourcing offers other benefits such as provider alternatives, transfer of risk to vendor, elimination of internal policies, elimination of recruitment, training and staff retention in non-core functions, and scalability (faster scale-up or scale-down capability).

3.4.7 REASONS FOR OUTSOURCING

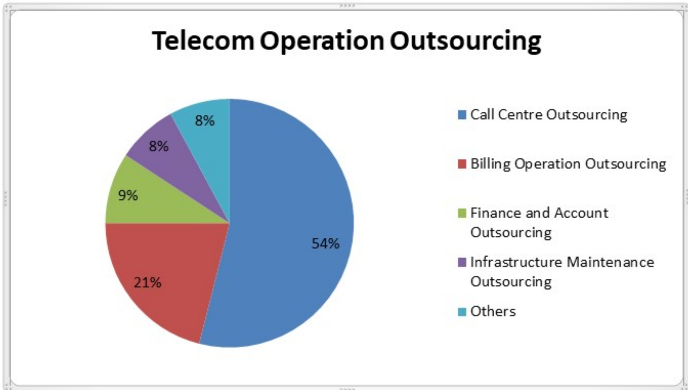


Figure 3: Reasons of outsourcing

3.4.8 HOW IMPORTANT IS OUTSOURCED WORK

The notion that unimportant work is being outsourced no-more holds true. The software development magazine conducted a survey in October 2003 to find what kind of work was being outsourced. Results compiled from 414 respondents (engineers and development managers) is givenbelow:

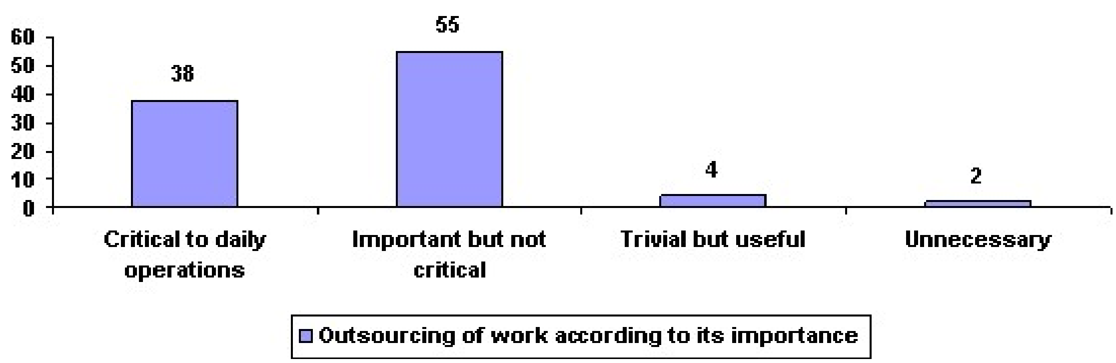


Figure 4: : Importance of outsourced work

3.5 WHAT IS BEING OUTSOURCED?

Outsourced services can be categorized into two groups
1. Technology services
2. BusinessProcesses

3.5.1 TECHNOLOGY SERVICES

Companies requires advanced IT and communication technologies for their regular operations. Rapid changes in the technology sector bring new capabilities to use for companies that need to select the right kind of vendor to get the best technology at the cheapest cost. Following technology services are generally outsourced by customers:

- Software andapplications
- Infrastructure
- Telecommunications
- E-commerce
- Web security andsolutions
- Web hosting, website designing, development andmaintenance

3.5.2 BUSINESS PROCESSES

Various business processes are not core to a company's main line of business. Companies outsource such processes and focus on their core competence. The various business processes that are being outsourced include the following:

- Back officeoperations
- Customer relationshipmanagement
- Sales and marketing (includingtelemarketing)
- Administrative support
- Payroll maintenance and other transactionprocessing
- Finance andAccounting
- Human resources andTraining
- Logistics, procurement and supply chainmanagement
- Medicaltranscription
- Security
- Research andanalysis
- Productdevelopment
- Legalservices
- Intellectual property research anddocumentation

Synonymous with these services are various commonly used terminologies such as Business Process Outsourcing (BPO), Knowledge Process Outsourcing (KPO), Legal Process Outsourcing (LPO), Research Process Outsourcing (RPO), Recruitment Process Outsourcing (this is also called RPO) and Education Process Outsourcing (EPO). As the market for each service grows, vendors coin a term for their service to showcase a distinct presence of their industry.

3.5.3 CRITERIA FOR SELECTING AN OUTSOURCING VENDOR

In an outsourcing deal, buyers want to achieve superior quality service at lower cost and minimum involvement. On the other hand, outsourcing the work to an external agency exposes the customer to risks of the work being delivered poorly. In such a scenario, selection of a vendor for outsourcing is a difficult task, which becomes even more complex while selecting an offshore vendor. Customers generally follow the criteria mentioned below for selecting an outsourcing supplier:

1.Quality commitment: The vendor should be qualityfocused.
2.Cost: The vendor should have prices that enable the customer sufficient cost saving.
3.Additional resources and capabilities: The vendor should have resources and capabilities that are not available to the customerinternally.
4.Prior work: The vendor should have experience working with other organizations and should have delivered satisfactorily to them. Checking with the references help the customer understand the vendor's capabilitiesproperly.
5.Contract terms: The terms of contract should offer flexibility to the client to modify the requirements or terminate the contract easily, ifrequired.
6.Confidentiality: How secure is the customer's data at the vendor site? The vendor should have well-defined security policies inplace.

In addition to these criteria, other parameters such as location, reporting methodologies, vendor processes, financial stability of the vendor and cultural similarity play a vital role in deciding the supplier.

3.5.4 KEY TO OUTSOURCING SUCCESS

Outsourcing involves getting work from an external firm which has limited knowledge about the customer's internal processes and operations. Hence, a customers needs to pay attention to certain considerations, apart from selecting the right vendor, to achieve outsourcing success. These considerations include the following:

1. Setting the right expectations: The customer needs to set right expectations upfront about the services that it needs (and will get) from its vendor. It should also have a proper plan in place with well defined (outsourcing) goals and objectives.

2. Benchmarking methodology: The customer should establish tools or criteria to benchmark the quality of output required from the vendor. Vendor's performance should be regularly monitored using thesecriteria.

3. Experience in handling outsourcing projects: If the vendor and customer both have experience in handling outsourcing projects, the chances of making the outsourcing deal a success increase significantly. Adequate planning and back-up plans for any foreseeable pitfalls will help both the client and supplier maintain a successful relationship.

4. Internal resistance: The buyer's management should explain the advantages of outsourcing to its employees and ensure agreement on the outsourcing decision internally before taking the outsourcing plunge. It should gather support for its decision from the top management as well as lower ranked employees.

Last but not the least, the customer should exhibit trust towards its vendor, which in turn should ensure transparency in its operations.

3.5.5 OUTSOURCING IN INDIAN TELECOM SECTOR

Outsourcing in telecom continues to evolve. Towers (active and passive components) constitute almost 70% of the networks. Active parts involve antenna and the electronics that is installed in the 'huts' next to the tower while passive parts involve power system that is supporting electronics. This infrastructure used to be managed by the staff of the operators but in recent years this has been outsourced to an independent tower management companies. There have been tower management companies providing these services for years in the North American and European markets. In the Indian markets only recently operators like Idea, Vodafone (India), and Bharti Airtel created Tower management companies like Indus Tower. Bharti Airtel also created a company Bharti Infratel for providing Tower management services. There are number of challenges in this working model as they exist in a multi-sourcing arrangement.

Average Revenue Per User (ARPU) has been dropping globally as voice has been commoditized. Telecom services is constantly looking for services which will improve his/her quality of life at work and at home. Mobility while working is very much required in number of functions. All this means, operators have to be constantly innovative for creating new applications and services. This has provided entrepreneurs new opportunities to start up ventures which focus on designing and developing apps which could be uploaded on telecom networks for consumers to use. Value added services or data services are expected to generate additional revenue which operators are desperately looking for. Content generation is the most important part of providing value added services. Telco's are being challenged in this space by several small to medium size companies who are more nimble, creative, and agile in bringing new apps faster to the users. Telco's have realized their limitations in content generation hence have started working with number of companies using a revenue sharing model. Over The Top (OTT) players are also challenging Telco's for number of voice and non-voice services hence yet another outsourced part of the business for operators

3.5.6 OUTSOURCING IN BSNL

Policy has been finalized by BSNL on outsourcing model for maintenance and provisioning of Landline and Broadband for External plant of Copper Network vide letter no. 77-1/2019/ Outsourcing Model - GEN/19 dated 20.12.2019 and amended from time to time.

Contract Management

Learning Objectives:

1. Indian contract act-1872

2. Of contracts, voidable contracts, and void agreements.

INDIAN CONTRACT ACT-1872

Sec-1 Short Title

- Applicable to whole of India except J&K
- Applicable from 1.09.1872

2.0 Sec-2 Interpretation-Clauses

2.1 Proposal

When one person signifies to another his willingness to do something, with a view to obtain the assent of another person, he is said to make a proposal.

2.2 Promise

A proposal when accepted becomes a promise.

2.3 Promisor

The person making the proposal is called PROMISOR (Contractor).

2.4 Promisee

The person accepting the proposal is called PROMISEE (Deptt./BSNL).

2.5 Consideration

When, at the desire of Promisor, the Promisee has done something or promises to do something, such act of promise is called consideration.

2.6 Agreement

Every promise forming the consideration for each other, is an AGREEMENT.

2.7 Reciprocal Promises

Promises which form the consideration for each other, are called RECIPROCAL PROMISES.

2.8 Contract

An Agreement enforceable by Law is a CONTRACT

2.9 Void

An agreement not enforceable by Law is said to be void.

Chapter – I

Communication, Acceptance and Revocation of Proposals

3.0 Sec-4 Communication When Complete

The Communication of a Proposal is Complete:-

The communication of a proposal is complete when it becomes to the knowledge of the person to whom it is made.

The Communication of an Acceptance is Complete:–

As against the proposer, when it is put in a course of transmission to him so at to be out of the power of the acceptor; The Communication of a Revocation is Complete:–

- As against the person who makes it, when it is put into a course of transmission to theperson to whom it is made, so as to be out of the power of the person who makes it;
- As against the person to whom it is made, when it comes to his knowledge.

4.0 Sec-5 Revocation of Proposal and Acceptance

A proposal may be revoked at any time before the communication of its acceptance is complete as against the proposer, but not afterwards. An acceptance may be revoked at any time before the communication of the acceptance is complete as against the acceptor, but not afterwards.

CHAPTER – II

Of Contracts, Voidable Contracts, and Void Agreements

Sec-10 – What agreements are contracts (Ingredients of Contract)

All the agreements are contracts.

- If they are made by free consent.
- Parties competent to contract (Sec-11).
- For a Lawful consideration.
- With Lawful object.
- Lawful objects are not expressly declared to be void.

Sec-11 who are competent to contract

Every person is competent to contract who is :

- major
- of sound mind (Sec-12)
- not disqualified from contracting by any law

7.0 Sec-14 Free consent defined Free consent if:

- No coercion (Sec-15)
- No undue influence (Sec-16) o No Fraud (Sec-17)
- No misrepresentation of facts (Sec-18)
- No mistake (Sec-20, 21, & 22)

8.0 Sec-24 Agreement void, if consideration and objects are unlawful.

9.0 Sec-25 Agreements without consideration, void An agreement without consideration is void, unless:

(i) It is expressed in writing and registered and is made due to natural love and affection between the parties standing in near relation to each other.

(ii) It is a promise to compensate a person who has done something for the promisor.

(iii) If a person promise to pay a debt which is time barred by Limitation Law.

Sec-29 Agreements Void for uncertainty
Agreements, the meaning of which is not certain are void.

Chapter – IV

Of Performance of Contracts, Contracts Which Must Be Performed

Performance of Reciprocal Promises

Sec-51 – Promisor not bound to perform, unless reciprocal promise ready and willing to perform

When a contract consists of reciprocal promises to be simultaneously performed, no promisor need perform his promise unless the promisee is ready and willing to perform his reciprocal promise.

Sec-52 – Order of performance of reciprocal promises

Where the order in which reciprocal promises are to be performed is expressly fixed by the contract, they shall be performed in the order, and where the orders is not expressly fixed by the contract, they shall be performed in that order which the nature of transaction requires.

Sec-53 – Liability of party preventing event on which contract is to take effect

When a contract contains reciprocal promises, and one party to the contract prevents the other from performing his promise, the contract becomes voidable at the option of the party so prevented; and he is entitled to compensation from the other party for any loss which he may sustain in consequence of the non-performance of the contract.

Sec-54 – Effect of default as to the promise which should be performed, in contract consisting of reciprocal promises

When a contract consists of reciprocal promises, such that one of them cannot be performed, or that its performance cannot be claimed till the other has been performed, and the promisor of the promise last mentioned fails to perform it, such promisor cannot claim the performance of the reciprocal promise, and must make compensation to the other party to the contract for any loss.

Sec-55 Effect of failure to perform at fixed time, in contract in which time is essential

When a party to a contract promises to do a certain thing at or before a specified time, or certain things at or before specified times, and fails to do any such thing at or before the specified time, the contract, or so much of it as has not been performed, becomes voidable at the option of the promisee, if the intention of the parties was that time should be of the essence of the contract.

Effect of such failure when time is not essential:-

If it was not the intention of the parties that time should be of the essence of the contract, the contract does not become voidable by the failure to do such thing at or before the specified time; but the promisee is entitled to compensation from the promisor for any loss occasioned to him by such failure.

Effect of acceptance of performance at time other than that agreed upon:-

If, in case of a contract voidable on account of the promisor's failure to perform his promise at the time agreed, the promisee accepts performance of such promise at any time other than that agreed**, the promisee cannot claim compensation for any loss occasioned by the non-performance of the promise at the time agreed, unless, at the time of such acceptance he gives notice to the promisor of his intention to do so.** Notice under section 55 before expiry of stipulated period is must before granting any provisional Extension of Time at the request of contractor. Even if contractor does not apply and promisee intends to continue the contract, su-moto provisional extension of time with notice under section 55 should be given to the contractor. If contractor continues to work, receiving instructions & accepting measurement & bills, it is implied acceptance of contractor.

Chapter V

Of Certain Relations Resembling Those Created by Contract

Sec-70 –Obligation of person enjoying benefit of non-gratuitous act

Where a person lawfully does anything for another person, or delivers anything to him, not intending to do so gratuitously, and such other person enjoys the benefit thereof, the later is bound to make compensation to the former in respect of, or to restore, the thing so done or delivered.

Chapter VI Of The Consequences of Breach of Contract

Sec-73 Compensation for loss or damage caused by breach of contract

When a contract has been broken, the party who suffers by such breach is entitled to receive, from the party who has broken the contract, compensation for any loss or damage caused to him thereby, which naturally arose in the usual course of things from such breach, or which the parties knew, when they made the contract, to be likely to result from the breach of it. Such compensation is not to be given for any remote and indirect loss or damage sustained by reason of the breach. Explanation.-In estimating the loss or damage arising from a breach of contract, the means which existed of remedying the inconvenience caused-by the non-performance of the contract must be taken into account.

Sec-74 Compensation for breach of contract where penalty stipulated for.

When a contract has been broken, if a sum is named in the contract as the amount to be paid in case of such breach, or if the contract contains any other stipulation by way of penalty, the party complaining of the breach is entitled, whether or not actual damage or loss is proved to have been caused thereby, to receive from the party who has broken the contract reasonable compensation not exceeding the amount so named or, as the case may be, the penalty stipulated for.

Sec-75 Party rightfully rescinding contract, entitled to compensation

A person who rightfully rescinds a contract is entitled to consideration for any damage which he has sustained through the non-fulfillment of the contract.

3.6 CONCLUSION

In outsourcing, the vendor has complete control over the process being outsourced as compared to contracting in which the customer has more control over the process being contracted.

An important aspect of contract management is the categorization of contracts for effective internal and centralized control and every robust contract management system should address the key elements for central and decentralized controls for contract execution. A robust contract management system which includes contract strategizing, vetting, versioning, storage and effective retrieval system, aided by prompting tools that highlight critical dates and events go a long way in managing a contractual relationship.

Business owners know from experience that managing relationships with vendors, customers and employees can be a challenging process. The applied theories of contract management can help you gauge the effectiveness and worth of these relationships, keeping your business mindful of the law and helping you create value for your organization's stakeholders.

4 PROJECT MANAGEMENT

4.1 LEARNING OBJECTIVE:

At the end of this lesson, participants shall be able to understand:

- Concept of Project Management.
- Project Management Life Cycle.
- Skills needed & jobs of a Project Manager.
- Project planning Technique.
- Software for project Management.

4.2 INTRODUCTION:

Project management is concerned with the overall planning and co-ordination of a project from conception to completion aimed at meeting the stated requirements and ensuring completion on time, within cost and to required quality standards.

Project management is normally reserved for focused, non-repetitive, time-limited activities with some degree of risk and that are beyond the usual scope of operational activities for which the organization is responsible.

4.3 WHAT IS A PROJECT?

A project is generally defined as a programme of work to bring about a beneficial change and which has: -

- A start and an end i.e. expected schedule and period.
- A multi-disciplinary team brought together for the project.
- Constraints of cost, time and quality.
- A scope of work that is unique and involves uncertainty.

Examples of a project are:

- The development and introduction of new services.
- The development of a management information system.
- The introduction of an improvement to an existing process.
- Setting up a new care initiative.
- The creation of a large tender or the preparation of a response to it
- The production of a new customer newsletter, catalogue or Web site.

4.3.1 HOW IS A PROJECT DIFFERENT TO ANY OTHER WORK?

A continuous process is not a project. The development of a new rent or lettings policy is a project but the subsequent day-to-day operation of that policy is a continuous process that is usually managed by an individual or a department.

4.3.2 WHEN IS PROJECT MANAGEMENT RELEVANT?

Project management is relevant to any job if it has the following features:-

- A defined goal.
- Time, cost and quality (or functionality) constraints.
- Requires expertise and support from other functions.
- Involves a unique (to you or the organization) scope of work.

Using a project team approach helps to achieve the beneficial gain in a structured, controlled and cost effective way.

4.4 PROJECT MANAGEMENT LIFE CYCLE:

The project management life cycle encompasses various stages through which a project passes from beginning to end. The process flow of Project management life cycle is shown below-

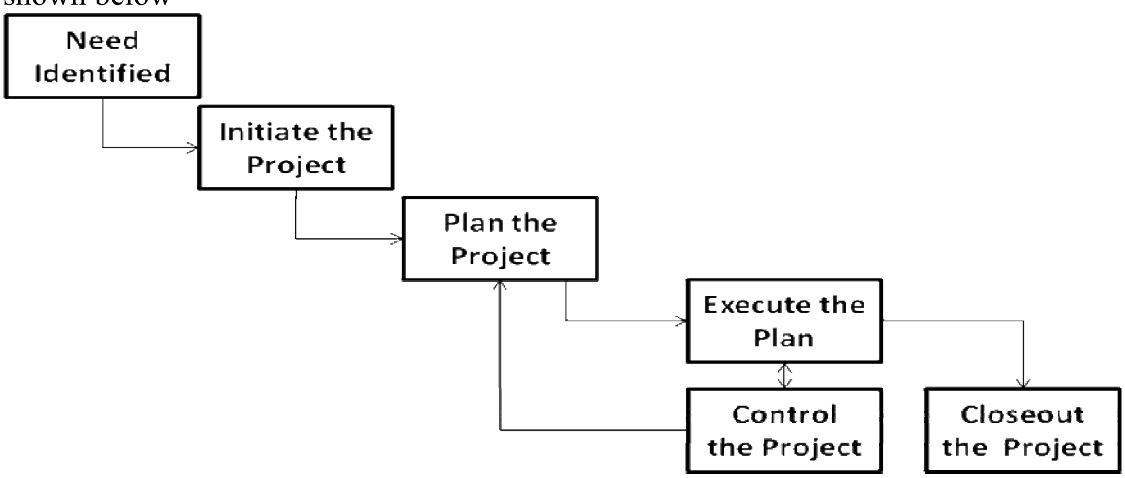


Figure 5: Project Management Life Cycle

4.4.1 NEED IDENTIFICATION:

This stage involves the project manager and sponsor in the preparation and approval of an outline of project justification, time lines, budget, plans etc.

4.4.2 INITIATION:

Initiating is the basic processes that should be performed to get the project started. This starting point is critical because those who will deliver the project, those who will use the project, and those who will have a stake in the project need to reach an agreement on its initiation. Involving all stakeholders in the project phases generally improves the probability of satisfying customer requirements by shared ownership of the project by the stakeholders. The success of the project team depends upon starting with complete and accurate information, management support, and the authorization necessary to manage the project.

4.4.3 PLANNING:

The planning phase is considered the most important phase in project management. Project planning defines project activities that will be performed; the products that will be produced, and describes how these activities will be accomplished and managed. Project planning defines each major task, estimates the time, resources and cost required, and provides a framework for management review and control. Planning involves identifying and documenting scope, tasks, schedules, cost, risk, quality, and staffing needs.

The result of the project planning, the project plan, will be an approved, comprehensive document that allows a project team to begin and complete the work necessary to achieve the project goals and objectives. The project plan will address how the project team will manage the project elements.

4.4.4 EXECUTING:

Once a project moves into the execution phase, the project team and all necessary resources to carry out the project should be in place and ready to perform project activities. The project team and the project manager's focus now shifts from planning the project efforts to participating, observing, and analysing the work being done.

The execution phase is when the work activities of the project plan are executed, resulting in the completion of the project deliverables and achievement of the project objective(s). This phase brings together all of the project management disciplines, resulting in a product or service that will meet the project deliverable requirements and the customers need. During this phase, elements completed in the planning phase are implemented, time is expended, and money is spent.

In short, it means coordinating and managing the project resources while executing the project plan, performing the planned project activities, and ensuring they are completed efficiently.

4.4.5 CONTROLLING:

Project Control function involves comparing actual performance with planned performance and taking corrective action to get the desired outcome when there are significant differences. By monitoring and measuring progress regularly, identifying variances from plan, and taking corrective action if required, project control ensures that project objectives are met.

4.4.6 CLOSEOUT OR CLOSURE:

Project closeout is performed after all defined project objectives have been met and the customer has formally accepted the project's deliverables and end product or, in some instances, when a project has been cancelled or terminated early. Although, project closeout is a routine process, it is an important one. By properly completing the project closeout, organizations can benefit from lessons learned and information compiled. The project closeout phase is comprised of contract closure and administrative closure.

4.5 JOB OF A PROJECT MANAGER:

Typically, a project manager will be nominated to lead a project and will be expected to be fully accountable for meeting its objectives. The project manager will be the leader of the project team and will be responsible for ensuring that followings are completed in a timely way:-

- Getting approval for the project objectives and goals
- Selecting and leading the team and setting individual objectives
- Ensuring a feasibility study is complete
- Ensuring that the project is planned in appropriate detail
- Allocating resources for different activities
- Monitoring various activities alongwith cost incurred
- Motivating the team members
- Reporting progress back to the organization
- Helping the team to solve project problems
- Achieve the goals, through the teams
- Reviewing and closing down etc.

4.5.1 SKILLS NEEDED BY A PROJECT MANAGER:

Very broad skills and a deal of experience are needed to manage a large project successfully. These include business knowledge, technical skills and individual and team leadership skills.

Individual Skills:

The personal skills are likely to include good presentation and persuasive skills, good written skills and credibility.

Team Skills:

A project manager is expected to appreciate the differing needs of both individuals and the project team at different stages of the project. The project manager is expected to promote and maintain team spirit among team members.

Technical Skills:

A project manager should have technical skills in setting objectives, planning complex tasks, negotiating resource, financial planning, contract management, monitoring skills, creative thinking and problem solving, as well as his own specialized topic/area.

4.6 PROJECT PLANNING TECHNIQUE –PERT:

The **Program Evaluation and Review Technique (PERT)** is a network model that allows for randomness in activity completion times. PERT was developed in the late 1950's for the U.S. Navy's Polaris project having thousands of contractors. It has the potential to reduce both the time and cost required to complete a project.

4.6.1 THE NETWORK DIAGRAM:

In a project, an activity is a task that must be performed and an event is a milestone marking the completion of one or more activities. Before an activity can begin, all of its predecessor activities must be completed. Project network models represent activities and milestones by arrows and nodes respectively.

In PERT diagram, the activities are represented on the arrows and milestones on the nodes. The Figure below shows a simple example of a PERT diagram.

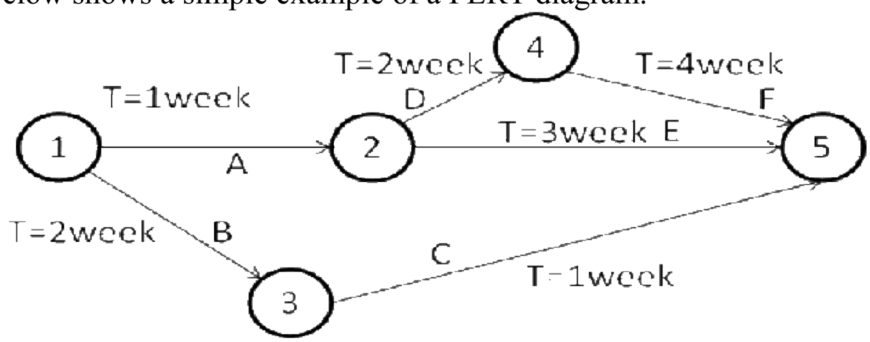


Figure 6: Network Diagram

The milestones generally are numbered so that the ending node of an activity has a higher number than the beginning node. The activities in the above diagram are labelled with letters along with the expected time required to complete the activity.

4.6.2 STEPS IN THE PERT PLANNING PROCESS:

The steps involved in PERT planning process are as under:-

4.6.3 IDENTIFY ACTIVITIES AND MILESTONES:

The activities are the tasks required to complete the project. The milestones are the events marking the beginning and end of one or more activities.

4.6.4 DETERMINE ACTIVITY SEQUENCE:

This step may be combined with the activity identification step since the activity sequence is known for some tasks. Other tasks may require more analysis to determine the exact order in which they must be performed.

Construct the Network Diagram:

Using the activity sequence information, a network diagram can be drawn showing the sequence of the serial and parallel activities.

Below is an **example** of preparing a **Network Diagram** for the "**Installation of new landline exchange".**

Table 8. Activity for Installation of new landline Exchange

	Activity description	Activity code	Duration	Preceding activity
1	Sanction of project estimate	A	10 days	-
2	Equipment/cable procurement	B	180 days	A
3	Land acquisition	C	30 days	A
4	Building construction (civil works)	D	180 days	C
5	Electrical works	E	60 days	D
6	Battery & power plant installation	F	20 days	B, E
7	Installation of equipment & MDF	G	30 days	B, E
8	Testing & Acceptance Testing	H	20 days	F,G

Note: Above is only an indicative list. Each work can further be split into many activities.

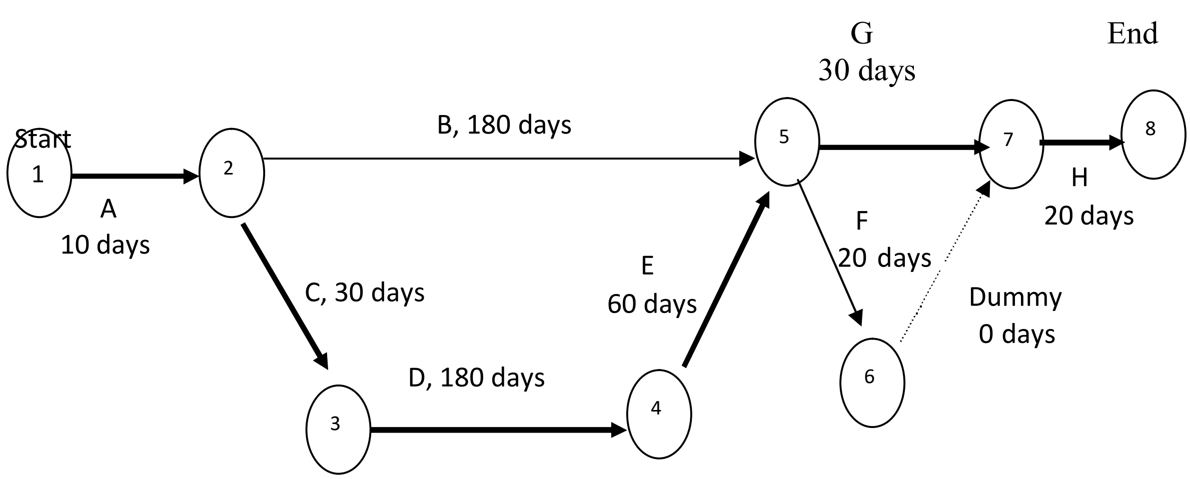


Figure 7: Activity Diagram

Above is a very simplistic model for understanding activities. Actual will vary. It can be seen that if land acquisition, civil work, electrical work gets completed early, up to 90 days can be saved as equipment delivery takes only 180 days. Similarly, any delay in one activity affects overall execution time if no slack (margin) is available. For example, delay in equipment supply can be tolerated for 90 days. Applying the definition of critical path (the longest path on the network from start node to end node), we can easily find it as the darkened path. Project manager has to identify sequence, plan all activities, allocate resources, manages risk and take dynamic decisions to achieve result in defined time & cost.

Estimate activity times:

Weeks are a commonly used unit of time for activity completion, but any consistent unit of time can be used.

A distinguishing feature of PERT is its ability to deal with uncertainty in activity completion times. For each activity, the model usually includes three time estimates:-

- ***Optimistic time (OT)* -** generally the shortest time in which the activity can be completed. (This is what an inexperienced manager believes!)
- ***Most likely time (MT)* -** the completion time having the highest probability. This is different from expected time. Seasoned managers have an amazing way of estimating very close to actual data from prior estimation errors.
- ***Pessimistic time* (PT)** - the longest time that an activity might require.

The expected time for each activity can be approximated using the following weighted average:

Expected time = (OT + 4 x MT+ PT) / 6

This expected time might be displayed on the network diagram.

Variance for each activity is given by: $[(PT - OT) / 6]^2$

Determine the Critical Path:

The critical path is determined by adding the times for the activities in each sequence and determining the longest path in the project. The critical path determines the total time required for the project.

If activities outside the critical path speed up or slow down (within limits), the total project time does not change. The amount of time that a non-critical path activity can be delayed without delaying the project is referred to as slack time.

Since the critical path determines the completion date of the project, the project can be accelerated by adding the resources required to decrease the time for the activities in the critical path. Such a shortening of the project sometimes is referred to as *project crashing*.

Update as project progresses:

Make adjustments in the PERT chart as the project progresses. As the project unfolds, the estimated times can be replaced with actual times. In cases where there are delays, additional resources may be needed to stay on schedule and the PERT chart may be modified to reflect the new situation.

4.6.5 BENEFITS OF PERT:

PERT is useful because it provides the following information:

- Expected project completion time.
- Probability of completion before a specified date.
- The critical path activities that directly impact the completion time.
- The activities that have slack time and that can lend resources to critical path activities.
- Activities start and end dates.

4.7 SOFTWARE FOR PROJECT MANAGEMENT:

Simpler projects can be managed manually by making Network diagram etc. But for complex projects, it becomes essential to use some project management software. There are several project management software available in the market. Two of them are briefly discussed below:-

4.7.1 MICROSOFT PROJECT:

Microsoft Project is a project management software program developed and sold by Microsoft which is designed to assist project managers in developing plans, assigning resources to tasks, tracking progress, managing budgets and analyzing workloads.

The application creates critical path schedules, although critical chain and event chain methodology third-party add-ons are available. Schedules can be resource levelled, and chains are visualized in a Gantt chart (in the form of horizontal bars). Additionally, Project can recognize different classes of users. These different classes of users can have differing accesslevels to projects, views, and other data. Custom objects such as calendars, views, tables, filters and fields are stored in an enterprise global which is shared by all users.

4.7.2 PRIMAVERA:

Primavera Systems Inc. provides project and program management software for the Architecture, Engineering and Construction industry. Focused on project portfolio management, or PPM, Primavera's solutions let users measure progress, assure governance, improve team collaboration and prioritize project investments and resources.

The newest addition to the suite of project management solutions is Primavera P6, which is an integrated PPM (project portfolio management) solution that provides a real-time view of portfolio performance. P6 also offers what-if scenario modelling, tabular scorecards and capacity analysis.

4.8 CONCLUSION:

All organizations use projects as the way to translate strategies into actions and objectives into realities. The art of managing projects is about having consistency in achieving stated objectives within limits of time, budget, and stakeholders' satisfaction, by directing and coordinating human and material resources. In order to remain competitive in this fast changing telecom market, it is essential for BSNL to use project management techniques.

5 RESTRUCTURING & RESPONSIBILITY MATRIX IN BSNL

5.1 LEARNING OBJECTIVES

At the end of the session, the trainees will be able to learn:

- Macro view of new company structure
- Job Description concept
- Implementation of new structure
- Example of Job description

5.2 OVERVIEW:

Organizational change is must to meet the competitive challenges and to keep pace with ever changing scenario. As part of Aspiration Driven Transformation, it was decided to restructure BSNL setup for realizing its shared dream. This chapter discusses the structural changes being effected in BSNL.

5.3 OBJECTIVES OF RESTRUCTURING

Project SHIKHAR is a holistic transformation exercise with the help of The Boston Consulting Group with a view to strengthen BSNL as an organization and enable it to get back on the path of growth and profitability. In order to implement the new strategy effectively, BSNL's organization structure has been redesigned with a view to provide end-to-end focus on potential growth areas such as Broadband, Mobile, Marketing, Sales & Distribution and Customer Service. A business unit based organization structure is being adopted.

The motive behind adoption of new organisation structure is to help BSNL to –

- Create adequate focus
    - On critical growth segments such as broadband, mobile, enterprise and new businesses (e.g., infrastructure sharing, international expansion etc)
    - On critical skills such as marketing, sales, customer service, network management and IT
- Develop accountability at all levels in the organisation along with control
    - Business units driving each of the key businesses with full responsibility for generating revenue with adequate control over all critical functions
    - Business unit structure at Head Office, Circle Office and in the field units (i.e. SSAs)
- Strike the right balance
    - Ensure business units have equitable distribution of work-load and resources

- Synergy/ Co-ordination
  - Ensure minimal duplication of resources between the different business units as well as ease of co-ordination among them

5.4 MACRO VIEW OF NEW STRUCTURE OF BSNL

The functional Directors on BSNL Board as per new organization structure have been re-designated as: -

Table 9. Functional Directors of BSNL

Earlier Designation	New Designation
Director (Operations)	Director (Consumer Fixed Access)
Director (P&NS)	Director (Consumer Mobility)
Director (C&M)	Director (Enterprise)
Director (HRD)	Director (HR)
Director (Finance)	Director (Finance)

In the new organisation structure, as depicted above there are four Business Units (BUs) –

5.4.1 CONSUMER FIXED ACCESS (HEADED BY A DIRECTOR):

Will be responsible for products such as landline, PCO, broadband and related VAS, and would target retail customers as well as small businesses. This business unit will control all PSTN and data switches as well as all fixed access media (i.e. the last mile)

5.4.2 CONSUMER MOBILITY (HEADED BY A DIRECTOR):

Will be responsible for products such as GSM (2G, 3G, 4G), WIMAX and related VAS, and would serve retail customers as well as small businesses. This business unit will control the mobility access network (i.e., BTS, BSC, MSC etc.)

5.4.3 ENTERPRISE (HEADED BY A DIRECTOR):

Will serve medium and large enterprises (i.e., corporate customers), carriers and ISPs. Enterprise products would include voice solutions, data solutions and managed services. This business unit will also be responsible for the wholesale business undertaken on BSNL's National Long Distance (NLD) and International Long Distance (ILD) network. It will also control BSNL's core network (i.e., transmission media assets – OFC, microwave etc). There will an Executive Director responsible for the core network within this BU

5.4.4 NEW BUSINESSES (HEADED BY AN EXECUTIVE DIRECTOR):

Will be in-charge of new business opportunities which BSNL plans to pursue. One such concrete opportunity that we have identified and are going to pursue is passive infrastructure sharing. Other areas being evaluated include expanding BSNL's core telecom operations in international markets; leveraging BSNL's real estate assets to earn additional revenues etc.

Each of the above described BUs will be responsible for generating revenue and driving profit in their respective areas. They will also have control over critical resources needed to drive the business – such as strategy & planning, product management, marketing, sales & distribution, customer service as well as engineering, development and operations of their respective network assets.

Table 10. Macro view of new verticals with reference to customer, product & assets

	Director Consumer Fixed Access	**Director Consumer Mobility**	**Director Enterprise**	**ED New Business**
Customer	Consumers SOHO Small enterprises	Consumers SOHO Small enterprises Carriers	Medium & large enterprises Carriers ISPs	Depends on nature of business
Products	Landline PCO Broadband VAS	GSM (2G,3G,4G) WLL WIMAX VAS Roaming	Voice Data Managed Services NLS/ILD wholesale	Depends on nature of business Passive Infra sharing

In addition to the four business units, there are a few critical shared functions to enable the entire organisation. These functions comprise –

- HR (including Admin, Legal) –Headed by Director
- Finance – Headed by Director, supported by an Executive Director
  Directly reporting to CMD

- ED Corporate Affairs (including Corporate IT, Corporate Planning & Monitoring, Corporate Marketing and Public Relations, Regulation)
- Company Secretary
- Vigilance (CVO)
- GM (Coordination & Monitoring) post has been created directly reporting to CMD

Each business unit will also have elements of these critical support functions, e.g. Finance, IT etc. within its organisation structure to support respective business units.

The business unit focus, which has been developed at the Head Office is being replicated at the Circle Offices and Region Offices. Hence each of the four BUs at Head Office will have their representatives at the Circle Office and Region Offices below them. This will ensure that there is a clear chain of command from top to bottom within each BU and accountability can be assigned to people at all levels. The same will also be true for all the critical shared functions.

Circle Office Restructuring: The existing Circles have been categorized as Big, Medium and small and accordingly revised structure has been worked. The categorization of these circles is given below:

Table 11. Restructuring of Circle Offices

Large	**Medium**	**Small**
Andhra Pradesh	Assam	Andaman & Nicobar
Gujarat	Bihar	Chhattisgarh
Karnataka	Haryana	Himachal Pradesh
Kerala	Jammu & Kashmir	Jharkhand
Maharashtra	Madhya Pradesh	North East-I
Rajasthan	Orissa	North East-II
Tamil Nadu	Punjab	Uttaranchal
Uttar Pradesh (E)	Uttar Pradesh (W)	
West Bengal		

All the circles have thirteen distinct sections namely, CFA, CM, Enterprise, Passive Infra, HR, Finance, Business Planning/IT, Civil, Electrical, Architect, Vigilance, Commercial & Regulation, CSC.

SSA restructuring: All SSAs in BSNL also need to be restructured to align their operations with the new vertical concept. This is being done progressively. In SSAs also CFA, CM, CSC, EB, Finance, Vigilance and HR/Admin/MIS/IT roles are defined. Depending on the size of SSA, job assignment and reporting structure is being planned.

Dual reporting concept: At circle level head of CSC and C&R posts have dual reporting

i.e., to CFA and CM heads. Similarly in SSAs, the CSC head of SSA has dual reporting to CFA and CM heads.

5.5 JOB DESCRIPTION CONCEPT:

A key feature of restructuring is introduction of Job description for each new post. Besides JD, key result areas and Key performance indicators have also been defined aligned with the new Group Performance Management System. This description enables the officers handling these jobs to have unambiguous understanding of their new role, expectations and measuring yardstick for performance. Few JDs are given at the end of this handout.

5.6 IMPLEMENTATION APPROACH FOR ORGANIZATION RESTRUCTURING

Restructuring exercise is a Top-Down approach. The steps implemented are:

- The organization structure of the Corporate Office has already been redesigned.
- All the officers of corporate office (now called as head office (HO)) have been assigned new job responsibilities.
- The BSNL HO is under the process of smooth transition from old to new structure, having equipped with new job description, and new responsibilities.
- The next phase of organization restructuring is to be implemented in the headquarters of the territorial Circles. Territorial Circles are in the process of carrying out the mapping of Officers to the new structure.
- Proposals of Circles are being examined at Corporate Office , GM (Administration) of territorial circles are meeting officers from Corporate Restructuring cell at HO ,for removing the teething troubles of mapping of officers at circle office to new business unit structure.
- After completion transformation of structure at Circle Office the same task has to be further taken up at Regional Office (RO) level.

5.7 EXAMPLE OF JOB DESCRIPTION: JD OF VARIOUS OFFICERS AT BSNL CO AND CIRCLES ARE AVAILABLE ON BSNL INTRANET. JD FOR A CIRCLE AGM (CM) IS GIVEN BELOW:

Table 12. JD of Head of Customer Service for CM at small Circle – AGM	
Job title/ Designation	Head of Customer Service for Consumer Mobility at Circle – AGM

Job objective	Management of customer service for Consumer Mobility (CM) business unit including Call centres
Reporting to	Direct: Head of Consumer Mobility at Circle – GM Indirect (functional) Head of Customer Service for CM at Head Office

Table 13. Key Responsibility Areas (KRAs)

Development of comprehensive action agenda for CM business unit for delivering best in-class service at all stages of customer lifecycle (pre-sales, service delivery, after-sales), with particular focus on management of Call centres.

Designing Service Level Agreements (SLAs) – internal and external
Setting-up of complaint and grievance management systems and processes at Circle level
Interaction with Head Office and Region Office for smooth day-to-day operations

Liaising with DGM (Customer Service) – Head Office on policy matters.
Recommendations to Head Office based on local environment.
Guidance to Region Office on business matters Monitoring performance against business plan at Circle level (by Region)
Development of employees to ensure continuous improvement in individual and company performance and encouraging a performance-oriented culture with emphasis on team-building and mentorship

Table 14. Key Performance Indicators (KPIs) – to be measured against targets

Financial	• Budget adherence on capex & opex (Rs. Cr)
Customer/Market	• Customer satisfaction (Scale of 1 to 5)
Operations	• Customer churn (%) - BSNL vs. market leader • By product (2G, 3G, etc.) • SLA adherence forCall centers • (e.g. response time, abandon rate, etc.) • Call centre roll-out status
Employee development	• Feedback from peers • Feedback from direct repartees

Table 15. Director (Consumer Fixed Access) – CFA

Job overview	
Job objective	Achieving profitable and sustainable growth of Consumer Fixed Access (CFA) business through innovative and affordable products, excellence in sales, marketing and customer service, superior network operations backed by efficient IT-enabled processes. Creating a work environment that encourages commitment and performance by ensuring employee growth and development
Reporting to	Direct: CMD
Reporting from	GM (Strategy & Planning) – CFA, PGM (Products, Sales, Marketing & Customer Service) – CFA, GM (Network Planning) – CFA,GM (Procurement) – CFA, GM (Rural Network) – CFA, GM (Network Engineering & Development) – CFA, GM (Network Operations) – CFA, GM (Network Operations – Enterprise) – CFA, CGM (Data Networks) – CFA (DNW), CGM (NCES) – CFA, CGM (IT Projects Circle) – CFA, PGM (Finance) – CFA, GM (IT) – CFA, Indirect (functional), Head of Consumer Fixed Access at Circle – PGM/ GM

Table 16. Key Responsibility Areas (KRAs)

- Formulation of CFA business unit strategy, in line with the overall company strategy
- Marketing strategy by liaising with GM (Corporate Marketing & Public Relations) – CA
- Product design, pricing and bundling strategy for CFA products such as Landline, Broadband, IPTV, PCO and related Value Added Services (VAS)
- Sales channel management strategy including margin structure design across products: Landline, Broadband, IPTV sales force, PCO sales force
- Setting-up and management of sales alliances (e.g., DSAs)
- Customer service strategy to deliver best-in-class service at all stages of customer lifecycle (presales, service delivery, after-sales)
- Network planning, expansion, up gradation and maintenance strategy
- Access media – Beyond local exchange (PSTN), Beyond DSLAM (data)
- All PSTN and data switches IT strategy by liaising with PGM (Corporate IT) – CA

• Operationalization of business strategy through multiple levers Creation of annual business plan for CFA business unit by liaisoning with PGM (Corporate Planning & Monitoring) – CA and financial plan by liaising with GM (Budgeting & Financial Control) Creation of annual business plan for CFA business unit by liaising with PGM (Corporate Planning & Monitoring) – CA and financial plan by liaising with GM (Budgeting & Financial Control)

- Fin, including
  - Financial targets – overall budget (revenue, capex, opex), profitability, etc.
  - Customer/ Market targets – # connections, churn, market share, ARPU, etc.
  - Operational targets – network roll-out & operations, customer service, etc.
- Target-setting for Circles by liaisoning with Circle Heads and PGM (Corporate Planning & Monitoring) – CA
- Monitoring performance against business plan at Corporate level (by Circle) and taking corrective action as and when required
- Ensuring timely billing, collections and revenue assurance for CFA business unit
- Liasoning with Circles for smooth day-to-day operations, HR section for adequate staffing and training within CFA business unit
- Development of employees to ensure continuous improvement in individual and company performance & Encouraging a performance-oriented culture with emphasis on team-building and mentorship

Table 17. Director (Consumer Mobility) – CM

Table 18. Key Responsibility Areas (KRAs)

- Formulation of CM business unit strategy, in line with the overall company strategy
- Marketing strategy by liaisoning with GM (Corporate Marketing & Public Relations) – CA
- Product design, pricing and bundling strategy for CM products such as GSM (2G, 3G), related Value Added Services (VAS) and Roaming
- Sales channel management strategy including margin structure design across products, Franchisees, Setting-up and management of sales alliances
- Customer service strategy to deliver best-in-class service at all stages of customer lifecycle (pre-sales, service delivery, after-sales)
- Management of access mechanisms – Call centers, online support, CSCs
- Setting-up of complaint and grievance management systems and processes
- Network planning, expansion, up gradation and maintenance strategy
- BTS – GSM (2G, 3G,4G), WiMAX, CDMA, Switches – MSC, BSC
- IT strategy by liaisoning with PGM (Corporate IT) – CA
- Creation of annual business plan for CM business by liaisoning with PGM (Corporate Planning & Monitoring) – CA and financial plan with GM (Budgeting & Financial Control)

– Fin, including

  - Financial targets – overall budget (revenue, capex, opex), profitability, etc .
  - Customer/ Market targets – # subscribers, churn, market share, ARPU, etc .
  - Operational targets – network roll-out & operations, customer service, etc.

- Target-setting for Circles by liaisoning with Circle Heads and PGM (Corporate Planning & Monitoring) – CA
- Monitoring performance against business plan at Corporate level (by Circle) and taking corrective action as and when required
- Ensuring timely billing, collections and revenue assurance for CM business unit
- Liaisoning with Circles for smooth day-to-day operations
- Liaisoning with HR section for adequate staffing and training within CM business unit
- Employee Development for continuous improvement in individual and company performance & Encouraging a performance-oriented culture with emphasis on team-building and mentorship

Table 19. Director (Enterprise & Wholesale)	
Job overview	
Job objective	Achieving profitable and sustainable growth of Enterprise & Wholesale (E&WS) business through innovative and affordable products, excellence in sales, marketing and customer service, superior network operations backed by efficient IT-enabled processes. Creating a work environment that encourages commitment and performance by ensuring employee growth and development
Reporting to	Direct: CMD
Reporting from	Direct: GM (Strategy & Planning) – E&WS, GM (Solutions) – E&WS, PGM (Platinum – BFSI) – E&WS, PGM (Platinum – Government) – E&WS, PGM (Platinum – IT & Services) – E&WS, PGM (Platinum – Manufacturing) – E&WS, GM (ILD) – E&WS, Executive Director (Core Network) – E&WS, PGM (Finance) – E&WS, GM (IT) – E&WS, Indirect (functional): Head KAM – Gold/ Silver at Circle – GM/ DGM

Table 20. Key Responsibility Areas (KRAs)

- Formulation of E&WS business unit strategy, in line with the overall company strategy
- Marketing strategy by liaisoning with GM (Corporate Marketing & Public Relations) – CA
- Product/ Solutions strategy for enterprise customers
- Developing basic voice, data and managed services offerings, Developing solutions and product bundles by industry vertical – BFSI, Government, IT, Services, Manufacturing
- Pricing of basic products, bundles and solutions, Pricing of wholesale product offering , ensuring compliance with regulations
- Key account management (sales) strategy for enterprise customers, Segmentation of customers into platinum, gold and silver accounts based on annual turnover, employee base, etc., Account allocation and organization structure for account managers
- Relationship management (sales) strategy for carriers and ISPs for wholesale business
- Customer service strategy to deliver best-in-class service at all stages of customer lifecycle (pre-sales, service delivery, after-sales)
- Network planning, expansion, up gradation and maintenance strategy for all Core network assets based on inputs from CFA, CM and sales expectation from enterprise

customers

- Transmission media – Up to local exchange (PSTN), up to DSLAM (data)
- Evaluating economic benefits of building own International Long Distance (ILD) network compared to leasing from other operators
- IT strategy by liaisoning with PGM (Corporate IT) – CA
- Creation of annual business plan by liaisoning with PGM (Corporate Planning & Monitoring) – CA and financial plan with GM (Budgeting & Financial Control) –

Fin, including

  - Financial targets – overall budget (revenue, capex, opex), profitability, etc.
  - Customer/ Market targets – market share, share of wallet, etc.
  - Operational targets – network roll-out & operations, customer service, etc.

- Target-setting for enterprise business by liaisoning with Circle Heads and PGM (Corporate Planning & Monitoring) – CA
- Platinum enterprise business targets by industry vertical
- Gold and Silver enterprise business targets by Circle
- Wholesale business targets for Head Office
- Monitoring performance against business plan at Corporate level (by City for Platinum accounts and by Circle for Gold and Silver accounts) and taking corrective action as and when required
- Liaisoning with industry-wise national KAMs and Circles for smooth day-to-day operations of EB
- Liaisoning with HR section for adequate staffing and training within E&WS business unit
- Employee Development for continuous improvement in individual andcompan performance & Encouraging a performance-oriented culture with emphasis on team-building and mentorship

5.8 CONCLUSION:-

Project SHIKHAR is a holistic transformation exercise with the help of The Boston Consulting Group with a view to strengthen BSNL as an organization and enable it to get back on the path of growth and profitability. In order to implement the new strategy effectively, BSNL's organization structure has been redesigned with a view to provide end-to-end focus on potential growth areas such as Broadband, Mobile, Marketing, Sales & Distribution and Customer Service. A business unit based organization structure is being adopted.

6 CORPORATE COMMUNICATIONS

6.1 LEARNING OBJECTIVES:

At the end of this session, participant will be able to understand:

- What is corporate communication?
- Various methods of communication at workplace
- Modes of communication
- Barriers to communication
- Ways to Facilitate better communication

6.2 INTRODUCTION:

It is difficult to overstate the critical importance of effective communication for most businesses and organizations.

It is through effective communication that customers learn about a company's products or services and what makes brands unique compared to their competitors. It's how management and employees coordinate their activities to ensure that the entire organization is marching toward the same strategic goals. It's also how executives inform investors, the media, and the general public about important organizational developments. In short, communication underlies many of the most significant activities that most businesses must complete.

People interact with each other for various reasons. In some cases they are successful in achieving what they intended to and in other cases not so. What makes some people better than others in getting results from their interaction is their art of communication.

Communication is so important that most organizations will eventually reach a point at which they realize they need to invest in building a corporate communication for these various activities.

6.3 WHAT IS COMMUNICATION?

Communication is the method by which people share their ideas, information, opinions and feelings. People sharing ideas, information, opinions and feelings may contribute to the operations of teams and the work of individuals. Communication is a two-way activity between two or more people. The common model of communication is:

Sender → Message→ Encoding→ Channel → Decoding→ Message→ Receiver
-------------------------Feedback-----------------------------------|

6.4 WHAT IS CORPORATE COMMUNICATION?

Corporate communications refers to the way in which businesses and organizations communicate with internal and external various audiences.
These audiences commonly include:

- Customers and potential customers
- Employees
- Key stakeholders (such as investors)
- The media and general public
- Government agencies and other third-party regulators

6.4.1 AREAS OF CORPORATE COMMUNICATIONS:

In corporate communications, there are typically three principal areas. These include:

Management communication:

This form of communication takes place between management and both internal and external audiences. To ensure successful external and internal business communication, management relies on specialists to deliver their messaging effectively. These specialists often work in marketing communication and organisational communication.

Marketing communication:

As marketing communication can include advertising, direct mail, sponsorship and selling, it is quite common for businesses to allocate the bulk of their budget to corporate and marketing communications.

Organisational communication:

Those in the public relations industry working in business will likely be involved in organisational communication. This consists of specialists in areas including public affairs, corporate advertising, employee communication, investor relations and public relations.

6.4.2 THE RESPONSIBILITIES OF CORPORATE COMMUNICATION ARE:

- To promote the profile of the "company behind the brand" (corporate branding).
- To minimize discrepancies between the company's desired identity and brand features.
- To delegate tasks in communication.
- To formulate and execute effective procedures to make decisions on communication matters.
- To mobilize internal and external support for corporate objectives.
- To coordinate with international business firms.

6.5 METHODS OF COMMUNICATION:

In an organisation, there are various methods of communication. The following is a list of some methods of communication:

- person to person - face to face, reading a letter, making a phone call
- in a small group - planning, problem solving, decision making, written reports, memos, notice boards
- in a meeting - presenting, bargaining, negotiating agreements
- using mass media - speaking in public, on radio or television, writing for print media such as newspapers and journals, books, advertising
- others - training, teaching, entertaining.

6.6 MODES OF COMMUNICATION:

- Verbal
- Nonverbal
- Written

6.6.1 VERBAL COMMUNICATION:

Verbal communication is when a person puts across a message by speaking. The message can be sent to an individual, a team or a group. The message can be sent in person, via an intercom, over the phone, email etc. The person sending the message should express the message clearly so that the receiver is able to understand and act, if required, on the message. The receiver of the message should be able to understand what was said. Many times the message may not be received as the sender intended, due to a range of factors including lack of attention or interest.

6.6.2 NON-VERBAL COMMUNICATION:

There are numerous ideas, thoughts and feelings that are communicated without words. Only one third of a message is sent in a person-to-person exchange in words alone. People have the ability to read non-verbal cues. These cues are learnt from the environment and through culture and can therefore be misinterpreted.

The following are examples of non-verbal communication;

- yawn
- tears
- frown
- crossing arms
- averting eyes
- Non-verbal communication is divided into six types. They are:
- body language

    - physical characteristics and appearance
    - voice
- space
- environment
- time
- Silence can be a type of non-verbal communication

6.6.3 WRITING:

Written communication provides a record for the future. Written communication can be studied, reflected on and absorbed at the receiver's own pace. Written communication is permanent and makes a lasting impression. The written word can sometimes have more authority. Words can be written, rewritten, edited until the communication is seen as clear and accurate and is ready to be sent to the receiver. Written communication includes letters, memos, email, minutes of meetings, reports, instructions, diagrams, maps, other pictorial aids etc. Written communication can overcome distance and can be cheaper than face-to face meetings. It can be useful when information has to be sent to large numbers of people and can reinforce verbal communication.

6.7 COMMUNICATION BARRIERS:

Personnel in a workplace communicate with peers, managers, supervisors, members of the public, suppliers and others. Barriers to communication can cause problems and misunderstanding with effective communication. These barriers suggest opportunities for improving communication.
Some barriers are explained below:

6.7.1 MUDDLED MESSAGES:

Effective communication starts with a clear message. Contrast these two messages: "Please be here about 7:00 tomorrow morning." "Please be here at 7:00 tomorrow morning." The one word difference makes the first message muddled and the second message clear. Muddled messages are a barrier to communication because the sender leaves the receiver unclear about the intent of the sender. Muddled messages have many causes. The sender may be confused in his or her thinking. The message may be little more than a vague idea. The problem may be semantics, e.g., note this muddled newspaper ad: "Dog for sale. Will eat anything. Especially likes children. Call 1800-3591-DOG for more information." Feedback from the receiver is the best way for a sender to be sure that the message is clear rather than muddled. Clarifying muddled messages is the responsibility of the sender. The sender hoping the receiver will figure out the message does little to remove this barrier to communication.

6.7.2 STEREOTYPING:

Stereotyping causes us to typify a person, a group, an event or a thing on oversimplified conceptions, beliefs, or opinions. Thus, basketball players can be stereotyped as tall, Petrol vehicle better than Diesel, Pandits as vegetarians, villagers as illiterate. Stereotyping can substitute for thinking, analysis and open mindedness to a new situation. Stereotyping is a barrier to communication when it causes people to act as if they already know the message that is coming from the sender or worse, as if no message is necessary because "everybody already knows." Both senders and listeners should continuously look for and address thinking, conclusions and actions based on stereotypes.

6.7.3 WRONG CHANNEL:

"Good morning." An oral channel for this message is highly appropriate. Writing "GOOD MORNING!" on a chalkboard in the classroom is less effective than a warm oral greeting. On the other hand, a detailed request to a contractor for supply of material should be in writing, i.e., non-oral. These simple examples illustrate how the wrong channel can be a barrier to communication. Variation of channels helps the receiver understand the nature and importance of a message. A written disciplinary warning for late coming emphasizes to the employee that the problem is serious. A birthday card to an employee's child is more sincere than a request to the employee to say "Happy Birthday" to the child.

Simple rules for selection of a channel cause more problems than they solve. In choice of a channel, the sender needs to be sensitive to such things as the complexity of the message (good morning versus a supply contract); knowledge, skills and abilities of the receiver; and immediacy of action to be taken from the message.

6.7.4 LANGUAGE:

Words are not reality. Words as the sender understands them are combined with the perceptions of those words by the receiver. Language represents only part of the whole. We fill in the rest with perceptions.

Coded words: Trying to understand a foreign language easily demonstrates words not being reality. Being "foreign" is not limited to the language of another country. A brassy day may say much about temperature and little about colour. Each new employee needs to be taught the language of the company. Until the company's language is learned, it can be as much a barrier to communication as a foreign language. For example in BSNL, various terms such as CDNP, Dead, NDT, etc.

Using "You" or "We" statements instead of "I" statements. I statements show ownership of what is being said. "You" statements are often a form of criticism. "We" statements often implies everyone within listening distance agrees with the statement, which is not true. It is like you speaking for another person without his or her permission.

Absolute Statements. These use such words as Never, always, forever, etc. and are often make a statement untrue. Use a less absolute word.

6.7.5 LACK OF FEEDBACK:

Feedback is the mirror of communication. Feedback mirrors what the sender has sent. Feedback is the receiver sending back to the sender the message as perceived. Without feedback, communication is one-way.

Feedback happens in a variety of ways. Asking a person to repeat what has been said, e.g., repeat instructions, is a very direct way of getting feedback. Feedback may be as subtle as a stare, a puzzled look, a nod, or failure to ask any questions after complicated instructions have been given. Both sender and receiver can play an active role in using feedback to make communication truly two-way.

Feedback should be helpful rather than hurtful. Prompt feedback is more effective that feedback saved up until the "right" moment. Feedback should deal in specifics rather than generalities. Approach feedback as a problem in perception rather than a problem of discovering the facts.

6.7.6 POOR LISTENING SKILLS:

Listening is difficult. A typical speaker says about 125 words per minute. The typical listener can receive 400-600 words per minute. Thus, about 75 percent of listening time is free time. The free time often sidetracks the listener. The solution is to be an active rather than passive listener. One important listening skill is to be prepared to listen. Tune out thoughts about other people and other problems. Search for meaning in what the person is saying. A mental "Shut up" is a useful listening guideline. Withhold evaluation and judgment until the other person has finished with the message. A listener's premature frown, shaking of the head, or bored look can easily convince the other person there is no reason to elaborate or try again to communicate his or her excellent idea. Providing feedback is the most important active listening skill. Ask questions. Nod in agreement. Look the person straight in the eye. Lean forward. Be an animated listener. Focus on what the other person is saying. Repeat key points.

Active listening is particularly important in dealing with an angry person. Encouraging the person to speak, i.e., to vent feelings, is essential to establishing communication with an angry person. Repeat what the person has said. Ask questions to encourage the person to say again what he or she seemed most anxious to say in the first place. An angry person will not start listening until they have "cooled" down. Telling an angry person to "cool" down often has the opposite effect. Getting angry with an angry person only assures that there are now two people not listening to what the other is saying.

Automatic Talking: Listening just long enough to find a word that you know something about. Then shut off the rest of what is being said, particularly the emotional content. Then start talking about the word you know something about. This blocks real communications by not hearing the total content. This is the most used form of blocking true communication.

Selective Listening: This is when a person hears another but selects to not hear what is being said by choice or desire to hear some other message. This can take several forms and result in acting out in destructive ways. An example is to become passive aggressive by pretending to hear and agree to what was said when actually your intent is to NOT act on the message, but make the other person think you will. Another form is to act on what you wanted to hear insteadof what was said. Continued selective listening is one of the best ways to destroy a relationship.

Daydreaming: Letting your attention drift away. There are many causes of this and you can stop it by getting into the conversation and saying you are having a hard time staying with what is being said, without blaming. You may find out others are having the same difficulty and will do the same.

Being the Reactor: On occasion, a person will attempt to get you to speak by trying to *"hook" you to react*. Swearing is a way of hooking some people. A good listener will continue to just listen and not react. This will often cause the person to stop trying to hook you if you keep it up long enough.

6.7.7 INTERRUPTIONS:

The interruptions may be due to something more pressing, rudeness, lack of privacy for discussion, a drop-in visitor, an emergency, or even the curiosity of someone else wanting to know what two other people are saying. Regardless of the cause, interruptions are a barrier to communication. In the extreme, there is a reluctance of employees and family members even to attempt discussion with a manager because of the near certainty that the conversation will be interrupted. Less extreme but serious is the problem of incomplete instructions because someone came by with a pressing question.

6.7.8 PHYSICAL DISTRACTIONS:

Physical distractions are the physical things that get in the way of communication. Examples of such things include the telephone, a pick-up truck door, a desk, an uncomfortable meeting place, and noise.

These physical distractions are common in offices. If the phone rings, the tendency is to answer it even if the caller is interrupting a very important meeting conversation. A supervisor may give instructions from the driver's seat of a pickup truck. Talking through an open window and down to an employee makes the truck door a barrier. A person sitting behind a desk, especially if sitting in a large chair, talking across the desk is talking from behind a physical barrier. Another example is a meeting room with uncomfortable chairs that soon cause people to want to stand even if it means cutting short the discussion.

6.7.9 EXPECTATIONS:

Are your expectations of others or organizations a barrier? Do others know your expectations or do you just think they know them? Can you change your expectations or let go of them to be part of a group or a relationship? How would that feel? Did this in any way feel like giving up your "self" to be what the others wants you to be? This is probably the number one barrier to communications. Expectations are often not expressed to others and it is as if the other is expected to have a crystal ball and know what you expect.

6.7.10 RISKING:

What is a risk for you? How much do you risk in a communications setting? What keeps you from risking? Is it fear? If so, fear of what? Is it control? Control of what? Yourself or others or the group? Do you wish to risk more? What will it take to risk more? More trust? This is probably the top barriers in communicating authentically. Risk in communication often has this silent question: *"If I risk myself and this is all I've got, what will happen if I am rejected?"* Building communications with others authentically takes a degree of risk.

6.7.11 AVOIDANCE:

What behaviour do you use to avoid looking at yourself? Think about this hard. What was behind the avoidance? Fear of rejection? Fear of loss of control? Have you been part of an avoidance "project" to shift the subject away from yourself to enter a comfort zone? Avoidance frequently is present when a person feels unsafe or is unsure if it is safe. Many business meetings start with considerable avoidance and only in the last minutes, does the participants get to the real subject, and then often try a quick fix. Avoidance can become a habit. Vulnerability is a good way to build relationships with others, but it is often scary and avoided. It takes risk to share your self.

6.7.12 FIXING:

Has anyone try to fix you? The group? How did that feel? Did you try to fix, heal or convert anyone or the group? Can you fix anyone other than yourself? How aware are you that this is often done, with good intentions and well-meaning but usually not wanted and unaccepted 90+% of the time?

What is your level of acceptance of people just as they are? Fixing is often trying to get the other to believe as you do or to do as you have done in a similar situation or to be more like you so you will feel more comfortable.

6.7.13 SCAPEGOATING:

Have you felt scapegoated? What did it feel like? Have you been part of a scapegoating effort on another person? Scapegoating is often form of nasty avoidance or blaming or excluding. It may be an attempt to keep focus off the person doing the scapegoating! It is seen in most family situations and in the workplace and is usually destructive.

6.7.14 PROBING:

Do you probe others for information? Have others probed you ? How did that feel? Did it create a barrier for you? If you were probed and did not like it, what kept you from confronting the prober? If you were the prober, why did you probe? Did it have anything to do with keeping the focus off you?
Probing can be avoidance of task or scapegoating if carried too far.

6.7.15 CONTROL:

Did anyone try to control you or what you said? How did it feel? Were you aware at any time that you were trying to control an outcome? If you tried to control, what was the reason? Was it to control what might happen to you? Did you notice others trying control? Controlling often takes the form of manipulation. Manipulation does not feel good when it is discovered. Most of us believe we have far more control than we actually do. Letting go of control and risking more may result in more love coming into your life.

6.7.16 BLAMING:

Have anyone blame you for what was or was not happening? How did that feel? Do you blame others or own what is your responsibility? What was your motive for the blaming? Did it have to do with trying to make some other person responsible for your behaviour? Did you experience blaming in your family of origin? Blaming can become an almost unconscious habit.

6.7.17 CONFLICT AVOIDANCE (CHAOS):

Do you run from conflict or avoid it in some way instead of trying to go through it? Do you leave a conversation when it gets too hot for you? (either actual or emotionally) How do you react to change? Another word for conflict/chaos can be change. People find many ways to avoid talking about change as it usually feels uncomfortable because of the unknown. Chaos can also mean conflict and most people will do anything to avoid it. Chaos is one of the most certain things in life and it is well to learn how to embrace it.

6.7.18 EXCLUSION:

Did you feel excluded at any time? Did you exclude yourself? Did some person say anything that made you feel excluded? Was your feeling of exclusion accurate? Is this something that often happens to you? Did you exclude any person either by avoiding them, or emotionally tuning them out, or by making a judgmental statement? Did you later change the exclusion to inclusion? Think of how people are often excluded and why. It is often done as an unconscious act that may have been learned in the family or work place.

6.7.19 BOUNDARY OR BARRIER:

A boundary is often created for protection and should only be changed with considerable thought. A boundary "rule" is one you have originated that defines what is good or bad for you. A boundary may be a barrier to communication depending on what it is. Boundaries are accumulated during life for protection and become a learned method of existing. Boundaries need to be changed slowly and may be replaced with another boundary that offers more freedom until it becomes safe to "take the next step". Some people have few or almost no boundaries and this often gets them into trouble. An example of this is a person that regularly offers far more information that is asked for by people they talk to. This becomes a turnoff to others and may result in other avoiding you.

6.7.20 CULTURAL BARRIERS:

When we join a group and wish to remain in it, sooner or later we need to adopt the behaviour patterns of the group. These are the behaviours that the group accept as signs of belonging. The group rewards such behaviour through acts of recognition, approval and inclusion. In groups which are happy to accept you, and where you are happy to conform, there is a mutuality of interest and a high level of win-win contact. Where, however, there are barriers to membership of a group, a high level of game-playing replaces good communication.

6.7.21 GENDER BARRIERS:

There are distinct differences between the speech patterns in a man and those in a woman. A woman speaks between 22,000 and 25,000 words a day whereas a man speaks between 7,000 and 10,000. In childhood, girls speak earlier than boys and at the age of three, have a vocabulary twice that of boys. The reason for this lies in the wiring of a man's and woman's brains. When a man talks, his speech is located in the left side of the brain but in no specific area. When a woman talks, the speech is located in both hemispheres and in two specific locations. This means that a man talks in a linear, logical and compartmentalised way, features of left-brain thinking; whereas a woman talks more freely mixing logic and emotion, features of both sides of the brain. It also explains why women talk for much longer than men each day.

6.7.22 LACK OF SUBJECT KNOWLEDGE:

If a person who sends a message lacks subject knowledge then he may not be able to convey his message clearly. The receiver could misunderstand his message, and this could lead to a barrier to effective communication.

6.7.23 STRESS:

One of the major communication barriers faced by employees in most of the organization is stress. When a person is under immense stress, he may find it difficult to understand the message, leading to communication distortion. At the time of stress, our psychological frame of mind depends on our beliefs, experiences, goals and values. Thus, we fail to realize the essence of communication.

6.8 FACILITATING COMMUNICATION:

In addition to removal of specific barriers to communication, the following general guidelines may also facilitate communication.

- Have a positive attitude about communication. Defensiveness interferes with communication. Work at improving communication skills. It takes knowledge and work. The communication model and discussion of barriers to communication provide thenecessary knowledge. This increased awareness of the potential for improving communication is the first step to better communication.
- Include communication as a skill to be evaluated along with all the other skills in each person's job description. Help other people improve their communication skills by helping them understand their communication problems.
- Make communication goal oriented. Relational goals come first and pave the way for other goals. When the sender and receiver have a good relationship, they are much more likely to accomplish their communication goals.
- Approach communication as a creative process rather than simply part of the chore of working with people. Experiment with communication alternatives. What works with one person may not work well with another person. Vary channels,listening techniques, and feedback techniques.
- Accept the reality of miscommunication. The best communicators fail to have perfect communication. They accept miscommunication and work to minimize its negative impacts.

6.9 REQUIRED SKILLS FOR CORPORATE COMMUNICATIONS:

Some of the most important skills required for corporate Communication include:

1. Writing skills:

As working in organisation, you will likely spend the majority of your day writing copy in various formats, from emails and memos, to blog posts and articles, to website copy, social media posts, printed collateral, and more. To be effective in the role, you will need to hone your writing skills so that you can communicate clearly to diverse audiences across many formats.

2. Presentation and public speaking skills:

Presentation skills have become more important in recent years. In fact, according to once survey of corporate recruiters, it's in the top five skills that companies look for when filling positions. Communications professionals are regularly expected to interface with the public and members of the media, as well as fellow employees and internal stakeholders. The ability to clearly and confidently present your ideas and information, whether in person or through the aid of technology (such as a video or webinar) is expected in many roles.

3. Communicating with data:

Organizations now collect more data than at any point in history, all of which is critical in informing important strategic decisions. As data has proliferated, employees across disciplines are finding that they must interact with this data in new ways. Modern communications professionals must be adept at interpreting data from a variety of sources, communicating with that data, and using it to tell compelling stories.

4. Research and critical thinking:

Depending on your exact role within an organization and the types of communication that you are expected to create, you may find yourself spending a lot of time searching for resources that can inform your content. The ability to conduct research and more importantly evaluate your resources critically, is an essential part of many communications roles.

5. Technical skills:

Technological advancements are shaping the field of communications as much as any other industry. The International Association of Business Communications states that the five most important technology trends impacting corporate communications are chatbots, blockchain, virtual reality, extremely-personalized experiences, and artificial personal assistants. Many (if not all) of these technologies are being driven by developments in machine learning and artificial intelligence, which threaten to automate many roles. Developing your technical skills can help you remain competitive in this new reality.

6.10 CONCLUSION

Communication is at the heart of many interpersonal problems faced by employees. Understanding the communication process and then working at improvement provide managers a recipe for becoming more effective communicators. Knowing the common barriers to communication is the first step to minimizing their impact. Managers can reflect on how they are doing and make use of the ideas presented in this paper. When taking stock of how well you are doing as a manager, first ask yourself and others how well you are doing as a communicator.

7 EFFECTIVE LEADERSHIP & TEAM BUILDING

7.1 LEARNING OBJECTIVE:

At the end of the session, the trainees will be able to learn:

- Define Leadership
- Leadership Competencies
- Leadership Abilities
- Leadership Framework
- Factors of leadership
- Leadership Styles
- The five points of power
- Team Building
- Leadership & Team Building

7.2 INTRODUCTION

“The Truth is that no one factor makes a company admirable. But if you were forced to pick the one that makes the most difference, you’d pick leadership.” Warren Bennis-1998

7.3 LEADERSHIP:

Leadership is a process by which a person influences others to accomplish an objective and directs the organization in a way that makes it more cohesive and coherent. Leaders carry out this process by applying their leadership attributes, such as beliefs, values, ethics, character, knowledge, and skills. Although the position of a manager, supervisor, lead, etc. gives the authority to accomplish certain tasks and objectives in the organization, this *power* does not make anyone a leader, it simply makes the boss. Leadership differs in that it makes the followers want to achieve high goals, rather than simply bossing people around.

Leaders exist at all levels of the organization, their roles differ. The pyramid shown below explains the various levels and the expectations from leaders in an organization.

Figure 8: Principle Based Leadership

7.4 LEADERSHIP COMPETENCIES

"The very essence of leadership is that you have to have a vision. It's got to be a vision you articulate clearly and forcefully on every occasion."

Core Competencies form the foundation of leadership. Without a solid base, the sides of the pyramid will soon crumble away.

- Leadership Competencies form the basic structure (walls) that separates leaders from bosses by building the knowledge and skills required for driving the organization towards the cutting edge of its business. Without these competencies, a leader has a shallow base from which to work.
- Professional Competencies add depth to the pyramid. The main driver of these competencies arrives from experiences and LEARNING from these experiences. While a person might have a firm grasp on the core and leadership competencies, it is only through trial and error, and later through reflection to increase the depth of those experiences, that an average leader grows into a good leader. Each organization requires a different set of professional competencies for each leadership position.

Managers are people who do things right, while leaders are people who do the right thing.

7.5 LEADERSHIP ABILITIES

Displays attributes that make people glad to follow. Provides a feeling of trust. Rallies the troops and builds morale when the going gets tough.

a) Visioning - Applies effort to increase productiveness in areas needing the most improvement. Creates and set goals (visions). Senses the environment by using personal sway to influence subordinates and peers. Gain commitment by influencing team to set objectives and buy in on the process. Reinforces change by embracing it (prevents relapse into prior state).

b) Create and Lead Teams - Develops high-performance teams by establishing a spirit of cooperation and cohesion for achieving goals.

c) Foster Conflict Resolutions (win-win) - Effectively handles disagreements and conflicts. Settles disputes by focusing on solving the problems, without offending egos. Provides support and expertise to other leaders with respect to managing people. Evaluates the feasibility of alternative dispute resolution mechanisms.

d) Assess Situations Quickly and Accurately - Takes charge when the situation demands it. Make the right things happen on time.

e) Coach and Train Peers and Subordinates - Recognizes that learning happens at every opportunity (treats mistakes as a learning event). Provides performance feedback, coaching, and career development to teams and individuals to maximize their probability of success.

f) Implement Employee Involvement Strategies - Develops ownership by bringing employees in on the decision making and planning process. Provides the means to enable employee success, while maintaining the well being of the organization. Develops processes to engage employees in achieving the objectives of the organization. Empower employees by giving them the authority to get things accomplished in the most efficient and timely manner.

Good leaders are made not born. If you have the desire and willpower, you can become an effective leader. Good leaders develop through a never-ending process of self-study, education, training, and experience. To inspire the team into higher levels of teamwork, there are certain things one must be, know, and, do. These do not come naturally, but are acquired through continual work and study. The best Leaders are continually working and studying to improve their leadership skills.

Leadership is a complex process by which a person influences others to accomplish a mission, task, or objective and directs the organization in a way that makes it more cohesive and coherent. A person carries out this process by applying his or her leadership attributes (belief, values, ethics, character, knowledge, and skills). Although your position as a manager, supervisor, lead, etc. gives you the authority to accomplish certain tasks and objectives in the organization, this power does not make you a leader...it simply makes you the boss. Leadership makes people want to achieve high goals and objectives, while, on the other hand, bosses tell people to accomplish a task or objective.

When a person is deciding if he respects you as a leader, he does not think about your attributes. He observes what you do so that he can know who you really are. He uses this observation to tell if you are an honourable and trusted leader or a self serving tyrant who misuses her authority to look good and be promoted. Self serving leaders are not as effective because their employees only obey them, not follow them. They succeed in many areas because they present a good image to their seniors at the expense of their team.

The basis of good leadership is honourable character and selfless service to your organization. In your followers' eyes, your leadership is everything you do that effects the organization's objectives and their well being. A respected leader concentrates on what she is [be] (beliefs and character), what she knows (job, tasks, human nature), and what she does (implement, motivate, provide direction).

What makes a person want to follow a leader? People want to be guided by those they respect and who have a clear sense of direction. To gain respect, they must be ethical. A sense of direction is achieved by conveying a strong vision of the future.

7.6 LEADERSHIP FRAMEWORK– BE, KNOW, & DO

If you are a leader that can be trusted, then the people around you will learn to respect you. To be a good leader, there are things that you must be, know, and do.

These fall under the Leadership Framework:

7.6.1 BE

A professional Seek responsibility and take responsibility for your actions. Search for ways to guide your organization to new heights. And when things go wrong, they will eventually, do not blame others. Analyze the situation, take corrective action, and move on to the next challenge.

A professional who possesses good character traits Develop good traits within yourself, such as honesty, competence, candor, commitment, integrity, courage, straightforward, imagination. Develop good character traits within your team that will help them carry out their professional responsibilities.

7.6.2 KNOW

The four factors of leadership - follower, leader, communication, situation. **Yourself** know yourself and seek self-improvement. In order to know yourself, you have to understand your be know, and do attributes. Seeking self improvement means continually strengthening your attributes. This can be accomplished through reading, self-study, classes, etc.

Human nature Know human nature and the importance of sincerely caring for your workers.

Your job Be technically proficient As a leader, you must know your job and have a solid familiarity with your employees' jobs. Train your people as a team. Although many supervisors call their organization, department, section, etc., a team; they are not really teams...they are just groups of people doing their jobs. **Your organization** use the full capabilities of your organization. By developing a team spirit, you will be able to employ your organization, department, section, etc. to its fullest capabilities. Your organization use the full capabilities of your organization. By developing a team spirit, you will be able to employ your organization, department, section, etc. to its fullest capabilities.

7.6.3 DO

Provide direction. Make sound and timely decisions. Use good problem solving, decision-making, and planning tools. Keep your team informed. Know how to communicate with your team, seniors, and other essential people within the organization.

Implement. Develop a sense of responsibility in your team. Ensure that tasks are understood, supervised, and accomplished. Communication is the key to this responsibility.

Motivate. Set the example. Be a good role model for you employees. They must not only hear what they are expected to do, but also see. Know your team and look out for their well being.

7.7 FACTORS OF LEADERSHIP:

The four major factors of leadership are the follower, leader, communication, and situation:

7.7.1 FOLLOWER

Different people require different styles of leadership. For example, a new hire requires more supervision than an experienced employee. A person with a poor attitude requires a different approach than one with a high degree of motivation. You must know your team. The fundamental starting point is having a good understanding of human nature: needs, emotions, and motivation. You must know your employees' be, known, and do attributes.

7.7.2 LEADER

You must have a honest understanding of who you are, what you know, and what you can do. Also, note that it is the followers, not the leader who determines if a leader is successful. If a follower does not trust or lacks confidence in her leader, then she will be uninspired. To be successful you have to convince your followers, not yourself or your superiors, that you are worthy of being followed.

7.7.3 COMMUNICATION

You lead through two-way communication. Much of it is nonverbal. For instance, when you "set the example," that communicates to your team that you would not ask them to perform anything that you would not be willing to do. What and how you communicate either builds or harms the relationship between you and your employees.

7.7.4 SITUATION

All situations are different. What you do in one leadership situation will not always work in another situation. You must use your judgment to decide the best course of action and the leadership style needed for each situation. For example, you may need to confront a employee for inappropriate behavior, but if the confrontation is too late or too early, too harsh or too weak, then the results may prove ineffective. Various forces will affect these factors. Examples of forces are your relationship with your seniors, the skill of your team, the informal leaders within your organization, and how your company is organized.

7.8 LEADERSHIP STYLES:

Leadership style is the manner and approach of providing direction, implementing plans, and motivating people. There are three different styles of leadership– autocratic, participative, and free-rein. Although most leaders use all three styles, one of them normally becomes the dominant one.

7.8.1 AUTHORITARIAN (AUTOCRATIC)

This type is used when the leader tells her employees what she wants done and how she wants it done, without getting the advice of her team. Some of the appropriate conditions to use it are when you have all the information to solve the problem, you are short on time, or your employees are well motivated. Some people think that this style includes yelling, using demeaning language, and leading by threats and abuse of power. This is not the authoritarian style...it is an abusive, unprofessional style of leadership.

7.8.2 PARTICIPATIVE (DEMOCRATIC)

This type of style involves the leader including one or more employees in on the decision making process (determining what to do and how to do it). However, the leader maintains the final decision making authority. Using this style is not a sign of weakness; it is a sign of strength that your employees will respect. This is normally used when you have some of the information, and your employees have some of the information. This allows them to become part of the team and allows you to make a better decision.

7.8.3 DELEGATE (FREE-REIGN)

In this style, the leader allows the employees to make the decision. However, the leader is still responsible for the decisions that are made. This is used when employees are able to analyze the situation and determine what needs to be done and how to do it. You cannot do everything! You must set priorities and delegate certain tasks.

7.9 THE FIVE POINTS OF POWER:

A person has the potential for influencing five points of power over another:

- Coercive Power - Power that is based on fear. A person with coercive power can make things difficult for people. These are the persons that you want to avoid getting angry. Employees working under coercive managers are unlikely to be committed, and more likely to resist the manager.

- Reward Power - Compliance achieved based on the ability to distribute rewards that others view as valuable. Able to give special benefits or rewards to people.
- Legitimate Power - The power a person receives as a result of his or her position in the formal hierarchy of an organization. The person has the right, considering his or her position and your job responsibilities, to expect you to comply with legitimate requests.
- Expert Power - Influence based on special skills or knowledge. This person earns respect by experience and knowledge. Expert power is the most strongly and consistently related to effective employee performance.
- Referent Power - Influence based on possession by an individual or desirable resources or personal traits. You like the person and enjoy doing things for him or her.

Power verses Leadership

Power does not require goal compatibility; instead, it focuses on intimidation, while leadership requires goal congruence
Power maximizes the importance of lateral and upward influence, while
leadership focuses upon downward influence
Power focuses on tactics for gaining compliance, while leadership focuses on getting answers and solutions

7.10 TEAM BUILDING

It refers to the process of establishing and developing a greater sense of collaboration and trust between team members. Interactive exercises, team assessments, and group discussions enable groups to cultivate this greater sense of teamwork.

CHARACTERISTICS OF GOOD TEAM BUILDING

- High level of interdependence among team members
- Team leader has good people skills and is committed to team approach
- Each team member is willing to contribute
- Team develops a relaxed climate for communication
- Team members develop a mutual trust
- Team and individuals are prepared to take risks
- Team is clear about goals and establishes targets
- Team member roles are defined
- Team members know how to examine team and individual errors without personal attacks
- Team has capacity to create new ideas
- Each team member knows he can influence the team agenda

- **Team Effectiveness:** When evaluating how well team members are working together, the following statements can be used as a guide:

- **Team goals** are developed through a group process of team interaction and agreement in which each team member is willing to work toward achieving these goals.
- **Participation** is actively shown by all team members and roles are shared to facilitate the accomplishment of tasks and feelings of group togetherness.
- **Feedback** is asked for by members and freely given as a way of evaluating the team's performance and clarifying both feelings and interests of the team members. When feedback is given it is done with a desire to help the other person.
- **Team decision making** involves a process that encourages active participation by all members.
- **Leadership** is distributed and shared among team members and individuals willingly contribute their resources as needed.
- **Problem solving**, discussing team issues, and critiquing team effectiveness are encouraged by all team members.
- **Conflict** is not suppressed. Team members are allowed to express negative feelings and confrontation within the team which is managed and dealt with by team members. Dealing with and managing conflict is seen as a way to improve team performance.
- **Team member resources**, talents, skills, knowledge, and experiences are fully identified, recognized, and used whenever appropriate.
- **Risk taking and creativity** are encouraged. When mistakes are made, they are treated as a source of learning rather than reasons for punishment.
- After evaluating team performance against the above guidelines, determine those areas in which the team members need to improve and develop a strategy for doing so.

7.11 LEADERSHIP AND TEAM BUILDING:

The three vital determinants of teamwork are:

- Leader
- Subordinates
- The environment.

These factors are interdependent. It is the leader's responsibility to make the environment conducive to work. By encouraging the inquisitive employees and by prohibiting insidious elements, he creates hygienic environment. He inculcates the sense of collectivism in employees to work as a team. The resultant output will then be efficiency.

7.11.1 LEADER IS A REPRESENTATIVE OF SUBORDINATES

He is intermediary between the work groups and top management. They are called linking pins by Rensis Likert. As linking pins they serve to integrate the entire organization and the effectiveness depends on the strength of these linking pins. Leader shows personal consideration for the employees. As representatives they carry the voice of the subordinates to the to management.

7.11.2 LEADER IS AN APPROPRIATE COUNSELLOR

Quite often people in the work place need counselling to eliminate the emotional block to effective performance. For instance, frustration that results from blocked need drive keeps an employee derailed or the working track. It is here the leader comes in, renders wise counsel, releases the employee of the emotional tension and restores equilibrium.

7.11.3 USES POWER PROPERLY

If a leader is to effectively achieve the goal expected of him, he must have power and authority to act in a way that will stimulate a positive response from the workers. A leader, depending on the situation, exercises different types of power, viz reward power and expert power. Besides the formal basis, the informal basis of power also has a more powerful impact on organizational effectiveness. No leader is effective unless the subordinates obey his orders. Therefore, the leader uses appropriate power so that subordinates willingly obey the orders and come forward with commitment.

7.11.4 LEADER MANAGES THE TIME WELL

Times is precious and vital but often overlooked in management. There are three dimensions of time – boss – imposed – time , system- imposed –time and self – imposed time .Because the leader has through knowledge of the principle of time management such as preparing time charts, scheduling techniques, etc., he is in a position to utilize the time productively in the organization.

7.11.5 STRIVES FOR EFFECTIVENESS

Quite frequently the manager are workaholic and too busy with petty things to address to major details of effectiveness. To fill the gap, sometimes leaders throws his concerted efforts to bring effectiveness by encouraging and nurturing team work, by better time management and by the proper use of power. Further, leader provides and adequate reward structure to encourage performance of employees. Leader delegates authority where needed and invites participation where possible to achieve the better result. He also provides the workers with necessary resources. By communicating to workers what is expected of them, leader brings effectiveness to organization.

7.12 CONCLUSION

Leadership is a process by which a person influences others to accomplish an objective and directs the organization in a way that makes it more cohesive and coherent. Leaders carry out this process by applying their leadership attributes, such as beliefs, values, ethics, character, knowledge, and skills. Team Building refers to the process of establishing and developing a greater sense of collaboration and trust between team members. Interactive exercises, team assessments, and group discussions enable groups to cultivate this greater sense of teamwork.

8 SALES MANAGEMENT

8.1 LEARNING OBJECTIVES

At the end of the session, the trainees will be able to learn:

- Sales
- Sales Management.
- Sales Cycle.
- Sales Forecasts.
- Sales Funnel.
- Introduction to SFA
- Sales Report
- Sales Pipeline
- Territory
- Fundamental of Sales Success
- Knowledge and Sales
- Sales Performance
- Types of Sales

8.2 SALES

Simply stated it is the Exchange of Goods or Services for an amount of money or its equivalent. A sale is a process which involves the buying and selling. One buys a product (or service) which solves his problem or satisfies a need. We do not buy the product as such; but the benefits that it will bring to us. Thus, SALES is basically a need satisfying process or a problem solving activity.

- **Linkage of Need and Want to Sale**: Problem/ discomforts /deprivation means presence of **Need.** Need May be **Implied**/dormant or **Active.** Active Need turns into **Want/Desire.** Want backed by Money Generates **Demand** *Remember! Salesperson don't invent or create the Need; they make the Latent Need Obvious…How they do is their selling skill!*
- **Understanding Sales**: Exchange, Need Satisfaction or Problem Solving by exchanging the Benefits/Solution that the Product or Services offer to money/considerations which the customer part with. Products or services are Solutions to someone's Problem.

8.3 SALES MANAGEMENT

It is the management process of establishing, directing, and coordinating the sales development activities for the company products. Strategically plan for, develop and profitably penetrate the market to which the products, services and capabilities of the company can be directed ensuring the sales to customers, distributors and resellers achieve the budgeted target.

The scope of the sales management, in broad terms includes, the following

- Establish Sales force objectives
- Organizing the Sales force
- Recruiting and Selecting Salespeople
- Training Sales Personnel
- Compensating Sales People
- Motivating Sales People
- Developing Sales plans
- Developing Sales development programs

8.3.1 SALES PROCESS:

Six steps can be identified in any type of sales; these are:

- **Prospecting**: A Prospect is an individual or group capable of making the decision on the product or service intended to be sold.
- **Pre-approach & Approach**: Gathering information about the Prospect & his Organization
- **Presentation**: Present and propose the product, rather the BENEFITS of the product.
- **Overcoming objections** (negotiation): Handle the concern of the customers, clarify the doubts and apprehensions emphasize the benefit of the products
- **Closing and order**: To Gain Agreement of the customer to sign the order form and ensure successful order
- **Follow up and maintenance**: For ensuring customer satisfaction & repeat business. Details on delivery time, purchase terms, follow up calls to obtain feedback, ensuring proper installation, Instructions and servicing, Maintenance & growth plan for the account etc.

Some important terms associated with sales are explained below:

8.4 SALES CYCLE

The Sales Cycle term generally describes the time and/or process between first contacts with the customer to when the sale is made. Sales Cycle times and processes vary enormously depending on the company, type of business (product/service), the effectiveness of the sales process, the market and the particular situation applying to the customer at the time of the enquiry. A typical Sales Cycle for a product might be:

- Receive Enquiry
- Qualify Details
- Arrange Appointment
- Customer Appointment
- Arrange Survey
- Conduct Survey
- Presentation Of Proposal And Close Sale

8.5 SALES FORECASTS

Also called sales projections, these are the predictions that sales people and sales managers are required to make about future business levels, necessary for their own organisation to plan and budget everything from stock levels, production, staffing levels, to advertising and promotion, financial performance and market strategies.

8.6 SALES FUNNEL

Describes the pattern, plan or actual achievement of conversion of prospects into sales, pre-enquiry and then through the sales cycle, so-called because it includes the conversion ratio at each stage of the sales cycle, which has a funnelling effect. Prospects are said to be fed into the top of the funnel, and converted sales drop out at the bottom. The extent of conversion success (i.e. the tightness of each ratio) reflects the quality of prospects fed into the top, and the sales skill at each conversion stage. Marketing funnel has **target market** as its input and output as **leads**. Sales funnel has leads as inputs and customers as the output.

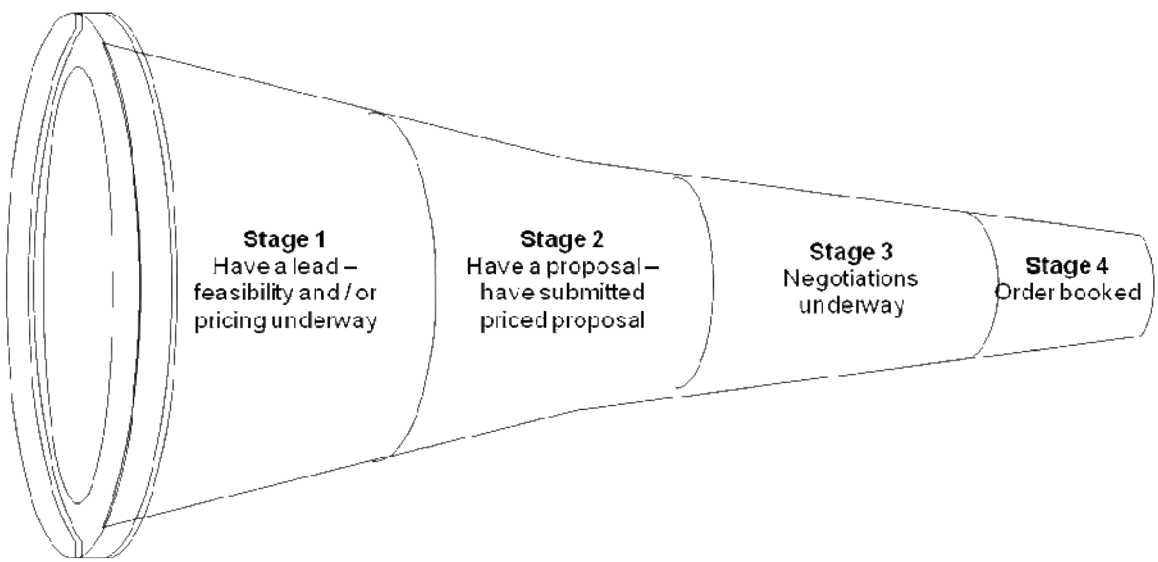


Figure 9: Sales Funnel

8.7 SALES FORCE AUTOMATION SYSTEM (SFA)

It is a system that automatically records all the stages in a sales process. SFA includes a contact management system which tracks all contact that has been made with a given customer, the purpose of the contact, and any follow up that might be required. This ensures that sales efforts are not duplicated, reducing the risk of irritating customers. SFA also includes a sales lead tracking system, which lists potential customers through paid phone lists, or customers of related products. Other elements of an SFA system can include sales forecasting, order management and product knowledge.

8.8 SALES REPORT

Sales report is a business report of sales results, activities, trends, etc., traditionally completed by a sales manager and sales executives.

8.9 SALES PIPELINE

Sales Pipeline is a linear equivalent of the Sales Funnel principle. Prospects need to be fed into the pipeline in order to drop out of the other end as sales. The length of the pipeline is the sales cycle time, which depends on business type, market situation, and the effectiveness of the sales process.

8.10 TERRITORY

Territory is the geographical area of responsibility of a sales person or a team or a sales organization.

8.10.1 TERRITORY PLANNING

It is the process of planning optimum and most cost-effective coverage (particularly for making appointments or personal calling) of a sales territory by the available sales resources, given prospect numbers, density, buying patterns, etc., even if one territory by one sales person; for one person this used to be called journey planning, and was often based on a four or six day cycle, so as to avoid always missing prospects who might never be available on one particular day of the week.

8.11 FUNDAMENTALS OF SALES SUCCESS

To gain credibility and foster customer loyalty, sales professionals must practice principles of ethical conduct, such as fairness and integrity. These principles increase the prestige and reputation of the sales profession.

Three principles in particular are fundamental to sales success.

Principle 1: Serve With Fairness and Integrity.

The first principle of ethical conduct is to serve your customers with fairness and integrity, striving always to subordinate your personal goals and ambitions to those of your customers.

Principle 2: Gain Trust and Respect.

The second principle of ethical conduct is to gain trust and respect. You demonstrate respect for your customers and earn their trust by maintaining strict customer confidentiality.

Principle 3: Pursue Excellence.

The third principle of ethical conduct is to pursue excellence through a regularly scheduled plan of personal development and continuous improvement.

8.12 KNOWLEDGE AND SALE

In terms of knowledge, the essential elements required to achieve lasting success are: self-knowledge, product knowledge, market knowledge, industry knowledge, and professional selling knowledge.

8.12.1 SELF-KNOWLEDGE

Self-knowledge is the first of the five essential elements of knowledge required to achieve lasting success. To succeed, you must be aware of your vision, values, presence, and communication skills.

8.12.2 PRODUCT KNOWLEDGE

Product knowledge is the second of the five essential elements of knowledge required to achieve lasting success. Whether you sell products or services, you must possess a commanding knowledge of the product or service features, function, and value.

8.12.3 MARKET KNOWLEDGE

Market knowledge encompasses a wide range of specific knowledge about the customer and their buying habits. One of the most important aspects of market knowledge concerns "buying influencers," such as the champion, economic buyer, end user, technical buyer, and the individual responsible for procurement. Each of these people plays a vital role in the sales process.

8.12.4 INDUSTRY KNOWLEDGE

A good sales professional must also possess industry knowledge—knowledge of an industry's history, future trends, competitors, and the strengths and weaknesses of these competitors.

8.12.5 PROFESSIONAL SELLING KNOWLEDGE

The fifth of the five essential elements of knowledge is professional selling knowledge. There are four components of professional selling knowledge.

The first component is understanding the hallmarks of professionalism, which include all the elements of professional selling knowledge and incorporating them into your personal and professional demeanour.

The second component is understanding time and territory management. Time and knowledge are the only real assets you have to sell. Your success will be measured by how effectively you sell in the time you have to invest and in the area you have to cover.

The third component for success is having a sound base of knowledge in the sales process. Top professionals understand that there is a process by which their prospective customers buy.

The fourth component is possessing a firm foundation in the principles and skills of interpersonal communication, as well as the ability to clearly communicate the value proposition that you, your firm, and your products or services offer.

8.13 SALES PERFORMANCE:

Sales performance can be measured with the following ratios:

- Contact Ratio
- Lead Generation Ratio
- Lead Conversion Ratio
- Qualification Ratio
- Proposal Ratio
- Closing Ratio

Contact Ratio: Contact ratio is achieved by dividing the number of contacts actually made to total number of call attempts. If one makes 100 calls and engage ten people in a conversation, the contact ratio is 10 percent.

Lead Generation Ratio: Lead generation ratio is found by dividing number of sales leads by the number of sale contacts. If one engages 100 contacts in a substantive conversation, from which 20 indicate that they wish to learn more about the offerings, the lead generation ratio is 20 percent.

Lead Conversion Ratio: It measures the new leads that are converted into sales opportunities. If we have 20 leads, and 10 of these become prequalified sales opportunities, the lead conversion ratio is 50 percent.

Qualification Ratio: It measures the success at bringing new sales opportunities through the initial relationship-building and qualification process. If one has generated ten new sales opportunities and four become fully qualified and viable prospects, the qualification ratio is 4:10, or 40 percent.

Proposal Ratio: The proposal ratio measures the number of proposals presented against the number of viable prospects you've identified in the qualification stage of sales cycle. If we have fully qualified ten sales opportunities and six of these turn into viable sales proposals, the proposal ratio is 6:10, or 60 percent.

Closing Ratio: The closing ratio measures the number of closed sales made against the outstanding proposals. If we have ten viable proposals outstanding and close four of these, then the closing ratio is 4:10, or 40 percent.

8.14 TYPES OF SALES

On the basis of process, sellers and buyer's relationship and volume of sales, two types of sales can be identified. These are:

- **Retail sales**
- **Enterprise Sales**

Table 21. Main difference between these two types of Sale processes

Factor	Retail	Enterprise	Remarks
Buyer & Seller Interaction	Buyer goes to seller	Seller goes to Buyer	Normally
Scale	Small value mass selling	Big ticket, big value customised selling	
Volume	Big Volume, small margin	Small Volume, Big Margin	
Selling Process	Determined by the seller	Determined by the Buyer	Normally

8.14.1 RETAIL SALES MANAGEMENT

Retailing consists of the sale of goods or merchandise from a fixed location, such as a department store, boutique or kiosk, or by mail, in small or individual lots for direct consumption by the purchaser. Retailing may include subordinated services, such as delivery. Purchasers may be individuals or businesses. In commerce, a "retailer" buys goods or products in large quantities from manufacturers or importers, either directly or through a wholesaler, and then sells smaller quantities to the end-user. Retail establishments are often called shops or stores. Retailers are at the end of the supply chain. Manufacturing marketers see the process of retailing as a necessary part of their overall distribution strategy. Shops may be on residential streets, shopping streets with few or no houses or in a shopping mall. Online retailing, a type of electronic commerce used for business-to-consumer (B2C) transactions and mail order, are forms of non-shop retailing. There are several ways in which consumers can receive goods from a retailer:

Counter service, where goods are out of reach of buyers and must be obtained from the seller. This type of retail is common for small expensive items (e.g. jewellery) and controlled items like medicine and liquor. In telecom sector FWT, new mobile connection, recharge vouchers sale happens over the counters now. (activation of connections may happen later)

Delivery (commerce), where goods are shipped directly to consumer's homes or workplaces. Ordering by telephone is now common, either from a catalogue, newspaper, television advertisement or a local restaurant menu, for immediate service (especially for pizza delivery). Direct marketing, including telemarketing and television shopping channels, are also used to generate telephone orders. In telecom sector, new connections can be ordered over phone.

Door-to-door sales, where the salesperson sometimes travels with the goods or takes order for sale. DSA concept in BSNL is an example of this category.

Self-service, where goods may be handled and examined prior to purchase has become more common now.

Key issues of concern to a retailer are:

- Location of outlet
- Stock availability
- Layout of outlet
- Margins
- Incentives
- Promotional-Push, Pull techniques
- Exclusive or Multi brand outlet

Key issues of concern to a company appointing retailers are:

Reach: Number of outlets that need to be opened so that the items are available at convenient locations.

Retailer service: Activities other than sale to be handled by retailer.

Brand control: Ensuring correct branding and level of service at retail outlets.

Cost of retailing: Incentives, margins, credit stock, replacement terms, product & sales training to retailer staff, monitoring system etc.

Stock ownership: Whether retailer assumes the title or manages stock on behalf of company.

Retail Sales structure & system in BSNL: Initially BSNL did not have a well-defined exclusive sales structure. The concept of commercial officer, CSCs and Marketing agents was expanded by introduction of franchisees with the launch of BSNL mobile services in October 2002. Since then, a strong need was felt to strengthen sales channels in BSNL and also to create sales role specific job structure in BSNL. In October 2009, as part of Project Shikhar, a new sales setup has been designed. Consumer mobility and Consumer Fixed Access verticals have dedicated GM/DGM rank officers at Corporate as well as Circle level to plan, manage and effect retail sales.

BSNL Products are defined for channel partners. It includes both primary products and secondary products of BSNL. Primary Products for the channel partners include GSM 3G / 2G, Wi-Max, Data Cards, EVDO, NIC, Blackberry, CDMA, WLL, FWT, IFWT, Value added services etc. and any other future product/ service that may be launched by BSNL from time to time. Other products such as Landline, broadband, ITC, etc. shall be Secondary Products for the channel partners, which may also be allowed by BSNL.

BSNL has put in place Franchisee Sales & Distribution policy 2009. The Sales & Distribution Policy has amended time to time and an integrated “CM Sales and Distribution Policy -2018” to be effective from 01.01.2018. This Policy is divided in four parts:

1.Franchisee Sales & Distribution Policy:

Franchisee will be responsible for selling of all BSNL Products to BSNL subscribers directly or through Rural Distributors (RDs) / retailers within a defined territory. To facilitate retailers, provision of three tier structure has been made by including Rural Distributor between franchisee and retailers only in rural territories to serve the area within the rural BTS. The salient features of policy are:

- Franchisees are appointed through EoI route by respective SSAs.
- Well defined geographical area for franchisee called as primary area

·Exclusive franchisee showroom as per design specified by BSNL
·Franchisees to appoint Feet on Street (FoS)
·Franchisee shop to open 0800h to 2200h
·Financial penalty for not meeting cut off performance score
·Selling of all BSNL Products purchased by Franchisee directly or through Rural Distributors (RDs) or retailers.
·Two tier structure for urban and three tier structure for rural areas by incorporating intermediate channel of RDs.
·Franchisee must appoint sufficient numbers of retailers in the territory such that:

- Each Urban BTS areas & Rural BTS areas should have at least 8 retailers and 4Retailers respectively.
- One retailer in urban commercial area at every 200 meter
- One retailer in urban residential area at every 500 meter
- At least one retailer in every Village

·Retailers in the rural areas will be appointed and served by RDs.

2. **e-Distributor Policy:**

e-Distributor will be responsible for selling of BSNL Products to customers through web-portal/ Kiosk/ ATMs/ POS (Retailers) and other electronic mode on Zonal/ PAN India basis.

The salient features of policy are:

·Serve BSNL customers through web portal / Kiosk /ATMs /POS (Retailers) and other electronic mode.
·e-Distributors will be selected on non-exclusive basis.
·The proposals from companies/ firms shall be scrutinized by Sales & Marketing–CM Cell of the BSNL corporate office, New Delhi.
·Successful firms shall be declared as empanelled in BSNL as e-Distributor and the concerned zone(s) will be intimated accordingly.
·There will be three types of e-Distributors:
I.Cat -1 : who is applying for single zone
II.Cat -2 : who is applying for two zones.
III.Cat-3 : who is applying for all four zones i.e. on PAN India basis
·e-Distributor shall integrate its system with BSNL"s zonal C-top up systems

3.DSA Policy:

Direct Selling Agents (DSAs) are individuals having direct agreement with BSNL. DSAs are responsible for selling of all BSNL Products, as assigned to them, to the customers at their door steps. Selection of DSAs will be done by SSA Head.

4. Rural Distributor Policy:

Rural Distributors are individuals having agreement directly with BSNL or through franchisee. Rural Distributors will be responsible for selling of all BSNL Products in Rural BTS areas through retailers. Rural Distributor will be preferably served by concerned franchisee or by BSNL directly.

To improve BSNL-external channel partners, monthly meetings are to be held by SSAs with franchisees along with retailers and separately with DSAs/PCOs/other channel partners.

BSNL owned Sales setup:

Customer Service Centres: BSNL has about 3000 CSCs across the country. CSCs are supposed to act as single window service centres and open from 8AM to 8PM. Appropriate arrangements need to be done to ensure that even cash transactions are handled till the closing hours. Staff posted at CSC has to be smart, courteous and knowledgeable about BSNL services.

BSNL has opened following dialup service across the country. This service is supposed to be centralized for whole circle and handle queries related to various services of BSNL such as billing, new facilities, on demand areas, new bookings etc. Customer queries can be made over either to BSNL sales team/franchisees/DSAs for follow up and converting it into sales.

1500/1800-345-1500 : For Landline/Broadband

1503/1800-180-1503 : For Mobile service

WEB Self Care: Sales are possible through link provided on BSNL websitewww.bsnl.co.in . Customer can book service, pay their bills & recharge their mobile through BSNL website.

Sales Teams:

Nodal officer: Heads of SSA have to appoint a suitable BSNL executive preferable CSC in charge to act as single window interface for the franchisees. Nodal officer is required to maintain inventory, stock register and reconcile revenue and sales made by franchisees. Minimum three months inventory has to be stocked by SSAs.

Sales staff: As per BSNL Sales policy BSNL has to appoint sufficient number of Retailer Managers, Retailer Manager Coordinator (RMC), and Franchisee Managers for providing time-to-time guidance, and addressing issues/ concerns raised by franchisees. BSNL shall also appoint other members of the Sales & Marketing team at Circle and SSA level.

Special teams are being appointed under Project Udaan and Project Vijay. Very lucrative reimbursement schemes have been put in place for sales people

Training Sales Personnel

A strong emphasis is being given to training of sales personnel including franchisees. Different training centres organize special sales training programs for executives and staff. Professional agencies were also engaged to impart training to BSNL officials as part of Project Vijay and Project Udaan. BSNL HQ has given a directive to provide training to all franchisee of BSNL in a time bound manner and also keep organizing such trainings to update franchisees on latest developments in BSNL. Sales training in following attributes is provided:

- **Knowledge:** About:
  - The organization,
  - The products,
  - The customer,
  - Technical and commercial aspects,
  - Similar products of the competitor.

Communication skills: Verbal, non-verbal, listening.

- **Administrative skills:** Organizing, planning and prioritizing, coordinating.
- **Strategies or "Game plan":** Building long-term relationship, sensing customer reactions, Managing customer perception and expectations
- **"YOU" factor**: Personal appearance, Interpersonal skills. The Sales personnel serve as the company's link to customers. In fact *"They are the Company for the customers and the Customers for the company"*.

8.14.2 ENTERPRISE SALES

This sales initiative can happen from either party. Purchasers usually float request for proposal (RFP) or Expression of Interest (EOI) or Tenders. Other possibility is the seller suggesting a solution to a company for their unfulfilled need or a better solution than the existing in use.

Goal is to help a client find value in offered solutions on a long term basis ensuring win-win for the company & client. While marketing is for masses, EB specifically targets select clients where high revenue is expected either through sale of its own services or Introduction of joint products/services. The emphasis is to make more money by selling solutions rather than just plain vanilla services.

Since it is usually a high volume business, purchaser expects volume discounts. Seller agrees to appropriate discounts depending on the contract value and the term. Thumb rule is Higher the discount, longer is the contract period

Enterprise Customer segmentation: BSNL has segmented enterprise customers into following three categories:

Platinum customers: These customers are large corporate entities (with indicative turnover greater than Rs. 500 cr p.a.), with significant telecom spend across several locations and sophisticated product needs. It is desired that BSNL should provide highest degree of focus to these accounts through a dedicated national team.

Gold customers: These are medium-sized corporate entities (with indicative turnover of Rs. 50-500 cr p.a.). It is desired that BSNL will provide higher service levels to these customers through an in-house account management team based in the circles.

Silver customers: All corporate customers that are not a part of the Platinum or Gold accounts are designated as Silver accounts (with indicative turnover greater than Rs. 10 cr p.a.). Since the number of companies in this segment is very large, it is proposed that BSNL should use appropriate channel partners to ensure that sufficient attention is devoted to these accounts.

Enterprise Sales structure in BSNL

Career Wholesale: This unit is responsible for generation of Carrier Wholesale revenues for on BSNL's National Long Distance (NLD) network and International Long Distance (ILD) network. Primarily GM (Business Planning) at BSNL HQ deals with it with back end support from maintenance regions.

Enterprise Business: The role of this wing, which has been created at corporate as well as circle levels is to identify the specific needs of enterprise customer which can be a mix of Voice, Data and Managed Services solutions. To give proper focus to such customers based on their potential, such customers are categorized as platinum, Gold and Silver. Another important segment of enterprise customers is BFSI i.e. banking, financial services and Insurance sector companies. Main function of this wing is to achieve profitable and sustainable growth of enterprise business by creating sales policy & strategy for Platinum, Gold and Silver enterprise customers and monitoring performance for the same. Promotion of Enterprise business to platinum customers through marketing activities such as advertisements and promotions based on focused market research is also its responsibility. This wing is supported by other related units such as leased circuit, Network operations, Core Network planning and field units of CFA, CM for execution of enterprise projects. A key difference from previous approach to enterprise sales is the creation of DGM (Service Delivery/Service Assurance) post at Circle level. Earlier this work was handled by DGM Enterprise sales thereby overloading the post with dual responsibility of bringing new business as well as handling project management for such business. Concept of National Account Manager (NAM) and Key Account Manager (KAM) has also been introduced to provide focused attention to corporate customers. Reimbursement of travel/meal/sundry expenses is allowed to NAM/KAM depending on their role and quantum of work.

System Integrators: Many of the Telecom project requirements of customers consist of a mix of following elements

- Hardware
- Software
- Bandwidth
- Integration

While BSNL has strong hold in bandwidth, yet for other three elements no in-house expertise exists. Since most customers ask for single window contact for all above items, BSNL decided to appoint system integrators for leveraging their expertise in hardware, software and integration. **SI** is appointed at national as well as Circle level. While BSNL can seek the help of System integrators, they can also bring business to BSNL. Depend upon situation, concept of front end bidding (BSNL at front end) or back end bidding is followed.

BSNL Channel Partners: BSNL has decided to deal with Platinum & Gold customers directly. BSNL executives have been appropriately trained in enterprise sales. For capturing silver customers, BSNL has started appointing Channel partners in the circles. These channel partners are given an exclusion list mentioning Platinum & Gold customers so that they don't waste their efforts on these customers. Two types of Channel partners are appointed:

Tier 1 Channel Partners (Tier 1 CPs')

Tier 1 CPs' will be primarily engaged in the Sales and Marketing of BSNL Voice and Data services to targeted Silver customers. In addition, CPs' may also be engaged for supply, configuration and maintenance of customer's end equipments, their network on LAN / WAN etc.

A prospective Tier 1 Channel Partner (Tier 1 CP) shall be a direct supplier of technology, hardware, telecom products or shall have a direct agreement with each of the Technology Companies, OEM's (Original equipment manufacturer) that form the core building blocks of the project. The core IT and Telecom building blocks may be classified as Routers, LAN Switches, Leased Line Modems & Converters, PC's and Servers etc. Tier 1 CP is required to have Minimum 5 number of sales personnel and 10 number of field engineers.

Tier 2 Channel Partners (Tier 2 CPs')

Tier 2 CPs' will be primarily engaged in the Sales and Marketing of BSNL Voice products. In addition, these CPs' will also be allowed to deal in a limited range of data services (e.g. 2G and 3G data cards, broadband services etc.).

Tier 2 CPs' showing exceptional growth may be given the opportunity to sell additional BSNL products / services like MPLS VPN, leased circuits etc. on a trial basis. This will be at the sole discretion of BSNL.

A prospective Tier 2 Channel Partner (Tier 2 CP) shall be a direct supplier of hardware and telecom products (e.g. Computer systems, Servers, Routers, EPABX systems etc.) to Silver customers.

Tier 2 CP is required to have Minimum 5 number of sales personnel/field engineers.

Roles and Responsibilities of Channel Partner

Sales and Marketing

The CP will actively market and promote BSNL's services using own Sales, Marketing and Distribution network. The CP is expected to acquire business from Silver customers within entire telecom Circle.

The Channel Partner is free to develop their own network in Circle either directly or through partners for Sales and Marketing of BSNL's services.

The CP is expected to achieve minimum sales targets set by BSNL.

Service Delivery

BSNL and CP will jointly address the telecom requirements of the customers.

The equipment required by the customers shall be procured and provided by the CP directly to the customers at their own cost. Time schedule will have to be adhered as per requirements of customers. In case customers require procurement of the equipment through BSNL, CP will get in touch with Channel manger to fulfil such requirements.

The CP will make all the efforts to get the services commissioned within the stipulated time frame. Any cases pending for more than a month will be reviewed separately by the Channel Manager from BSNL.

For providing last mile connectivity to the customer, CP will coordinate and pursue with concerned BSNL authorities as well as with other agencies/Departments (Like MTNL, other offices of BSNL, contact person of customer etc.) to enable the same and complete the project in time.

Service Assurance

The CP is expected to receive customer complaints and escalate these complaints for resolution to BSNL, as and when required

Tier 1 CP shall provide all assistance in restoration of the service in case of disruption of services to the customer

CP should pass on the warranty extended of OEM's products to the customer

CP should have necessary resources/capabilities to provide the AMC (Annual Maintenance Contract) to the Customer for their End Equipments, their network on LAN / WAN etc as per their requirement. The CP must give a commitment to provide AMC for a minimum period of 3 years. However, decision of the customer will be final with respect to the duration of AMC, as per his / her requirement.

The CP should provide support to existing customers by conducting periodic visits, answering queries, clarifying issues etc. The CP should solicit the support for BSNL Channel Manager as and when required for these activities

Customer lead generated by CP

Channel Partners must provide regular updates on new leads to the BSNL Channel Manager. An indicative list of details to be provided is give below:

Name of customer

Product / service required

Approximate deal value

Expected date for completion

Current status of lead

The CP will receive a provisional lock-in code for this customer. Such a code may be given to multiple CPs' at this stage for a single customer. Only the BSNL channel manager will be able to identify all the CPs' targeting a particular customer.

The CP who receives the order and collects payment against the order will receive complete lock-in for the customer and will become eligible for payment of the incentive.

Customer lead provided by BSNL

Points will be allocated for the business generated from each CP for every quarter. For example, points will be given for the number of leads generated, along with the revenues booked in the quarter.

New leads originating from BSNL will be allocated to CPs' in proportion to the accrued points earned by each CP

The CPs' may choose to refuse the allocated lead, in which case the lead may then be allocated to the next CP. However, persistent refusal by the CP may lead to his disqualification.

In case BSNL is lead bidder or services from BSNL are specifically demanded by the customer, quotation from the selected CP will be taken and the same will be quoted to the customer after taking relevant taxes into consideration.

The CP will furnish a certificate to BSNL that the charges made to customers for Customer's requirement are fair and reasonable.

Incentive to CP will be applicable only on BSNL portion of services

Targets:

BSNL will fix annual targets for each CP, which will be decided through mutual agreement based on the resources deployed and competitive scenario. However, BSNL's decision in fixing the targets will be final.

Further, this target will be split into quarterly targets which will be constantly monitored. The targets can be increased / decreased depending on the performance of the CP.

Training:

BSNL provides technical / service training and product information to empanelled CPs' in order to familiarize them with BSNL's product portfolio, tariffs, discounts etc. Present policy is to ensure that channel partners are provided such initial training as and when they sign agreement with BSNL followed by regular update trainings.

Sales Management Software in BSNL

Sales software in CRM module of CDR project: As part of BSNL CDR/Convergent billing project under commissioning, a centralized CRM module having sales features is also being put in place for handling all BSNL service as a single window concept. Functions like lead generation, lead qualification, selling to a retail new/existing Customer will be available.

Sancharsoft: This software has been developed and made operational by IT project circle for retail/bulk Inventory Management which is a web based module for management of Sales & Distribution Channels. Software provides various reports for planning and redistribution of inventory, manages stock issuing, invoice management, commission payouts, sales data on geographical as well franchisee/retailer/DSA wise for analysis.

Sales & Distribution Module in ERP: ERP under implementation in BSNL will have this module enabling integrated handling of PBG, order management, stock issue at various levels such as Direct sales (CSC), Franchisees, Post office etc.

EB Portal: The Enterprise Business Portal is developed by ITPC Hydrabad. It provides the Enterprise Business Team of BSNL with a end to end web based software solution that delivers a secure, scalable and reliable tool to enter, update, manage various Enterprise Business activities with in BSNL and facilities to track and report the various activities of EB Team. This software is used enter the lead, Opportunity Data, generate Quotation, Service Orders and also keep track of the stages an opportunities are.

8.15 CONCLUSION

Sales management is a vital part of any business organization. It not only makes the products or services available to the customers but also supports the organization to sustain competition in the long run.

9 COSTMANAGEMENT

9.1 LESSONOBJECTIVES:

At the end of the session, the trainees will be able to learn:

- Definitionsof CostAccounting
- CostaccountingRegulations andBSNL Guidelines
- ReportingFormats
- ClassificationofCost

9.2 INTRODUCTION

CostManagementistheprocesswherebycompaniesusecostaccounting toreportorcontrolthevariouscostsofdoingbusiness.CostManagementhasabroad focus.Itincludesbutisnotconfinedtothecontinuous controlofcosts.CostManagement isnotpracticedinisolation.Itisanintegralpartofgeneralmanagementstrategiesand theirimplementation.Itis acompany-widesystematicandstructuredapproach,which provides aholisticframeworktocontrol,reduceandeliminatecosts, throughoutthevalue chain.Intoday'scut throat competition,alltelecomoperatorsareunderpressureto reduceprices.In ordertomaintainprofitability costcuttingandoperationalefficiencyis must.Thishandoutgivesanoverviewofcostaccountingandcorrespondingregulations inBSNL.

9.3 DEFINITIONSINCOSTACCOUNTING

Cost: Costisameasurement,inmonetaryterms,oftheamountofresourcesusedfor thepurposeofproductionofgoodsorrenderingservices.Costismeasuredbythe sacrificemadeintermsofresourcesorpricepaidtoacquiregoodsorservices.The typeofcostisoften referredin thecostingsystemdependson thepurposeforwhich costisincurred.

Cost Centre: Any unit of Cost Accounting selected with a view to accumulating all cost under that unit. The unit may be a product, a service, division, department, section, a group of plant & machinery, a group of employees or a combination of several units.

Cost Unit: It is a unit of quantity of product, service or time in relation to which costs may be ascertained or expressed. Cost Unit is a form of measurement of volume of production or service. This unit is generally adopted on the basis of convenience and practice in the industry concerned.

Cost Accounting: It is the process of accounting for costs. It embraces the accounting procedures relating to recording of all income and expenditure and the preparation of periodical statements and reports with the object of ascertaining and controlling costs. It is thus the formal mechanism by means of which costs of products or services are ascertained and controlled.

Cost Audit: It is the verification of cost accounts and a check on the adherence to the cost accounting plan.

Points Of Difference Between Cost Accounting And Financial Accounting
a. Objectives
b. Modeofpresentation
c. Recording
d. AnalyzingProfits
e. Periodicityofreporting
f.Degreeofaccuracy

Cost Allocation: Allocation is the process of charging the full amount of cost to a particular cost center. This is possible when the nature of expense is such that it can be easily identified with a particular cost center.

Cost Apportionment: It is the process of splitting up an item of cost and charging it to the cost centers on an equitable basis. This is done in case of those items which cannot be wholly allocated to a particular cost center.

Cost Control: It is exercised by a variety of techniques like standard costing, budgetary control and quality control etc.

Other control Techniques
a. RatiosandkeyperformanceindicatorslikeGrossProfitRatio,Operating ExpensestoSalesRatio,ReturnonCapitalEmployedRatio,Profitper employee,LiquidityRatios
b. TrendAnalysis

Cost Management is the process whereby companies use cost accounting to report or control the various costs of doing business. Cost Management has a broad focus. It includes but is not confined to the continuous control of costs. Cost Management is not practiced in isolation. It is an integral part of general management strategies and their implementation.

9.4 COSTINGINBSNL

9.4.1 REFERENCES

1. CostAuditReportRules,2011
2. CostAccountingRecords(Telecommunications)Rules,2002[Notificationdated 08.10.2002]
3. CircularNo.20(No.600-22/2002-03/CAdated31.03.2003)regardingRevised

AccountingProcedure&AccountCodes w.e.f01.04.2003.
4.Letter no.(No. 500-142/2011-12/CA-IIII/BSNL(Pt) dated 17.09.2012 & 29.10.2012) regarding Maintenance of costing records as per Cost Accounting Records (Telecommunications) Rules, 2011.
5. Letter No.500-142/2013-14/CA-III/BSNL/37 dated at New Delhi 21.04.2014

9.4.2 OBJECTIVESOFCOSTINGSYSTEM

1. TomaintainCostAccountingRecordsaccordingtoCostAccountingRecords (Telecommunication)Rules,2011.
2. TocompileCostCentrewisecostinformation.
3. Toallocate/apportionthecostofServiceCostCenterstoOperationCostCenters orService-products.
4. Todeterminethecostofdifferentservice-products.
5. Toidentifyprofitable/non-profitableoperationcenters.
6. Togeneratedatatofacilitatefixingtariff.
7. Toprovideessentialcostinformationforstrategicdecision-making.
8. Toprovidebaseforcostreductionprogramme.
9. TogeneratecostinformationforreportsforsubmissiontoRegulatoryAuthority orotherbodies.
10. TopreparestatementsofCost&RevenueforRuralOperationCentersforclaim ofsubsidy/grants fromGovernment.

9.4.3 COSTCENTRESINBSNL

1. **CostCenter**–Unitforaccumulatingcost.In caseof BSNLCostingSystem, differentfunctional areasaretakenascostcenters.CostCentersaredividedinto twotypes – Operation CostCenters andServiceCostCenters.

2. **Operation Cost Center**– Functional area engaged in telecom operation.
Operational CostCenters (OCC) are:

Table 22. OCC

OperationCostCenters	**FunctionalArea**
Secondary Switching Areas Units of MetroDistricts Units ofRegionalMaintenanceCircle	Operation Maintenance Administration ProjectExecution
DataNetwork	InternetService

3. **ServiceCostCentres**–FunctionalareasengagedinsupportservicetoOperation. ServicedCostCentres(SCC)are:

Table 23. Service Cost CentresSCC

ServiceCostCentres	**Function**
CorporateOffice	Administration Planning
TelecomCircles RegionalMaintenanceCircleOffice TCO,Kolkata	Administration Operation Planning ProjectExecution
Factories	ProductionofEquipmentMaintenance
Material Management&Stores	Materialprocurementplanning MaterialProcurement
CPAO (ITIBills)	ClearanceofITIBills
National Centre of Electronic Switching	Repair& Maintenance
TrainingCentres	Trainingtoemployees
TechnicalDevelopmentCircle	TechnologyDevelopment
QualityAssuranceCircle	Quality Control
ProjectCircles	Equipment&NetworkDevelopment
ITCentre	SoftwareDevelopment
CivilDivision	CivilWork
ElectricalDivision	ElectricalWork

9.5 SERVICE PRODUCTS

Service Products means thedifferentservices offeredby BSNL tothe Subscribers (consumers)as product.
Serviceproducts (Activities)aregivenbelowwithcodes:

Table 24. : Product Code

ServiceProducts	ServiceProductCode
BasicTelephony	01
NationalLongDistance Service	02
InternationalLongDistance Service	03
CellularMobile	04
Telex	05
Telegraph	06
WILL	07
LeasedCircuit	08
InternetServices	09
PSPDN	10
VSAT	11
ValueAddedService	12
Common Services (used for Asset Register)	99

Maintenanceoffollowinginformationrequired
CostAccountingRecords(Telecommunications)Ruleshavespecifiedmaintenanceof ninesets ofdifferentinformationwhicharegivenbelow:

Assets –Service-productwise
Costs -Costcentre/ service-productwise
Revenue–Serviceproductwise
Activity–OperationandServiceproductwise
Statistical/Technicalrecords
CaptiveConsumption
ReconciliationofCostandFinancialAccounts
AdjustmentofCostVariances whenStandardCostingis used
Recordson RelatedPartytransactions

9.5.1 PROFORMAS REQUIREDTOBE PREPARED

- Proforma-A:AssetRegister
- Proforma-B:CostinformationonOperation Cost
- Proforma-C:PartI:Statistical(Quantitative)Information
- Proforma-C:PartII:CostInformationonServiceCost
- Proforma-D:ApportionmentofCosttoService-Products; RevenueInformation Serviceproductwise; Marginetc

9.5.2 PROFORMA A

- Proforma'A'is tobemaintainedbyboth'Operationcostcenters'&'ServiceCost Centers'i.e.allunitsincludingadministrativeoffices ofBSNLforrecording assets particulars.
- Proforma'A'is tobebuiltupfromtheexistingAssetRegistermaintainedfor financialaccounting.
- AssetRegisteris tobemaintainedatallcostcenters.Assets aretobemaintained service-productwiseunderfollowingcomponents:
  - Land
  - Building
  - Apparatus &Plants
  - MotorVehicle&Launches
  - Cables
  - Lines &Wires
  - Installation&TestEquipments
  - OfficeMachinery&Equipments
  - Electricalfittings &Appliances
  - Furniture&Fixtures
  - Computer
  - Masts &Arial
  - SatelliteEarthStationetc.

9.5.3 PROFORMA B

Proforma'B'is tobemaintainedforcompilingtheoperationcostofvarious 'service products'.'Operation CostCenters'i.e.SSAofTerritorialTelecomCircles,Units of MetroDistrict,UnitsofMaintenanceRegion&Units ofDataNetwork Circlewill maintainProforma'B'.

9.5.4 PROFORMA C

Proforma'C'has twoparts namely(i)Quantitativeinformation(ii)CostInformation.
<u>ProformaC(PartI)</u>:Quantitativeinformation'partofProforma'C'
This partwillbemaintainedby SSA,Units ofMetroDistrict,Units ofMaintenance Region&DataNetwork. This partismeantforrecordingtechnicaldataandas suchthe samewillbeprepared&maintainedbythePlanning/DevelopmentSection.Attheendof financialyeartheUnits will submitthis partofProforma'C'totheirrespectiveCircleHQ forconsolidationatthatend.
<u>ProformaC(PartII)</u>
This partwillbemaintainedby'ServiceCostCentre'&'Operation CostCentre'

9.5.5 PROFORMA D

ProformaDisfor allocationandapportionmentofoperationcost,servicecostandother coststoservice-products. Revenuealsowillbepostedservice-productwise.

9.6 COST RECORD CIRCULAR

CORPORATE ACCOUNTS SECTION,
Bharat Sanchar Bhawan , 1st Floor
Harish Chandra Mathur Lane, Janpath
NEW DELHI – 110001 .
TEL: 23734106, 23734107(fax)

भारत संचार निगम लिमिटेड
(भारत सरकार का उपक्रम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)

No: 500-142/2013-14/CA-III/BSNL/37 **Dated 21.04.2014**

To
The PGM (F)/Sr.GM (F)/IFAs
All BSNL Circles

Subject: Preparation of Cost records and Cost Audit for the Financial Year 2013-14.

This is to inform all the circles that M/s Chandra Wadhwa & Co., Cost Accountant firm has been appointed as the Cost Auditor of Bharat Sanchar Nigam Limited as a whole for the financial year 2013-14. Like previous year 2012-13, the Cost records will be prepared (for all the Circles as well as BSNL as a whole) centrally at BSNL, Corporate Office for complying the provisions of the Reporting System on Accounting Separation Regulations, 2012 (ASR 2012) issued by TRAI and provisions of Companies Act 1956 along with various notifications, circulars and amendments issued by Ministry of Corporate Affairs from time to time. For this purpose, all the circles are now requested to kindly provide the details necessary for preparation of cost records.

All non territorial circles should furnish the required details based on which the cost of respective non-territorial circle is to be transferred to the other non-territorial and /or territorial circles. All national level training centres – ALTTC, BRBRAITT, NATFM – need to provide the details of number of man days training imparted to the personnel of different circles, QA centres and T& D Circle to provide the details of number of testing done on behalf of each circle. These details are to be given in numbers only and where ratios are used, the details as to how the ratio has been derived should be accompanied. Basis of apportionment to be used by circles is enumerated in Table 1. Where the circle is following the basis of apportionment other than the basis defined in Table 1, the same should be clearly enumerated in the letter by the circle. Such clarity is necessary to avoid any qualification by the cost auditor.

Table I

Service cost Centre	Basis of apportionment
BRBRAITT,NATFM, ALTTC	Number of man days trained
NCES	Number of cards repaired
CPAO(ITI)	Value of procurement
T &D , QA	Number of testing done
DNW	Bandwidth usage
TS/TF	Value of material consumed by circles
Project Circles/TF Guwahati	Value of Service rendered to other circles(actual expenses)
Maintenance circles	Capital cost of network elements of circles concerned

For the purpose of providing such information, Pyramid Structure given in point 4 of this office circular no. 500-142/2011-12/CA-III/BSNL(pt) dated 29.10.2012 should be strictly followed. This means that the circle lying in the set of circles as per pyramid has to distribute the cost to the circles lying below it in the pyramid ***and not to the circles lying upward or along with it in the pyramid.*** E.g.; NTP circle will not distribute the cost to any of the circles lying above it in the Pyramid like PAO (HQ), BRBRAITT, ALTTC, NATFM, NCES, QA Bangalore, CPAO (ITI), T& D Jabalpur, DNW, TS, All TFs and other project circles. NTP can distribute its cost to all maintenance regions and all the territorial circles only. **(Pyramid enclosed as Annexure '1')**

This restriction does not apply to territorial circles. A territorial circle can distribute the cost to other territorial circles or non-territorial circles. All the territorial circles should also give the details **(Amount in Rs.)** regarding the cost incurred and allocated/apportioned to different circles for services rendered on behalf of other circles e.g. training costs of RTTC, CTTC and DTTC. Maharashtra circle is required to give the details about ITPC, WZBC cost and ILD revenue/cost as provided during the last year. Similarly, West Bengal Circle is required to provide the details on international roaming, EZBC expenditure etc. Apart from above mentioned costs and costs as identified in the circulars issued from time to time, if there is any other expenditure incurred by the circle which need be apportioned to other circles then details of such expenditure(s) incurred by circles should also be sent to Corporate Office e.g. KUBAND cost/revenue of STP circle etc.

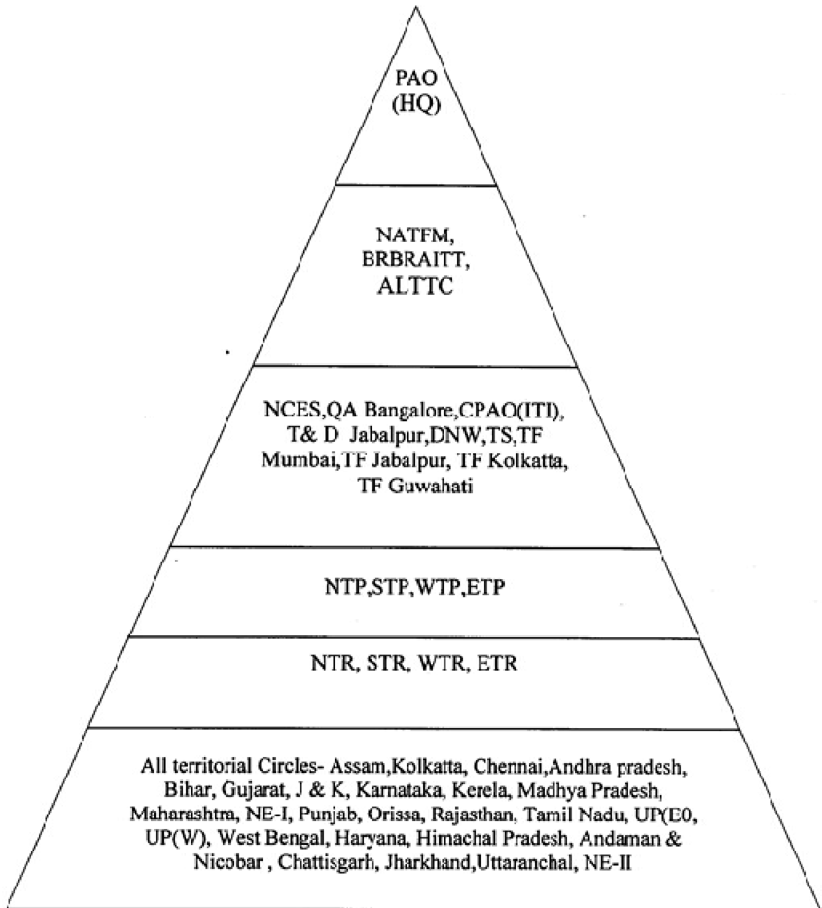
Further, all circles-territorial as well as non-territorial- are required to fill the details in the enclosed **Annexure '2'**only for the purpose of uniformity. All territorial circles should refrain from giving details in lakhs /thousands of rupees and all details should be submitted as **amount in Rs. only.**

All circles are requested to kindly compile these details for the period from 1st April, 2013 to 31st March, 2014 (i.e. F.Y. 2013-14) and send hardcopy to the Corporate office latest by 30.04.2014 and also through email at agmca3@rediffmail.com so that cost records can be compiled centrally in time.

Encl. As above

(Rajeev Singh)
GM (CA)

Annexure 1


PAO
(HQ)
NATFM,
BRBRAITT,
ALTTC
NCES,QA Bangalore,CPAO(ITI),
T& D Jabalpur,DNW,TS,TF
Mumbai,TF Jabalpur, TF Kolkatta,
TF Guwahati
NTP,STP,WTP,ETP
NTR, STR, WTR, ETR
All territorial Circles- Assam,Kolkatta, Chennai,Andhra pradesh,
Bihar, Gujarat, J & K, Karnataka, Kerela, Madhya Pradesh,
Maharashtra, NE-I, Punjab, Orissa, Rajasthan, Tamil Nadu, UP(E0,
UP(W), West Bengal, Haryana, Himachal Pradesh, Andaman &
Nicobar , Chattisgarh, Jharkhand,Uttaranchal, NE-II

Annexure 2

CIRCLE DISTRIBUTING COST TO OTHER CIRCLES

CIRCLES TO WHICH COST IS BEING DISTRIBUTED

s.No	CIRCLE	
1	Corporate office	
2	ASSAM TELECOM	
3	CALCUTTA TELEPHONES	
4	CHENNAI TELEPHONES	
5	ANDHRA TELECOM	
6	BIHAR TELECOM	
7	GUJARAT TELECOM	
8	J & K TELECOM	
9	KARNATAKA TELECOM	
10	KERALA TELECOM	
11	MADHYA PRADESH TELECOM	
12	MAHARASHTRA TELECOM	
13	N.E.TELECOM	
14	PUNJAB TELECOM	
15	ORISSA TELECOM	
16	RAJASTHAN TELECOM	
17	TAMILNADU TELECOM	
18	U.P.EAST TELECOM	
19	U.P.WEST TELECOM	
20	WEST BENGAL TELECOM	
21	HARYANA TELECOM	
22	HIMACHAL TELECOM	
23	TS CALCUTTA	
24	TF MUMBAI	
25	TF KOLKATTA	
26	TF JABALPUR	
27	NTP	
28	WTP	
29	STP	
30	ETP	
31	NTR	
32	WTR	
33	STR	
34	ETR	
35	CGM T&D CIRCLE JABALPUR	
38	CGM BRBRAITT JABALPUR	
39	CGM ALTTC GHAZIABAD	
40	TF GUWAHATI	
41	CGM DATA NETWORKS	
42	CGM NCES	
43	A & N	
44	PAO HQ and DDG BBF	
45	ITI Bangalore	
46	QUALITY ASSURANCE BANGALOR	
49	NATFM HYDERABAD	
50	CHATTISGARH TELECOM	
51	JHARKAND TELECOM	
52	UTTARANCHAL TELECOM	
53	NORTHEAST II	
	TOTAL	

9.7 ADDITIONALREADINGMATERIAL

ClassificationofCost

9.7.1 BYNATUREOFEXPENSE

a. **MaterialCost**:Itisthecostofmaterialofanynatureusedforthepurposeof productionofaproductoraservice.
b. **LaborCost**: Itmeans thepaymentmadetotheemployees,permanentor temporary,fortheirservices.
c. **Expenses:** Expenses are other than material cost or labour cost which are involvedinanactivity.

9.7.2 BYRELATIONTOCOSTCENTRE

a. **DirectCost:**Ifexpenditurecanbeallocatedtoacostcenterorcostobjectby economicallyfeasiblewaythenitiscalleddirectcost.Sumofalldirectcostis calledprimecost.

i. DirectMaterial Cost
ii. DirectLabour Cost
iii. DirectExpenses

b. **IndirectCost:**Ifanexpenditurecannotbeallocatedtoacostcenterorcost objectbyeconomicallyfeasiblewaythenitiscalledindirectcost.IndirectCostis alsoknownas overhead.

i. IndirectMaterial Cost
ii. IndirectLabourCost
iii. IndirectExpenses

9.7.3 BYFUNCTIONS/ACTIVITIES

a. **ProductionCost:**It isthecostofallitemsinvolved intheproductionora productorservice.Itincludesalldirectcostsandallindirectcosts(Production overhead)relatedtotheproduction.

b. **AdministrationCosts:**Thesearetheexpensesincurredforgeneralmanagement ofanorganization.Thesearofthenatureofindirectcosts andarealsotermedas administrativeoverhead.

c. **Research &Development Costs:** These refer to the costs for undertaking researchtoimprovequalityof apresentproductorimproveprocessof manufacture,developanewproduct,marketresearch etc.andcommercialization thereof.

d. **SellingCosts:**Theseareindirectcostsrelatedtosellingofproductsorservices andincludeallindirectcostin salesmanagementfortheorganization.
e. **DistributionCosts:**Thesearethecostsincurredinhandlingaproductfrom the timeitis completedintheworks untilitreaches theultimateconsumer.

9.7.4 BYBEHAVIOUR

a. **FixedCost:**Itreferstothecostwhichdoesnotvarywiththechangeinthe volumeofactivityin theshortrun.Thesecostsarenotaffectedby temporary fluctuationinactivityofanenterprise.Thesearealsoknownas periodcosts.

b. **VariableCost:**Itreferstothecostofelementswhichtends todirectlyvarywith thevolumeof activity.Variablecosthastwoparts–(a)Variabledirectcost;and (b) Variable indirect costs. Variable indirect costs are termed as variable overhead.

c. **Semi-variableCosts:**It containsbothfixedandvariableelements.Theyare partlyaffectedbyfluctuationinthelevelofactivity.

9.7.5 FOR MANAGEMENTDECISIONMAKING

a. **MarginalCost:**Itistheaggregateof variablecostsi.e.primecostplusvariable overhead.Marginal Costperunitis thechangeintheamountatanygivenvolume of output by which the aggregate cost changes if the volume of output is increasedordecreasedbyoneunit.

b. **OpportunityCost:**Itis thevalueof thealternativesforegonebyadoptinga particularstrategyoremploying resources in specificmanner.

c. **Relevant Cost:** These refer to the costs relevant for a specific purpose or situation.

d. **ShutDownCosts:**Costsofidleplant.Amanufacturerrenderingservicemay have to suspend its operation for a period on account of some temporary difficultiese.g.shortageof rawmaterial,non-availabilityof requisitelabour. Duringthisperiodthoughnotworkdonecertainfixedcostsareincurredlikerent andinsuranceofbuildings,maintenanceetc.whicharereferredtoas 'shut-down cost'

e.**AvoidableCosts:**Thesearethosecostswhich undergiven conditionsof performanceefficiencyshouldnothavebeenincurred.

f. **UnavoidableCosts:**Theseareinescapablecostswhich areessentially tobe incurred,withinthelimitsornormsprovidedfor.Itisthecostthat mustbe incurredunderaprogrammeof businessrestriction.Itisfixedinnatureand inescapable.

9.7.6 CLASSIFICATIONBYTIME

a. **HistoricalCosts:**Thesearetheactualcostsofacquiringassetsorproducing goodsorservices.

b. **Standard Costs:** A predetermined normapplied as a scale ofreference for assessingactualcost,whetherthesearemoreorless.Thestandardcostservesas abasisofcostcontrolandasameasureorproductiveefficiency when ultimately posedwithanactual cost.Itprovidesmanagementwithamediumbywhich the effectiveness ofcurrentresultsismeasuredand responsibilityofdeviationplaced.

9.8 CONCLUSION:-

Cost management is indeed one of the essential requisites for the success of any project or business for that matter. When one knows the scope for the cost that the business can bear, it becomes much easier to set the goals and accordingly work towards it.

10 CORPORATEACCOUNTS, BSNLB/S&P&LACCOUNT

10.1 LEARNING OBJECTIVES

At the end of the session, the trainees will be able to learn:

- Accounting Mechanism
- Accounting Principles
- Balance Sheet
- Profit & loss account
- Financial Statement Analysis: Using Accounting Ratios

10.2 INTRODUCTION

Abasicunderstandingoffinanceisvery relevantto ourlives.Inboth thepublicand privatesectors,financial competence and understandingare essentialformostmanagers and executives, although many of them will have received no formal training.

The company wants its revenues to exceed it expenses so that it will earn profit. Accounting helps executives measure the revenues, expenses, and profit (or loss) of the business.

Accounting is the information system that measures business activities, processes that information into reports, and communicates the results to decision makers.

As a business executive or an interested party while dealing with other business firms, you would like to know their financial viability. Balance Sheet is one such financial statement that will help you to check the financial health of a firm. It has two sides, Liabilities payable and Assets owned. The total of these two sides is always equal. If it is so, how can one judge that the financial health of a business firm/company is better or more sound than the other? Given innumerable transactions, how does it happen that the two sides of a Balance Sheet always tally? The objective of this session is to provide answers to all these and other perplexing questions.

10.3 ACCOUNTINGMECHANISM

Accounting in order to communicate the results of the operations of a business, records business transactions, classifies them, summarizes and presents them in manner useful for interpretation. Various steps involved in the accounting procedures are briefly discussed as under.

Transaction: Thestartingpointforaccountingisabusinesstransaction, say,thepurchaseof rawmaterial.Suchatransactionis evidencedby adocumentcalled'voucher',sayinthiscase, materialpurchasedbill.Itgivesthedetailsofthematerial purchased,thenameofthepartyfrom whom goods purchasedeitheroncredit, orifpurchasedforcash,thefact thatpaymenthasbeen made.Similarly,'receipt'forthe payment ofarent isthe voucher for thetransactionof 'paymentofrent'.

Recording: Transactionsarerecordedinvariousbooksof accounts on thebasisofvouchers.Suchbooksof accountsinclude cashbook,andjournal.Thetransactionofpurchaseof raw materialon creditwillberecordedin thepurchasebook; similarly the payment of rent will be recorded in thecashbook.Transactionsrelating tocreditsaleswill be recordedin thesalesbook.Thejournalisabook torecord all those transactions, which are not recorded in any specificbook.

Classification: Thenextstepintheaccountingprocedureistoclassifythe transactionsunderappropriateheadslikesalaries,rent payments, rawmaterial.Thisisdoneby analyzingthe transactionrecordedinthebooksofaccountsandposting transactionsofasimilarnatureunderonehead,calledthe 'ledgeraccount'.The accountbookcontainingvarious accountheadsis called, theledger.Forexample,all transaction relating to'salaries'maybe postedin'salaries account'orthoserelatingtorentpaidmaybepostedinrent paymentaccount.

Summarization: Theartofsummarizationrelatestoperiodicalpresentation of the classifieddata in the form of ledger accounts balancesinastatementcalledthetrialbalance.Allledger accountsarebalancedperiodically,say,attheendof a month,andtheaccountbalancesare placedtogetherinthe formofatrialbalance.Inthetrialbalance, thetotalofdebit balancesequalsthetotalofcreditbalancesandthisisone waytochecktheaccuracyoftheaccounts books.

Financial Statements:Thetrialbalanceisnormallythebasisforthepreparationof financialstatements calledProfit &Loss Account and Balance Sheet.

Auditing: Inthecaseofcorporations, accountsarerequired to be auditedbyan auditor.Theauditorisanindependentperson havingexpertiseinaccounting.Heexaminestheaccuracy oftheaccountbooks and records andgiveshis reportonthe balancesheetandprofitandloss account.

Auditedfinancialstatements arerequiredtobesubmittedto theRegistrarof Companies,andsuchauditedstatement becomepublicdocumentsandthisform themeansof reportingbythecompaniestovariouspartiesinterestedin theenterprise.

Balancesheet :Showsthefinancialpositionofthefirmatagivenpointoftimein terms ofassets andliabilities.

Standalone Balance Sheet as at 31st March 2020

Table 25. Balance Sheet

Asset	**Amount in Lakhs**	**Liabilities**	**Amount in Lakhs**
Non-current assets	10,990,120	Non-current liabilities	3,132,581
Current assets	3,685,961	Current liabilities	5,629,235
		Total Equity	5,914,265
Total	**14,676,081**	**Total**	**14,676,081**

Profitandloss statement:Reflects theperformanceofthefirmoveraperiodoftime.

Standalone Statement of Profit and Loss for the year ended 31st March 2020
Table 26. P&L A/C

Revenue	**Amount in Lakhs**	**Expenses**	**Amount in Lakhs**
Revenue from operations	1,788,609	Total Expenses	3,440,608
Other income	102,047	Loss Before Tax	(1,549,952)
Total	**1,890,656**	**Total**	**1,890,656**

10.4 ACCOUNTINGPRINCIPLES

10.4.1 MONEYMEASUREMENTCONCEPT

Accounting records stateonlythosefacts aboutabusinessfirm,whichcanbe expressedinmonetaryterms.Inotherwords,business events andfactsthatcannot beexpressedinmonetaryterms,howsoeverimportanttheymaybe,areexcluded.

TheoperationalimplicationoftheMoney MeasurementConceptis thatfinancial statements donotprovideallinformationaboutthebusiness.

10.4.2 BUSINESS ENTITYCONCEPT

Business transactions ofasoleproprietorshipareseparatefromthebusiness owner's *personal*transactions.For*legal*purposes, asoleproprietorshipandits ownerareconsideredtobeoneentity,butforaccountingpurposestheyare consideredtobetwoseparateentities.

10.4.3 GOINGCONCERNCONCEPT

The Going Concern Concept implies that the firm will continue to operate in the foreseeable future. The operational implication of this assumption is that assets are not shown in Balance Sheet at their realizable market value, which implies liquidation value.

Instead, evaluation of assets is with reference to the value of goods and services they are likely to produce in future years to come.

10.4.4 COSTCONCEPT

Assets/resources owned by the firm are shown at their acquisition cost and not at current market value/current worth. The rationale for this assumption is that it provides objective and verifiable basis for accounting records. Market valuation of assets in use is not only difficult to be made but also is related to subjectivity. Besides, market values may be constantly subject to change.

10.4.5 DUALASPECT

Every business transaction has a dual effect, one receiving of a benefit and the other giving of a benefit. For example, when a firm acquires an asset (receiving of a benefit), it has to pay cash (giving of a benefit). Therefore, two accounts are to be opened in the books of account, one for receiving the benefit and the other for giving the benefit. Thus, there will be a double entry for every transaction. For each and every debit, there should be a corresponding credit and vice-versa. This is nothing but the principle of double entry system of accounting which, in other words, is known as dual aspect concept.

Another accounting implication of the dual aspect concept is that the initialamount is contributed by the owner. If additional funds are required, bank loans are taken. As per the dual aspect concept, all these receipts create corresponding obligations for their repayment. In other words, a contribution to the business, either in cash or kind, not only increases its resources (assets) but also its obligations (liabilities) corresponding. Thus, at any given point of time, the total assets and the total liabilities should be equal. This equality is called "balance sheet equation" or "accounting equation."

Liabilities =Assets or,Capital+Liabilities =Assets,or,

Assets -Liabilities =Capital

10.4.6 CONSERVATIVECONCEPT

As the name suggests, Conservative Concept warrants use of conservatism in business records. In relation to Income Statement, the principle is, "anticipate no profits unless realized but provide for all probable future losses". Stock of finished goods is valued at the cost of the market price whichever is lower.

Likewise, it is normal for the firms to provide for likely irrecoverable sum from debtors by creating provisions for bad and doubtful debts at the end of accounting year. This assumption safeguards over-estimation of profits.

10.4.7 ACCRUAL(REALIZATION)CONCEPT

Accrual Concept is a fall-out of Accounting Period concept. This concept requires that expenses incurred for a particular accounting period should be reckoned in the same period, irrespective of the fact whether these expenses have been paid in cash or not in that year. The same holds true for revenues, i.e., revenues earned in a specific accounting period are construed as incomes of the same period, irrespective of their receipts.

In the absence of Accrual accounting, the Income Statement may indicate more profit in one year at the cost of the profits of some other year, which is entirely inappropriate and illogical. In other words, cash basis of expense recognition will hamper comparison of profit figures over the years. Clearly, there is a very strong case for a business firm to adopt accrual basis of accounting, known as Accrual accounting to determine correct profits.

10.4.8 MATERIALITY

It states that if the value of any asset is very low, it might be expensed in the year of purchase itself rather than amortizing over its useful life. (through depreciation)

10.5 BALANCE SHEET

Balance sheet is the most significant financial statement. It indicates the financial condition or the state of affairs of a business at a particular moment of time. More specifically, balance sheet contains information about the resources and obligations of a business and about interests' in the business at a particular point of time. It provides a snap shot of the financial position of the firm at the close of the firm's accounting period. The balance sheet should contain a heading. The heading includes the name of the firm, the type of statement and the date to which the statement applies.

The balance sheet can be presented in the account form or the report form. In the account form, the balance sheet is divided into two sides. The right hand side lists the assets of the company and the left hand side shows the means by which the assets have been financed. The totals on two sides must be equal.

In the report form, a step wise balance sheet is prepared listing assets at the top and then listing liabilities and owner's equity

10.5.1 FUNCTIONS OF BALANCE SHEET:

The three important functions served by the balance sheet are:

i. It gives concise summary of the firm's resources and obligations.
ii. It is a source of information to measure the firm's liquidity.
iii. It is a source of information to measure the firm's solvency.

Themajor elements oftheBalanceSheetareAssets and Liabilities.Thesetwo counter balancingelementsformtheBalance SheetEquation.

10.5.2 BALANCE SHEETEQUATION:

Assets =Liabilities

Assets arevaluableresources ownedbythefirmand Liabilities areobligations payablebyit.

Liabilities aresourcesoffinancingassets.

Liabilities arebroadlyclassifiedintotwocategories,namely,ExternalLiabilities (consistingofcreditors andlenders) and InternalLiabilities (consistingofowners' contribution/equity).

Owners'equityconsists of initialcapitalprovidedbythemand retainedearnings accumulatedovertheyearsfromthefirm's profitableoperations.

Externalliability-holdershavefirstclaimontheassetsofthefirmandowners havearesidualclaim.Itisforthis reasonowners'capitalis knownas Risky Capital.

Profits,sincepayabletoowners,areliabilitiesfromtheperspectiveofthefirm andlosses,sincerecoverablefromthemareits assets. Thisis as perSeparate Entityconcept.

TotalAssets arealways equaltototalLiabilities.Thisis as perthe Principleof Duality.Therefore,thefundamentalaccountingequation,is:

Owners'equity+Liabilities (external)=Assets

Balance Sheetis always withreferencetoapointoftime(say31st March). Therefore,itis asnapshotoffinancialpositionofafirmataspecificdateinterms ofAssets ownedand Liabilities owed.Whereasincomestatementindicates profits earned (orlosses suffered)duringtheaccountingperiod.

10.6 PROFIT&LOSS ACCOUNT

Profit & Loss (abbreviated to P&L) Account/Income Statement reports the revenues and expenses of a firm of an accounting period.

The earning capacity and potential of a firm are reflected by its profit and loss account. The P& L account is a **scoreboard** of the **firm's performance during the period of time**. It is a **flow statement**. Profit and loss account presents the summary of revenues, expenses and net income (net loss) of a firm. It serves as a measure of the firm's profitability. The heading of the P&L account includes the name of the firm, type of statement and the period of time to which the statement relates.

The P&L account is also presented in two forms namely the **step form** and the **account form**. The step form statement may be single step or multi step. The single step P&L account records all revenue items first then the expense items are shown. The total of expenses is subtracted from the total revenue to obtain the net income or net profit. In the account form the account is divided in to two sides. The left hand side is used to record expense items and the right hand side lists revenue items.

In broad terms, Revenue, as the name suggests, is the income that mainly accrues to the firm either by the sale of goods and services or by investing the resources of the firm outside. In contrast, Expenses are the costs incurred in earning revenues. Thus, P&L Account is concerned with matching the revenues of a specified period with the expenses of that period. Greater the accuracy of this matching procedure, more correct is the income determination. In other words, preparationofaP&L accountisbasedonthe*MatchingPrinciple*.

10.6.1 FINANCIAL STATEMENTANALYSIS:USINGACCOUNTINGRATIOS.

Financial ratios are useful indicators of a firm's performance and financial situation. Most ratios can be calculated from information provided by the financial statements.

Financial ratios can be classified according to the information they provide. The following types of ratios are important for BSNL:

10.6.2 LIQUIDITYRATIOS

Liquidityratios provideinformationabouta firm'sabilitytomeetits short-term financialobligations.Theyareofparticularinteresttothoseextendingshort-term credittothefirm.Twofrequently-usedliquidityratios arethe*currentratio*(or *workingcapitalratio*)andthe*quickratio*.

$$\text{QuickRatio} = \frac{\text{CurrentAssets - Inventory}}{\text{CurrentLiabilities}}$$

$$\text{CurrentRatio} = \frac{\text{CurrentAssets}}{\text{CurrentLiabilities}}$$

10.6.3 FINANCIAL LEVERAGERATIOS

Financialleverageratios provideanindicationofthelong-termsolvencyofthe firm.Unlikeliquidityratios thatareconcernedwithshort-termassets and liabilities,financialleverageratiosmeasuretheextenttowhichthefirmis using longtermdebt. The*debtratio*is definedas totaldebtdividedbytotalassets:

$$\text{DebtRatio} = \frac{\text{TotalDebt}}{\text{Total Assets}}$$

The*debt-to-equity*ratiois totaldebtdividedbytotalequity:

$$\text{Debt-to-EquityRatio} = \frac{\text{TotalDebt}}{\text{TotalEquity}}$$

Profitability Ratios

Profitabilityratios offerseveraldifferentmeasures ofthesuccess ofthefirmat generatingprofits.

The*gross profitmargin*is ameasureofthegross profitearnedon sales.Thegross profitmarginconsiders thefirm's costofgoods sold,butdoes notincludeother costs.Itis definedasfollows:

$$\text{Gross ProfitMargin} = \frac{\text{Sales - CostofGoodsSold}}{\text{Sales}}$$

*Returnonassets*is ameasureofhoweffectivelythefirm's assets arebeingused togenerateprofits.Itis definedas:

$$\text{ReturnonAssets} = \frac{\text{Net-Income}}{\text{TotalAssets}}$$

10.7 CONCLUSION

Financial analysis determines a company’s health and stability, providing an understanding of how the company conducts its business. But it is important to know that financial statement analysis has its limitations as well. Different accounting methods adopted by different firms' changes the visible health and profit levels for either better or worse. Different analysts may get different results from the same information. Hence, we must conclude that financial statement analysis is only one of the tools (although a major one) while taking an investment decision.

11 MARKETING OF SERVICES

11.1 LEARNING OBJECTIVE:

After this session, participants will be able to

- Define marketing
- Describe service and its difference from product
- List the services marketing mix
- Apply the marketing mix to BSNL services
- Marketing v/s sales
- Marketing strategies
- Understand marketing activities of BSNL

11.2 INTRODUCTION:

Every organization wants to make more profit. This can be achieved by increasing sales. More selling depends on many factors such as product acceptability, company and product's image, its price versus benefits, its availability etc. Marketing is a tool to help to achieve it.

Marketing- The sum of all activities that take you to a sales outlet after those sales takes over. The process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational goals.

Marketing Management- The *art and science* of choosing target markets. Getting,keeping, and growing customers through creating, delivering, and communicating superior customer value.

Marketing uses various tools & techniques to raise the perceived benefits of a product/service. A marketing orientation occurs when *everyone* in the organization is constantly aware of:

- Who the company's customers are
- What the company's customers want or need
- How the firm can satisfy those customer needs better than its rivals
- How the firm can satisfy customer needs in a way that generates the kind of profits that the company wants to achieve.

11.3 PRODUCT VERSUS SERVICE:

Since a product differs from service, marketer has to understand these differences so as to apply proper tools & techniques to be successful.

Products' *physical* distinctions include:

- **Form:** size, shape, physical structure; for example, aspirin coating and dosage
- **Features:** such as a word processing software's new text-editing tool
- **Performance quality:** the level at which the product's primary characteristics function
- **Conformance quality:** the degree to which all the units of the product perform equally
- **Durability:** the product's expected operating life under natural or stressful conditions
- **Reliability:** the probability that the product won't malfunction or fail
- **Reparability:** the ease with which the product can be fixed if it malfunctions
- **Style:** the product's look and feel
- **Design:** the way all the above qualities work together (it's easy to use, looks nice, and lasts a long time)

Products' service distinctions include:

- **Ordering ease: ho**w easy it is for customers to buy the product
- **Delivery:** how quickly and accurately the product is delivered
- **Installation:** how well the work is done to make the product useable in its intended location
- **Customer training:** whether your company offers to train customers in using the product
- **Customer consulting:** whether your company offers advising or research services to buyers of the product
- **Maintenance and repair:** how well your company helps customers keep the product in good working order

- Service is characterized by following distinctions:
- **Intangible:** Customers can't see, touch, smell, or handle services before deciding whether to buy.
- **Inseparable:** Services are usually delivered and consumed simultaneously, so both the provider and the buyer influence the outcome of the service delivery.

- **Variable:** Services vary depending on who provides them and when and where they're provided; thus, controlling their quality is difficult.
- **Perishable:** Services are used up upon delivery, not stored for future sale.

All these characteristics can make it difficult for customers to judge the quality of a service they have purchased. Therefore, there is a need to design market strategies that address these unique characteristics of services. Some ways to focus are:

- **Select unique processes to deliver the service**
- **Train and motivate employees to service customers well.**
- **Develop an attractive physical (or virtual) environment in which to deliver the service.**
- **Differentiate the image associated with the service.**

By using imagination and some creative thinking, one can design powerful marketing strategies even for services.

11.4 SERVICES MARKETING MIX-SEVEN PS

Services Marketing is a lot similar to Music. While music has seven notes, known to all composers and singers, still some singers/composers become famous & others fail, the reason being their poor application of these seven notes. For the ease of study, on the same lines, Services Marketing can be considered to have seven 'P's, known to all marketers. Those who play smart on these Ps, become successful.

There are standard four Ps (**Product, Pricing, Promotion and Placement**) applicable for products. Services marketing require extra three, totalling seven and known together as the extended marketing mix. For a marketing plan to be successful, the mix of the four"Ps" must reflect the wants and desires of the consumers in the target market. Trying to convince a market segment to buy something they don't want is extremely expensive and seldom successful. Marketers depend on marketing research, both formal and informal, to determine what consumers want and what they are willing to pay for it. Marketers hope that this process will give them a sustainable competitive advantage. Marketing management is the practical application of this process.

11.4.1 PRODUCT

The product aspects of marketing deal with the specifications of the actual good or service, and how it relates to the end-user's needs and wants. The scope of a product generally includes supporting elements such as warranties, guarantees, and support.

BSNL context: All services offered by BSNL such as landline, mobile-prepaid & postpaid, lease line, VSAT, internet (different types), Broadband etc fall in this category. Many types of internet access have been devised to cater to needs of specific customer segments. Similarly post-paid & prepaid is suitable to different group of customers. Market research helps identify needs of the customers to enable marketers give inputs to product development team for new services & features. Acceptability is first requirement of any product. BSNL carries out market research time to time to find needs for new product/features. Some important researches carried were to assess expectations of people for BSNL Mobile, MPLS VPN. Research was also carried to find reasons for surrender & disconnection of landline connections.

11.4.2 PRICING

This refers to the process of setting a price for a product, including discounts. The price need not be monetary - it can simply be what is exchanged for the product or service, e.g. time, or attention.

BSNL context: Price indicates affordability of the offer. Definitely, it varies with customer segments. BSNL has multiple tariff plans in various services. Discount schemes are also available such as Volume discount: More the revenue contributed by a customer, higher is the discount. This discount goes up to 20% for annual revenue of Rs 20 crore in case of corporate customers. Similarly in broadband BSNL offers two months free period if ten month advance rental is paid. Free ADSL modem is given on advance payment of rental. ECS (electronic clearing scheme) provides for 1% discount (max Rs 1000/-).

11.4.3 PROMOTION:

This includes advertising; sales promotion, publicity, and personal selling etc. and refers to the various methods of promoting the product, brand, or company. ***Branding is done to differentiate offers of a company from other's offer***.

BSNL context: BSNL keeps releasing various advertisements in print, electronic & outdoor media. These advertisements have messages for creating awareness as well sales promotion (such as schemes). **In 2007**, **BSNL merged all individual brand names (Cellone, Bfone, Dataone, Sancharnet etc) into unified brand BSNL**. Now all services are known as BSNL-services. Advertising agencies are empanelled at corporate & circle level. BSNL has produced many TV commercials till now. Prominent Bollywood stars such as Ms Preity Zinta, Ms Deepika Padukone and Boxer Merry Com have featured in BSNL TVCs.

11.4.4 PLACE OR DISTRIBUTION:

This refers to how the product gets to the customer; for example, point of sale placement or retailing. This fourth P has also sometimes been called *Place*, referring to the channel by which a product or service is sold (e.g. online vs. retail), which geographic region or industry, to which segment (young adults, families, business people), etc.

BSNL context: BSNL utilizes physical as well as electronic space for easy accessibility of its services. Over 3000 BSNL Customer services centres, approximate 1200 franchisees, lakhs of retailers allow convenience to customers for knowing & buying services. BSNL has Business Associates for corporate sales and DSA (direct selling agents)) for door to door selling. Apart from this 1500 call centre facilitates sales. Broadband registration through website was made available since launch of the service. Now Customer care portal (web solution) has been introduced to provide similar solution for all other services of BSNL.

These four elements are often referred to as the marketing Mix. A marketer can use these variables to craft a marketing plan. In BSNL marketing cells at corporate & circle level take care of various aspects of these Ps. At SSA level also, the marketing & sales organization structure is evolving. However, the process is slow & needs to be expedited.

People:

Any person coming into contact with customers can have an impact on overall satisfaction. Whether as part of a supporting service to a product or involved in a total service, people are particularly important because, in the customer's eyes, they are generally inseparable from the total service. As a result of this, they must be appropriately trained, well motivated and the right type of person. Fellow customers are also sometimes referred to under 'people', as they too can affect the customer's service experience, (e.g., at a sporting event).A linked concept is of Internal customer i.e. all employees & sections in an organization treat each other as customers. Within the organization, internal marketing is required which is the development and training of staff to ensure high levels of quality and consistency in service delivery and support. Internal marketing includes recruitment, training, motivation and productivity.

Process:

This is the process (es) involved in providing a service, which can be crucial to customer satisfaction. Standardization of processes, checklists etc. are helpful.

Physical evidence:

Since services are intangible, unlike a product, a service cannot be experienced before it is delivered. This, therefore, means that potential customers could perceive greater risk when deciding whether to use a service. To reduce the feeling of risk, thus improving the chance for success, it is often vital to offer potential customers the chance to see what a service would be like. This is done by providing physical evidence, such as case studies, testimonials or demonstrations.

11.5 MARKETING V/S SALES:

Marketing and sales are often said to be sides of the same coin. Both are interrelated. While marketing involves all those activities that bring the people forward for purchase, sales actually converts these interested people into customers. Sales and marketing both want the same thing – increased sales. Sales by closing deals, marketing by supporting sales and increasing brand awareness.

Segmentation: Neither all customers have similar needs nor all are profitable. Market segmentation pertains to the division of a market of consumers into persons with similar needs and wants. Marketers carry out surveys to segment the target audience and apply appropriate marketing mix for better results. General criteria used for segmentation is:

- **Demographic Variables:** Age, Gender, Income, Education, Occupation, Family size, Religion/Social class etc.

- **Geographic Variables**: Region, Urban/Rural, City/State/Country size, Market density, Climate, Terrain etc.
- **Psychographic Variables:** Personality, Motives, Lifestyles etc.
- **Behavioristic Variables:** Volume usage, End use, Benefit experience, Brand loyalty, Price sensitivity etc.

11.6 MARKETING STRATEGIES:

Marketing strategy is a method of focusing an organization's energies and resources on a course of action which can lead to increased sales and dominance of a targeted market niche. A marketing strategy combines product development, promotion, distribution, pricing, relationship management and other elements; identifies the firm's marketing goals, and explains how they will be achieved, ideally within a stated timeframe. For deciding an appropriate mix of 7Ps depends on the market situation where this mix has to be applied. Market situation for a product/service is defined as Product life cycle. The distinct stages in this life cycle are introduction, growth, maturity and decline. Same product may be at a different stage of product life cycle in different markets at the same time. This necessitates different marketing strategies in these markets. Analysis of following factors is important before finalization of strategy-

11.6.1 PRODUCT LIFE CYCLE

Products or Service are also having life cycle and new one Service/Product should be launched before down fall or expiry.

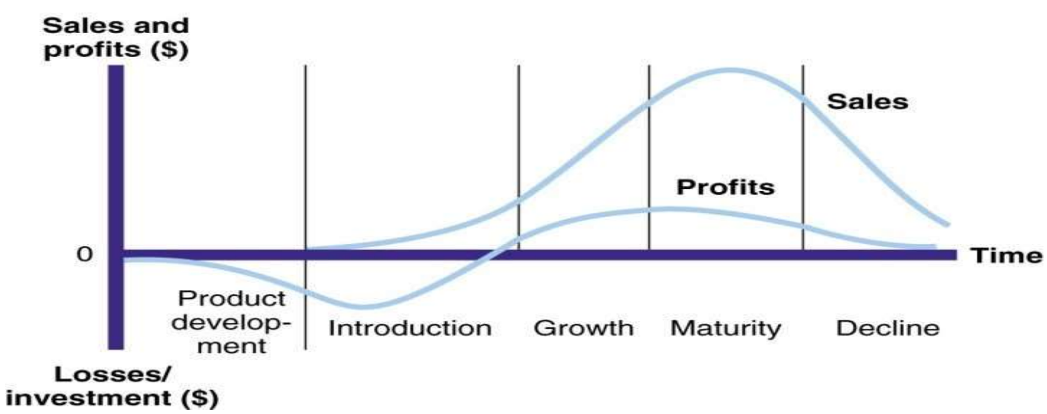


Figure 10: A typical product life cycle curve

11.6.2 SWOT(STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS) ANALYSIS –

Strengths and weaknesses are internal analysis of organization while opportunities and threats are external element available in the market.

11.6.3 PEST (POLITICAL, ECONOMICAL, SOCIAL AND TECHNOLOGICAL)

Situation Analysis- These are also termed environmental analysis and required to be considered.

11.6.4 PORTERS FIVE FORCE MODEL

Another important model worth considering in deciding about new product is the porter's five force model. In case of telecom sector, this model can help us understand about the interest of existing and new operators in entering 3G, Wi-Max and other new telecom services market.

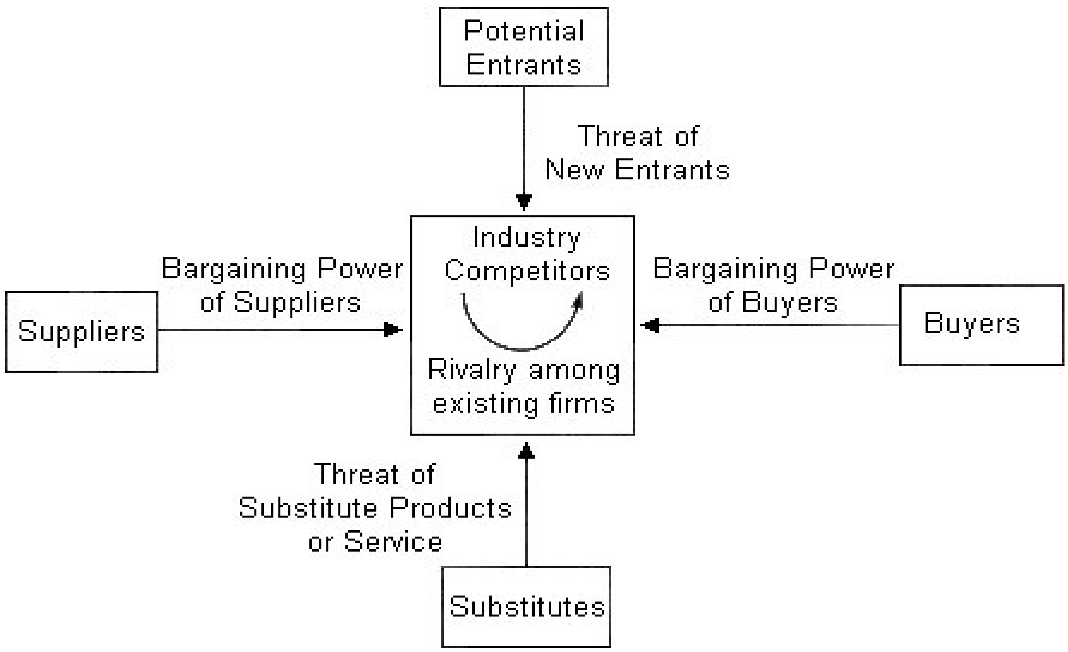


Figure 11: PORTERS FIVE FORCE MODEL

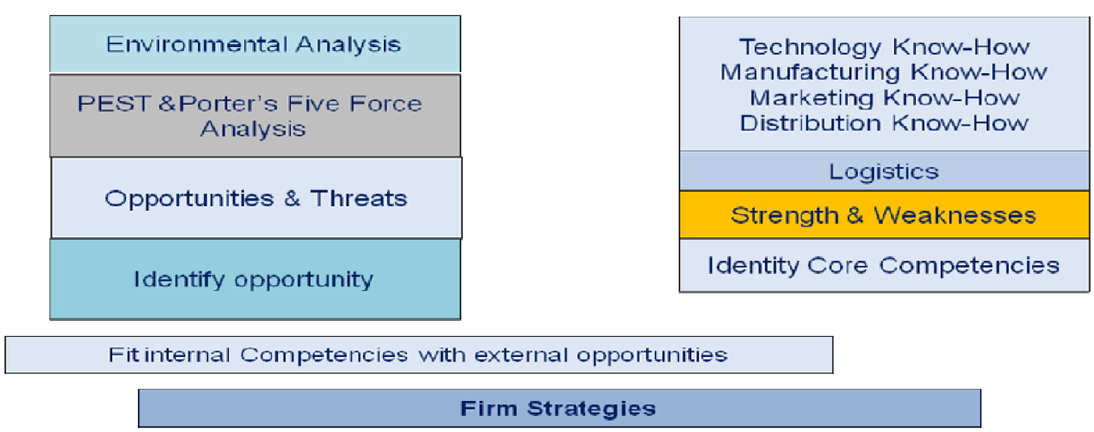


Figure 12: Flow Chart of Strategy Formulation

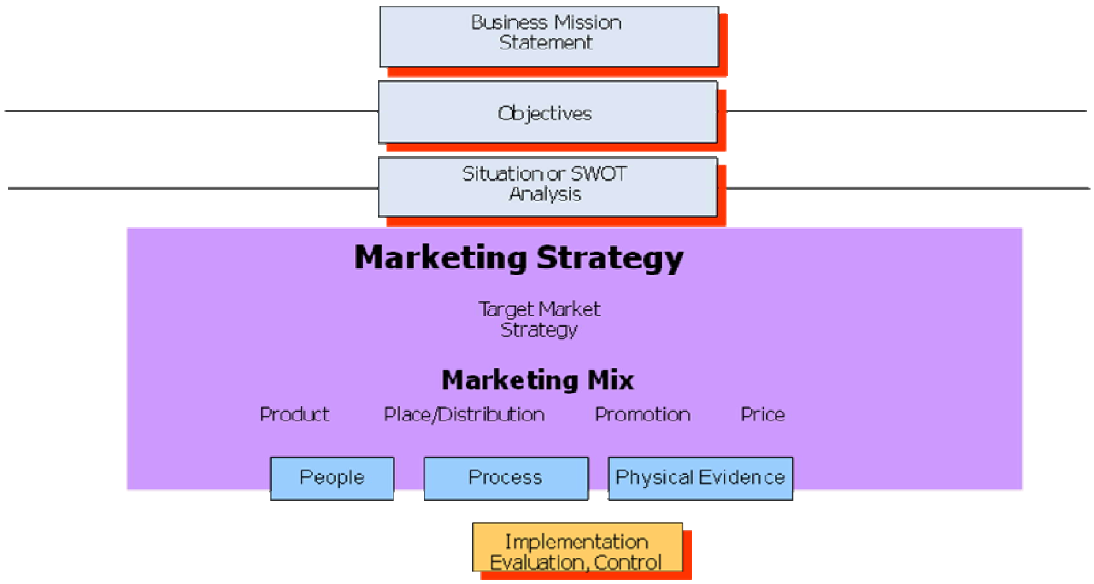


Figure 13: Flow Chart of Complete Marketing Process

11.7 MARKETING IN BSNL:

Marketing wing came into existence along with formation of BSNL. Marketing section started functioning in November 2000 at BSNL Corporate office. Since then BSNL has come a long way. From no policy, procedures and system in 2000, BSNL now has marketing cells in each vertical i.e. CFA, CM and Enterprise. Marketing budget has grown from few lakh rupees to hundreds of crore. Advertising agencies have been appointed at corporate & Circle level. Public relation agency has also been engaged at corporate level. Many advertising campaigns have been launched since inception of BSNL on various occasions such as world cup cricket, Mobile launch, and promotional schemes. Brand ambassadors have also been appointed. Ms Preeti Zinta, Ms Deepika Padukone Mr Abhinav Bindra and Merry Com have served as BSNL's brand ambassador. BSNL regularly participates in local & national exhibitions & melas. Roadshows are also organized.

Marketing budget is allocated to Circles, which can be delegated to SSAs also. Training programs are conducted at various training centres for BSNL executives so as to make them more market oriented.

Market research & surveys are also used extensively to ensure success of planned strategies and measure response to various campaigns. Segmentation of customers is also done such as rural, urban, commercially important, corporate, students etc. Try to answer the following:

1.Stage of Product Life Cycle in your area for: Landline, WLL, Mobile, Broadband

2.BSNL Marketing Strategy for above services in your area:

3.Market Segmentation applied by BSNL for above products

11.8 KEY TERMS:

Advertising- Any paid form of non-personal presentation and promotion of ideas, goods, or services by an identified sponsor.

Brand-A company or product name, term, sign, symbol, design—or combination of these-that identifies the offerings of one company and differentiates them from those of competitors.

Demand- Wants for a specific product that is backed by a customer's ability to pay
Differentiation- The act of designing a set of meaningful differences to distinguish a company's offering from competitors' offerings

Marketing- The process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational goals.

Marketing channels - Intermediary companies between producers and final consumers that make products or services available to consumers. It also called *trade channels* or *distribution channels*.

Marketing concept - The belief that a company can achieve its goals primarily by being more effective than its competitors at creating, delivering, and communicating value to its target markets. The marketing concept rests on four pillars: (1) identifying a *target market*, (2) focusing on *customer needs*, (3) coordinating all marketing functions from the *customer's point of view*, and (4) achieving *profitability*.

Marketing mix - The set of tools—product, price, place, promotion, people, process, physical evidence—that a company uses to pursue its marketing objectives in the target market.

Marketing network- A web of connections among a company and its supporting stakeholders—customers, employees, suppliers, distributors, and others—with whom it has built profitable business relationships. Today, companies that have the best marketing networks also have a major competitive edge.

Market- oriented strategic planning. The managerial process of developing and maintaining a viable fit among a company's objectives, skills, and resources and its changing market opportunities

Need-A basic human requirement, such as food, air, water, clothing, and shelter, as well as recreation, education, and entertainment.

Positioning-The central benefit of a market offering in the minds of target buyers. For example, a car manufacturer that targets buyers for whom safety is a major concern would position its cars as the safest that customers can buy.

"Pull" marketing- A type of marketing that attempts to persuade the customer to try a product and continue to use the product. Advertising is an example of it.

"Push" marketing- A type of marketing in which the product is "pushed" from the seller to the consumer. Direct sales force, contests, free trials etc. are its examples.

Satisfaction-A customer's feelings of pleasure or disappointment resulting from comparing a product's perceived performance with the customer's expectations of that performance.

Value- The ratio between what a customer gets and what he or she gives in return. **Want-** A desire that occurs when a need is directed to specific objects that might satisfy that need; for example, a hamburger is a *want* that might satisfy the *need* for food.

11.9 CONCLUSION:

Lot of effort has been made by BSNL in retaining & strengthening its market position. In spite of heavy growth in BSNL subscriber base from 2.5 crore to over 9 crore since its formation, its market share is on the decline. Mergers & acquisitions are helping competitors to improve their market share. While certainly a comprehensive internal & external marketing strategy for BSNL is needed to check this trend, procedural changes and more functional autonomy may also be required.

12 CORPORATEIMAGEBUILDING&PR

12.1 LEARNING OBJECTIVES:-

At the end of the session, the trainees will be able to learn:

- PublicRelations
- Corporate Imageand Public Relations Campaign
- BSNL Corporate Image Assessment
- Conclusion

12.2 INTRODUCTION

CorporateImage:Asthenamesuggests,itisanimage.Imagegetsformedinamirror. Inthecontext ofcorporateimage, themirroristhe mind oftarget audience, beitcustomer,media,employees,government,shareholderetc.Imagesrestin thesub-consciousmindsofthecustomersandshareholdersalike.Thisisaverysacredplace, accessableonly throughsubtlemessagesandasolid trackrecord,slowlybuildinginto images ofrespectability,confidenceandtrustaboutaparticularcorporation.Onemistake andtheseimagesareshattered,likeaglassnevertoberepairedagain.Forthisreason, nasty scandalskill thecorporateimagesonceandforall.Patchworkandbandagesonly prolongtheagony.Corporateimageislikeahouseof cards,delicateandfragile,likea crystalpalace,itcan’thavestonesthrownatit.Imageisnotafortthatyoucanattack againandagainandhopethatitwill survive.

Corporations thatdevelopclearmessages andclearlycommunicatetheirstories toboth theinternalorganizations andtheexternalforces aretherealplayers.Therestareeither stilldiscoveringwhotheyareorjustmakingstories as theygoalongorperiodically fallingflatontheirfaces.

Inbusinesses ofallsizes,itisvitalthatmanagers recognizetheimportanceofcreating andmaintainingastrongimage,andthattheyalsomakeemployees awareofit. Corporateimagebegins withintheoffices ofacompany'smanagers.Itshouldbebased onthedevelopmentofgoodcompanypolicies.Thecompanyitselfdoes notsolelycreate acorporation’simage.Othercontributorstoacompany'simagecouldincludenews media,journalists,labourunions,environmentalorganizations,andotherNGOs.

Governments,charitableorganizations,religiousorganizations,politicalorganizations , andeducational organizationsalltendtohaveauniqueimage,animagethatispartially deliberateandpartiallyaccidental,partiallyself-created.

Thecreation ofacorporateimageisanexercisein perceptionmanagement.Itiscreated primarilybymarketingexpertswhousepublicrelationsandotherformsofpromotionto suggestamentalpictureofthecorporatetothepublic.Typically,acorporateimageis designed tobeappealing to thepublic,sothatthecompany cansparkaninterestamong consumers,createshareof mind,generatebrandequity,andthusfacilitateproductsales.

Generallyfollowingtools areusedforbuildingcorporateimage:

- Branding
- CorporateIdentityManual
- Advertising
- PublicRelations

Branding:Itisrequiredtodifferentiateacompany,itsproducts/servicesfromthatof others.Brandingrequireslotofinsightintothecompany'sstrengths&themindoftarget segments.Forexamplewhensomebodytakes thenameof'Sony' whatimagerycomes to ourmind.Isitthatofsuperbproductquality,highpriceorotherwise.Similarlythink aboutHP, Tata, Infosys.Brandcanbealogo,nameorsignage.When peopletalkabout BSNL,whatcomes totheirmindwillsignifythecorporateimageofBSNL.Brandnames needtobeprotectedfortrademarks withappropriateauthorities.

CorporateIdentityManual:Many companieshaveamanualhowtheiroffices, showrooms,stationary,communicationswilldepictthecompanybranding.Thisisdone toconveyauniqueimagetothetargetsegmentacrossitsterritory.BSNLalsohasits corporateidentity manual. ThismanualstandardizestheuseofBSNLlogoinvarious circumstances, officesignage,name-plates,IDcards,visitingcards,letterheads etc.

Advertising: Itisapaidformofcommunicationwithtargetsegments.Variousmedia usedforadvertisingare electronic (TV,internetetc.),print (magazines,newspapersetc.), outdooretc.Brochures,pamphletsetc arealsousedtocreate awarenessforbuilding positiveopinions aboutthecompany.

12.3 PUBLIC RELATIONS

Successmustbe**conferred**onus(organization)by**Outsiders**likecustomers,opinion leaders,neighbors,electedofficials,vendors,voters,prospective employees,coalitions, stakeholders,shareowners,therefore,thebottomlineforeveryorganizationisto**Build relationships** that**Earn TrustandMotivate SupportiveBehaviors**.Itis aplannedand sustainedefforttobringoutaharmoniousinteractionbetweenanorganizationandthe community,through dissemination ofinformationandideasabouttheorganization,toits publics andtoprovidefeedbackfromthepublics tothemanagement.

- Aplannedeffortormanagementfunction
- Therelationshipbetweenanorganizationandthepublics
- Evaluationofpublicattitudeandopinion
- Amouthpiecefororganization'spolicies,proceduresandactionastheyrelateto

thepublics.

- Executionofanactionand/orcommunicationprogram
- Internaleducation
- Handleadversesituations,developmentofgoodrapport,goodwill,understanding andacceptancethroughatwo-waycommunication.

NormallyPRisnotdirectlypaidforandhencehasmorecredibility.

Expectations FromPRActivities

- Improvedpurchases by,and relationships with,customers
- Bettercommunityrelationships
- Activesupportonissuesfromopinionleaders
- Reducedtensionwithwatchdogagencies
- Greater employeeloyaltyorproductivity
- Moreconfidenceinthevalueofacompany

DifferentWays ToPromote CorporateImage ThroughPublicRelations

1. Publicrelationsareoftencalledontogiveexistingproductsandserviceaboost by creating or renewing visibility. Public relations can interest the media in familiarproductsandservicesinanumberofways,includingholdingseminars forjournalists,andsupplyingthemedia withprintedmaterialsrangingfrom "backgrounders"(in-depthnews releases)tobooklets andbrochures.Changesin existing products offer additional public relations opportunities to focus consumers' attention.An effectivepublicrelationscampaign canhelp toproperly positionaproductandovercomenegativeperceptions onthepartof thegeneral public.

2. Annual reports and stockholder meetings are the two most important public relationstoolsformaintaininggood investorrelations.Somecompanieshold regional orquarterlymeetingsinaddition totheusual annualmeeting.Other companies reach more stockholders by moving the location of their annual meetingfrom citytocity.Annualreportscanbecomplementedbyquarterly reportsand dividendcheckinserts.Companiesthatwish toprovideadditional communicationswithstockholdersmaysendthemanewsletter orcompany magazine.Personalletters tonewstockholders andaquickresponsetoinquiries insureanadditionalmeasureofgoodwill.

3. Publicrelationsinvolvecommunicatingnotonlywithacompany'sstockholders, butalsowiththewidercommunityoffinancialanalystsandpotentialinvestors. Aneffectiveinvestorrelationsplancanincreasethevalueofacompany'sstock andmakeiteasiertoraiseadditional capital.Insomecasesspecialmeetingswith financial analysts are necessary to overcome adverse publicity, negative

perceptionsaboutacompany,orinvestorindifference.Suchmeetingsmaytake theform offull-daybriefings,formalpresentations,orluncheonmeetings. Mailingsand ongoingcommunicationscanhelpacompany achievevisibility amongpotentialinvestors andfinancialanalysts.

4.Organizationsconductavariety ofspecial programstoimprovecommunity relations,includingprovidingemployeevolunteerstowork on community projects,sponsoringeducationalandliteracy programs,stagingopenhousesand conductingplanttours,celebratinganniversaries,andmountingspecialexhibits. Organizationsarerecognizedasgoodcommunity citizenswhen theysupport programsthatimprovethequality oflifein theircommunity,includingcrime prevention,employment,environmental programs,clean-upandbeautification, recycling,and restorationetc.

5. Employeesareoneofthemostimportantaudiences,asinternalcustomerswhich acompany posses.An ongoingpublicrelationsprogramisnecessary tomaintain employeegoodwill aswellastoupholdthecompany'simageandreputation amongitsemployees. The essenceofagood employeerelationsprogramis keeping employees informed and providing them with channels of communicationtoupperlevels ofmanagementpublicrelations programsfocusing on employeesincludetraining themascompanypublicrelationsrepresentatives; explainingbenefitsprogramstothem; offeringthem educational,opportunities; and staging special events such as picnics or open houses for them. Other programs canimproveperformanceandincreaseemployeeprideandmotivation. Fivebasicprinciples ofgoodemployeerelations are:

- Employeesmustbetoldfirst
- Tellthebadnews alongwiththegood
- Ensuretimeliness
- Employeesmustbeinformedonsubjectstheyconsiderimportant:Future plansof company,Jobadvancementopportunities,productivity improvement,Personnel policiesandpractices, Competitorcomparisons,, Howmyjobfitsintotheorganization,How external eventsaffectmyjob, Howprofitsareused,Financialresults,Advertising&promotional plans, Personnel changesandpromotions,Personalnews,Organizational communityinvolvementetc.
- Use the media that employees trust: Small group meetings, Large group meetings, Employee handbook, orientation program, Bulletin boards, Regular employee publication, Audio visual programs, union, Mass media, Grapevine

6.Publicrelationscan alsoplay arolein recruitingnew employees;handling reorganizations,relocations,andmergers; andresolvinglabordisputes.Itcan furtherhelpinmanaginggoodrelationshipwith otherbureaucraticandlaw maintainingforces.

7. Throughpressmediaorganizationswritetheirownarticlesandsubmitthemto editorssotheymaypublishthearticle(s)intheirpublications.Thisisahighly effectivePRtactic.Suchsponsoredarticlesinaformofnewsservetoeducate businessmarket,increasethevisibilityof thecompany,andmaybeanexcellent

waytofindnewcustomersfor business.

8. Publicrelationsinthepoliticalarenacoversawiderangeofactivities,including staging debates,holding seminarsforgovernmentleaders,influencing proposed legislation,andtestifyingbefore a congressionalcommittee.Trade associations andothertypesof organizationsattempttoblockunfavorablelegislationand supportfavorablelegislationinanumberofways.

9. Organizations attempt to generate good will and position themselves as responsible citizens through a variety of programs conducted in the public interest.Someexamplesareenvironmentalprogramssuchaswaterandenergy conservation andantipollution programs.Such programmesprojecttheimageof organizationas responsibleand reliableorganization.

10. Business units canalsouse PR,as atoolforeducatingconsumers'.Itmayinclude sponsoring television and radioprograms,producingmanualsand otherprinted materials,producingmaterialsforclassroom use,andreleasingtheresultsof surveys.Inaddition tofocusingonspecificissuesorindustries,educational programsmay seektoinformconsumersabouteconomicmattersandbusinessin general.

12.4 CORPORATEIMAGEANDPUBLICRELATIONSCAMPAIGN

Effectivepublicrelationsrequireaknowledge,basedonanalysisandunderstanding,of allthefactorsthatinfluencepublicattitudestowardtheorganization.Whileaspecific publicrelationsprojectorcampaignmaybeundertakenproactively orreactively to promotecorporateimageortomanagesomesortofimagecrisis.

- Thefirstbasicstepineithercaseinvolvesanalysisandresearchtoidentifyallthe relevantfactorsof thesituation.Inthisfirststep,theorganizationgainsan understandingofitsvarious constituencies andthekeyfactorsthatareinfluencing theirperceptions oftheorganization.

- Inthesecondstep,theorganizationestablishesanoverallpolicywithrespectto thecampaign.Thisinvolvesdefininggoalsanddesired outcomes,aswell asthe constraintsunderwhichthecampaignwilloperate.Itisnecessarytoestablish such policy guidelinesin ordertoevaluateproposedstrategiesand tacticsaswell as theoverallsuccess ofthecampaigntopromotethecorporateimage.

- In step three, the organization outlines its strategies and tactics. Using its knowledgeof thetargetaudiencesanditsownestablishedpolicies,the organizationdevelops specificprograms toachievethedesiredobjectives.

- Finally,stepfourinvolvesactualcommunicationwiththetargetedpublic.The organization then employsspecificpublicrelationstechniques,such aspress conferencesorspecial events,toreach theintendedaudience.In stepfivethe organization receivesfeedbackfrom itspublic.Howhavethey reacted tothe publicrelationscampaign?Aretheresomeunexpecteddevelopments?Inthefinal step, theorganizationassesses theprogramandmakes anynecessaryadjustments.

12.5 BSNLCORPORATE IMAGE ASSESSMENT

Everyyear,BSNLis rankedprominentlyinvarious surveys conductedbyindependent bodies.Someimportantachievements arelistedbelow:

- BSNL was rankedfirstinVisibility&ImagescoreforTelecomcompaniesinthe surveyconductedby**Business Today**magazineinDecember2003.BSNL was rankedfourthamongallbrandsinIndia.This surveyrankingwasjudgedonthe basis ofcoverage(visibility)andqualityofexposureinvariousmediaduringthe year(i.e.positivenews,negativenews,neutralandsize/durationofcoverage).

- BSNL won**GoldenPeacockAwardforCorporate SocialResponsibility**:**2005** *AwardinstitutedbyInstituteofDirectors,Centrefor CorporateGovernancein associationwithWorldCouncilfor CorporateGovernance*

- BSNL selectedas Superbrand2007

Superbrands areaconceptthatoriginatedintheUnitedKingdomin1993.The Superbrandstatus is awardedbyindependentjudgingpanels ofexperts calledthe Superbrands Council.(www.superbrandsindia.com)

- CNBCAwaazaward2007BestBroadbandand Landlineserviceprovider
- CNBCAwaaz'HallofFame' specialaward2008
- Voice&DataTopFixedServices,NLD,andBroadband”2008
- Voice&DataTopFixedServices andBroadband”2009
- CNBCAwaazaward2009BestBroadbandserviceprovider
- BSNL yet again swept WiFi Leadership Awards 2018 by bagging six awards and emerged as the largest public WiFi focused organization

12.6 CONCLUSION

PositiveCorporateImageismustforthesuccessofanorganization.Publicrelationsare anessentialfunctionforthesurvivalofanyorganization.PRisthemanagementofa company'spublicimagethathelps thepublicunderstandthecompanyandits products. Publicrelationsaremosteffectivewhenitisviewedas astrategicmanagementfunction supportingthebusinessgoalsoftheorganization.Ahealthypublicrelationsstrategy mustpermeateallaspectsofthebusinesstopromotethecorporateimage.BSNLhasa fullfledgedPRdivisionatcorporateofficeandhelpofPublicRelationAgencyisalso taken.AtCirclelevel&SSAlevel,PROsaredesignatedwhoarrangeinteractionswith variousmediaandparticipateinexhibitions/melas/seminarsforpositiveimagebuilding.

13 ERP AND E-OFFICE

13.1 LEARNING OBJECTIVES

After this session, participants will be able to understand

- What is ERP?
- Why ERP at BSNL
- ERP project – Current Status
- ERP Modules
- ERP Implementation in BSNL a CASE STUDY
- ERP Centralized Architecture
- Thegoal of e-office
- Benefits of e-office
- Using BSNL e-office
- BSNL e-officeuser id and password

13.2 WHAT IS ERP?

ERP stands for Enterprise Resource Planning. It is a system used to integrate the data and processes of an organization into one single system. Usually ERP systems will have many components covering various units and functions of an organisation. The term ERP originally referred to how a large organization planned to use organizational wide resources. In the past, ERP systems were used in larger more industrial types of companies. The use of ERP has changed and is extremely comprehensive. Today the term can refer to any type of company, no matter what industry it falls in. In fact, ERP systems are used in almost any type of organization.

Today's ERP systems can cover a wide range of functions and integrate them into one unified database. For instance, functions such as Human Resources, Supply Chain Management, Customer Relations Management, Financials, Manufacturing functions and Warehouse Management functions were all once stand alone software application, usually housed with their own database and network, today, they can all fit under one umbrella - the ERP system

Integration is an extremely important part to ERP's. ERP's main goal is to integrate data and processes from all areas of an organization and unify it for easy access and work flow. ERP's usually accomplish integration by creating one single database that employs multiple software modules providing different areas of an organization with various business functions.

Before ERP systems, each unit and department in an organization would most likely have their own computer system, data and database. Unfortunately, many of these systems would not be able to communicate with one another or need to store or rewrite data to make it possible for cross computer system communication. Once an ERP system is in place, usually all aspects of an organization can work in harmony instead of every single system needing to be compatible with each other. For large organizations, increased productivity and less types of software are a result.

13.3 WHY ERP AT BSNL

BSNL presently uses many independent systems with no communication across them such as HRMS for HRM, BSNL Resource Management System (Inventory, Work Accounting etc) and many more. In order to integrate we need ERP working across the company. It will result in

- Improvement in the information flow
- Better and Timely Inputs of better decision making
- Improvements in productivity, cycle time, financial performance and information transparency
- Driving operational excellence across BSNL through process standardization
- Single version of truth
- Accurate and real-time information availability
- Visibility on product and service costs
- Unified platform for one integrated organization view
- Overall improvement in the performance of the organization
- Enhanced stakeholder participation and satisfaction
- Enable BSNL's mission "To provide world class state of art technology telecom services to its customers on demand at competitive prices. To provide world class telecom infrastructure in its area of operation and to contribute to the growth of country's economy" and "vision "To become the largest telecom Service Provider in Asia"

13.4 ERP PROJECT – CURRENT STATUS

ERP is a system used to integrate the data and processes of an organization into one single system. Systems. Applications & Product in data processing (SAP Package) is being used for implementing ERP in BSNL.

M/s SAP is BSNL ERP Solution Provider. M/s. HCL Info systems Limited (now restructured as HCL InfoTech Limited) and HCL Technologies Limited is the System Integrator (SI) and M/s E&Y has completed BPR (Business Process Re-engineering) consultant along with ERP implementation

13.5 ERP MODULES AND MODULES WORKING IN BSNL

13.5.1 MODULES WORKING IN BSNL

ERP system is touching all the functions of the organization such as finance, marketing, MM, Maintenance, Projects, HR, Planning and procurement, civil electrical, etc. ERP is implemented in all the BSNL units including training centres, telecom factories and stores etc.. Broadly BSNL ERP system has the following modules:

(i) FICO -Financial Accounting and Controlling.
(ii) HCM – Human Capital Management
(iii) MM – Material and Inventory Management
(iv) PM – Plant Maintenance
(v) PS – Project System
(vi) REM – Real Estate Management
(vii) SD – Sales And Distribution

(viii) BASIS
(ix) Production Planning And Quality Control Module

13.5.2 MODULES WORKING IN BSNL AND PROCESSES COVERED

(i) Finance and Controlling (FICO)

- FI-G/L sub-module; records all account data including all postings happening to subsidiary ledgers.
- Accounts Receivable (FI-AR)— This sub-module records all transactions relating to the customer. FI-AR is treated as a subsidiary ledger of FI-GL. All transactions relating to this module are recorded in a summary form in FI-GL.
- Accounts Payable (FI-AP) —Like FI-AR, this sub-module records transactions relating to vendors and is summarized in FI-GL.
- FI-AA - The FI-AA sub-module takes care of recording transactions relating to assets. Here assets mean both tangible and intangible assets. FI-AA is also treated as a subsidiary ledger.
- Controlling Module is used for the internal reporting purpose. Controlling Area is the organization unit used to represents the controlling activities of Cost Center accounting, Profit Center Accounting, Product Costing, and Profitability etc.

(ii) Human Capital Management (HCM)

- HR Administration including Organizational Structure
- Personal Actions e.g. Training, Promotion, Transfer etc. Career History.
- Payroll (Salary) / Off cycle Pay (Personal claims).
- Employee Self Service (ESS) & Management Self Service
- Claim items e.g. Newspaper/ Mobile/ Brief Case etc.) Medical Claims, Travel Management etc.
- Form 16, GPF Balance Slips / Withdrawal / Advances, Leaves, Annual Property Returns etc.
- Payroll transactions.

(iii)Material Management Module (MM)

- Materials And Inventory Management including e-procurement (MM) Material / Service Procurement
- Requisition
- A.P.O. & Purchase Order
- Goods Receipt / Service Verification for Vendor payment.
- Inventory Management

(iv)Plant/Equipment Maintenance Module (PM)

- Planned & Unplanned Maintenance of various technical objects of Consumer Mobility, Broad Band, CFA, IT, Transmission (Equipment & Route), Electro-Mechanical, Civil, Ducts, Fleet etc. including their Log books [Condition Monitoring] & History Sheets [Catalog] and Scrapping,

- Re-parenting (Shifting) etc. Notification types: Preventive, Breakdown, General, Corrective, Calibration, Shutdown, Energy Audit & Report Fault (G-1) with corresponding order types.

(v) Project Systems (PS)

- Execution & Monitoring of Capital Project works of various business lines e.g. CM, BB, CFA, General (Civil & Electrical) including Project Creation, its approval and Budget Allotment.
- External Projects Execution & Monitoring. Elements are Project, WBS (Work breakdown structure), Network, Activity, Cost Settlement and AUC (Asset under construction).

(vi) Real Estate Management (REM)

- Real Estate and Telecom Infrastructure management
- Lease-in & Lease-out of Land and Buildings.
- Lease-in & Lease-out of CMTS Towers & USO Towers
- (Part-A and Part-B) – Under Development.
- Staff Quarter Allotment to Employees & Others. Temporary Allotment of Staff Quarters.
- Booking/Allotment of Inspection Quarter, Holiday Home, Hostel, Community Centre, Auditorium etc.
- Management of Contracts.

(vii) Sales And Distribution (S&D)

- First point of sale
- POI (Point of Interconnect)
- Enterprise Business lead tracking
- Sale of Mobile(CM) & CFA products to CSC and Channel Partners (Franchisee/DSA/RD)

(viii) BASIS

- Support for readiness of Networking.
- Guidelines for readiness of PC for ERP access.
- Roles and Authorization being done centrally
- MANTIS (ERP Helpdesk).

(ix) Production Planning (PP) and Quality Control Module (QC)

- Used in Telecom Factory for Manufacturing Accounts

13.6 ERP IMPLEMENTATION IN BSNL A CASE STUDY

13.6.1 ERP CENTRALIZED ARCHITECTURE

Development Centre for ERP is setup at ALTTC Ghaziabad.

ERP is Centralized Installation with a single database. All units are accessing the central server. They have secure access to their own set of data & processes. Corporate Office is having view of BSNL as a whole across circles.

Two of the CDR Project data centres are used. Hyderabad is primary ERP site and Kolkata is DR site. ERP is deployed like another application of CDR Project is deployed in CDR Data centre. Security systems, Access Control System, Identity Management, UPS, and Storage etc of CDR system are used. Intranet rolled out in CDR Project is the default network for ERP as well. Additional network is set up for non CDR units of BSNL.

13.6.2 ERP PROJECT SPONSORS

- BSNL : CMD & Corporate Office Directors
- HCL Info system CEO,
- VP M/s SAP
- VP M/s E&Y (BPR Management Consultant)

13.6.3 PROJECT SPONSORS KEY ROLE

- To drive the engagement and giving overall direction to the Project team.
- Ensuring implementation meets set Goals based on best practices
- Review of progress and timelines
- Ensuring appropriate and adequate resources are assigned
- final authority to resolve Project Issue / Conflict resolution (if escalated)

13.6.4 FACILITATOR FOR ERP IN BSNL

- IT Cell/ IT Project Circle acts as a facilitator for ERP implementation in BSNL.

13.6.5 ROLE AND RESPONSIBILITIES OF FACILITATOR

- Setup the ERP data centre.
- Install and Commission and Validate ERP Hardware and Software
- Set up country wide ERP user Network extending to each and every location and BSNL Point of Presence
- Configuring the ERP system as per SRS document
- validation and AT of ERP system in association with Module teams
- Co-ordinate activity of Data extraction, conversion to electronic format and migration of data to ERP system in association with Module teams
- Training of the BSNL officials etc
- Day-to-day operation and maintenance of ERP system and providing operation support to BSNL staff.

13.6.6 ROLES AND RESPONSIBILITIES OF MODULE TEAMS

- To capture, map and document all the existing "as it is" Business
- Processes, Work Flows and Decision
- Finalization of SRS (System Requirement Specifications) document of their part
- To carry out the BPR exercise with the help of SI and Management
- Consultant
- To identify critical business for BPR and suggest new critical processes, work flows, re-engineering and optimization of existing processes, to simplify, improve and even speedup the work environment
- Associate in configuring, validation and AT the ERP system as per the
- SRS finalized by them
- Associate with CGM ITPC in coordinating activity of Data extraction, conversion

to electronic format and migration of data to ERP system for their respective part

13.6.7 ERP IMPLEMENTATION ROLE OF CIRCLES

- Study and understand new process as per BPR
- Ensuring availability of IT Infrastructure (Computers and Network)
- Creation of L1 and L2 Support Centres
- Identification of SPOC(Single Point of Contact) officers for Data Preparation
- Preparation of Master Data
- Identification of Power Users
- Training
- Preparation of Transactional Data (At the time of Pre Go Live)
- Go Live Activities

13.7 INTRODUCTION TO E OFFICE

E-Office is electronic software, which helps to convert your office into E-office. E Office is a software solution that is used to share information, conduct business and manage documents, papers, and job profiles on a computer network. The software is designed with a friendly interface for users.

The goal of e Office is to gives users most of the benefits of a computer network but with a natural approach that helps the users gradually have a modern, efficient working style that easily accesses to more information technology applications. E Office changes the way we distribute documents and traditional tasks with a modern solution: From our computers, we update the documents and distribute them to the departments. Management of departments review the dispatch and division of work to the staff. Search aggregate documents quickly by type, book, number of documents, agencies promulgated.

e File in e Office is a workflow-based system that includes the features of existing manual handling of files in addition to more efficient electronic system. This system involves all stages of working in a file, including the diarization of inward receipts, creation of files, movement of receipts and files and finally, the archival of records. With this system, the movement of receipts and files becomes seamless and there is more transparency in the system since each and every action taken on a file is recorded electronically. This simplifies decision making, as all the required information is available at a single point. It envisions a paperless office, with increased transparency, efficiency and accountability of the Organization.

The e Office project is being implemented by Recruitment Section BSNL Corporate Office. Phase-1 of the project has been successfully implemented at BSNL Corporate Office and Maharashtra Circle Office, and it is worth mentioning here that the platform has really proved itself in this time of lockdown and helped the officers to work efficiently even staying at home

13.8 THE GOAL OF E OFFICE

The need for transforming conventional government offices into more efficient and transparent e-offices, eliminating huge amounts of paperwork has long been felt. The e Office product pioneered by National Informatics Centre (NIC) aims to support governance by using more effective and transparent inter and intra-government processes. eFile, an integral part of e Office suite is a system designed for the Government Departments, PSUs and Autonomous Bodies to enable a paperless office by scanning, registering and routing the inward correspondences along with creation of file, noting, referencing, correspondence attachment, draft for approvals and finally movement and tracking of files as well as receipts.

The goal of e Office is to build a system of electronic dispatch centres, to overcome the situation of scattered and misleading information. Provides information on documents and work files to meet the requirements of Managements, managers and professional staff quickly, accurately, fully and in time. Set up a management system, process and issue official dispatches, documents, support the ability to distribute workflow, permission for each individual and department.

e Office provides users with remote working capabilities that users can access at any location with an Internet connection. Our system build a paperless office, help Managements communicate with staff, departments in the agency quickly, timely; helps the user to schedule appointments, automatically reminders when it comes to the time of the job through the computer.

At the same time through this system, agency Managements can assign work to employees and receive feedback from those jobs; establishing a system of information exchange to help officials and experts in the agency can exchange information directly; provides users with most of the benefits of computer networking but with the most natural approach to solve work at the office, improving the quality and efficiency of work; improve the level of application and use of IT tools, create a modern and effective working environment in the network environment and use electronic information that make positive changes in information processing; handle the work of Managements, staff in the agency, contribute to the implementation of administrative reform.

Creating an environment for the exchange of ideas, discussions, sharing information widely, promptly, fully and timely, contributing very positively to the development of corporate culture. People will communicate and understand each other, Managements can communicate their will to the staff more easily.

13.9 BENEFITS OF E-OFFICE

The need for transforming conventional government offices into more efficient and transparent e-offices, eliminating huge amounts of paperwork has long been felt.

13.9.1 BENEFITS OF E-OFFICE TO MANAGEMENT

- Operate and manage remotely, anytime, anywhere
- Manage the assigned tasks in a clear and transparent manner
- Capture complete information, make the right decision
- To create a democratic and open work environment.

13.9.2 BENEFITS OF EOFFICE TO EXECUTIVE

- Easily manage, lookup, search for documents related to the job being handled
- Quick cover task assigned by Management
- Report work timely
- Easily schedule personal tasks

13.9.3 BENEFITS OF EOFFICE FOR DOCUMENT

- Easy document distribution
- Easy to manage, look up information when needed.
- Supports printing of text reports, bookkeeping
- Transmit announcements, directives of Managements to the department quickly, timely

13.10 BSNL E-OFFICE HIGHLIGHTS

- A comprehensive platform for deploying, integrating multiple applications
- Scalability both in application and scale
- Easy to handle, quickly capture the information to process Tightly integrates with Microsoft Office, Windows Explore
- Business Process Automation – Easily customize the process
- Easily integrate with other systems
- Safe, secure

13.11 USING BSNL EOFFICE

BSNL e Office User ID and Password

- The BSNL (@bsnl.co.in) email account (BSNL email accounts are already transferred to NIC email Server) username and password is to be used to login to BSNL e-Office

BSNL e Office Login Page and Login

- BSNL e Office can be accesses via url https://eoffice.bsnl.co.in/ or https://parichay.nic.in/Accounts/Services?service=eOfficeBSNL
- The BSNL e Office login page as shown in Figure-17.

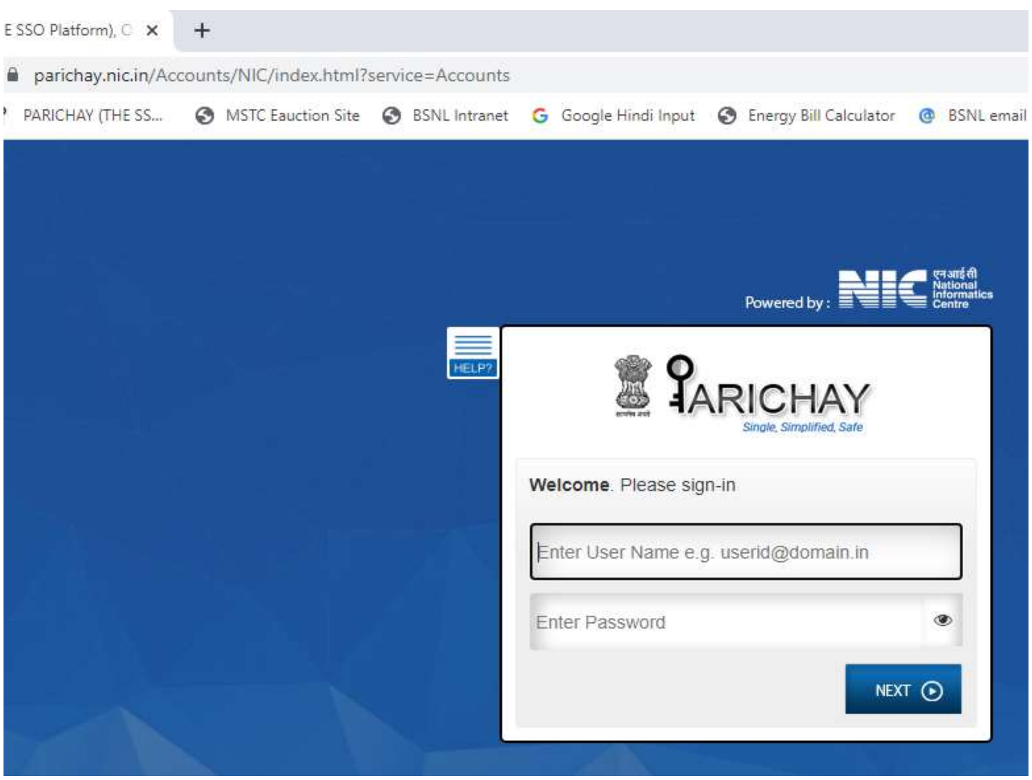


Figure 14: BSNL e Office Login page

- After putting your BSNL email as user id and BSNL email Password as password you are logged in and after on successful login will be shown page shown id Figure-18.

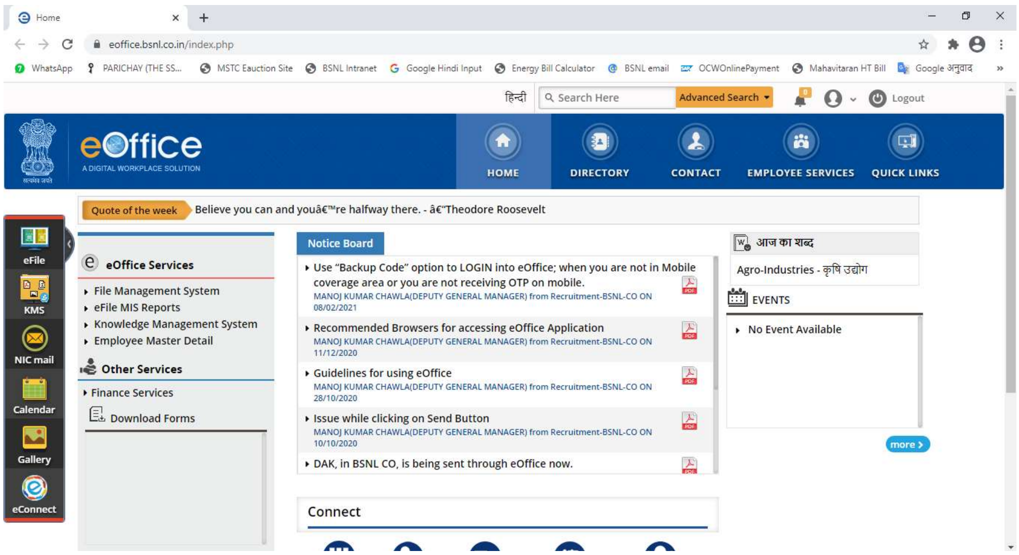


Figure 15: BSNL eOffice Home Page after Login

e-File (FMS)

- **E file** is the e Office File Management System (FMS)
- File Management System (FMS) or e File, comprises of different modules which are inter-linked and manage the official work flow of the entire life cycle of a Document/DAK from the moment it is received by the organization till the time it is disposed of with proper set of actions.
- The different modules in FMS are Receipts, Files, Dispatch, Notifications, Settings and etc. Each module comprises of different sub modules (links) with actionable menus that help the users to accomplish different official procedures in an electronic environment.

Figure 16: Modules in FMS

Submenusof Receipts Module

- To open the File Management System, click the link File Management system Available under e Office Services Section.
- You are now presented with e File Menu on left hand side and your file list on right hand side.
- Submenus of Receipt Module are shown in Figure-4

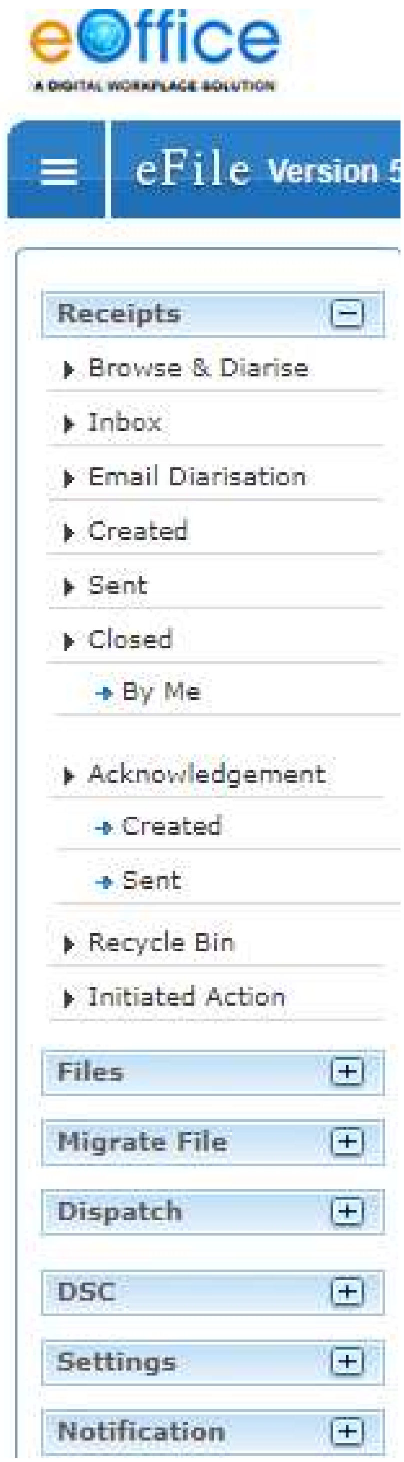


Figure 17: Submenu of Receipts

Submenu Of Files

Figure 18: Submenu of Files

Diaries Receipts

- **Let us see Figure-4 and see how to use Browse and Diaries**
- The DAK/ **letter** must be scanned as a single PDF (preferably a searchable PDF).
- Once a DAK/ letter is diarized and a unique receipt/ diary number is **allocated** then it becomes **Receipt**.
- To diaries the DAK/ letter, perform the following steps:
- Click Browse & Diarize sub-module
- In the Next screen Click the Upload File button. The File Upload dialog box appears. Select the desired scanned PDF document (up to 20 MB) and click open.

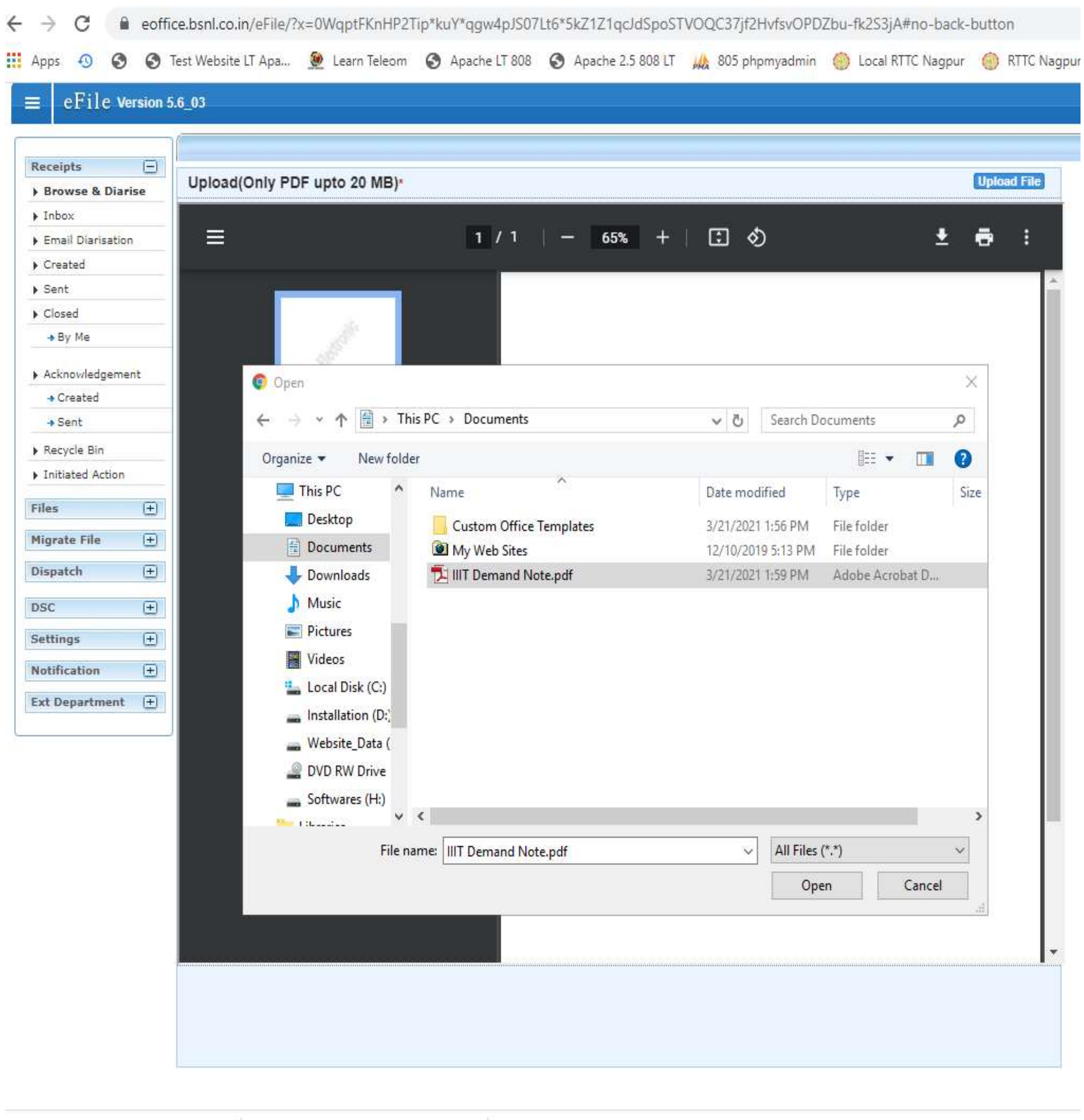
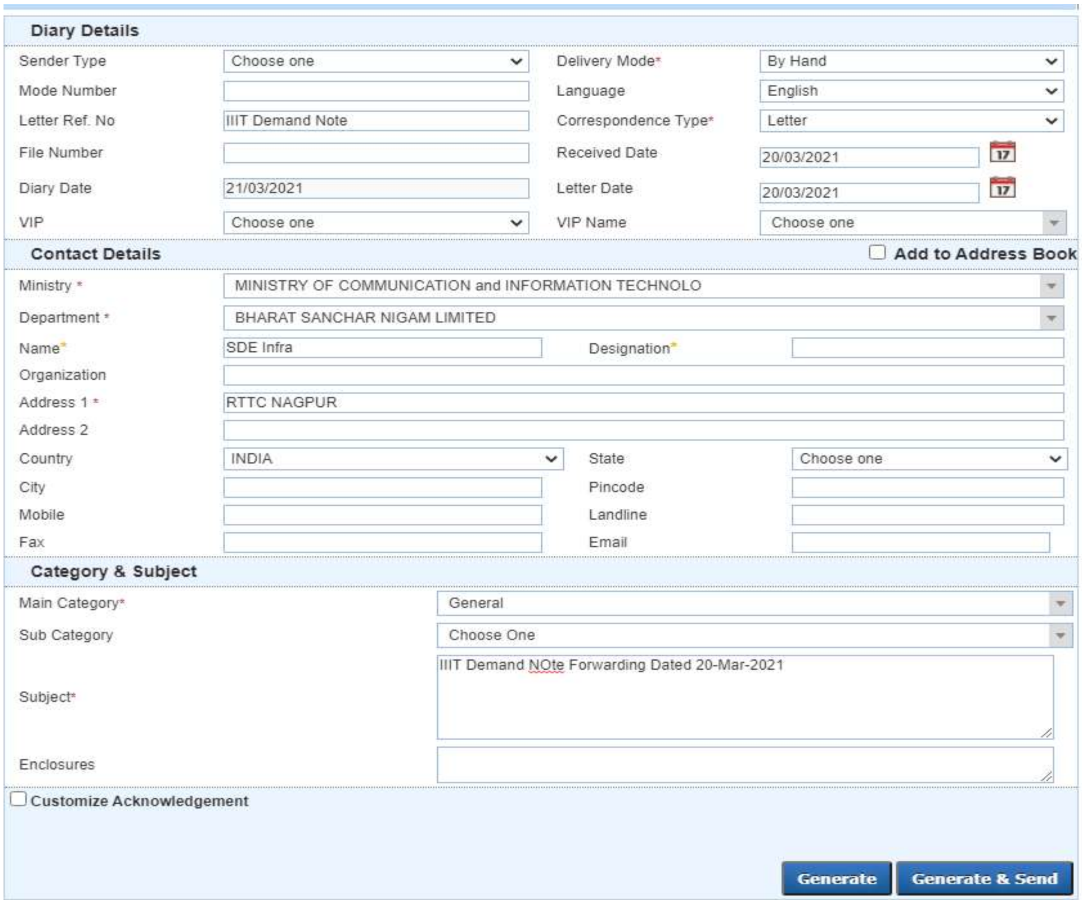


Figure 19: Browse and Diarize Left Part

- Once the scanned DAK/ letter is uploaded, enter the required metadata (various details in the fields available on the right of the screen) and then, click Generate Button.



Diary Details

Sender Type	Choose one	Delivery Mode*	By Hand
Mode Number		Language	English
Letter Ref. No	IIIT Demand Note	Correspondence Type*	Letter
File Number		Received Date	20/03/2021
Diary Date	21/03/2021	Letter Date	20/03/2021
VIP	Choose one	VIP Name	Choose one

Contact Details ☐ Add to Address Book

Ministry *	MINISTRY OF COMMUNICATION and INFORMATION TECHNOLO		
Department *	BHARAT SANCHAR NIGAM LIMITED		
Name*	SDE Infra	Designation*	
Organization			
Address 1 *	RTTC NAGPUR		
Address 2			
Country	INDIA	State	Choose one
City		Pincode	
Mobile		Landline	
Fax		Email	

Category & Subject

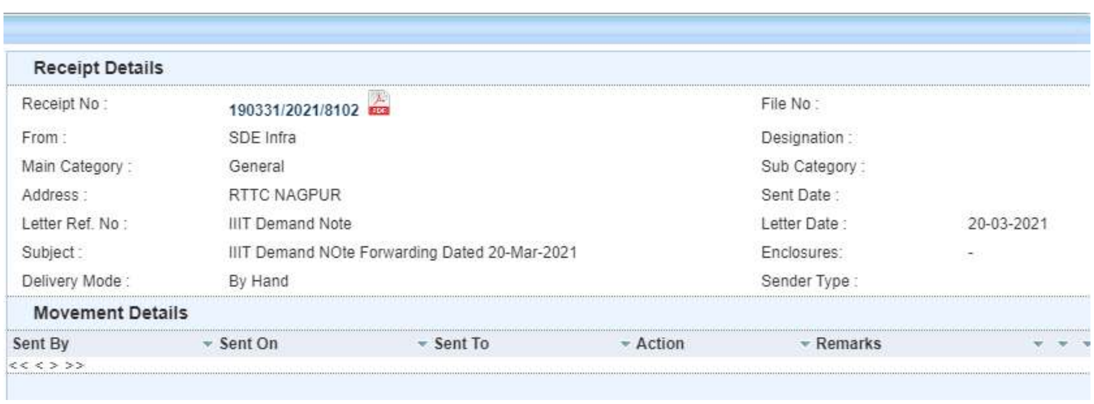
Main Category*	General
Sub Category	Choose One
Subject*	IIIT Demand NOte Forwarding Dated 20-Mar-2021
Enclosures	

☐ Customize Acknowledgement

Generate | Generate & Send

Figure 20: Browse and Diarize Right Part

- The DAK / letter gets diarized and a unique Receipt Number is generated.



Receipt Details

Receipt No :	190331/2021/8102	File No :	
From :	SDE Infra	Designation :	
Main Category :	General	Sub Category :	
Address :	RTTC NAGPUR	Sent Date :	
Letter Ref. No :	IIIT Demand Note	Letter Date :	20-03-2021
Subject :	IIIT Demand NOte Forwarding Dated 20-Mar-2021	Enclosures:	-
Delivery Mode :	By Hand	Sender Type :	

Movement Details

Sent By	Sent On	Sent To	Action	Remarks

<< < > >>

Figure 21: Unique Receipt Number

- Click Put in file and Select required listed file and letter is kept in file.

- The generated receipts are saved in the "**Created**" sub-module till they are marked to other user(s).

Use Diarised Receipts as Correspondence

- The Generated Receipts can be used for various purposes

Figure 22: Uses of Generated Receipts

- **Send**: This option facilitates the user to mark the receipt to the intended recipient(s).
- **Put in a File**: To put the generated receipt into a concerned file, Click Put in a File
- Select File number coming in right Panel
- (If file is not already created you need to create file first using create file red button. Click Create File button then Click button and click Non-SFS, from dropdown menu.
- The new file creation screen appears))

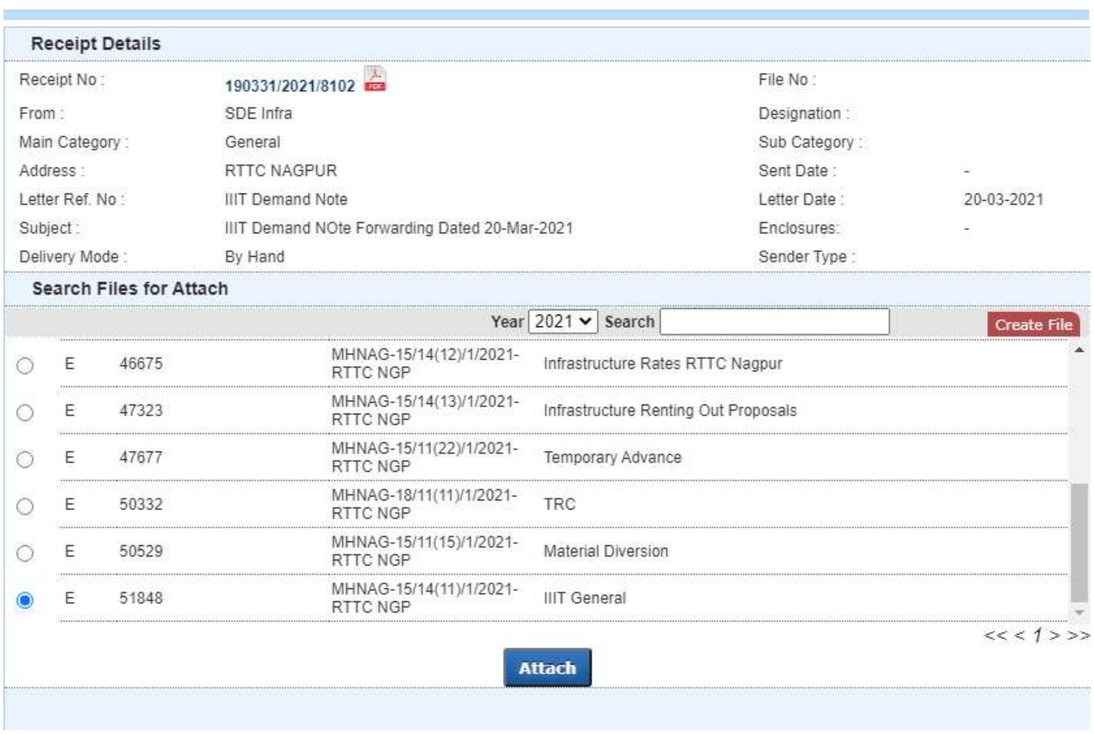


Figure 23: Putting Receipt In A File As Correspondence

- Click Attach button, the receipt gets attached in the correspondences of the created file.

Opening Already Created File For Use

- Click on File Menu
- The list of files with you get listed

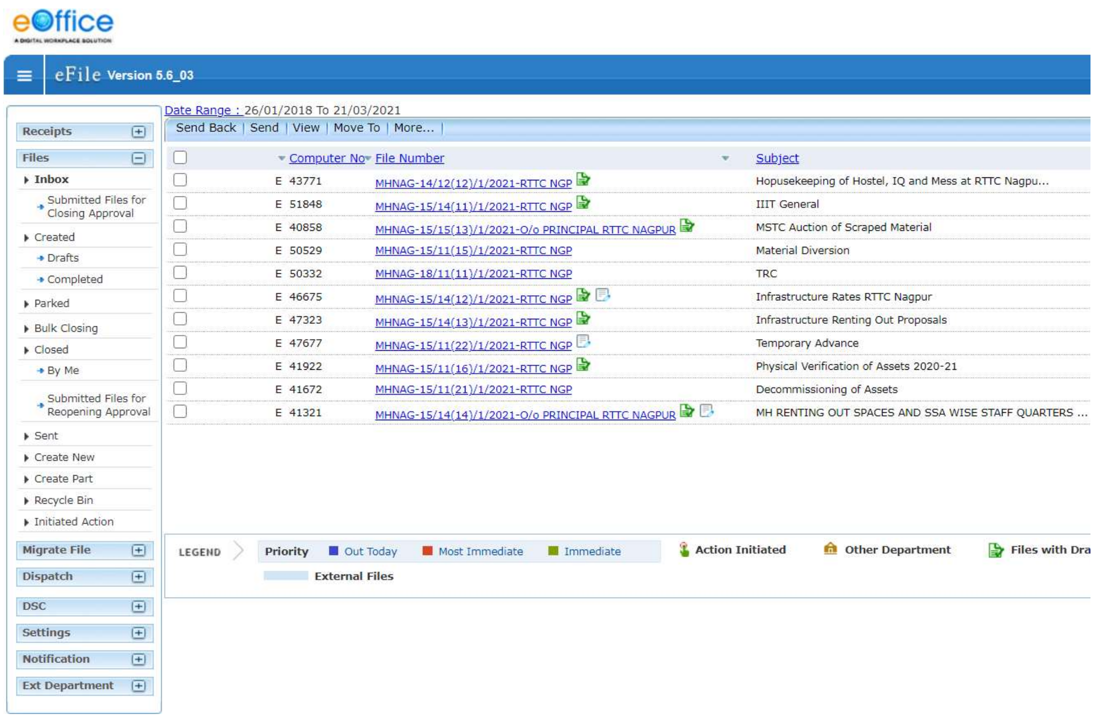


Figure 24: Opening Already Created File

- Click on required file the file gets opened to work with
- Left side is a Note sheet window and right side is a correspondence.

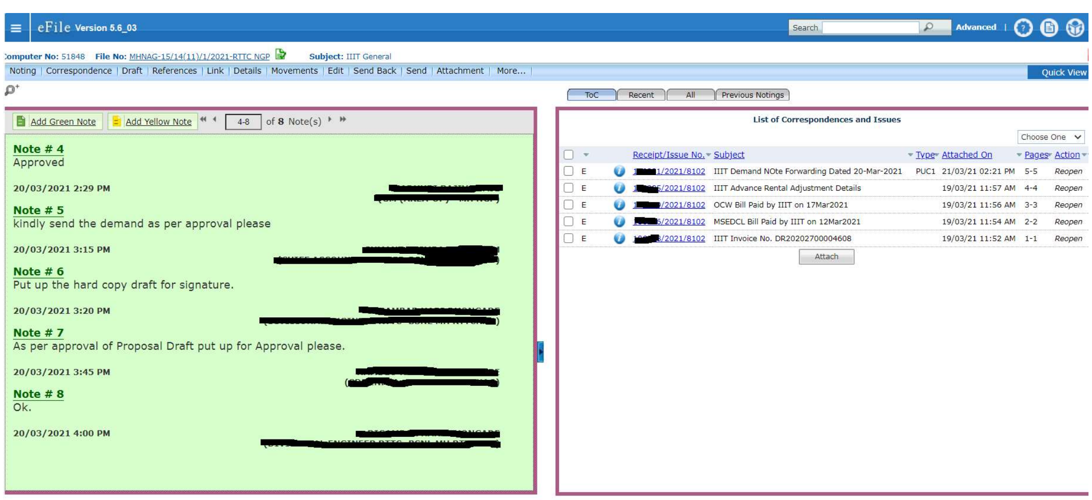


Figure 25: Note sheet and Correspondence

- To add your notes click on Add Green Note (you can start with Yellow note which need to be confirmed before sending file to concerned)
- Type your noting and click on send
- Search the receiver of file by selection of initial name of receiver

  And click ok File is send to concern

  You can view this file in files section under sent.

eFile MIS Reports

To optimize the usage of eFile & provide real-time monitoring, an explicit MIS-Report application has been integrated in the pre-existing eOffice application suite. The product has been designed with role-based scope privilege for users to access different reports based on user's department, OU and hierarchy.

The product has been broadly categorized into File, Receipt, Dispatch, VIP, My Reports and Miscellaneous modules to provide seamless monitoring of all the actions & entities involved in the decision-making process. System facilitates reports for all the available parameters in the eFile application, along-with provision of customized output. Additionally user can generate these reports in different formats viz. HTML, EXCEL and PDF.

The eFile MIS Reports is totally based on your eFile Hierarchy i.e. The person can view the reports of only those Department(s)/Section(s)/OU(s) in which either he belong or which are under him/her. For Example consider the scenario of an Office, where the Head of the Office can view reports of all the employees as he is on top of hierarchy, while as we go down the hierarchy the scope decreases and user can only view report as per his post/Designation in the office.

To select the module, click on the tab from Menu bar.

File: This is to view the MIS reports of file. It has the following subheadings

· File Closed

· File Conversion

· File Forwarded

· File Parked

· File Migration

· File Monitoring

· File Pendency

· File Received

· File Register

· User Wise Files Received and Forwarded

Employee Master Details (EMD)

EMD is an application in eOffice which helps building the organization structure and the employee data in the eOffice product.

It is the backbone of the product that maintains the employee details which is used by various applications part of eOffice product suite.

The administration of the application or rather the employee data in the application is done by administrators at two levels –

1. Super Administrator – Administrator at the entire eOffice instance level (CBIC).

2. EMD Manager (also known as Local Administrator) – Administrator at the level of the respective organization / department, for example, ALTTC-BRBR-ADMN.

The responsibility of the Super Administrator is, creation of master list of designations, posts etc. along with the creation of organizations/departments and their nominated user(s) as EMD Manager(s) respectively.

Whereas, the EMD Manager is mainly responsible for creating the organization units (list of Offices/Sections), employees, assigning employees post and etc. to get the end-user accounts created in eOffice.

An EMD manager to be able to create users in the system and assign roles in eOffice (i.e. functional accounts for working in 'File Management System).

IMPORTANT NOTE

1. For users to be able to create eFiles in the 'File management System', the list of File codes is to be entered in the application by the Super Administrator.

2. The file codes are entered against each 'Organization Unit' name.

3. Hence, Super Administrator can only enter the list of File Codes against OUs, once the EMD Manager has created all OUs.

4. Once the EMD Manager has created all OUs, he/she must communicate the same to the Super Administrator for further population of File Heads in the application.

13.12 CONCLUSION:

The utilization of ERP & E-OFFICE software allows companies to decrease the time it takes the company to get paid for its goods or services after the sale. Employing an ERP & e-office system allows for increased cash flow. The utilization of the ERP & E-OFFICE system's integrated system architecture removes the necessity for multiple, different systems to be used within the company and consolidates to the same system across multiple geographies.

Different locations can use and see the same data regardless of the physical geography and eliminates the knees for storing redundant data in multiple physical locations. The ERP & E-OFFICE system also eliminates the requirement for each location to upload or extract data to and from the central data storage site.ERP & E-OFFICE systems increase productivity by integrating data and processes across multiple departments and location which allows our company to move product faster, process orders quicker, invoice customers more aptly and reconcile shipments sooner. Information flow is the lifeblood of any company.

Utilizing an ERP & E-OFFICE system allows access to a multitude of company information. The ERP & E-OFFICE system also tends to have more accuracy and relevancy because it all comes from one source, not multiple sources. The ERP & E-OFFICE system will provide the company various reporting tools and make generating time sensitive and up-to-date information faster and more user-friendly.

14 DRAFTING OF COMMITTEE REPORTS, PREPARING BUSINESS CASES

14.1 LEARNING OBJECTIVE

After this session, participants will be able to understand:

- Concept of Committee: pros & cons
- Generic tips for committee reports
- Tender Evaluation report
- Scrapping of assets report
- Executive Promotion Policy DPC report
- FRAC report
- What is a business case?
- How to write a business case

14.2 INTRODUCTION:

In an organizational setup, many committees are constituted for accomplishing specific tasks. Committees are formed even in societies, schools, government setup for various issues, monitoring, execution or policy making etc. This chapter discusses the concept of committee and guidelines for its report writing with respect to BSNL setup.

14.3 COMMITTEE:

A committee is a group of persons within an organization (may include outsiders also) to whom, as a group, some matter is committed. The committee may be formed for a limited duration or a standing committee. Also the members of the team may or may not have other responsibility in the organization in addition to those as a member of the committee.

14.3.1 ADVANTAGES OF COMMITTEE SYSTEM:

- Professional expertise to examine various aspects of problem.
- Collective responsibility leading to fearless approach.
- It is possible to bring together a wide range of ideas, expertise and interests together.
- When committee consists of people representing different departments and functions in the department, it helps to ensure that all aspects of a decision are considered before final decision.
- As decisions are taken jointly by all the committee members, their acceptance by all the departments represented on the committee is easier.

14.3.2 DISADVANTAGE OF COMMITTEE:

- Usually require considerable expenditure of total manpower in the committee work.
- The committees are also known to cause excessive delays in decision making and in taking action.
- Frequently, an absence of a clear-cut authority and responsibility for results, the committee tends to take decision that represents compromise between dissenting views rather than an optimal balance of conflicting requirements.
- In some situations, where one member or a small group is significantly more powerful than others, some people may impose their decision on the committee.
- In this way, the more powerful members gain power beyond the intended limits.

14.4 GENERIC TIPS FOR COMMITTEE REPORTS:

- All pages must be signed by the members.
- All pages must be numbered mentioning total number of pages also. [e.g. 1 of n]
- In the beginning of report, constitution of committee, its member details, authorization (formation) memo details must be mentioned.
- Date, time and venue of the committee meetings have to be mentioned in the beginning.
- Brief background on the task & scope of the committee.
- Observations of the committee members.
- Facts need to be substantiated by giving appropriate references of the file number/letter number. As far as possible, relevant extracts of the referred notes/orders/rulings may be made annexure to the report. It is desirable that committee report is written as a standalone document complete in itself to the best possible extent.
- Appropriate format for data tabulation/comparison should be used such as tables, pie-charts, graphs etc. for ease & clarity of communication.
- Recommendations of the committee need to be clearly stated at the end of report.
- Report should be concise, to the point and in an unambiguous language. Use of high sounding words should be avoided. Long sentences need to be avoided. Punctuation makes a lot of difference in the meaning of sentence. For example, what do you infer from Giant Panda: Eats bamboo, shoots and leaves?
- In case of dissent by any member, the same should be clearly stated so with reasons thereof.

14.5 TENDER EVALUATION REPORTS:

- Apart from following the generic tips, the tender evaluation report should detail the following:
- Any clarifications sought, discrepancies noticed, bids rejected by Tender Opening committee etc.
- Compliance to all mandatory eligibility conditions has to be checked and certified.
- These conditions are in general specified under the head ‘eligibility conditions’. It is usually specified that non-fulfilment of any such condition will lead to summary rejection of bid.

- Criteria used for evaluation of bids have to be as specified in the tender document.
- While assessing the reasonability of rates the basis of arriving at such result need to be mentioned.
- In evaluation of financial bid, committee needs to confirm in its recommendation that rates are reasonable & competitive.
- In case of single bid being evaluated, the conditions as specified by BSNL CO must be checked for compliance and indicated so in the report.
- While preparing the report, compliance to CVC guidelines must be ensured.
- In case, negotiations are recommended as per CVC guidelines, the reasonable rate/ assessed by the committee along with reasons for doing so also needs to be mentioned in the report.

14.6 DRAFTING OF REPORT FOR SCRAPPING OF THE ASSETS IN BSNL:

The equipment/items procured in BSNL like switching, transmission, line and wires, cables, instruments, vehicles, computers, electrical items (including fans, air-conditioner, water coolers etc), battery and power plants etc are required to be scrapped once the life of these items is complete as these items are no longer in use and unnecessarily occupy precious space. Moreover we can easily purchase new equipment/item against the scrapped ones.

The lives of various telecom assets in BSNL has been re-fixed by BSNL vide letter no 8-39/2001-PHM dated 05-09-2001 of BSNL Corporate office.

Normally any item is scrapped based on following criteria:

- The life of the item is complete.
- The technology of the equipment/item is outdated and that item is no more in use.
- If the life is not complete, but it is faulty and its repair is not viable.

The concerned unit under which the equipment/item is to be scrapped prepares the list of the equipment/item, to be scrapped. The unit in charge should ensure that the equipment/item to be scrapped is of no use within the unit where it is working and even within the whole BSNL. This later point is ensured by circulating a list of the equipment to all the field units with a clear request to place a demand of any of the equipment/item which is being scrapped. Sufficient time is given for this request. If some field unit requests for some of the equipment/item, that is diverted.

The remaining equipment/item list is prepared and a committee is constituted by the competent authority to scrap the equipment/item.

The scrapping committee examines following data:

- The list of the equipment/item to be scrapped.
- The History sheet of the equipment/item in which there should be details about when the equipment/item was purchased, its purchase order no. , estimate no., the
- expenditure incurred on its maintenance.
- The committee calculates the life of the equipment/item.
- Requirement raised by the field units and diverted equipment/item, if any, is also put up to the committee
- The prescribed life of the equipment/item by the BSNL Corporate office is taken into account.
- It is also checked by the committee that the technology of the equipment/item under scrapping is obsolete or not.
- If the technology of the equipment/item is not obsolete, then the total expenditure which is estimated to be incurred to make the system running is considered.
- The performance report of the equipment/item under consideration is taken from the concerned user of the equipment/item.
- The comments of the concerned vendor who was providing maintenance support to the equipment/item.
- Based upon the above facts and data the committee should decide about the scrapping and should prepare the report taking into consideration of these facts.

14.7 DRAFTING OF SCREENING COMMITTEE REPORT FOR EXECUTIVE PROMOTION POLICY:

Pursuant to absorption of Group "B" level officers of various services/cadres into BSNL w.e.f. 01.10.2000, BSNL management finalized a time bound executive promotion policy in respect of Group "B" level executives to meet their career aspirations in the company (Ref: Letter no. 400-61/2004-Pers.I dated 18.01.2007 from Jt. DDG (Pers.), BSNL C. O., New Delhi and subsequent clarifications issued on the subject). As per this scheme a screening committee has to examine the eligibility of executives and give recommendations accordingly. Following issues have to be thoroughly understood, examined and substantiated by the committee members in their report.

Upgradation criteria:

- **Review:** The review for all executives meeting the qualifying service conditions will be done every year on 1st October. On being found fit, the IDA scale upgradation will be effective from the due date i.e. date on which the executive fulfills the qualifying service condition for upgradation to next higher IDA scale.

- **Fitness:** The fitness of the eligible executive will be judged by a prescribed screening committee on the basis of performance rating of ACRs/ APARs, subject to necessary disciplinary /vigilance clearance and no punishment is current.

- **Performance ratings in ACRs/ APARs**: The ACRs/ APARs of the previous 5 (five) years shall be taken into consideration for assessing the fitness of eligible executives on the basis of following criteria:-

Table 27. Upgradation criteria

S. N	Scale	Category	Grading criteria
1	JTO to SDE	OC SC/ST	No Adverse, not more than four Average No Adverse
2	SDE to Sr. SDE	OC SC/ST	No Adverse, not more than two Average No Adverse, not more than three Average
3	Sr. SDE to STS	OC SC/ST	No Adverse, not more than two Average No Adverse, not more than three Average
4	STS to JAG	OC SC/ST	No Adverse, not more than one Average No Adverse, not more than two Average
5	JAG to NFSGJAG	OC SC/ST	No Adverse, not more than one Average No Adverse, not more than two Average

General principles:

- On being found fit for IDA scale up gradation, fixation under FR 22 (I) (a) (1) shall be allowed.
- Time bound IDA scale up gradation are not linked with the availability of the posts.
- For the purpose of counting the service in current IDA scale for any time bound up gradation, technical break periods in the adhoc arrangements ordered by DOT/DTS/DTO/BSNL CO will be treated as continuous for the limited purpose of counting of current IDA scale service only without any other benefit, monetary or otherwise.
- IDA scale granted to any executive by virtue of any local officiating arrangement will not count for the purpose of IDA scale up gradation.
- Review, as on 1st October every year, is to be done at Circle level for all disciplines.
- Consequent to up gradation of IDA pay scale, there will be no change in substantive status, designation and duties & responsibilities of the executive, unless ordered in any specific context.

- Under the policy, no claim what-so-ever can be made by comparison on grounds of seniority, class, community, cadre, stream etc. Further, except as provided in the policy, no claim will lie on account of any of the other provisions of FRSR in the context of pay scale, pay fixation, substantive status etc.

Proceedings of screening committee:

The establishment/HR section or concerned section of the Circle office will submit following documents for the consideration of the committee:-

- Pay scale status of eligible executive on relevant dates, details of intervening promotions if any etc. duly certified by Accounts Officer (P&A)
- Disciplinary/Vigilance clearance with no current punishment status as certified by respective controlling officer / Vigilance section.
- Original ACRs/ APARs of eligible executives for previous five years.
- Details of completion of compulsory training undergone by the eligible executive as applicable.

Service books of executives are to be made available wherever demanded by screening committee.

The screening committee has to examine documents as submitted by concerned section with reference to various provisions contained in the policy and would recommend the case of IDA scale up gradation for all those executive who are found fit. The screening committee will also specify the due date from which IDA scale up gradation will be effective. The minutes of meeting shall have following documents as annexures:--

I. Pay scales status of executives on relevant dates
II. Disciplinary/vigilance clearance status
III. ACRs / APARs grading of executives for last five years

14.8 FAIR RENT ASSESSMENT FOR HIRING OF LAND & BUILDINGS

14.8.1 SALIENT FEATURE

- To ensure competitiveness and transparency, whenever any commercial/residential premises are to be acquired on lease/ rent etc., an advertisement in leading newspapers is required to be given. The advertisement should contain salient features like area of accommodation required, locations preferable and other terms and condition to be quoted by the tenderer. Preferably, tenders shall be invited by the two bids system viz, technical and financial. The technical bid shall be opened in the first instance and legal entitlement of the Person making the offer and legal ownership of the property, suitability of accommodation, terms and conditions offered, specifications and other liabilities should be assessed. The market rate justification for the areas at which property is available should be assessed before opening the financial bid.

- The accommodation should be procured only after proper advertisement in leading newspapers etc. irrespective of the amount(s) of rents etc., involved. However, competent authorities could decide cases on merits subject to usual formalities if Government/Public Sector accommodation is proposed to be procured.
- While inviting lenders for renting accommodation it should be borne in mind that tender is invited for hiring of accommodation on the basis of carpet area prescribed in BIS: 3861. The Civil Wing in accordance with relevant instructions should measure the carpet area of the building offered and a certificate of measurement obtained from them. Any discrepancy between the carpet area quoted in the tender and that actually measured should be settled before hand. FRAC should be asked to recommend rent in terms of carpet area and give clear recommendation taking all relevant factors into account. The rent should be fixed only on the basis of carpet area and the lease deed should be accordingly worded.
- Whenever any premises includes any open land etc., full details of area/boundaries etc., of the same should be clearly mentioned in the agreements so that there are no occasions for dispute.
- To avoid in-fructuous expenditure, it should be scrupulously ensured that there are no time gaps between dates of execution of lease deeds and dates of actual occupations of the rented premises.
- Appropriate notices should be sent to the landlords well in time as per the general prescribed notice periods for such actions as per the signed agreement. Such compliances are essential for safeguarding the B.S.N.L's interest.
- As the signed lease deeds are required to be got registered, it may be useful if the advertisement for accommodation also makes it clear that the lease deed will be got registered expeditiously by the landlord at his own expenses.
- As non-payment of rent can even result into eviction and other penalties, expeditious action should be taken for payment of rent regularly as per rules and relevant guidelines.
- The figures of 15% and 24% increase in rent after expiry of three years lease mentioned under para 3 are the upper limits. The increase in rent proposed by the units should be based on the existed market trend in that area. However as per normal practice the payment of rent at enhanced rate should be subject to signing and executing a fresh lease deed by the landlord.
- In cases of hiring building which have other occupants and/or building centrally airconditioned and/or building having lifts facility, the Clauses concerning to the above given in Annexure A may be suitably incorporated in the Standard Lease

  Agreement (SLA) document. (Reference B.S.N.L C.O. order No-BSNL/151/SR/NB?2001dt. 23.03.2004).

14.8.2 FAIR RENT ASSESSMENT COMMITTEES:

All cases involving payment of rent beyond the power of SSA head shall be assessed by a Circle Assessment Committee. The Assessment of rent on the basis of capital cost should be made by the E.E (Civil) and this should be given due consideration while taking into account other conditions such as prevailing rentals etc.

14.8.3 ASSESSING REASONABLENESS OF RENT:

The assessment of rent of private building is to be done on two basic principles:

- On the recognized principles of evaluation (as enumerated in DG (W) on No. 8/5/87 WII (DGW) at 16*87).
- On the corporate study of the rentals prevailing in the locality leaving the final decision with the authority wanting to hire the property.

14.8.4 POINT TO BE OBSERVED FOR HIRING ACCOMMODATION:

- The suitability of the accommodation offered with reference to the requirement of the department should be assessed after visiting the premises, especially theavailability of municipal water supply, electricity etc. and other facilities in the building. Merits and demerits of the accommodation offered will have to be clearly brought out in the minutes.
- he reasonableness of rent of the accommodation offered for rent is to be made with reference to prevailing rent for similar accommodation in the area.

14.8.5 POINT TO BE OBSERVED FOR HIRING LAND FOR GBT AND BTS:

- The land should be easily accessible and approachable by vehicles etc.
- It should be by and large levelled plot with minimum undulations and should not be low-lying with respect to main road as far as possible for convenient and effective drainage of storm water and also avoiding high cost of developing the plot.
- Land having the rock at shallow depth should be avoided.
- It should be free from any encumbrances & encroachment of any kind and should have the clear title and legal power of attorney to authorized person.
- Electric power & water supply line should be in close proximity of the land being selected.
- No H.T/LT. line /Sewer/water supply mains should be passing across the land.
- In case of tower location, the land should fall within lat-long given and as per R.F survey norms.
- Assurance from land lord should be obtained for obtaining the NOC, if any, from local body.

14.8.6 DRAFT MINUTES OF FRAC MEETING FOR HIRING OF BUILDING:

Fair rent assessment committee was constituted vide PGMT, Chandigarh order

No………………….. dt……………………..for the fair assessment of rent for hiring accommodation for Telephone exchange at town………………………… Following members of the committee met on …………….at……… 1. Shri ABC 1. DGM…………………………, Chairman

2. Shri DEF CAO……………… Member

3. Shri GHI EE(C)……………… .Member

4. Shri JKL DE (plg.)…………… Member coordinator.

Total four offers were received in response to advertisement in newspapers. All the sites offered for the rent were visited by the committee members on

………………and their technical suitability is evaluated as under-

1. Shri UVW……….. site at……………………………………………..

The site is not technically suitable as there is no offer for the G.F which is mandatory for installation of Telephone Exchange and E/A. Further there was no open space for earthing. Hence the offer is rejected.

2. Shri. PQR…………site at…………………………………….

This site is under construction and also far away from main population area.

Hence, it is not technically suitable and therefore, rejected.

3. Shri XYZ………..site at ……………………………………

This space is available at ground floor and area offered for rent is suitable as per requirement. This site is also within the load center. Open space is also available for earthing. Proper approach road is available & amenities like water supply & electricity are also available. Hence, the site is suitable for consideration.

4. Shri LMN…………site at……………………………………

This space is available at ground floor and area offered for rent is suitable as per requirement. The site is not very far off from the load center. Open space is also available for earthing. Proper approach road is available & amenities like water supply & electricity are also available. Hence, the site is suitable for consideration.

In view of above, the committee recommends to open the financial bids of the suitable offers at S.No. 3 & 4 above.

<u>2nd FRAC Meeting</u>

Following members of the FRAC met on ………………………….. at ……..

1. ………………………………………….

2. …………………………………………..

& so on.

The opened financial bids and comparative statements were put up by the member coordinator to the committee for consideration.

The lowest offer of Shri XYZ………., site at …………..is Rs. 30,000/- p.m. Fair rent assessed by the EE (C) is Rs 24,000/- p.m. Therefore, the lowest offered rate is higher than that assessed by EE (C). The committee invited the party for negotiation of offer.

After vigorous persuasion, the party has agreed to accept the reduced rent at Rs. 26,000/- p.m.

The prevailing market rates as enquired by the member coordinator were found to be in the range of Rs 26,000/- p.m to Rs 28,000/- p.m for the same carpet area in the near vicinity. Moreover, this offered site is located at the main road and in the center of highly populated area. The fair rent assessed by EE (C) is based on certain standard calculations as per codal provisions but the prevailing market rate in that vicinity cannot be ignored while assessing the fair rent. Moreover, the reduced rent is quite close to the prevailing market rate as well as to the standard fair rent assessed by EE (C).

Recommendations:-

Therefore, in view of above, the committee recommends for acceptance of rent @ Rs 26,000/-per month for the building of Shri XYZ……..at……………..for a minimum period 3 to 5 years.

sd	sd	sd
..………………………	………………	…………………….
……..…………………		
DEF	GHI	JKL
C.A.O (member)	EE (C) (member)	D.E (plg.)(member)

sd

………………………

ABC

DGM (Chairman)

14.9 WHAT IS A BUSINESS CASE?

A business case is developed during the early stages of a project and outlines the why, what, how, and who necessary to decide if it is worthwhile continuing a project. One of the first things you need to know when starting a new project are the benefits of the proposed business change and how to communicate those benefits to the business.

While the project proposal focuses on why you want a project, it will only contain an outline of the project: business vision, business need, expected benefits, strategic fit, products produced, broad estimates of time and cost, and impact on the organization.

In contrast, the business case, which is first developed during the project initiation phase, has much more detail and should be reviewed by the project sponsor and key stakeholders before being accepted, rejected, cancelled, deferred, or revised.

Depending on the scale of the business change, the business case may need further development as part of a detailed investigation. Therefore, it should be developed incrementally so that time and resources aren't unnecessarily wasted on the impractical.

14.10 WHAT IS THE NEED A BUSINESS CASE?

Preparing the business case involves an assessment of:

- Business problem or opportunity
- Benefits
- Risk
- Costs including investment appraisal
- Technical solutions
- Timescale
- Impact on operations
- Organizational capability to deliver the project outcomes

These project issues are an important part of the business case. They express the problems with the current situation and demonstrate the benefits of the new business vision.

The business case brings together the benefits, disadvantages, costs, and risks of the current situation and future vision so that executive management can decide if the project should go ahead.

14.11 WHEN TO USE A BUSINESS CASE:

The business case is needed when resources or expenditure on a project has to be justified. Approval is usually sought from the project sponsor and other interested parties.

14.12 HOW TO WRITE A BUSINESS CASE:

The purpose of the business case is communication. Therefore, each section should be written in the parlance of the intended audience.

Moreover, it should only contain enough information to help decision making. When writing a business case keep the following in mind:

- Be brief and convey only the bare essentials.
- Make it interesting, clear, and concise.
- Eliminate conjecture and minimize jargon.
- Describe your vision of the future.
- Demonstrate the value and benefits the project brings to the business.
- Ensure consistent style and readability.

The project sponsor is responsible for preparing the business case.

However, all appropriate team members should contribute to its development. Likewise, subject matter experts from other functions — finance, HR, IT, service delivery, and so on — can provide specialist information.

Those writing the business case should have a thorough understanding of the project's aims and be able to merge the varied and potentially complex plans into one document using the following business case template.

14.13 THE BUSINESS CASE TEMPLATE:

What follows are the four steps to writing a business case template for your project.

It includes the following four sections:

- Executive Summary
- Finance
- Project Definition
- Project Organization

14.13.1THE EXECUTIVE SUMMARY:

Depending on the length of the business case you may want to include a high-level summary of the project.

The executive summary is the first section of the business case and the last written. It is a short summary of the entire business case. It succinctly conveys vital information about the project and communicates the entire story to the reader.First impressions are important. Get this right!

14.13.2THE FINANCE SECTION:

The finance section of an effective business case is primarily for those who approve funding.

The purpose of a financial section is to:

- Identify the financial implications for the project
- Allow comparison of project costs against the forecast benefits
- Ensure the project is affordable
- Assess value for money
- Predict cash flow

14.13.3THE PROJECT DEFINITION:

This is the largest part of the business case and is for the project sponsor, stakeholders, and project team. It answers most of the why, what, and how questions about your project.

Background information

The purpose of this section is to give a clear introduction to the business case and project. It should contain a brief overview of the reasons why the project or business change has come about: the problem, opportunity, or change of circumstances.

If necessary, refer to related programs, projects, studies, or business plans.

Business objective

This part describes why you are doing the project. The business objective answers the following questions:

- What is your goal?
- What is needed to overcome the problem?
- How will the project support the business strategy?

Benefits and limitations

The benefits and limitations section describes the financial and non-financial benefits in turn. The purpose is to explain why you need a project.

For instance, to:

- Improve quality
- Save costs through efficiencies
- Reduce working capital
- Generate revenue
- Remain competitive
- Improve customer service
- Align to corporate strategy

The business case should also include any limitations since these present potential risk to the project.

Option identification and selection

Identify the potential solutions to the problem and describe them in enough detail for the reader to understand.

For instance, if the business case and proposed solution makes use of technology, make sure to explain how the technology is used and define the terms used in a glossary. Since most problems have multiple solutions an option appraisal is often needed. This will explore the potential solutions and recommend the best option.

When writing the initial business case the option appraisal is likely to contain a long list of options and will cover many possibilities. As the project continues a number of options will be rejected. The final business case may contain three to five options — the short list — that includes a do nothing or benchmark option.

Scope, impact, and interdependencies

This section of the business case template describes the work needed to deliver the business objective and identifies those business functions affected by the project.

Moreover, the project scope, impact, and interdependencies section should state the project's scope and boundaries. It describes what is included and what is excluded plus the key interdependencies with other projects. It is important for the business case to consider the failure of other interrelated projects and show how such dependencies make impact benefits.

Outline plan

The outline plan provides a summary of the main activities and overall timescale — project schedule — for the project.

Ideally, the project should be divided into stages with key decisions preceding each stage. Use this section to answer the following questions:

- What is required?
- How is it done?
- Who does what?
- When will things happen?

This outline plan lists the major deliverables and includes a brief project description plus accountabilities for each activity.

Market assessment

It is important that the business case provide its readers with a thorough assessment of the business context , the market assessment. In other words, make the underlying business interests explicit.

Therefore, the market assessment should show a complete understanding of the marketplace in which your business operates.

A good starting point is the inclusions of a PESTLE — political, economical, sociological, technological, legal, and environmental — analysis.

Risk assessment

The risk assessment summarizes the significant project risks and opportunities and how they are managed. The risks included should cover those that could arise from your project or the organization's ability to deliver change.

This section answers the following questions:

- What risks are involved?
- What are the consequences of a risk happening?
- What opportunities may emerge?
- What plans are in place to deal with the risks?
- Every project should include a risk log.

When writing a business case, make sure this is included as it explains how risk and opportunity are managed.

Project approach

The project approach describes how the project is tackled. That is, the way in which work is done to deliver the project.

For instance, a project with much of the work contracted out is likely to take a different approach to a project that develops an in-house solution.

Purchasing strategy

This section describes how a project is to be financed and whether a decision to buy, lease, or outsource should be taken by the organization before purchasing.

Moreover, the purchasing strategy should describe the purchasing process used. A formal procurement process may save time and money and reduce project risk.

14.13.4PROJECT ORGANIZATION:

The last section of the business case template is of most interest to the project manager, project team, and managers responsible for delivering work to the project.

This section of the business case template shows the reader how the project is structured and the different levels of decision-making. Usually a business will already have implemented a project governance framework that will support the project through each stage.

Finally, the business case should define how project progress is recorded and the project board updated on project performance. Usually the project manager does this by preparing a concise progress report or highlight report at regular intervals.

14.14 CONCLUSION:

For writing the report, no format can be perfect. Reports will differ depending on the knowledge & style of writing of committee members, the type of audience for whom the report is written, the nature of subject etc. Following the best practices of report writing minimizes the chance of wrong interpretation and improves the probability of outcome expected from the report.

15 CONTRACT MANAGEMENT & ARBITRATION

15.1 LEARNING OBJECTIVES:-

At the end of the session, the trainees will be able to learn:

- Introduction to contract
- Public procurement infrastructure at the center
- Government e-marketplace (gem)
- Amendment to schedule of financial powers
- The arbitration and conciliation act,1996
- Conciliation

15.2 INTRODUCTION

15.2.1 WHAT IS CONTRACT?

The promises, agreements, transactions between two parties based on which commercial activities are carried out are called contracts. Indian Contract Act, 1872 deals with all types of Contracts. Section 2(h) of the Indian Contract Act, 1872 defines the term Contract as "An agreement enforceable by law"

An agreement means a set of promises forming the consideration for each other.

There are two parties to a contract In practice, if someone wants some work to be executed, he approaches a person for the said purpose. The other person on receiving the proposal, quotes his price or charges, which is a consideration and other terms and conditions. An agreement in relation to it comes into force. If this agreement is liable to be enforced by law, it is called a CONTRACT.

15.2.2 ESSENTIAL REQUIREMENTS FOR VALID CONTRACTS ARE:

- Offer and its acceptance
- Free consent of both parties
- Mutual and lawful consideration for agreement
- It should be enforceable by law. Hence, intention should be to create legal relationship. Agreements of social or domestic nature are not contracts.
- Parties should be competent to enter to contract
- Object should be lawful
- Certainty and possibility of performance
- Contract should not have been declared as void under Contract Act or any other law.

15.2.3 LEGAL ASPECTS GOVERNING PUBLIC PROCUREMENT OF WORKS

A public procurement contract, besides being a commercial transaction, is also a legal transaction. There are a number of laws that may affect various commercial aspects of public procurement contracts. A public procurement professional is expected to be generally aware of the implications of following basic laws affecting procurement of works; however, he or she is not expected to be a legal expert. In different contexts of the scope of work, an additional set of laws may be relevant.

i. The Constitution of India;

ii. Indian Contracts Act, 1872;

iii. Arbitration and Conciliation Act, 1996 read with The Arbitration and Conciliation (Amendment) Act, 2015;

iv. Competition Act, 2002 as amended with Competition (Amendment) Act, 2009;

v. The Information Technology Act, 2000 (IT Act, regarding e-procurement and e-auction, popularly called the Cyber Law); Amended in 2008

vi. Right to Information (RTI) Act 2005;

vii. Central Vigilance Commission Act, 2003;

viii. Delhi Special Police Establishment Act, 1946 (DSPE – basis of the Central Bureau of Investigation);

ix. Prevention of Corruption Act, 1988; Amended in 2018

x. Code of Criminal Procedure, 1973 (Sections 195(1) and 197(1));

xi. Various labor laws applicable at the works' site;

xii. Various building and safety acts, codes, standards applicable in the context of the scope of work; and

xiii. Various environmental and mining laws, codes, standards applicable in the context of the scope of work.

15.2.4 FREQUENTLY USED TERMS

Some of the terms frequently used with reference to tenders and contracts are:

1. **Bidder:** A Person, firm, company (or any other legal person) who has submitted an

offer in response to a notice inviting tender.

2. **Contractor:** The bidder whose tender (offer) has been accepted, and who has entered into an valid agreement.
3. **"Supplier"** means the individual or firm supplying the goods on contract.
4. **"Goods"** means all the equipment, machinery or other material which the supplier is required to supply under the contract.
5. **"Advance purchase Order**" means the intention of purchaser to place the purchase order on the bidder
6. **"Purchase Order"** means the order placed by the purchaser on the supplier signed by the purchaser including all attachments and appendices thereto and all documents incorporated by reference therein. The purchase order shall be deemed as 'Contract'.
7. **"Work Order"** means the order issued to the contractor by the officer in charge of the works.
8. **"Contract Price"** means the price payable to the supplier under the purchase order for the full and proper performance of its contractual obligations.
9. **"Bid documents/ Tender documen**ts" means all the documents of 1.specifications of the materials or work 2. Terms and conditions of the contract 3. Plans and detailed diagrams if any and other related documents forming part of contract.
10. **"Notice Inviting Tender" (NIT**) means any publication or notice issued to the public through press or otherwise expressing the intention of the corporation to get the supplies or work done and requesting the bidder to make offers.
11. "Earnest Money Deposit (EMD)/ Bid Security" means an amount required to be deposited by the bidder/ tenderer along with his offer as a security against his default of entering into contract.
12. **"Security Deposit/ Performance Guarantee**" means an amount fixed as security for ensuring the performance of the contract and compliance to the other conditions of contract by the contractor.

15.3 PUBLIC PROCUREMENT INFRASTRUCTURE AT THE CENTRE

15.3.1 PROCUREMENT POLICY DIVISION

Procurement Policy Division (PPD) in Department of Expenditure; Ministry of Finance has been created to encourage uniformity and harmonization in public procurement processes by setting guidelines, dissemination of best practices, providing guidance, oversight and capacity building and issuing of procurement manuals. However, Centralization of procurement or involvement in procurement processes is not the intended purpose of creation of PPD.

15.3.2 CENTRAL PUBLIC PROCUREMENT PORTAL

Central Public Procurement Portal (CPPP) has been designed, developed and hosted by National Informatics Centre (NIC, Ministry of Electronics & Information

Technology) in association with Dept. of Expenditure to ensure transparency in the public procurement process. The primary objective of the Central Public Procurement portal is to provide a single point access to the information on procurements made across various Ministries and the Departments. The CPPP has e-publishing and e-procurement modules. It is mandatory for all Ministries/ Departments of the Central Government, Central Public Sector Enterprises (CPSEs) and Autonomous and Statutory Bodies to publish on the CPPP all their tender enquiries and information about the resulting contracts. CPPP provides access to information such as documents relating to pre-qualification, Bidders' enlistment, Bidding documents; details of bidders, their pre-qualification, enlistment, exclusions/ debarments; decisions taken regarding prequalification and selection of successful bid. GFR 2017 (Rule 160) makes it mandatory for Ministries/ Departments to receive all bids through e-procurement portals in respect of all procurements. Ministries/ Departments which do not have a large volume of procurement or carry out procurements required only for day-to-day running of offices and also have not initiated e-procurement through any other solution provided so far, may use e-procurement solution (CPPP) developed by NIC. Other Ministries/ Departments may either use e-procurement solution developed by NIC or engage any other service provider following due process. In the latter case, data on tenders are to be published on CPPP as well through web-service.

15.4 GOVERNMENT E-MARKET PLACE (GEM)

To ensure better transparency and higher efficiency an online Government e-Marketplace (GeM– an e-commerce marketplace) has been developed for common use goods and services. In GeM product or services are offered by a number of eligible sellers and all the eligible buyers can view/ compare all the product/ services and select the product/ services offered by any one of the seller. In general, because online marketplaces aggregate product/ services from a wide array of providers, selection is usually wider, availability is higher, and prices are more competitive than in vendor-specific online retail stores. The procurement process on GeM is online and electronic - end to end from placement of supply order to payment to suppliers. The registration of suppliers on GeM is online and automatic based on ID authentication etc. The procuring authorities have to assess the reasonability of rates. Buyer's transactions are processed by the GeM portal and then product/ services are delivered and fulfilled directly by the participating sellers.

Tools of reverse bidding and e-auction are also available which can be utilized for the procurement of bulk quantities. More details are available in Rule 149, GFR, 2017. The Procurement of Goods and Services by Ministries or Departments are mandatory for Goods or Services available on GeM. Ministries/ Departments are expected to work with GeM in making available on the GeM platform as many products/ services by making available such Goods and Services which are regularly procured by them.

15.5 AMENDMENT TO SCHEDULE OF FINANCIAL POWERS

The approval of BSNL Board is hereby conveyed for amendment in the schedule of financial power under item No 17.2 of CGMs/GMs/TDMs (circle head/SSA head) w.r.t. Award of work to lowest tenderer through limited tenders, to make it in conformity with GFR 2005 as given below. The proposal was discussed and approved by the Management Committee of the Board in 249th Meeting held on 29th day of July, 2015 vide Item No.249.08 and by the Board of Directors of BSNL in 164th meeting held 28th day of August, 2015 vide Item no.164.22. Besides, a few amendments have been made with the approval of Director (Finance) to make it in conformity with GFR 2005. As the circulars get amended, the latest information can be verified from BSNL Intranet. The revised delegation of Financial Powers to Head of Circle/BA is issued vide BSNL CO, New Delhi L.No. BSNL CO-EF/11/(11)/6/2020-ESTT FIN dated 03-12-2021.

Table 28. Schedule of Financial power

S.N.	Activity	Head of Circle	BA Head
1	(a) Award of work to the lowest tenderer (b)Acceptance of single tender in case of limited Tender	Rs 5 crore through open tender Rs.2 lakhs	Rs 3 crore through open tender Rs.1 lakhs
2	Purchase of centralized items	Full powers to the extent of quantities authorized & rates prescribed by Corporate office	Full powers to the extent of quantities authorized & rates prescribed by Corporate office
3	Purchase of decentralized items	Full powers to purchase against rate/price finalized by tenders by head of circle subject to quantitative limits of materials & Budget allocation for the items prescribed by BSNL Board & as per the standards	Full powers to purchase against rate/price finalized by tenders by head of circle subject to quantitative limits of materials & Budget allocation for the items prescribed by BSNL Board/circle office & as per the standards. For the items other than decentralized: a. In case of procurement from PSU- Up to Rs 10 Lakh b. In case of procurement from non-PSU- Up to Rs 4 Lakh in each case c. In case of procurement from GeM/CPP portal - Rs 6 Lakh in each case Annual limit of Rs 30 Lakh for a, b & c combined subject to budget
4	Procurement of spares & equipment without quotation	Upto Rs 25000/- in each case	Upto Rs 15000/- in each case with Annual limit of Rs 3Lakh

15.5.1 LIMIT

Beyond delegated power sanctioned vide para 5 of revised delegation of Financial Powers issued by BSNL CO dated 31-12-2021, award of work through limited tender up to the limit of Rs 25 lakh on each occasion, in case of procurement of goods & Rs 10 lakh on each occasion, in case of works of services can be invoiced and approved by BA heads, subject to annual ceiling limit of Rs 3 crore (vide No. CA/MMT/3-1/2012 Dated 18-12-2015.

(a) Method will be adopted when estimated value of the work or service up to Rs10 lakhs or less.
(b) The number of supplier firms in limited tender enquiry should be more than three in case of procurement of goods & not less than six in case of works or services.
(c) copies of the bidding document should be sent directly by speed post/registered post/courier/email/ to firms, which are borne of the list of registered suppliers for the goods in question, as per Rule 142- Registration of Supplier".
(d) Web based publicity should be given for limited tender.
(e) Efforts should be made to identify a higher number of approved suppliers to obtain more responsive bids on competitive basis.

(BSNL Corporate office letter No. CA/MMT/3-1/2012 dated 18.12.2015)

15.5.2 VERIFICATION OF EXPERIENCE CERTIFICATES PRODUCED BY THE BIDDERS

In some cases it was noticed that fake certificates were produced along with the bids. In view of this, BSNL decided that

1. It shall be clearly stated in APO that the same is subject to verification of eligibility criteria documents submitted in the tender with originals.
2. The bidder is required to show the originals to the APO issuing authority or an officer/committee nominated by him for this purpose within the time prescribed time period.
3. In case the eligibility criteria document is issued by a BSNL unit, then the APO issuing authority shall verify the same from the concerned BSNL unit.
4. The PO will be placed on the vendor only on successful verification of documents and certificates .
5. (BSNL Corporate office letter No. CA/MMT/10-9/2014/Pt.I dated 8.6.2018)

15.5.3 PUBLICATION OF ADVERTISEMENT OF TENDERS

The requirement of compulsory advertisement in News papers as per GFR 2005 has been dispensed with vide Department of Expenditure OM No. F.1/8/2018-PPD dated 8.3.2018. Advertisement in case of tenders above certain threshold value should given on Central Public Procurement Portal (CPPP), Government e-market place(GeM) portal as well as on the website of Ministries/Departments/Organizations if available. In view of this, tender advertisement should be published on GeM portal(if applicable), BSNL website, e-tendering portal and CPP portal. This is applicable to all procurements wherever open tender is resorted to as per procurement guidelines and delegation of financial powers.

(BSNL Corporate office letter No. CA/MMT/3-1/2018 dated 17.7.2018)

15.5.4 TENDER SYSTEMS IMPROVEMENT

Based on a meeting with CVO, CMD –BSNL decided that

1. To enhance transparency in tender decisions, the tender accepting authority is required to pass detailed speaking orders before cancellation of tenders and promptly report each case of cancellation to the next higher authority.
2. Tender conditions in Works tenders must not vary across SSAs within a Circle and across Circles as far as possible. In case of any required deviation in tender conditions, prior approval from next higher authority must be mandatorily taken.
   (BSNL Corporate office letter No. CA/MMT/10-9/2014/Pt.1 dated 10.10.2018)

15.6 THE ARBITRATION AND CONCILIATION ACT, 1996

1. Sec-1 Short Title, extent and commencement

Arbitration has increasingly become a preferred option to settle commercial disputes globally for quick enforcement of contracts & settlement of monetary claims. Arbitration & Conciliation Act came into effect from 25.01.1996and was amended by Act 3 of 2016. The amended act deemed to have come into force from 23.10.15. It was further amended by Act 33 of 2019 with effect from 9th August 2019. The Key features of this amendment act are:

(1) Establishment of an independent body called the Arbitration Council of India.
(2) Appointment of arbitrators by arbitral institutions.
(3) The time restriction for arbitral tribunals to make their award within a period of 12 months is removed for international commercial arbitrations.
(4) The time limit to file written claim and the defence to the claim before an arbitral tribunal has been fixed as six months.

2. DIFFERENCE IN 1996 ACT ANDAMENDED ARBITRATION & CONCILIATION ACT

Table 29. Difference in Old and AMENDED Arbitration Act

Sl . No.	Point of Difference	Arbitration & Conciliation Act 1996	Arbitration & Conciliation Act 1996 as amended by Amendment Act 2015	Arbitration & Conciliation Act 1996 as amended by Amendment Act 2019
1.	**Conciliation**	Provision Exist	Provision Exist	Provision Exist
2.	**Reasoned award**	All awards	All Awards	All Awards
3.	**Provision of Arbitral Institution**	Does not exist	Does not exist	Inserted vide Sec-11(3A)
4.	**Provision of Arbitration Council**	Does not exist	Does not exist	Inserted vide Part –IA

	of India			
5.	**Time limit for completion of statement of claims and defense**	No time limit prescribed but as decided by arbitration tribunal (Sec-23)	No time limit prescribed but as decided by arbitration tribunal (Sec-23)	6 Months from the date the arbitrators received notice of their appointments (Sec-23 amended)
6.	**Time of Hearing & Publishing award.**	No time limit	12 Months from the date of Arbitral Tribunal enters upon reference (Sec-29A inserted)	12 Months from the date of completion of pleadings (Sec-29A amended)
7.	**Award become rule of Court**	After 3 months of receipt of award by opposite party, award will become DECREE. (Sec-36)	No change	No change
8.	**Fast track procedure**	No Provision Exist	Provision added (Sec-29B).	No change in Sec-29B
9.	**Fourth, Fifth, Sixth, Seventh and Eighth Schedule**	Do not exist	4th to 7th Schedule existed.	8th Schedule Inserted.

3. ARBITRATION

"Arbitration" means any arbitration whether or not administered by permanent arbitral institution.

4. SEC-7 ARBITRATION AGREEMENT

Means an agreement by the parties to submit to Arbitration all or certain disputes which have arisen or which may arise between them in respect of a defined legal relationship.

An arbitration agreement mustbe in writing. It may be in the form of an Arbitration Clause in the contract or in the form of separate agreement.

5. SEC- 8 POWER TO REFER PARTIES TO ARBITRATION WHERE THERE IS AN ARBITRATION AGREEMENT

(i) A Judicial authority before which an action is brought where ArbitrationAgreement exist shall refer the parties to Arbitration.

(ii) (Sub Section-3) If same issue under Sub Section-1 is pending before the judicial authority, an arbitration may be commenced or continued and Arbitration Award made.

Composition of Arbitral Tribunal

- **Sec-10 to 12**

(i). A person of any nationality may be an arbitrator, unless otherwise agreed by the parties. The parties are free to determine the number of arbitrators, provided that such number shall not be an even number. They can agree for a sole arbitrator.

(ii) The parties are free to agree on a procedure for appointing the arbitrator or arbitrators. In absence of any agreement otherwise, in an arbitration with three arbitrators, each party shall appoint one arbitrator, and the two appointed arbitrators shall appoint the third arbitrator who shall act as the presiding arbitrator. As per **Sec-11**, an arbitrator should be appointed within **thirty days** from the date of receipt of request from the other party or otherwise the appointment shall be made, upon request of a party, by the Supreme/High Court or any person or institution designated by such Court. Any arbitrator so appointed is required to disclose in writing,in the form specified in the Sixth Schedule, any circumstances,—

(a) Any grounds as stated in the Fifth Schedule either direct or indirect, of any past or present relationship of any kind with any of the parties or in relation to the subject-matter in disputewhich is likely to give rise to doubts as to his independence or impartiality; and also

(b) which are likely to affect his ability to devote sufficient time to the arbitration and complete entire arbitration within a period of twelve months.

6. Conduct of Arbitral Proceeding

- **Sec-18 – Equal Treatment of Parties**

The parties shall be treated with equality and each party shall be given a full opportunity to present his case.

- **Sec-19 Determination of Rules of Procedure**

The arbitral tribunal shall not be bound by the Code of Civil Procedure or the Indian Evidence Act.Parties are free to agree on the procedure to be followed by the Arbitrator in conducting proceedings.Failing any agreement, Arbitrator may conduct the proceedings in the manner it considers appropriate and shall have the power to determine the admissibility, relevance, materiality and weight of any evidence.

- **Sec-20- Place of Hearing**

(i) Parties are free to agree on the place of Arbitration.

(ii) Failing any agreement, place of arbitration shall be determined by Arbitrator as appropriate considering the circumstances of the case and convenience of the parties.

- **Sec-23- Statement of claim and defense**

(i) Within thetime period agrees or so determined by the Arbitrator, claimant shall submit statement of facts supporting his claim and relief sought and respondent shall submit his statement of defense. Parties may submit with their statement all documents they consider to be relevant. The respondent may also submit a counterclaim or plead a set-off, which shall be adjudicated upon by the arbitral tribunal, if such counterclaim or set-off falls within the scope of the arbitration agreement.

(ii) Either party may amend or supplement his claim or defence during the course of proceedings, unless the tribunal considers it inappropriate to allow having regard to the delay in making it.

(iii) The statement of claim and defence under this section shall be completed within a period of **six months** from the date the arbitrator or all the arbitrators received notice, in writing of their appointment.

- **Sec-24 – Hearings and written proceedings**

(i) Unless agreed by the parties, Arbitrator shall decide whether to hold oral hearing or to decide on the basis of documents.

(ii) Arbitral tribunal shall, as far as possible, hold oral hearings for the presentation of evidence or for oral argument on day-to-day basis, and not grant any adjournments unless sufficient cause is made out, and may impose costs including exemplary costs on the party seeking adjournment without any sufficient cause.]

(iii) Parties shall be given sufficient advance notice of any hearing or inspection ofrecords, goods or property.

(iv) All statements, documents or applications made to Arbitrator by one party **shall be communicated to other party.** Any expert report or evidence on which Arbitrator may rely in making its decision **shall be communicated to the parties.**

Sec-25 Default of a party

(a) If without sufficient cause, claimant fails to communicate his statement of claim, Arbitrator shall**Terminate the Proceedings.**

(b) If respondent fail to communicate his statement of defense, Arbitrator **shall continue the** proceedings without treating failure in itself as on admission of the allegation by the claimantand shall have the discretion to treat the right of the respondent to file such statement of defence as having been forfeited.

(c) If a party fails to appear at an oral hearingor to produce documentary evidence, Arbitrator may continue the proceedings and make the arbitral award on the evidence before it.

Section 29. Decision making by panel of arbitrators.—

(i) Unless otherwise agreed by the parties, in arbitral proceedings with more than one arbitrator, any decision of the arbitral tribunal shall be made by a majority of all its members. If so authorised by the parties or all the members of the arbitral tribunal, questions of procedure may be decided by the presiding arbitrator.

Section 29A Time limit for arbitral award.—

(1)The award in matters other than international commercial arbitration shall be made by the arbitral tribunal within a period of **twelve months** from the date of completion of pleadings.

(2) If the award is made within a period of six months, the arbitral tribunal shall be entitled to receive such amount of additional fees as the parties may agree.

(3) The parties may, by consent, extend this period specified in sub-section (1) for a further period not exceeding six months.

(4) If the award is not made within the period specified in sub-section (1) or the extended period specified under sub-section (3), the mandate of the arbitrator(s) shall terminate unless the Court has, on application of any party, either prior to or after the expiry of the period so specified, extended the period on the basis of sufficient cause, on such terms and conditions as may be imposed by the Court. Till suchapplication is pending, the mandate of the arbitrator shall continue.Such application filed to be disposed of by the Court within a period of sixty days from the date of service of notice on the opposite party

(5) While extending the period, if the Court finds that the proceedings have been delayed for the reasons attributable to the arbitral tribunal, it may order reduction of fees of arbitrator(s) by not exceeding five per cent for each month of such delay and/or

substitute any or all arbitrators. The arbitrator shall be given an opportunity of being heard before the fee is reduced. Court may also impose actual or exemplary costs upon any of the parties.

(6) If one or all of the arbitrators are substituted, the arbitral proceedings shall continue from the stage already reached and on the basis of the evidence and material already on record, and the arbitrator(s) so appointed shall be deemed to have received the said evidence and material and the arbitral tribunal thus reconstituted shall be deemed to be in continuation of the previously appointed arbitral tribunal.

Section 29B. Fast track procedure

(1) The parties may, at any stage either before or at the time of appointment of the arbitral tribunal, agree in writing to have their dispute resolved by fast track procedure specified in sub-para (3).

(2) The parties while agreeing for resolution of dispute by fast track procedure, may agree that the arbitral tribunal shall consist of a sole arbitrator who shall be chosen by the parties

(3) The arbitral tribunal shall follow the following procedure while conducting arbitration proceedings under sub-section (1):—

(a) The arbitral tribunal shall decide the dispute on the basis of written pleadings, documents and submissions filed by the parties without any oral hearing;

(b) The arbitral tribunal shall have power to call for any further information or clarification from the parties in addition to the pleadings and documents filed by them;

(c) An oral hearing may be held only, if, all the parties make a request or if the arbitral tribunal considers it necessary to have oral hearing for clarifying certain issues;

(d) The arbitral tribunal may dispense with any technical formalities, if an oral hearing is held, and adopt such procedure as deemed appropriate for expeditious disposal of the case.

(4) The award under this section shall be made within a period of **six months** from the date the arbitral tribunal enters upon the reference. If the award is not made within **six months**period, the provisions of section 29A shall apply with regard to extension of the period.

(5) The fees payable to the arbitrator and the manner of payment of the fees shall be such as may be agreed between the arbitrator and the parties.

Sec-30 Settlement

(a) Arbitrator may use mediation or conciliation during arbitral proceedings to encourage settlement

(b) If, during arbitral proceedings, the parties settled the dispute, the Arbitrator shall terminate the proceedings and, if requested by the parties, Arbitrator may record the settlement in the form of an Arbitral Award on agreed terms.

(c) An Arbitration award on **agreed terms** shall have the same status and effect as any other arbitral award.

<u>Sec-31 Form and Contents of Arbitral Award</u>

(i) Arbitration award shall be **in writing** and shall be **signed** by Arbitrator/ Arbitrators.

(ii) Arbitral award shall **state the reasons** upon which it is based unless it is on agreed terms or parties have agreed that no reasons are to be given.

(iii) The Arbitral award shall state **date and place** of **Arbitration** and award deemed to have been made at that place.

(iv) A signed copy shall be delivered to each party.

(v) Arbitrator may make an interim arbitral award.

(vi) (Sub-Sec-7a) Arbitrator may award **Interest as deems reasonable** on the whole or party of money, for whole or part of period between the date on which the cause of action arose and the date on which the award is made (Pre- reference Period + Pendent elite Interest)

(vii) (Sub-Sec-7b) In Arbitration award, interest on the amount of award is to be paid as directed or otherwise Award shall carry **interest at the rate of two per cent higher than the current rate of interest** prevalent on the date of award**,** from the date of award to the date of payment.Explanation.—The expression “current rate of interest” shall have the same meaning as assigned to it under clause (b) of section 2 of the Interest Act, 1978 (14 of 1978).

Section 31A. Regime for costs.—

(1) In relation to any arbitration proceedings, the Court or arbitral tribunal shall have the discretion to determine—

(a) whether costs are payable by one party to another;
(b) the amount of such costs
(c) when such costs are to be paid.

“Costs” here means reasonable costs relating to—

(i) the fees and expenses of the arbitrators, Courts and witnesses;
(ii) legal fees and expenses;
(iii) any administration fees of the institution supervising the arbitration; and
(iv) any other expenses incurred in connection with the arbitral or Court proceedings and the arbitral award.

(2) If the Court or arbitral tribunal decides to make an order as to payment of costs,—

(a) the general rule is that the unsuccessful party shall be ordered to pay the costs of the successful party; or (b) the Court or arbitral tribunal may make a different order for reasons to be recorded in writing.

(3) In determining the costs, the Court or arbitral tribunal shall have regard to all the circumstances, including—

(a) the conduct of all the parties;
(b) whether a party has succeeded partly in the case;
(c) whether the party had made a frivolous counterclaim leading to delay in the disposal of the arbitral proceedings; and
(d) whether any reasonable offer to settle the dispute is made by a party and refused by the other party.

(4) The Court or arbitral tribunal may make any order under this section including the order that a party shall pay—

(a) a proportion of another party's costs;
(b) a stated amount in respect of another party's costs;
(c) costs from or until a certain date only;
(d) costs incurred before proceedings have begun;
(e) costs relating to particular steps taken in the proceedings;
(f) costs relating only to a distinct part of the proceedings; and
(g) interest on costs from or until a certain date.

(5) An agreement which has the effect that a party is to pay the whole or part of the costs of the arbitration in any event shall be only valid if such agreement is made after the dispute in question has arisen.

Sec-32 Termination Proceedings

(i) The arbitral proceedings shall be terminated **by the Final ArbitrationAward.**

(ii) Arbitrator shall issue an order for termination of Arbitral Proceedings where:-

(a) The claimant withdraws his claims.
(b) Parties agree on the termination of proceedings
(c) Arbitrator finds that the continuation of the proceedings for any reason become unnecessary or impossible.

The mandate of the arbitral tribunal shall terminate with the termination of the arbitral proceedings.

Sec-33-Correction and interpretation of award, Additional Award

(i) Within **thirty days** from the receipt of the arbitral award:

(a) A party, with notice to the other party, may request the arbitral tribunal **to correct any computational error, any clerical or typographical errors** or any other errors of similar nature occurring in the award;

(b) A party, with notice to the other party, may request the arbitral tribunal **to give an interpretation of a specific point** or part of the award.If the arbitral tribunal considers such request to be justified, it shall make the correction or give the interpretation **within thirty days from the receipt of the request** and the interpretation shall from part of the arbitral award.

(ii) The arbitral tribunal **may correct any error** of above type, o**n its own initiative, within thirty days from the date of the arbitral award.**

(iii) A party with notice to the other party may request, within **thirty daysfrom the receipt of the arbitral award**, the arbitral tribunal to make an additional arbitral award as to claims presented in the arbitral proceedings but omitted from the arbitral award.If the arbitral tribunal considers such request to be justified, it shall make the additional arbitral award **within sixty days from the receipt of such request.**

(iv) The arbitral tribunal may extend, if necessary, the period of time within which it shall make a correction, give an interpretation or make an additional arbitral award under above sub-sections.

7. Recourse against Arbitration Award

- **Sec-34 Application for setting aside arbitral award**

(1) Recourse to a Court against an arbitral award may be made only by an application for setting aside such award.

(2) An arbitral award may be set aside by the Court only if—

(a) The party making the application establishes on the basis of the record of the arbitral tribunal that—

(i) A party was under **some incapacity**; or

(ii) The arbitration agreement is **not valid under the law**

(iii) The party making the application **was not given proper notice** of the appointment of an arbitrator or of the arbitral proceedings or was otherwise unable to present his case; or

(iv) the arbitral award deals with a dispute not contemplated by or not falling **within the terms of the submission to arbitration**, or it contains decisions on matters **beyond the scope of the submission to arbitration: or**

(v) The composition of the arbitral Tribunal or the arbitral procedure was not in accordance with the agreement of the parties.

(3) An application for setting aside **may not be made after three months have elapsed from the date on which the party making that application had received the arbitral award or**, if a request had been made under section 33, from the date on which that request had been disposed of by the arbitral Tribunal. If the Court is satisfied that the applicant was prevented by sufficient cause from making the application within the period of three months it may entertain the application within a further period of thirty days, but not thereafter.

8. Finality and Enforcement of Arbitral Awards

- **Sec-35 Finality of arbitral awards**

Subject to this Part an arbitral award **shall be final and binding on the parties.**

- **Sec-36 - Enforcement**

Where the time for making an application to set aside the arbitral award under section 34 has expired, **the award shall be enforced** under the Code of Civil Procedure, 1908 (5 of 1908) in the same manner **as if it were a decree of the Court.**

Where an application to set aside the arbitral award has been filed in the Court under section 34, the filing of such an application shall not by itself render that award unenforceable, unless the Court grants an order of stay of the operation of the said arbitral award on a separate application made for that purpose.

- **Section No. 37 :- Appealable orders:-**

(*1*)An appeal shall lie from the following orders (and from no others) to the Court authorised by law to hear appeals from original decrees of the Court passing the order, namely:—

(*a*) refusing to refer the parties to arbitration under section 8;

(*b*) granting or refusing to grant any measure under section 9;

(*c*) setting aside or refusing to set aside an arbitral award under section 34.

(*2*) Appeal shall also lie to a court from an order of the arbitral tribunal—

(*a*) accepting the plea referred to in sub-section (*2*) or sub-section (*3*) of section 16 regarding arbitral tribunal exceeding its scope or jurisdiction; or
(*b*) granting or refusing to grant an interim measure under section 17.
(3) No second appeal shall lie from an order passed in appeal under this section, but nothing in this section shall affect or take away any right to appeal to the Supreme Court.

- **Sec-40-Arbitration agreement not to be discharged by death of party thereto**

An arbitration agreement **shall not be discharged by the death** of any party thereto either, but shall in such event be enforceable **by or against the legal representative of the deceased.**The mandate of an arbitrator shall not be terminated by the death of any party by whom he was appointed.

- **Section No. 42A Confidentiality of information.-**

The arbitrator, the arbitral institution and the parties to the arbitration agreement shall maintain confidentiality of all arbitral proceedings except award where its disclosure is necessary for the purpose of implementation and enforcement of award.

9. CONCILIATION

- **Sec-62 Commencement of conciliation proceedings**

(i) The party initiating conciliation shall send to the other party a written**invitation to conciliate**.

(ii) Conciliation proceedings shall commence **when the other party accepts** in writing the invitation to conciliate. If the other party rejects the invitation, there will be no conciliation proceedings.

(iii) If the party initiating conciliation **does not receive a reply within thirty days** from the date on which he sends the invitation, he may elect to treat this as a rejection of the invitation to conciliate.

- **Sec-66**The conciliator is not bound by Code of Civil Procedure or the Indian Evidence Act.

- **Sec-67 Role of conciliator**

(i) The conciliator shall assist the parties to reach an amicable settlement of their dispute.

(ii) The conciliator may, at any stage of the conciliation proceedings, make proposals for a settlement of the dispute. Such proposals need not be in writing and need not be accompanied by a statement of the reasons thereof.

- **Sec-73 - Settlement agreement**

(i). If the parties reach agreement on a settlement of the dispute, they may draw up and **sign a written settlement agreement.**The conciliator shall authenticate the settlement agreement and furnish a copy thereof to each of the parties**.**

(ii). When the parties sign the **settlement agreement, it shall be final and binding on the parties** and persons claiming under them respectively.

- **Sec-74 Status and effect of settlement agreement**

The settlement agreement shall have the **same status and effect as if it is an arbitral award** on agreed terms on the substance of the dispute rendered by an arbitral Tribunal under section 30.

- **76. Termination of conciliation proceedings.—**

The conciliation proceedings shall be terminated—

(a) by the signing of the settlement agreement by the partieson the date of agreement; or

(b) by a written declaration of the conciliator, after consultation with the parties, to the effect that further efforts at conciliation are no longer justified, on the date of the declaration; or

(c) by a written declaration of the parties addressed to the conciliator to the effect that the conciliation proceedings are terminated, on the date of the declaration; or

(d) by a written declaration of a party to the other party and the conciliator, if appointed, to the effect that the conciliation proceedings are terminated, on the date of the declaration.

- **Sec-77 - Resort to arbitral or judicial proceedings**

The parties **shall not initiate, during the conciliation proceedings, any arbitral or judicial proceedings** in respect of a dispute that is the subject-matter of the conciliation proceedings

15.7 CONCLUSION

Arbitration has developed significantly in India and also the justice is served to the people without any delay. Nowadays most of the people are including the arbitration clause in their contracts or agreements to resolve their disputes through arbitration without court's involvement. However, there are some decisions and provisions which are not clearly interpreted. Hopefully, these would be identified and addressed by the Supreme Court and a clear interpretation and decisions are given in the near future.

16 BSNL PROCUREMENT POLICY

16.1 LEARNING OBJECTIVES:

At the end of the session, the trainees will be able to learn:

- Introduction & Tender types
- Guidelines For User Sections
- Purchase Proposals- Role of IFA
- Stores Purchase Committee & Tender Processing
- Formation of Committee For Evaluation Of Tender/ EOI (CET)
- Government E-Market Place (GeM)
- Conclusion

16.2 INTRODUCTION & TENDER TYPES

BSNL's aim is to procure the material of the specified quality, at the most competitive rates, in a fair, just and transparent manner. Procurement is an important activity in BSNL as about 50% of its budget is used for procurement of materials. Consequent upon corporatization of Department of Telecom Services & Department of Telecom Operations into a Corporate Entity i.e. BSNL, a need has been felt to modify the existing procurement Procedure being followed by BSNL Corporate Office as well as by Telecom Circles so as to cut down the procurement time in the present liberalized telecom market. This is all the more necessary as BSNL is facing increasing competition in all types of services and has to respond quickly for procurement of materials as well as its utilization so as not only to keep its market share in the emerging telecom scenario but also to expand and acquire new market segments.

The procurement of materials in BSNL is usually done by inviting tenders and also through M/s ITI Ltd. against their reservation quota (as per guidelines issued by Department of Telecommunications from time-to-time).

The procurement is done at two levels viz.,

- BSNL Corporate Office
- Telecom Circle H/Q

The procurement of materials in BSNL Corporate Office is done for high value critical equipments such as large size switching equipment, transmission equipment, PIJF U/G Cables, WLL equipment & terminals and new technology equipments etc. are a list of items being procured at the BSNL Corporate Office.

Items not covered in the at corporate office stand decentralized for procurement by Telecom Circles. In addition, CGM Telecom Stores, Calcutta has been entrusted with the procurement of following items for some designated Circles:

- Batteries & power plants.
- Line & Wire materials.

This manual contains the detailed procedures, guidelines to be followed by BSNL Corporate Office as well as by Telecom Circles to ensure smoother and faster decision making. While the Manual aims at providing broad procedures for procurement of goods/ services, the decision regarding the competent authority should be taken on the basis of Schedule of Delegation of Administrative and Financial Powers issued by Corporate Office.For purchase without quotations and purchase of goods by a purchase committee, the delegation of powers should be referred.

With the formation of BSNL as a corporate entity in a Liberalized Telecom Market where BSNL has to compete with a large number of competitors, it is imperative for BSNL to serve in the competitive environment. For such a scenario, it is essential not only to see the cost of materials being procured but also the time required for its procurement as well as successful implementation so as to make its presence felt among various competitors.
Thus, not only the cost and time factor is required to be taken into consideration but at the same time the cost of opportunity lost due to long gestation period of procurement and implementation is also to be taken into consideration i.e., the business opportunity is also one of the most important factors for implementation of any such venture/project. Hence, under such circumstances, it is essential to take an overall view for cost of material, time for procurement, method of procurement as well as business opportunity for any such venture/ project. In such a situation, the Management Committee / BSNL Board may decide the methodology to be adopted for such procurement taking into consideration cost, time as well as business opportunities as situation warrants. In addition to open tendering, the
following methodologies can be adopted:

16.2.1 NEGOTIATIONS ROUTE

In a situation where the requirement is of an immediate nature and it is necessary to ensure continued supplies or addition of new features from the existing vendors, the BSNL management committee may decide to place repeat orders up to 100% of the quantities contained in the running contract and at a rate negotiated with the existing vendors considering the prevailing market conditions. Depending upon the total value of additional procurement, the negotiation committee can be constituted with the approval of competent authority of BSNL. This route will however be resorted to in exceptional circumstances.

16.2.2 LIMITED TENDER ROUTE

There are certain specific provisions for calling the limited tender appearing in Para 31 to 36 under Rule 128 in the General Financial Rules (GFRs). The limited tender option has to be exercised in specific circumstances as already provided.

In some cases the equipment is sophisticated and requires thorough technical screening, testing and prototype approval by the Telecom Engineering Centre/Quality Assurance to ensure that these equipments are of sufficient quality level to be used in public Telecom Network. In such cases an open tender may result in the participation of unknown bidders in open tenders, whose capability in making such equipment is yet to be established. They may submit unrealistic bids which may cause major difficulties in the tender evaluation process. In such cases, it would be necessary to screen out such bidders so that BSNL could interact only with bidders who have intrinsic capability as well as proven track record of supplying such sophisticated equipment. Where such equipments are required, it would be worthwhile restricting Bids by issue of limited tenders only to those parties who have proven expertise in manufacture and supply of such equipment and who have prototype approval and production clearance. In such tenders it is essential that the reasons for limiting the tenders to proven suppliers needs to be brought out in the NIT itself so that such an action would stand justified. The issue of such limited tender should have the concurrence of Financial Advisor and personal approval by the head of the unit.

16.2.3 EXPRESSION OF INTEREST ROUTE

In situations where BSNL proposes to induct new technology/ equipment/new service and the specifications of the new technology/ equipment/ new service are not firmed up, BSNL may invite Expression of Interest (EOI) from the available vendors of that technology/equipment/new service. Based on the offers received from the bidders who choose to participate in the EOI, the bidders satisfying the terms of EOI will be short-listed. Before short listing the participants for handing over the tender documents, BSNL may freely interact with them, obtain clarifications and feedback on the delivery of similar equipment/services elsewhere. The short listed bidders will be given the tender document containing detailed technical, commercial and financial conditions. After evaluation by a designated committee, the contract shall be awarded with the approval of competent authority to the successful bidder(s) as per the terms and conditions stipulated in the EOI and the technical, commercial and financial bids.

16.2.4 MANAGED SERVICES AND MANAGED CAPACITY ROUTE

Managed Service is the practice of transferring day-to-day related management responsibility as a strategic method for improved, effective and efficient operations. Typical managed services may be network build (i.e. managed capacity), including planning and design, field operations, Network Operation Centre (NOC) operations, application and service development, billing, etc. Many private operators have chosen to outsource laying out the network to third party companies. Using other Service provider’s telecom towers is the latest trend which falls under managed services. In future, BSNL may also opt for managed service and/ or managed capacity model for which guidelines would be issued subsequently. However, this route shall be applied only on cases specifically approved by BSNL Board/ Management Committee.

16.2.5 RATE CONTRACT ROUTE

Certain routine items/ services of mass consumption are required in the organization, but their precise quantity may not be known. In such cases, the rate contract (RC) route of procurement may be adopted valid for a specific period not exceeding a year. BSNL should have own rate contracts and should not depend on other agencies for this purpose.

16.2.6 E-PROCUREMENT

Procurement through e-procurement and e-tendering should be encouraged. E-Tendering is the carrying out of the tendering process through the Internet, using e-tendering software applications. This promotes competition for the tender, and provides a process that is efficient for both the buyer and suppliers and a selection process that is transparent to bidders. The process results in a host of tangible and intangible benefits to both parties. The ERP project is being implemented and this would provide a platform for e-procurement in BSNL. The modalities and procedures for e-procurement are being framed and shall be issued separately. Meanwhile a set of instructions in this regard has been brought out in this Manual. It has been decided to process the Procurement cases of amount of Rs 2 lakhs and above through e-tendering method.

16.3 GUIDELINES FOR USER SECTIONS

16.3.1 ROLE OF THE USER SECTION

- The User Section (i.e. the Unit that has raised the requisition e.g. Planning/Operations/ Marketing/ Administration/ any other unit) is primarily responsible for deciding and getting approval of the competent authority for the quantities to be procured, the estimated cost of procurement, the eligibility conditions, specifications, technical requirements, Schedule of Requirements and the conditions specific to the procurement. Further, after bid opening, the evaluation is carried out by a Committee whose Chairman/ Convener is usually from the concerned User group. As such, the User Section has a very important role right from inception of the procurement requirement till the finalization of the tender.

- Delay in finalization of tenders often leads to delay in project rollout and revenue loss. Often, the delay could be avoided if the tender conditions and requirements are framed meticulously. Some of the common reasons for delays are mentioned below:

  - The eligibility conditions being restrictive, the unsuccessful bidder complains/ goes into litigation.
  - The technical requirements are too idealistic and many bidders are unable to meet some or the other requirement. This leads to loading/rejection/ relaxation and hence associated delays.
  - Contradictory clauses in the bid document.
  - The technical requirement getting amended during pre-bid clarification leading to ambiguity. As a result, the loading, etc. is challenged by bidders.

- In this chapter, broad guidelines are provided which should be kept in view before floating a tender enquiry. The correct decision will continue to depend on experience and good judgment of the concerned sections.

16.3.2 NEED/ QUANTITY

- The starting point of the procurement process for any item is estimation or forecast of its requirements to be reflected in the tender documents. The price of the item has a bearing on the quantity being tendered for example, higher the quantity, more the chances of price being lower for the same item.

- Provisioning is the basis for any purchase. Excessive provisioning without taking into consideration the important aspects like available stock, outstanding dues/supplies, past consumption pattern and the average life of the equipment/ item etc. results in infructuous expenditure both in term of procurement cost and the inventory carrying cost. The projection and provisioning must be judicious and justified depending on various factors including usage pattern. One time purchase for project or capital equipment/spares should be properly justified taking into account the obsolescence factor, etc.

16.3.3 FORECASTING METHODS

- For all items being procured, the forecast of the equipment is obtained from the concerned user branches that plan for the induction of such equipment into the network. The requirement of the equipment, usually for one year, against each project or by each Circle is worked out after discussion with the concerned Head of the circle/ SSA and finalized by the User Branch. Some of the parameters based on which the forecast should be made are as follows.

1. Target of gross DELs, WLL, Cellular Mobile, Broadband, Lease Lines, etc to be provided.
2. Target of Village Public Telephones to be provided.
3. Requirement of Transmission media, Power Plants, Batteries and
4. Terminal Equipment.
5. Requirement under "New Programmes/ Services".
6. Requirement of service(s) in view of competition from other telecom service providers.
7. Special up gradation requirements, including those due to technological, licensing or regulatory requirements.
8. Maintenance Requirements.
9. Spares.

- The lead time for procurement has an important bearing in these requirements e.g. items having longer lead time need to be procured for requirement over a longer time frame whereas items having very short lead time can be procured for commensurately shorter period of requirements.

- While forecasting the requirements, it is necessary to keep in mind the necessity of ensuring that the projects covered in the requirements are planned projects which have been approved by the competent authorities, for which funds are provided and are backed-up by estimates sanctioned by the competent authorities.

- In the cases where the supplier of the equipment or the production of equipment depends on imported components, it is necessary to have an accurate forecast so that the cost of equipment is shielded from rapid changes in the exchange rate over a longer period of time.

- Planning/ forecast for the next financial year should normally start in September of the preceding year to ensure availability of equipment well in time for the next financial year.

16.3.4 ESTIMATED RATES

- Estimated rates are often worked out in an adhoc, unprofessional and perfunctory manner, at times by extrapolating the price of the lowest capacity equipment or by applying a uniform yearly compounded escalation over the prices of similar equipment purchased few years ago. As estimated rate is a vital element in establishing the reasonableness of prices, it is important that the same is worked out in a realistic and objective manner on the basis of prevailing market rates, last purchase prices, economic indices for the raw material/ labour, other input costs and assessment based on intrinsic value of the item etc.

- The estimated rates should be worked out while keeping in view the above on case-to-case basis and should be vetted by finance wing before issue of NIT.

16.3.5 DECIDING THE ELIGIBILITY CRITERIA

- Credentials, manufacturing capability, quality control systems, past performance for the goods in question, facility for after-sales service, financial background etc. of the supplier(s) may be considered while framing the eligibility conditions.

- In case there is a change in the eligibility conditions with reference to the last successful procurement of same item, or if the good is being procured for the first time, then before issue of NIT it should be checked that sufficient bidders would meet the eligibility criteria. A vendor conference, before issue of NIT, with established suppliers, Original Equipment Manufacturers (OEMs) may be held, if required.

- The eligible Micro & Small Enterprises (MSEs) shall be given the Preferences.

- Requirement for minimum financial turn over Criteria The prequalification criteria in respect of minimum annual financial turnover of a bidder should be kept in such a way as to facilitate the participation of bidders. It should neither be very stringent nor too lax. It should be decided by the respective Business Unit Head on case to case basis.

- Requirement for experience criteria The prequalification criteria in respect of experience of the bidder in respect of having performed similar works should also be part of eligibility. The criteria regarding satisfactory performance of equipment/ stores supplied or satisfactory execution of works etc. may be incorporated according to the requirement of Project/procurement on case to case basis.

16.3.6 GUIDELINES FOR FRAMING THE SPECIFICATIONS AND TECHNICAL REQUIREMENTS

- The specification of the required good should be framed in such a manner that it attracts sufficient number of bidders. The specification, while maintaining the essential requirement of the user department, should not be too restrictive or too lenient. Efforts should also be made to use standard specifications which are widely known to the industry.

- The specifications in terms of quality, type etc., as also quantity of goods to be procured, should be clearly spelt out keeping in view the specific needs of the user sections. The specifications so worked out should meet the basic needs of the organization without including superfluous and non-essential features, which may result in unwarranted expenditure. Care should also be taken to avoid purchasing quantities in excess of requirement to avoid unnecessary inventory carrying costs.

- Specifications should call for new unused goods.

- Specifications shall aim at the latest proven technology and procurement of obsolete goods/ technology shall not be made.

- Specifications should have emphasis on factors like efficiency, optimum fuel/power consumption, use of environmental friendly materials, reduced noise & emission levels, low maintenance cost etc.

- The specifications should also take care of the country's mandatory and statutory regulations, if any, applicable for the goods to be purchased.

- Except in case of proprietary purchase from a selected single source, the specification must not contain any brand name, make or catalogue no. of a particular manufacturer and if the same is unavoidable due to some compelling reasons, it should be followed by the words "or equivalent".

- The specifications and the technical details should be expressed with proper clarity without any ambiguity or double meaning. Wherever necessary, the written specification should be supplemented with drawings for additional clarity etc.

- Deciding tender only on the basis of tender sample is too subjective. Therefore, unless specifically decided due to some reasons duly recorded with the approval of competent authority, tender sample clause shall not be incorporated in the specification. If necessary, suitable stipulations for submission of advance sample (before starting bulk production) by the successful bidder may be incorporated in the specification.

- In some cases, the technical parameters may be marginally different from the TEC GRs. In such cases, the general principle shall be to adopt the TEC GRs and the BSNL specifications could cover only such additional details and/ or deletions as are specially required to be complied for a particular end use. In cases where TEC GRs do not exist or, alternatively, decision has been taken to try the foreign market also, International Standards (like ISO,ITU, IEEE, EIA etc.) may also be adopted. Where no widely known standards exist, the specification shall be drawn in a generalized and broad-based manner to obtain competitive bids from different sources. As far as possible the specifications shall be drafted keeping the BSNL's requirements in mind. The concerned user section shall decide, with the approval of competent authority, the extent of references to full or part of the TEC GR suiting to the actual BSNL network requirements.

- For large infrastructure projects or turnkey projects, the Detailed Technical Requirements (DTR) should be prepared covering the solution architecture, services to be supported, existing network architecture, functional and technical requirements of the product, any other requirement.

16.3.7 SCHEDULE OF REQUIREMENT (SOR)

The Schedule of Requirement (SOR) should be prepared meticulously and it should be clearly indicated that what details are expected in the detailed Bill of Material (BOM) for each SOR item. This issue should be specially considered while dealing with projects having number of SOR items.

16.3.8 SPECIAL INSTRUCTIONS TO BIDDERS AND SPECIAL CONDITIONS OF CONTRACT

The user section in consultation with the MM cell may introduce additional instructions to bidders and special commercial conditions of contract, as necessary. These special conditions and/ or instructions shall constitute the Section- 4 B & 5 B of the tender enquiry document as explained in Chapter 3.

16.3.9 AUTHORITIES COMPETENT TO PURCHASE GOODS AND THEIR PURCHASE POWERS

- An authority which is competent to incur contingent expenditure may sanction the purchase of goods required for use in BSNL in accordance with Schedule of Delegation of Financial Powers issued by BSNL Corporate Office, following the general procedure contained in this manual.

- The Board of Directors of BSNL has full powers for procurement of goods and services.

- A demand should not be split into small quantities for the sole purpose of avoiding the necessity of taking approval of the higher authority required for sanctioning the purchase of the original demand.

- Amendment in any commercial condition of the contract may be with the explicit approval of Management Committee of BSNL Board.

16.4 PURCHASE PROPOSALS- ROLE OF IFA

All purchase proposals containing the important details of items such as, “Quality to be purchased, Requirement of the items as per Norms, Target for the year, stock in hand and balance requirements” are to be put up for concurrence of Internal Financial Adviser. The IFA of the Circle is to take this information into account in addition to any other inputs considered necessary, before giving finance concurrence for purchase of any item.

While making procurements of decentralized items (as well as other huge purchases requiring call of tenders), Circle IFA is to be an integral part of whole process right from the stage of scrutiny of indent to placement of orders. His concurrence would be necessary while finalizing the requirement and while floating the tender as well as while approving the procurements. Mere consultation with IFA would not be sufficient. Purchase order must be vetted by Finance before issue.

It will be one of the duties and responsibilities of the IFA that all such proposals of procurements are thoroughly examined so as to ensure that the procedures laid down by the Department and the terms and conditions for making purchases of stores have been fulfilled/adhered to strictly.

In case any proposals does not fulfil the prescribed procedures and terms/conditions, IFA in the SSA/Circle must record in writing the reasons and return to the authority concerned for remedial action.

If however it is not possible to modify such proposals, Heads of units must record the reasons before according sanction for purchase of stores but the relevant extracts of the proposals must be sent simultaneously with full facts and figures to the next higher authorities namely IFA of the Circle office etc., and by the Circles/Districts to the BSNL HQ who may process such case further.

16.5 STORES PURCHASE COMMITTEE & TENDER PROCESSING

To ensure that purchases proposed are strictly as per requirements and are according to existing Departmental standards and specifications where prescribed, the purchases are to be processed through “Stores purchase committees” set up for each SSA.

TENDER PROCESSING

16.6 BID DOCUMENTS

16.6.1 PREPARATION OF TENDER ENQUIRY DOCUMENT

- A set of Standard Tender Enquiry Document has been prepared in line with the purchase policy of BSNL. The broad procedures for tendering process and contract management are available in Section-4 Part A and Section-5 Part A of this Standard Tender Enquiry Document. The officials handling purchases must, at the outset, get themselves acquainted with the rules, regulations, procedures etc. contained in these chapters. This standard document should be utilized for preparing tender enquiry document while incorporating specific requirements on case-to-case basis.
- While formulating the tender enquiry document, care should be taken to avoid contradictions among the stipulations incorporated in the document. Duplications should also be avoided, except where duplication is unavoidable and necessary.
- The tender enquiry document should not contain any footnote or vague stipulation, which may create confusion in the mind of the bidder.

16.6.2 STANDARD TENDER ENQUIRY DOCUMENT

- The text of the Standard Tender Enquiry Document has been grouped under different broad sections in order to streamline the purchase system and also to make the system transparent, comprehensive, efficient and user-friendly. The broad sections of the document are :

Item Details in tender document

Section No.	Item
1.Part A	Detailed NIT
1. Part B	Newspaper NIT
2.	Tender Information
3 Part A	Scope of work
3 Part B	Technical Specifications/ Requirements
3 Part C	Schedule of Requirements(SOR)
4 Part A	General Instructions to Bidders(GIB)
4 Part B	Special Instructions to Bidders(SIB)
4 Part C	E-tendering Instructions to Bidders (If applicable)
5 Part A	General (Commercial) Conditions of Contract (GCC)

5 Part B	Special (Commercial) Conditions of Contract (SCC)
5 Part C	General Conditions of AMC (If applicable)
6.	Undertaking & declaration
7.	Performa (s)
8.	Bidder's profile & Questionnaire.
9.	Bid Form & Price Schedule

- A reading of the sections of the tender enquiry document, in the above order will make it amply clear about the purpose and instructions behind the same. However, some broad guidelines for using this document (viz. Standard Tender Enquiry Document) are provided in the subsequent paragraphs.

16.6.3 SECTION-1–DETAILED NOTICE INVITING TENDER (DNIT) & NEWSPAPER NIT (NNIT)

- The Detailed Notice Inviting Tender (DNIT) should contain:
  - Brief description of the goods and quantity
  - Eligibility conditions
  - Period and terms of delivery
  - Cost of the tender/ bidding document
  - Place(s) and timing of sale of tender documents
  - Place and deadline for receipt of tenders
  - Place, time & date for opening of tenders
  - Amount of Bid Security / Earnest Money Deposit
  - Any other important information
- A sample format of NNIT is placed below (refer Section-1Part B of the Standard Tender Enquiry Document also).

NOTICE INVITING TENDER

Tender No. MM/…………./T…………./2020-21 dated ……………..

Sealed tenders are invited by………………. (Write Designation of Officer approving inviting of tender) e.g. "CMD, BSNL" from the prospective bidders for the following work:

Name of the work	Quantity (With Unit)	Estimated cost in Rs.

Last date of receipt of tender is …............. up to ………… Hours.

For further detailed information, kindly visit our website www.bsnl.co.in& follow Link for E-tenders by BSNL.

DGM (MM)

Tel. No. ………………. ,FAXNo. ………………

- The Detailed Notice Inviting Tender (DNIT) shall be put in the format at Para 3.3.1 above on the Website of BSNL i.e. **www.bsnl.co.in** or website of respective Circle and provide a link with NIC website& e-tendering portal.
- As per latest guideline of BSNL Corporate office letter no.CA/MMT/3-1/2018 Dated 17.07.2018, advertisement in case of tenders above certain threshold value should be given on central public procurement portal(CPPP), Government e-marketplace(GeM) portal as well as on the website of ministry/ Departments/Organizations ,if available.
- After issue of NIT, eligibility conditions should not be changed.

16.6.4 SECTION 2-TENDER INFORMATION

This section provides important information of the tender in respect of Tender methodology, Type of Tender, Envelope system, Bid validity, Payment terms, Delivery Schedule, consignee details etc.

16.6.5 SECTION 3- SCOPE OF WORK, TECHNICAL SPECIFICATIONS/REQUIREMENTS AND SOR

- Section 3 A provides information on Scope of Work.
- Section 3 B -Technical specifications/Requirements.
  - Aspects to be considered while framing the Technical Requirements and Specifications are mentioned in the previous chapter in Para **Error! Reference source not found.**.
  - There shall be no change in specifications once tender has been opened. Purchase orders and supplies shall be strictly as per the specifications laid down in the tender. Delivery period extension for purchase order, if considered, shall also be with the same specification as given in tender. Any change in specifications after issue of tender shall be applicable to subsequent tenders only.
- **Section 3 C-Schedule of requirements (SOR)**
  - The Schedule of Requirements (SOR) should clearly indicate all the essential details of the required goods and services, measurement unit, total quantity etc. Para **Error! Reference source not found.** of the previous chapter may also be referred.
  - Requirement of detailed bill of material (BOM) for each SOR item should be clearly mentioned wherever applicable. The note in Section-3 Part C of the Standard Tender Enquiry Document in Chapter 4 may be referred.
  - If the list of requirements contains more than one schedule; each schedule should be described in a self-contained manner along with the applicable earnest money. The period of delivery and terms of delivery are also to be incorporated and if these two aspects differ from schedule to schedule, the same should be properly clarified in the Schedule of Requirements.

Note: Section-3 Part A, B & C have to be prepared by the concerned user section.

16.6.6 SECTION-4 PART A GENERAL INSTRUCTIONS TO BIDDERS (GIB)

This section provides all the necessary information as well as guidance to the prospective bidders for preparation and submission of their bids. In addition, this section informs the bidders about the tender opening procedure and also how the bids will be scrutinized, evaluated and ranked to decide the lowest evaluated responsive bid for placement of the contract. This section is to be included unchanged in every tender enquiry document. However, for every purchase case, there will be distinct purchase specific information and data, which are to be made known to the prospective bidders. Such needs are to be taken care of in Section 4 Part B–'Special Instructions to Bidders' as elaborated in the subsequent paragraphs.

16.6.7 SECTION-4 PART B - SPECIAL INSTRUCTIONS TO BIDDERS(SIB)

- The issues and the areas for which specific data/ details are to be provided for a purchase case can be located easily by going through the clauses of the General Instructions to Bidders (GIB) under Section-4 Part A. Further, for certain aspects of a particular purchase case, necessity may arise to incorporate additional special instructions. These include clauses for eligibility conditions, value of bid security, single-stage or two-stage bidding, opening stages, additional documents to be submitted, evaluation criteria, etc. However, while doing so, care should be taken not to violate any instruction/ directive contained in the procurement policies of BSNL.

16.6.8 SECTION-5 PART A - GENERAL (COMMERCIAL) CONDITIONS OF CONTRACT (GCC)

This section provides the general rules, regulations and conditions which will guide the resultant contract. This section is to be incorporated unchanged in the tender enquiry document. However, here also, there may be some purchase specific contractual conditions, which are to be suitably incorporated in the tender enquiry documents. Such special conditions are to be included in Section 5-B - 'Special (Commercial) Conditions of Contract' and Section 3-Part B–'Technical Specifications' as elaborated in following paragraphs.

16.6.9 SECTION-5-B - SPECIAL (COMMERCIAL) CONDITIONS OF CONTRACT (SCC)

- The areas of the General (Commercial) Conditions of Contract (GCC), in which specific data/ details are to be provided and/or which need modification to take care of special situations for a particular purchase case can easily be located by going through the GCC clauses. However, while doing so, it should be ensured that such modifications remain within the framework of the procurement policies of BSNL.

- The User Section (i.e. the Unit that has raised the requisition e.g. Planning/Operations/ Marketing/ Administration/ any other unit) shall have to formulate the Section 5-Part B (SCC) accordingly. Also, the approval of the competent authority must be taken while framing such details and before incorporating the same in the Special (Commercial) Conditions of Contract (SCC).

- **Payment Terms:**

  The terms and mode of payment will depend on the milestones defined here which may again depend upon nature of the goods, terms of delivery, requirement of incidental services, etc.

  The actual payment conditions for new products or procurements having installation and AMC services may be decided on case-to-case basis and incorporated in Section-2.

  The documents needed for effecting the payments are also to be specified accordingly.
- **Liquidated Damages (LD):**

  The LD defined in Section-5 Part A (GCC) is only for the delay in supply of goods. However, if the contract involves services such as Installation, commissioning, etc., then the penalties applicable when there is delay in executing such services should be mentioned in Section-5 Part B (SCC).

- **Change in make/ model after opening of bids:**

  In some cases supplier / vendor asks for change in
  - model of main equipment which may be required due to :

    (i) Change in Technology /Technological up gradation.

    For allowing any change in model of the equipment /item the vendor will be required to establish the suitability of the replacing equipment in regard to the required specifications.

    (ii) Obsolescence of the technology/ Phase-out of the item in production line by the OEM to bidder.

    For allowing any change in make/model of the equipment/item due to obsolescence or phasing out of model by OEM, a certificate from OEM in this regard must be submitted by the bidder.

    (These are some illustrative situations and are not exhaustive)

  - Make/ model of the third party equipment, which is not the main tendered item. Shall be allowed provided that the vendor is able to establish the suitability of the replacing equipment in regard to the required specifications.

In such aforesaid situations, case shall be dealt as per following steps

- A committee, of the level of CET, should be formed for assessing the suitability of the alternate offered item in regard to specifications and resultant financial gain, if any, to BSNL due to this change.
- These cases should be decided by the tender approving authority on case-to-case basis upon recommendations of the committee so formed as above.

Note 1:- In case of aforesaid change in any make/model of the equipment/item, lowest of the rates offered by proposing bidder or any other bidder who quoted for the same make/model in the tender, shall be applicable.

Note 2: - In any case the vendor shall be required to supply the item at a rate not more than the quoted rate in the tender.

16.6.10 SECTION 9 – PRICE SCHEDUL

There are two price schedules, Part-A and Part–B for indigenous and imported items respectively, which are self-explanatory.

16.6.11 PRE-BID CLARIFICATIONS AND AMENDMENTS IN THE TENDER DOCUMENT

- After issue of tender document, a number of queries are sometimes received and pre-bid clarifications are issued by BSNL. Sometimes, the same clause gets clarified in contradictory manner against different clarifications. Sometimes the original clause gets amended but the language of new clause is not clear as the clarification is replied simply as “Yes please” or “agreed” or “accepted”. During evaluation and subsequently while preparing special conditions for issue of APO/ PO, lot of difficulty is faced. In this regard, the clarifications issued should be unambiguous and if any clause is getting modified, then the amended clause should be stated in proper language.
- When a large number of clarifications have been issued resulting in number of changes in the tender clauses, then after issue of the last pre-bid clarification, BSNL should issue the updated tender document incorporating all the relevant clarifications and amended clauses just below the original clause. If printing of the amended document may not be possible due to time constraint, then it should be uploaded on BSNL Website/ electronic tender portal. In such cases, the bidders should be asked to submit the clause-by-clause compliance of this amended tender document only and for evaluation the CET Members should rely only on the amended document.

16.7 OPENING OF BIDS BY PURCHASER

- The purchaser shall open bids online (in case of e-Tenders) or physically (in case of manual bidding process) in the presence of the authorized representatives of bidders online (in case of e-Tenders) or physically present (in case of e-Tenders as well as manual bidding process) who chose to attend, at time & date specified in Clause 7 of D NIT(Section-1) on due date.
  The bidder's representatives, who are present, shall sign in an attendance register. Authority letter to this effect shall be submitted by the authorized representatives of bidders before they are allowed to participate in bid opening (A Format is given in enclosed in Section-7 C).
- Name of envelopes to be opened & information to be read out by Bid Opening Committee
  (i) In Single stage bidding & single envelope system; techno-commercial bid & financial Bid will be opened on the date of tender opening given in NIT.
  (ii) In Single stage bidding & two envelopes system; the bids will be opened in 2 stages i.e. the techno-commercial bid shall be opened on the date of tender opening given in NIT. The financial bid will not be opened on the Date of opening of techno commercial bids in this case & sealed financial bids will be handed over to DGM (MMT), BSNL, CO./ Other section in BSNL, CO./ 'MM' cell in circle/ SSA offices (as applicable) for retention.
  Thereafter the CET will evaluate Techno-commercial bids & the report of CET will be approved by competent authority.
  The financial bids of those bidders who are approved to be techno-commercially compliant by the competent authority, will be opened by TOC in front of techno commercially eligible bidders/ authorized representatives by sending them a suitable notice.
  (iii) The following information should be read out at the time of Techno-commercial bid opening:-
  a) Name of the Bidder
  b) Name of the item
  c) EMD amount & validity and acceptability
  d) Information in respect of eligibility of the bidder.
  e) Details of bid modification/ withdrawal, if applicable.
  (iv) The following information should be read out at the time of Financial bid opening:-
  a) Name of the Bidder
  b) Name of the item
  c) Quantities/prices quoted in the bid
  d) Discount, if offered
  e) Taxes & levies

- The date fixed for opening of bids, if subsequently declared as holiday by the BSNL, the revised date of schedule will be notified. However, in absence of such notification, the bids will be opened on next working day, time and venue remaining unaltered.

16.8 CLARIFICATION OF BIDS

- To assist in the examination, evaluation and comparison of bids, the purchaser may, at its discretion ask the bidder for the clarification of its bid. The request for the clarification and the response shall be in writing. However, no post bid clarification at the initiative of the bidder shall be entertained.
- If any of the documents, required to be submitted along with the technical bid is found wanting, the offer is liable to be rejected at that stage. However the purchaser at its discretion may call for any clarification regarding the bid document within a stipulated time period. In case of non-compliance to such queries, the bid will be out rightly rejected without entertaining further correspondence in this regard.

16.9 PRELIMINARY EVALUATION

- Purchaser shall evaluate the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed and whether the bids are generally in order.
- Arithmetical errors shall be rectified on the following basis. Based on the quoted percentage of duties and taxes, Freight etc. the amounts quoted thereof shall be worked out and rounded off to 2 decimal points. In case the unit price quoted in column 12 does not tally with its breakup quoted in col. 4, 6, 8, 10 & 11, the same shall be corrected by summing up the breakups. If there is a discrepancy between the unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected by the purchaser.
- If there is a discrepancy between words and figures, the amount in words shall prevail. If the supplier does not accept the correction of the errors, its bid shall be rejected.
- Prior to the detailed evaluation pursuant to clause 22, the Purchaser will determine the substantial responsiveness of each bid to the Bid Document. For purposes of these clauses, a substantially responsive bid is one which confirms to all the terms and conditions of the Bid Documents without material deviations. The purchaser's determination of bid's responsiveness shall be based on the contents of the bid itself without recourse to extrinsic evidence.

- A bid, determined as substantially non-responsive will be rejected by the purchaser and shall not subsequent to the bid opening be made responsive by the bidder by correction of the non-conformity.
- The Purchaser may waive any minor infirmity or non-conformity or irregularity in a bid which doesn't constitute a material deviation, provided such waiver doesn't prejudice or affect the relative ranking of any bidder.

16.10 FORMATION OF COMMITTEE FOR EVALUTION OF TENDER/ EOI (CET)

16.10.1FORMATION OF COMMITTEES FOR EVALUATION OF TENDER

- Tenders are evaluated by a Committee called Committee for Evaluation of Tender. Its formation and constitution is covered in this chapter. The Committee for Evaluation of Tender (CET) is constituted for the evaluation of each and every tender. This duly constituted CET evaluates the tender as per the terms and conditions and other clauses stipulated in the tender document. The Committee submits its recommendations in the form of a report. This report is thereafter examined by the procurement branch of the BSNL. The proposals emerging out of the recommendations of the Committee for Evaluation of Tender are submitted to the competent authority for approval.
- Each tender is evaluated by a Committee for Evaluation of Tender set up for this purpose. The formation of the Committee is proposed by the MM branch and approved by the concerned Director of BSNL Board. In case of tenders issued by field units, the CET would be approved by the tender approving authority. Formation of the CET should be done well in advance of the opening of the Bids.

16.10.2CONSTITUTION OF CET

- A Committee for Evaluation of Tender basically comprises of three members representing the Planning/ User, MM and Finance Wings, so that bids could be evaluated technically, commercially and financially. In addition, when the item is likely to have impact on the quality of service, a member from the Operations/ QA Branch may be included.
- The Technical Member would be from the concerned User Wing and who would be generally the chairman/ convener and who would have the prime responsibility for preparation of the report.
- The commercial member would be from the MM Cell.
- The Finance member would be from Finance Cell.

Table 30. Constitution of CET

Technical	User (Planning/ Operations/ Marketing/ Admin/ Service/ Technology, etc) cell	Chairman/ Member-cum-Convener
Commercial	MM Cell	Member
Finance	Finance Cell	Member

- In addition depending upon the nature of the tender, officer(s) from Operation Branch/ any other related branches could also be co-opted as part of the Committee for Evaluation of Tender.

16.10.3 LEVEL OF COMMITTEE FOR EVALUATION OF TENDER

The level of the Committee members for Evaluation of Tender depends upon the value of the Tender. The levels for different value are given below :

Table 31. Level of CET

Value of the Tender	Members		
	Technical	Commercial	Finance
Up to Rs 10 Crores	DGM	AGM	AGM
>Rs 10 Cr & up to Rs 50 Cr	DGM	DGM	DGM
>Rs 50 Cr &uptoRs 100 Cr	PGM / GM	DGM	DGM
> Rs 100 Cr	PGM / GM	PGM / GM	PGM / GM

16.10.4WORKING GROUPS

For the Purpose of evaluating complex telecommunication system or those costing more than 100 Crores, it may be necessary to provide the main Committee for Evaluation of Tender with the assistance of the Technical Working Group, Commercial and Finance Working Groups. Such Tenders are high value Tenders, where the Evaluation Committee level would be at GM and above. The Working Groups or sub-committee would be at DGM level. The setting up of such Groups/ sub- committee would require approval of the concerned Director of BSNL Board. However, the necessity of forming such Groups should be decided by the Committee for Evaluation of Tender.

16.11 CONTACTING THE PURCHASER

- No bidder shall try to influence the Purchaser on any matter relating to its bid, from the time of the bid opening till the time the contract is awarded.
- Any effort by a bidder to modify its bid or influence the purchaser in the purchaser's bid evaluation, bid comparison or contract award decision shall result in the rejection of the bid.

16.12 PERFORMANCE BANK GUARANTEE

16.12.1PURPOSE

Performance Bank Guarantees are obtained from suppliers to ensure performance of the contract as specified in the purchase order including warranty for satisfactory working of the equipment and stores during the warranty period. This also serves to cover the risk of the BSNL during the performance of the contract.

16.12.2 WHEN REQUIRED

After a tender has been evaluated and the purchase proposal of the BSNL to place orders on the bidders has been approved by the competent authority, a formal letter of intent(Advance Purchase Order) is placed on the supplier. The supplier is required to furnish bank guarantee for an amount equal to 5% of the value of Advance purchase order from a Nationalized/ Scheduled Bank in a standard format within two weeks from the date of issue of letter of intent. The acceptance of the letter of intent by the supplier as well as furnishing of the Bank Guarantee would result in the issue of formal purchase orders.

16.12.3 VALIDITY OF PERFORMANCE SECURITY

- The validity period of Performance Security in the form of Performance Bank Guarantee should be in proportion to the delivery period as per the details given below :

S. No.	Delivery Period	Validity Period of Performance BG
1.	Up to 6 months	2 Years
2.	6 months to 1 year	2 years and 6 months
3.	More than 1 year	3 years

- However, in no case the validity period of the PBG should be less than the period by which all the contractual obligations of the bidders in the respective tenders are likely to be fulfilled.
- BSNL may ask for extension(s) of the validity period till the time all contractual obligations have been satisfactorily performed by the supplier.

16.13 ACTION TO BE TAKEN ON RECEIPT OF BANK GUARANTEE FROM THE SUPPLIER

- Examination for Accuracy: The first action to be taken on receipt of bank guarantee from the supplier is to examine the genuineness of the bank guarantee in the light of standard format prescribed as well as a formal check with the bank.
- Acceptance of Bank Guarantee: Acceptance of Bank Guarantee is issued to the concerned bank after its genuineness has been examined and entries made in the Register. The acceptance letter is issued to the concerned bank with a copy to the

supplier.

- Entry in Bank Guarantee Register: After the genuineness has been established, it is entered in the Bank Guarantee Review Register with reference to the amount and the date of validity supplier-wise. The format of the register is enclosed. The entry of the bank Guarantee in the Register is done in the space allocated to the month and year on which it expires and not the month and year of the issue of the Bank Guarantee i.e. entries in the register indicate expiry date of the bank guarantee, thereby enabling them to be monitored in case renewals are required.
- Periodic Monitoring of Register: A periodic monitoring of the status of the validity of the bank guarantee vis-à-vis the performance of the supplier against the contract is necessary to ensure that the bank guarantee is available to BSNL, if required.

16.14 IMPORTANCE OF BANK GUARANTEE REGISTER

Bank Guarantees are one of the remedies available to the BSNL for covering risk during the performance of the contract. It is therefore necessary that bank guarantee be properly entered in the register and monitored so that these remedies are available. Monthly checks of all the pending bank guarantees which expire in the next three months are necessary. All bank guarantees which are likely to expire during the next three months, should be followed up with regard to the performance of the supplier against the contract. In case the supplier has satisfactorily performed this contract, then no further action will be taken. However, in case the supplier has not performed satisfactorily, then it would be necessary to ask for an extension of validity of bank guarantee for a further period of 3 months to 1 year so that these remedies would continue to be available to the BSNL. Therefore, when the monthly check-up of the bank guarantee register is carried out, the bank guarantees likely to expire in the next three months needs to be separated out in two categories viz.

- which are by and large OK and
- where extensions need to be asked for immediately.

16.15 EXTENSION OF BANK GUARANTEE

If extension of the Bank Guarantee is required then the supplier should be intimated at least two months before the expiry date for furnishing the extension well in time. If extension is not received 15 days before the expiry of the Bank Guarantee, then a formal letter should be issued to the bank asking for revocation unless the Bank Guarantee is extended as per BSNL requirements. If the Bank Guarantee is not extended then it should be encashed. It should be ensured that the Bank Guarantee is not allowed to expire in any circumstances.

16.16 OPERATION OF THE SET-OFF CLAUSE

Till now the suppliers are being asked to furnish bank guarantee for each purchase order. At present, there is no practice for an omnibus bank guarantee, covering say one year. In order to cover risk element, the purchase order should contain a set-off clause which will enable BSNL to encash any bank guarantees against any other purchase order given by the same supplier. Therefore, it is prudent to keep all the bank guarantees of a supplier recorded at the same place in the register so that the operation in the set-off clause wherever felt necessary could be under taken without any problem.

16.17 RELEASE OF BANK GUARANTEE

Before bank guarantee is released, it should be ensured that the equipment has been taken over satisfactorily by BSNL, no claim is pending against the supplier and that the equipment are working satisfactorily during warranty period. The combination of "taken over" certificate and "no claim" certificate will lead to release of the bank guarantee to the supplier.

16.18 ENCASHMENT OF BANK GUARANTEE

- This is resorted to where the supplier fails to honor its contractual obligations. The precaution to be taken is to ensure that the bank guarantee is still valid. A formal letter to the bank giving particulars of the guarantee number asking for revocation of the Bank guarantee in favor of the BSNL, needs to be issued.
- Even in case where BSNL has asked for extension well in advance, the extension has not been given by the bank, then it is within the rights of the BSNL to encash the bank guarantee just prior to the date of expiry and the bank is bound to honor this revocation.

16.19 ACCEPTABLE FORMS OF PERFORMANCE SECURITY

The Performance Security should be in the form of a Bank Guarantee issued by a scheduled bank in favour of BSNL. Performance security in the form of Account Payee Demand Draft, Fixed Deposit Receipt or Banker’s Cheque, safeguarding the purchaser’s interest in all respects, shall also be acceptable. However, no interest shall be payable on this account.

16.20 FORMAT OF PERFORMANCE SECURITY (PBG)

A model format of Performance Bank Guarantee is provided at Section-IX of Chapter 4(Standard Tender Enquiry Document).

16.21 VERIFICATION OF THE BANK GUARANTEES

Bank Guarantees submitted by the bidders as Performance security or additional bank guarantee must be immediately verified from the issuing Bank before acceptance

16.22 ADVANCE PURCHASE ORDER

16.22.1PURPOSE

The purpose of the Advance Purchase Order (APO) is to formally intimate the successful bidder/bidders of the intention of the BSNL to procure the equipment.

16.22.2 CONTENTS

The APO shall contain the following information:

- File number, date and reference of Tender Enquiry No. and submitted bid reference No., etc.
- Equipment to be procured with quantities/price.
- Technical Specifications
- Commercial conditions governing the contract.
- Finance aspects such as advance payable (if any), amount of Performance Bank Guarantee along with format of the Bank Guarantee.
- Delivery Schedule.
- Period within which the Bidder has to confirm acceptance to the APO along with the performance bank guarantee.
- Annexures comprising Sections-3 Part B , 5 Part A, 5 Part B of the bid document, AMC draft, scope of work, detailed bill of material, make-model list, etc.

16.23 PLACEMENT OF ORDER

- The Purchaser shall consider placement of orders for commercial supplies only on those eligible bidders whose offers have been found technically, commercially and financially acceptable and whose goods have been type approved/ validated by the purchaser. The Purchaser reserves the right to counter offer price(s) against price(s) quoted by any bidder.
- The ordering price of any bidder shall not exceed the lowest evaluated package price. However, at a later stage if there is any increase in Govt. duties/taxes within scheduled delivery date (SDD), the unit prices with applicable revised duties/taxes will be paid to suppliers irrespective of their ranking viz.L1/ L2/ L3 …..etc keeping other levies & charges unchanged.
- The purchaser reserves the right for the placement of order of entire tendered quantity on the bidder with the lowest evaluated price.
- In the event of L2 and so on bidders refusing to accept its package de rated to the price of L1 bidder, BSNL reserves the right to place the order for entire quantity to the L1 bidder. It is mandatory for the L1 bidder to accept such an offer (second APO) at evaluated L-1 price and shall perform the whole contract as envisaged in the tender document. The additional quantity, due to non-acceptance of respective quantity by L2 and/or L3 and so on bidders, (Distribution of Quantity) in section 4 Part B, shall be supplied by the L-1 bidder as part of whole contract.

16.24 PURCHASER'S RIGHT TO VARY QUANTITIES

(a) BSNL reserves the right to increase or decrease up to 25% of the quantity of goods and services specified in the schedule of requirements without any change in the unit price or other terms and conditions at the time of award of contract.

(b) BSNL also reserves the right for placement of additional order or up to 50% of the additional quantities of goods and services contained in the running tender/ contract within a period of twelve months from the date of acceptance of first APO in the tender at the same rate or a rate negotiated (downwardly) with the existing venders considering the reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc and supplies to be obtained within delivery period scheduled afresh.

b) In exceptional situation where the requirement is of an emergent nature and it is necessary to ensure continued supplies from the existing venders, the purchaser reserves the right to place repeat order up to 100% of the quantities of goods and services contained in the running tender /contract within a period of twelve months from the date of acceptance of first APO in the tender at the same rate or a rate negotiated (downwardly) with the existing venders considering the reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc. Exceptional situation and emergent nature should be spelt out clearly detailing the justification as well as benefits accrued out of it and loss incurred in case this provision is not invoked and approved by the authority competent to accord administrative and financial approval for the procurement calculated on the basis of total procurement i.e. initial and proposed add-on quantity.

16.25 PURCHASER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of contract without assigning any reason whatsoever and without thereby incurring any liability to the affected bidder or bidders on the grounds of purchaser’s action.

16.26 ISSUE OF ADVANCE PURCHASE ORDER

- The issue of an Advance Purchase Order shall constitute the intention of the Purchaser to enter into contract with the bidder.
- The bidder shall within 14 days of issue of the advance purchase order, give its acceptance along with performance security in conformity with the proforma provided with the bid document at Section-7B.
- L-1 bidder may be issued Advanced Purchase Order (APO) in two stages. The first APO shall be issued for L-1 quantity as defined in clause above. The second APO may be issued to L-1 bidder only when the Purchaser exercises the right for placement of order on balance tendered quantity on the bidder with the lowest evaluated price in conformity to Clause 24.3 & 24.4 of Section 4 Part A.

16.27 SIGNING OF CONTRACT

- The issue of Purchase order shall constitute the award of contract on the bidder.

- Upon the successful bidder furnishing performance security, the Purchaser shall discharge the bid security, except in case of L-1 bidder, whose EMBG/ EMD shall be released only after finalization of ordering of complete tendered quantity.

16.28 ANNULMENT OF AWARD

Failure of the successful bidder to comply with the requirement shall constitute sufficient ground for the annulment of the award and the forfeiture of the bid security in which event the Purchaser may make the award to any other bidder at the discretion of the purchaser or call for new bids.

16.29 GOVERNMENT E-MARKET PLACE (GEM)

Based on recommendations of Group of Secretaries made to Hon'ble Prime Minister, the Government decided that GeM SPV will create a one stop Government e-Market Place (GeM) to facilitate on line procurement of common use Goods and Services required by various Govt. Departments/organizations/PSUs. GeM aims to enhance transparency, efficiency, and speed in public procurement. It provides the tools of e-bidding, reverse e-auction and demand aggregation to facilitate the Government users achieve the best value for their money.

The purchases through GeM by Government users have been authorized and made mandatory by Ministry of Finance by adding a new Rule No. 149 in the General Financial Rules2017.

Special purpose Vehicle to be called Government e-market place(GeM SPV) as the National Public procurement portal as section 8 Company registered under the Companies Act 2013 for providing procurement of goods and services required by Central & State Government organizations. GeM SPV shall provide an end-to-end online Market place for Central and State Government Ministries/Departments. Central & State Public Undertakings(CPSUs&SPSUs). Autonomous Institutions and Local bodies, for procurement of common use goods & services in transparent and efficient manner.

ADVANTAGES FOR BUYERS

- Offers rich listing or products for individual categories of Goods/services
- Makes available in search, compare, select and buy facility
- Enables buying of Goods and Services online as and when required
- Provides transparency and ease of busying
- Ensures continuous vendor rating system
- Up-to-date user-friendly dashboard for buying, monitoring supplies and payments
- Provision of easy return policy
- Search with option to provide multiple consignee locations and quantity after authentication
- Order process redesigned for ease of use
- Provision to generate multiple bills for one single order
- Multiple CRAC to be generated on the basis of the invoice and generated for one order
- Bunching for products is available for Bidding

ADVANTAGES FOR SELLERS

- Direct access to all Government departments
- One-stop shop for marketing with minimal efforts
- One stop-shop for bids/reverse auction on products/services
- New product suggestion facility available to sellers
- Dynamic pricing: Price can be changed based on market conditions
- Seller friendly dashboard for selling, and monitoring of supplies and payments
- Consistent and uniform purchase procedures across the GeM portal
- Multiple consignee locations are enabled with or without variation
- Multiple invoices for one order
- Ensures continuous vendor assessment system

PROCUREMENT OF GOODS AND SERVICES THROUGH GOVERNMENT e-MARKET PLACE(GeM)- IMPLEMENTATION OF PROVISIONS OF GFR 2017 IN BSNL:-

BSNL Board has approved the implementation of GFR 2017 in place of GFR 2005 in BSNL for procurement of Goods & Services through GeM Portal.

Rule 149 of GFRs 2017 :-

- Upto Rs.50,000/- through any of the available suppliers on the Gem, meeting the requisite quality, specification and delivery period.
- Above Rs.50,000/- and upto Rs.30 lakhs through the GeM seller having lowest [price amongst the available sellers of atleast three different manufacturers on GeM meeting the requisite quality, specification and delivery period. The tools for online bidding and online reserve auction available on GeM can be used by the buyer if decided by the competent authority.
- Above Rs.30 lakhs through the supplier having lowest price meeting the requisite quality, specification and delivery period after mandatorily obtaining bids using on line bidding of reverse auction tool provided on Gem.
- The invitation for the on line e-bidding/reverse auction will be available to all the existing sellers or other sellers registered on the portal and who have offered their goods/service under the particular product/service category as per terms and conditions of Gem.
- The above mentioned monetary ceiling is applicable only for purchases made through Gem. For purchases, if any outside Gem, relevant GFR Rules shall apply.
- The Govt. buyers may ascertain the reasonableness of prices before placement of order using the business analytics(BA) tools available on Gem including the last purchase price of Gem, Department's own last purchase price etc.,
- A demand for goods shall not be divided into small quantities to make piecemeal purchases to avoid procurement through L1 buying/biddings reverse auction on

Gem or the necessity of obtaining the sanction of higher authorities required with reference to the estimated value of the total demand.

- All such powers shall be exercised by the CGMs/GMs/TDMs (Circles Heads/SSA Heads) strictly in accordance with the approved budget, business plan/policies and guidelines of the Central Govt./Admn ministry issued in this regard. Further these powers are to be exercised with the concurrence of concerned IFA after observing rules, orders and instructions issued from time to time.

(BSNL Corporate office letter No. CA/MMT/3-1/2017 dated 20th April 2018)

16.30 CONCLUSION

The tendering process is a means for businesses to put their services forward to fulfil advertised contracts and projects. Winning tenders can prove to be profitable for businesses but the process can seem demanding – every application is time-consuming and requires a level of detail companies new to the system may not have expected. However, with proper preparation and understanding, any business can perfect its approach to a tender and be successful. This knowledge gives a closer look at the tendering process, covering the following each steps of tendering.

17 TRANSFORMING STRESS

17.1 LEARNING OBJECTIVE:

17.2 AT THE END OF SESSION, THE TRAINEES WILL BE ABLE TO:-

- Define stress
- Explain the effects of stress
- Describe the different types of stress
- Explain "Who are more vulnerable to fall prey to stress?"
- Tips for managing stress

17.3 INTRODUCTION:

Stress is no more a rare phenomenon. In this age of cut-throat competition, more and more people are beginning to suffer from stress. One is constantly under pressure to perform and to overtake others in the race for more money and more fame. The reason we suffer from stress is because we are insensitive to the mental and physical habits and patterns which maintain a constant level of activation in our bodies and mind.

Everywhere we are now confronted with a competitively hectic life, thus racing against time and virtually ending up with tension and fatigue. Fatigue, relating to work, is more a state of mind than that of body. Whatever might be our attitude towards life, we cannot get away from the fact that nervous tension has become a regular phenomenon.

The reasons for increase in stress levels are not difficult to find. Due to sedentary (with no physical exertion) life style, more and more people are suffering from chronic diseases like High Blood Pressure, Diabetes and Heart Problems. We have increased our needs e.g. House, Car, Refrigerator, Television, Air conditioner, washing machine and all sorts of electrical gadgets. To possess all such items, we need money and for that we want to earn more and more money, by fair or foul means. All this results in chronic shortage of time. Because the work has increased many-fold, consequently the time-stress will pile up. The result is an overloaded and stressed brain.

It is a problem, because the effects of stress are very detrimental to health, productivity and expression of human potential. Almost every one admits that he/she is experiencing some degree of stress and that stress is certainly a major problem of modern society. As per Dr. Robert Eliot "stress may be the greatest single contributor to illness in the industrialized world."

17.3.1 DEFINITION OF STRESS

Truly speaking, stress can be called the most severe state of tension. In the present-day world, tensions seem to have become a part of our lives. We quite often get tense almost every day, as our routine has become very complex and life awfully busy. But if the tensions get accumulated and are not channelized and continue to mount with each passing day, a stage may soon come when we are under stress. That is to say that accumulation and prolongation of tension leads to stress. The management of stress must be done quickly, as mental stress leads to a lot of complications, affecting our mental and physical health. We should gain a precise understanding of the nature of stress, and develop practical methods to deal with it. The daily schedule of top-brass in Government and Industry is so packed with meetings and assignments that by the end of the day, they feel completely drained-out.

The result is that they do not seem to find quality-time for themselves and their families these days. All they strive for is the desire to possess and grab more money and more material. This continued stress could be fatal. Thousands of young persons are dying of heart failures, when none of the known risk factors like smoking, high blood pressure, high cholesterol, family history and diabetes are present. Many of our problems are caused by wrong attitudes and conduct.

Stress leads to excessive production of certain chemicals that cause "Vasoconstriction" (contraction of conducting vessels). Large quantities of these chemicals, then, do irreparable damage to the body. One has to understand the origin of the conflicts created by the mind and projected through the nervous system and body. Conflicts within and without play prime roles in human life. Experiencing less conflicts will free the human mind from stress. Freedom from stress is therefore an absolute necessity for a modern man. All human beings face challenges and difficulties in dealing with the external world.

17.3.2 THE EFFECTS OF STRESS

In our body, our state of mind is reflected in various aches and pains as well as in a number of stress related diseases. In fact, most diseases are now linked to the state of sustained stress in which most of us live. This stems directly from our frustrations, worries and despondency (dejection). This is why a suffering and dejected/depressed mind makes the body diseased and painful. Scientific research, however, though much sophisticated, touches only the physical level, while stress is a condition of mind that reflects its symptoms in the body. It is unfortunate that most treatment for psychosomatic diseases is directed overwhelmingly towards giving symptomatic relief and that very little has been and is being done to cure and remove the root causes which are related to the mind. The traditional approach seems to have been drowned in the pond of science. If the body is unhealthy and distressed, the mind does not remain unaffected and this is precisely the area which traditional methods deal with. Yoga considers mind and body as two interrelated aspects of one unit. They are the manifestations (revelation) of one and the same energy. Consequently, one is bound to affect the other. Most of our physical diseases are born out of conflicting and disturbed state of mind, as the route of bodily diseases exists in the mind itself and this fact seems to have been overlooked till date.

Stress may lead to:

* Heart Attack * Diabetes * Hypertension

* Alcoholism * Ulcers * Cancer

* Sleeplessness * Depression * Obesity

* Mental illness and so on.

How many young persons ride a bicycle or play games on weekends? The answer is very few. Little wonder that a host of them are falling prey to diseases, most of which are generally associated with middle age or old age groups. Doctors attribute this alarming trend to sedentary life styles, stressful jobs, bad food habits, lack of exercise, smoking or drinking. Needless to say this trend is more prevalent in urban areas. The daily routine of people in the rural areas usually includes manual work, some amount of exercise, even if it is in the form of walks. Besides, they keep away from junk food and fried fatty-acids and their environment is free from air, noise and water pollution.

17.4 DIFFERENT TYPES OF STRESS

17.4.1 STRESS IS MAINLY OF 3 TYPES:

- **Emotional Stress** or the mental stress is the stress generated by our personality as we interact with our environment on day to day basis. Emotional stress leads to physiological stress and this result in diseases of the target organ. This can also be called Social stress. What is increasingly clear is that stress is at the root of all physical diseases regardless of the organ system involved.

- **Digestive Stress** is the stress we get from poor eating habits; it basically depends on what we eat, how we eat and when we eat. As a source of stress, a poor diet is second only to emotional (or mental) events. The simple fact that we eat several times a day is more than enough opportunity to generate constant imbalance. Bad dietary habits can create constant stress. Very few people know that diet is a significant determinant to our health. Modern man does not pay attention to the quality of food he eats, nor does he eat it properly. He is unaware of the fact that food without nutritive value is unhealthy, he eats it too fast and he has allowed junk food to dominate his diet. After becoming aware of our habits however, we will find that bad dietary habits can create constant stress.

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- **What We Eat:** Freshness, simplicity and nutrition are the food qualities most suitable for our health. For the well-off families, refined sugar, which contains absolutely no nutrients, makes up 25% of their diet; and fats, which also contain no nutrients total up to 45%. High sugar diet is associated with diabetes whereas high fat is associated with heart ailments. This does not necessarily mean that we should eliminate refined sugar from our diet. Instead, we should begin to develop a consciousness how refined sugar may be creating serious problems for us as individuals. Similarly a limited quantity of fat is necessary-- say about 10% of the total diet and how much fat people consume is an open secret.

- **How We Eat:** As Swami Rama has rightly said “how we eat is just as important as what we eat.” But we are always in a haste to take time to really chew and taste our food. After two or three quick bites, we swallow it and expecting the ‘poor’ digestive system to break it down further. Our liver does not have mechanism to crush down swallowed-size pieces. Eating properly is an art. It saves us from over-eating and it satisfies our senses. Our ancestors used to offer a silent prayer before meals, which would give them time to clear the mind of disturbing emotions and thus achieve a calm physique before eating. When we eat in a serene and carefree environment and hardly do we have any realization of this fact.

- **When We Eat:** The third way to create stress by our dietary habits is when we eat. Eating “on the run” almost guarantees that one is going to suffer from digestive stress. The more frequent one does this, the more likely, it is likely to lead to constant stress. Irregular snacks and constant eating forces the digestive system work non-stop. This aggravates digestive stress. The first and probably the simplest point here is the scheduling of the meals. During digestion, blood is diverted to the digestive track away from the brain and our ability to think clearly is seriously impaired. The timing of meals is therefore, extremely important. Surprisingly, it is most often overlooked. Thus we have seen how our dietary habits provide the basis for our physical foundation--our body. By paying attention to what we eat, how we eat and when we eat as well as the effects these have on us, can be helpful in significantly reducing chronic stress.

17.5 ENVIRONMENTAL STRESS

It is created by factors as smog, noise and air pollution. Most of the common physical stresses in our lives are no longer the stresses associated with survival, but are more subtly, less obvious physical stresses, such as — improper lighting, high ambient noise, poor quality of air and food, overcrowding, subsonic vibrations associated with motor vehicles, and other such concomitants (co-existents) of technologically advanced culture.

Who are more vulnerable to fall prey to stress?

Dr. Mayer and Dr. Ray have categorized personalities under two heads. i.e., Type A and Type B.

They point out that Type A are more prone to cardio-vascular diseases (CVD) than Type B.

The following are some of the typical traits of Type A and Type B;

Type A: Hurried speech, always under tension, restlessness, constant rapid movement in eating, lack of patience, chronic sense of time urgency, thinking and performing several things at a time, an over-smart attempt to dominate conversation, vague sense of guilt during periods of relaxation, competitiveness, always dominating, pre-occupied, over concerned about how to get things done, ego-centrism, unable to delegate power for fear of losing control, perfectionists, no concern for other types of people and typical gestures such as clenching fists, grinding teeth etc. Such persons are more prone to heart diseases.

Type B: Such a person has no sense of time urgency, no need felt to discuss or display one's achievements and accomplishments, no exhibition of superiority, absence of Type A habits, not devastated by criticism, flexible, gives benefit of doubt, ability to exist without guilt, can work without any kind of excitement, without any agitation, respectful to others, relaxes when fatigued, believes in team effort, co-operative and helpful to others, not afraid to admit mistakes and so on.

Type C: Apart from the above two types, there is another type--Type C, which also exhibits the ill effects of stress. People of this brand have got negative approach to life. They fail to perceive brighter aspects of life. They are totally pessimistic and think "life is all dark, there is no hope, because I am born like that, I can never achieve success." Such a negative mental set-up in Type C is the cause of his suffering. The core belief in such a person is that no matter what he does, it is not going to have much effect. The busy executive is a classic example of Type A personality. On the other hand, Type B personalities appear to be calm and relaxed and free from the desperate urgency of fighting against time. They do not harbour anger and know when to relax and enjoy. Type A persons, suffering form emotional stress, are three times more likely to experience heart diseases. Type A personalities are almost under constant pressure to perform. However, type A personalities do not accomplish more than type B personalities. They only exert more effort in order to do the same amount of work that type B does accomplish in a much more relaxed way. To remedy it, we can say that we should go slowly. We should not be excited. We should not do anything on the spur of the moment. Those, who are cautious and patient, are likely to commit fewer mistakes and stay safe from diseases, which occur as a result of nervous tension. The sum total of the above is as Swami Vivekananda said "the calmer we are, the less disturbed our life will be, and the more shall we love and the better our work will be."

17.6 TIPS FOR MANAGING STRESS

Mind: Mind is the major culprit responsible for harbouring stress. You must learn to touch the mind at the right point. Unless you know how to manipulate your own mind you cannot get much benefit from it. The mind has many compartments. Some of them you must lock up carefully; that is, bad impulses and memories must be checked. The others must be opened, that is, the tendency to practice detachment, devotion etc. must be encouraged. But finally you must set fire to all the compartments, for truth is beyond both bad and good. One, who has controlled his mind, has controlled the whole world. The following are the major ways to eliminate or reduce stress:

- Diet Control
- Positive thinking
- Exercise & Yoga asanas
- Breath control and
- Meditation

Diet Control: One means of reducing chronic digestive stress is to begin learning about nutrition and to begin paying attention to how the food we eat affects us both mentally and physically. Major problem for modern man is that a great deal of what he eats not only fails to provide any nutrition but also leads to serious diseases. All this will lead to serious autonomic imbalances, which is stress. The basic strategy for successfully improving one's diet is to learn to gear dietary intake to nutritional needs. Over-eating is
a common phenomenon of digestive stress. Eating very large meal, especially one that is oily and greasy, will tend to delay the digestive process. Similarly foods extremely high in protein or oil and fats require increased secretion on the part of the liver and kidneys. Until these wastes are cleared from the blood there will be some impairment of consciousness and lack of clarity in the mind.

Positive thinking: The first step to remedy nervous tension is to have a clear understanding of its causes. If our mind is healthy, we can get rid of nervous tension. As long as we have fragmentary perception and associate reality with the body/mind, we continue to suffer. An optimist should think that if he practises sincerely and whole- heartedly, with no negative thinking, he would be successful. For example, none could climb the Mount Everest till 1953, till Tensing and Hillary dared to do it. After that, lot of persons have been able to climb, even though non-conventional routes. Success is not the outcome of wishful thinking; it is the product of both intelligence and industry. From Srimada Bhagwat Gita, if we could adopt only one *Shaloka* in our life, we will be successful i.e. "action thy duty, reward not thy concern".

Exercise & Yoga-asanas: Physically training is beneficial. Moderate but consistent exercise regularly and punctually will help maintain good physical health (exercise at least twice a week). This will strengthen the heart, improve circulation, lower cholesterol and reduce your chances of a heart attack. In recent years, man has become very exercise conscious. Those who practice yoga consistently are healthier, have less coronary- vascular diseases (CVD), fewer frustrations and generally report greater satisfaction with their lives than those who do not. For yoga to be effective in significantly altering chronic levels of stress, the attentional faculty of the mind must be on the activity itself and not wandering into past and future imagery. Yoga does not see the cause of an ailment in the deterioration of a particular organ of a body. It takes into account the whole holistic system (i.e. body, mind and spirit). Purifying and making the body healthy helps cure the disease. The physical benefits of yogic exercises include a lower resting heart rate, a lowered blood pressure, a reduction in weight, decreased blood sugar and in total cholesterol. Doing about 30 minutes of stretching exercises per day is quite beneficial. Once you have good knowledge of *Yoga-asanas*, you can choose a routine each day that meets your needs. Pay attention to all levels of your being when you perform **the postures.**

Breath control (Pranayama's): One of the most important skills for managing stress is learning to regulate the breath. Breath plays an important role in overcoming physical and mental tension. Yoga provides the profound knowledge of every structure and pattern that provide a logical framework for understanding stress and leads directly to the ability to regulate stress and eventually become free from its consequences. There is an emerging awareness of a critical relationship between breathing and cardio-vascular functioning. Breathing also influences blood pressure. Breathing – an activity that we all do and pay very little attention to -- is quite probably the single most important tool in stress management. Most of us have poor breathing patterns that create stress and disturb us both physically and emotionally.

Meditation: In terms of stress management, inner concentration and meditation are the keys to freedom. It is true that a consistent practice of relaxation and physical exercises will modify or alleviate stress, but they will not eliminate the stress inducing patterns in the mind. Doing only relaxation and physical exercises is like putting out a fire-only to come back and find it burning again. It is more efficient to remove the conditions which create the fire than to continually have to put the fire out. In other words, it is much simpler and more effective to understand the subtle mental/emotional origins of stress, and then to alter or remove them, than to continually rescue the body and mind from stress.

This has been just a brief overview of the process of inner concentration and meditation; it is intended only to give you a practical understanding of the importance of training the mind and expanding one's conscious awareness. It involves self-training and as with any training program, it takes time and practice. The rewards, however, are far greater than the effort involved. Almost immediately you will begin to experience increased mental and physical health, increased mental clarity and control, increased personal effectiveness and most important, an increased capacity for experiencing joy. The more skilful you become, the greater the rewards. Regular meditation increases empathy (understanding), concern and interest in the well-being of others. In meditation, alpha waves increase, reflecting an extremely restful, non-anxious, non-problem solving mental state. After successful meditation the person is relaxed, with a greater capacity for creativity, love and compassion.

Figure 26: Stress Management

17.7 CONCLUSION

Read books on positive things and on religion; always make sure you complete your duties well in time; learn to delegate work whenever you can; you should be sure of your goals and priorities. Plan your recreation. On holidays, find out what makes you happy and do it. Play games, spend time with your family, go to the gym., to a party, to the park or listen to songs, watch TV, paint, cook, chat or surf the Internet. Learn techniques of relaxation. A structured life and a balanced diet, some physical exercises in terms of cardiovascular acceleration like jogging, skipping, *yoga-asanas*, running and gradually entering the mental function. Relaxation, *Pranayama* (breath control) and meditation should find place in your daily routine. In the present world which is full of stress, there is no parallel to yoga and meditation. It should be clearly understood that there is no medicine for mental diseases in Allopathy, except for the sedatives and so called tranquilizers. Try to remain calm and quiet in all circumstances.

18 PROJECT VIJAY

18.1 LEARNING OBJECTIVES:

At the end of session, the trainees will be able to:

- Describe Project Vijay Objectives
- Define key terms used in Project Vijay
- Explain revised structure of Franchisee channel
- Explain team structure for Project Vijay
- Explain the concept of market retailer survey
- Describe role description of Project Vijay Team
- Describe proposed process for ordering and delivery

18.2 INTRODUCTION:

Globalization has made the market competitive but the recession has the competitive market more challenging. This situation has forced companies to increase their revenue by increasing market share. BSNL is not exception to it.

BSNL is providing various kinds of services. Consumer Mobility is one service which has rising trends. To capture the market share in consumer mobility, BSNL has created some new roles and made some changes in its old strategies and processes for marketing its product to face the today's turbulent environment. .

This handout deals with the strategies and processes adopted by BSNL to increase market share of the one of the product i.e. consumer mobility.

18.3 PRESENT STATUS OF BSNL:

BSNL is an organization with much strength as

- Largest fiber and copper network
- Widest geographical reach
- Large base of mobile towers
- Significant potential to monetize assets through broadband
- Large existing customer base
- Long customer relationships
- Leading broadband provider
- Large , geographically distributed and experienced manpower

- Cash reserves to support bold moves

Yet, it has many challenges as

- Slowing growth leading to poor financial performance
- Facing an extremely competitive environment
- Lacking some critical skills to succeed in current market scenario
- Organization structure and processes that are not attuned to market needs
- Low employee motivation and involvement

To achieve one of the aspirations of BSNL as **"to be the leading telecom service provider in India with global presence"** Project Vijay has been implemented to increase the market share in consumer mobility.

The Project Vijay is concerned with consumer mobility. It is being implemented with a view to expand reach and capture significant share of retailers counter sales. This builds the distinctive channel management capabilities and nurture and build strong and viable channel partner.

18.4 OBJECTIVES OF PROJECT VIJAY:

1. Expand reach – ensure availability of BSNL products at more than 95% of telecom retail outlets
2. Capture significant share (25-30%) of retailer's counter sales (increase extraction)
3. Build distinctive channel management capabilities Nurture and build strong and viable channel partner network

18.5 DEFINITIONS OF KEY TERMS USED IN PROJECT VIJAY:

FoS: Feet on street**:**

Franchise's employees:

- who will visit retailer shops,
- deliver material and
- collect CAF (Customer Application forms) forms

Primary Sales:

Salesof product from BSNL to franchise are defined as 'Primary Sales'.

Secondary Sales:

Any sales from franchise unit to retailer are defined as 'Secondary Sales'.

Tertiary sales:

Product sales from retailer to end-customer are defined as 'Tertiary Sales.'

Reach:

Reach defined as the ratio of telecom retail outlets (multi-brand telecom outlets) that sell BSNL products to the total number of telecom retail outlets in a particular geographical area.

For example, if total number of multibrand telecom retail outlet that sell BSNL product is M and total number of multibrand telecom retail outlet is N in a particular geography then

BSNL Reach=M/N

If M=4 and N=8 then BSNL Reach=4/8=.5 or .5x100=50%

Extraction:

Extraction defined as the share of BSNL sales in the total sales of a particular multibrand telecom outlet

- By number of SIMs
- By value of recharge

For example, if BSNL sell is M (i.e. Number of SIM or value of recharge) and total sales of a particular multi-brand telecom retail outlet is N (i.e. Number of SIM or value of recharge) then

BSNL Extraction=M/N

If M=4 and N=10 Then BSNL Extraction=4/10=.4 or .4x100=40%

MBO: Multi-brand telecom outlets

18.6 REVISED STRUCTURE OF FRANCHISEE CHANNEL:

- Primary sales will be made from BSNL SSA to Franchisee.
- Franchisee will make the sales to Sub Franchisee and also to MBO retail Outlets through FoS.
- Sub Franchisee will also make sales to MBO retail Outlets in its area.
- MBO retail Outlets will make the sales to customers.

Revised structure

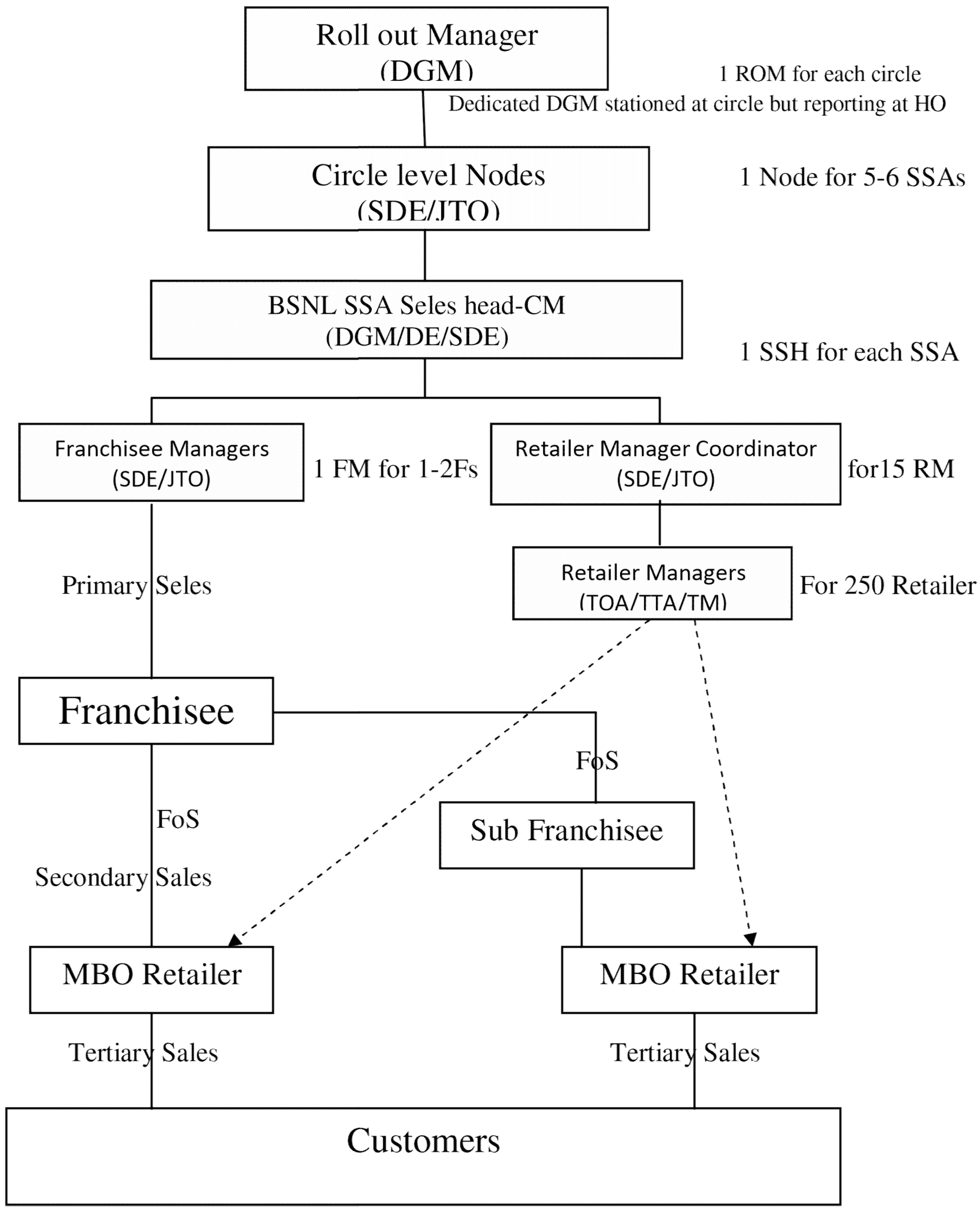


Figure 27: Revised Structure of Franchisee Channel

Table 32. Team structure for Project Vijay

Roles	Designation	Details
Roll Out Mangers (ROM)	DGM	Dedicated DGM stationed at Circle but reporting at HO
Circle level Nodes	SDE / JTO	One node for 5-6 SSA’s
SSA Sales Head – cons. Mobility	DGM / DE/ SDE	One per SSA /Region
Franchisee Manger (FM)	SDE/JTO	One Franchisee Manger per Franchisee
Retailer manager Coordinator (RMC)	SDE/JTO	One RMC for upto 15 RM’s
Retailer manager (RM)	(TOA/TTA/TM)	One RM for upto 250 retailers

18.7 CONCEPT OF MARKET RETAILER SURVEY:

In the beginning a survey of retailers selling telecom products in a particular geographical area will be made by BSNL survey team with a purpose

- To baseline existing retailer universe before pilot launch
- To develop channel norms for franchisee FOS #s and service frequency, based on analysis of retailer universe
- Survey to be conducted in each SSA of circle
- Both urban & rural areas to be covered
- Survey to be completed in 3-4 weeks duration

The surveyor will make survey with the help of a questionnaire in the form of a printed survey form containing details as shown below.

Details which are contained in the printed survey form in brief

1. Details of the surveyor
2. Details of the retailers with phone numbers
3. Do you sell SIMs of any brand? yes/no
4. Do you sell recharge voucher of any kind? Yes ?No
5. Do you sell BSNL SIM? yes/no
6. Who sell BSNL SIM to you?
7. Details of monthly sale of telecom product.
8. Comments about BSNL services to the retailer?

Categories of retailers:

The category of retailers are different according to the characteristics which depends on number of SIMs sold per month or amount of Recharge sales per month. These categories are

Class A

Class B

Class C

Class D

Class A:

The Retailers who sold more than 100 SIMs per month or Recharge sales more than Rs. 3 lakhs per month come under this category. For examples large multi-brand telecom outlets comes under this category.

Class B:

The Retailers who sold between 50-100 SIMs per month or Recharge sales between Rs.13 lakhs per month come under this category. For examples large kirana shops, medium multi-brand telecom outlets, STD/ PCO shops, etc. comes under this category.

Class C:

The Retailers who sold less than 50 SIMs per month or Recharge sales Between Rs. 0.5-1 lakhs per month come under this category. For examples medium kirana stores, small multi-brand telecom outlets, etc. comes under this category.

Class D:

The Retailers who sold negligible (mostly nil; may sell 10-30 SIMs per month) or Recharge sales less than Rs. 50,000 per month come under this category. For examples small kirana stores, paan shop, tea stall, etc. comes under this category.

Service frequency by class

- Class A: Daily
- Class B: Every alternate day
- Class C: Twice a week
- Class D: Once a week

18.8 DESCRIBE ROLE DESCRIPTION OF PROJECT VIJAY TEAM:

Table 33. Role Description of Project Vijay Team

Roles	**Role Description**
Roll Out Mangers (ROM)	Responsible for overall roll-out of Project Vijay in circle Expected to drive on-the-ground implementation in circle and escalate unresolved issues at the circle level, to HO
Circle level Nodes	Guide SSA teams with best practices, key risks at a particular stage, etc. Help SSA teams resolve and escalate issues
SSA Sales Head – cons. Mobility	Responsible for overall roll-out of Project Vijay in Region/SSA, incl. team formation, process changes and value outcome Act as Sales head, Mobility at SSA/ Region
Franchisee Manger (FM)	Provide support and manage franchisees and sub franchisees
Retailer manager Coordinator (RMC)	Provide support and manage retailer managers
Retailer manager (RM)	Act as retailer survey team, to map retailer universe (upfront) Directly interact with and provide support to retailers on an ongoing basis

18.9 DESCRIBE PROPOSED PROCESS FOR ORDERING AND DELIVERY:

- The franchisee need not come to SSA office.
- She/he will deposit the amount in bank and intimate the Franchisee manager and AO SALES) about money deposited in BSNL account to supply the telecom product and place an order on phone or through email.
- AO (Sales) will verify whether the amount has been credited in BSNL account or not.
- After verifying, AO (Sales) and Franchisee manager will deliver the material at the door of the Franchisees.

18.10 INCENTIVE, AWARDS & FACILITIES:

There is a provision of incentives & awards to the members of Project VIJAY team. A detail of incentives is given below:

Table 34. Provision of incentives to the members of Project VIJAY team

Role	Reimbursement type Travel/meal/mobile	Reimbursement amount per month
Franchisee manager	Travel & Meal	Rs 1800/-
	Mobile (if not already provided)	Rs 500/-
Retailer Manager coordinator	Travel & Meal	Rs 1300/-
	Mobile (if not already provided)	Rs 500/-
Retailer Manager for visits up to 40kms/day average	Travel & Meal	Rs 1800/-
	Mobile (if not already provided)	Rs 500/-
Retailer Manager for visits beyond 40kms/day average	Travel & Meal	Rs 2600/-
	Mobile (if not already provided)	Rs 500/-

- Franchisee Manager is expected to manage up-to 2 Franchisees and visit them every alternate day; Franchisee Manager is also expected to visit each subfranchise once a month.

- Retailer Manager Coordinators expected to manage up to 15 Retailer Managers and does 1 inspection visit per Retailer Manager per month.
- Each retailer manager is typically assigned -200-300 retailers, depending on area geography and is expected to visit each retailer -2 times a month.
- Final decision on which category the retailer Manager falls in should be made by the SSA sales head, advised by the Retailer Manager Coordinator.
- The base reimbursement will be paid to Franchisee Manager and Retailer Manager Coordinator upon meeting a minimum of 10% achievement on Primary sale (# of SIM and Recharge value).The base reimbursement will be paid to Retailer Manager upon meeting a minimum of 30% achievement on no. of retailers visits done as a proportion of the total no. of retailers visits assigned.

Table 35. Provision of Awards to the members of PROJECT VIJAY team

Award	Level	Frequency	Amount	Criteria
Best Franchisee manager	Circle	Quarterly	Rs 3000	Highest average score on KPAs
Best Retailer Manager coordinator	Circle	Quarterly	Rs 3000	-do-
Best Re Manager	SSA	Quarterly	Rs 750	-do-
Best Sales Head	Circle	Quarterly	Rs 5000	-do-

- In case of a tie, the award amount may be equally split.
- In order to qualify for an award the Franchisee Manager or Retailer Manager coordinator must meet a minimum of 10% achievement on Primary sale (# of SIM and Recharge value), Similarly in, order to qualify for the award, the Retailer Manager must meet a minimum of 30% achievement on no. of retailers visits done as a proportion of the total no of retailer visits assigned.
- The final decision on awards at the circle levels should be made by the PGM/GM (Consumer Mobility) at circle level at the end of the month, after taking in to the account the average score on KPAs received from SSAs'.

Table 36. Provision of Facilities to the members of PROJECT VIJAY team

SSA Sales Head	Office space, Desktop with broadband GSM SIM or WLL phone (if not available
Franchisee Manager	-do-
Retailer Manager Coordinator	-do-
Retailer Manager	GSM SIM or WLL phone (if not available

18.11 SANCHARSOFT:

Sancharsoft is a SIM Inventory Management Application is jointly designed and maintained by IT Cell Chennai Telephones and ITPC Hyderabad.

SIM Inventory Management is a web based application for integrated management of O&M and Sales & Distribution Channels. Software is designed based on actual work flow for O&M and SIM/RC sales network.

Application is hosted on Zonal WEB server with oracles 8i server at back end, User access control, security features are in built. It is possible to trace all transactions. This application will be accessible on both CELLONE/Dotsoft network and MPLS networks. It is proposed to provided Sales and MIS reports through intranet WEB SITE for all the circles.

SIM Inventory Management:

Sancharsoft is SIM and RC, other Prepaid Inventory Management tool, Incorporates workflow like no other tool available in the market. It has been integrated to IN and HLR to ensure that all the activities related to SIM and RC are automated. Entire Setup is mapped to workflow right from procurement of SIM to Sale at Point of Sale, with Roles and Responsibilities well defined as per Corporate Guidelines.

Important Features

- Procurement, allotment, distribution and sale through online transactions.
- Enabling/Activation of SIM based on sale, CAF data
- CAF monitoring can provided alert to Franchisee, Retailers and customer through SMS
- Reconciliation of Sold inventory v/s stock by Scheduled Synchronization/querying of IN and HLR
- Integration of Franchise and commission calculation based on SIM activation info as per guidelines.

- Access to Franchisee for monitoring retailers Sales if SIM card activation of SIM commission, Invoices, CAF submission status
- Handling of Damaged/Lost RC and SIM inventory. Blocking of Damaged to RC/SIM to issue replacements and their accounting
- Stock Reports to ensure availability of stores at POS
- Performance report of CSR/CSC/SSA/franchises/DSA
- Performance of various marketing schemes and live reports on day-to-day basis.
- System is configured to send this sale info to activation server, and CAF info to Billing server.
- System can be configured to accept IN info on SIM activation and deactivation, which will be used for SSA wise net additions closer analysis as per SSA. Franchises commission is computed based actual activation. Retention bonus, retention of mobiles connection as per franchise can also be computed.

18.12 CONCLUSION:

The project Vijay will take care of market share in consumer mobility. The market share is the product of reach and extraction. Project Vijay will increase the reach and extraction of consumer mobility in the market through dedicated channel management. As the reach and extraction will be increased, the market share will go up. All depends on the sincerity and hard work of Project Vijay team members.

19 ENTERPRISE SERVICES & TECHNOLOGY

19.1 LEANING OBJECTIVE:

At the end of session, the trainees will be able to understand:

- Current scenario of Enterprise Services
- Market size
- Desire of enterprise customer
- Enterprise services offered by BSNL
- Salient features in brief description of each services / Solutions

19.2 INTRODUCTION:

There is a growing need of connecting various branches of an Enterprise, which might be located across the globe. Lease line & Internet bandwidth has become necessary for networking multi-site business. Today's business owner wants to focus more on its core competencies rather than trying to implement such things of their own. Such a networking solution often requires not just bandwidth, but hardware components, security solution and maintenance also.

19.3 CURRENT SCENARIO:

Presently as per advice of BCG (Boston Consultancy Group) consultant activates of BSNL have been restructured as under:

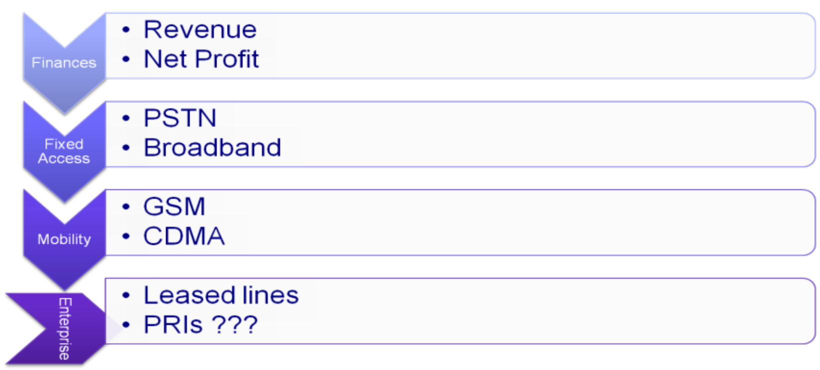


Figure 28: BSNL Restructured Scenario

DESIRE OF ENTERPRISE CUSTOMER:

- ➢ Complete Reliable Services from One Interface Organization.
- ➢ Supply of not only Bandwidth but also Leased line Modems / Routers etc. i.e. Complete Telecom Solutions.
- ➢ Secured Network.
- ➢ OPEX Model instead of CAPEX

- Proactive Monitoring of the customers Network.
- Guaranteed SLA.

	Why Use a Enterprises Managed Services
1	**Cost Reduction**
2	**Better Availability**
3	**Core / Context**
4	**Reduce Admin Time**
5	**Single point of contact**
6	**Faster technology refresh**
7	**Performance**
8	**Knowledge Transfer**
9	**Reduce number of suppliers**
10	**Meet business objectives**

	MSP Selection Criteria
1	**Customer Service**
2	**Technical Support**
3	**Guaranteed SLA**
4	**Price**
5	**Overall reputation and experience**
6	**Coverage / Footprint**
7	**Reputation in a particular service**
8	**Breadth of Service Offerings**
9	**Existing Relationship**
10	**Ability to get all services from one provider**

Figure 29: Why do they buy – what is important to them

BSNL provides following service products to the Enterprise customers.

1. MPLS VPN Product Information
2. VSAT service of BSNL
3. ISDN PRI (Primary Rate Interface)
4. MLLN – Managed Leased Line Service
5. Domestic Leased Lines Service
6. Internet Leased Line (ILL)
7. BlackBerry Services
8. 3G Mobile Broadband Device (Data Card)
9. Free EPABX scheme
10. Wire Line Intelligent Network Services
11. Managed Network Services (MNS)

19.4 BRIEF INTRODUCTION OF SERVICE PRODUCTS:

19.4.1 MPLS VPN PRODUCT INFORMATION

MPLS – a new solution to the customers

- Network can be easily implemented
- Network highly secured.
- Network built for better Traffic Engineering.
- Any differentiated Services possible.
- Network very reliable due to built in redundancy.

Why MPLS based VPNs?

- Security is the responsibility of BSNL MPLS Network.
  (Company will be responsible for the Security of the Information and network in Point to Point leased lines.)
- Simple Network Implementation.
- Easy to configure & manage.
- Better Traffic Engineering.
- Easy Network Expansion at Customer Premises.
- Easy Introduction of New Services (Multicasting, VoIP, Hosting over the same link)
- Mobile Workers can dial up on a Secure Network to access Company VPN.

19.4.2 VSAT SERVICE OF BSNL:

VSAT service of BSNL covers all parts of India

- Available at any remote location.

- Provides voice as well as data service.
- Provides broadband services.
- Supports Internet, video multicast, video conferencing as well as voice telephony.
- Capable of providing access to MPLS VPN as well as normal leased lines.
- A range of satellite bandwidth available.
- Installation and maintenance at remote location by BSNL.
- Centralized NOC at Bangalore.
- 24 x 7 support available at NOC.

19.4.3 ISDN PRI (PRIMARY RATE INTERFACE):

- Digital telephone line as opposed to ordinary analog phone line.
- 30 (B) channels over a single pair of ordinary telephone copper wires.
- Useful for connecting private exchange (EPABX) of Corporates to the PSTN telephone network.
- Also useful for DID franchisees of BSNL and ISPs (for their incoming traffic).
- Better voice quality due to digital transmission of voice & data.
- Capable of both voice & date usage.
- Video conferencing and other data applications possible by utilizing required number of B channels.

19.4.4 MLLN – MANAGED LEASED LINE SERVICE:

- The MLLN service is specially designed mainly for having effective control monitoring on the leased line so that the down time is minimized and the circuit efficiency is increased.
- This mainly deals with data circuits ranging from 64 Kbps to 2048 Kbps.

19.4.5 DOMESTIC LEASED LINES SERVICE:

- It is a symmetric telecommunications line connecting two locations.
- It is a dedicated line (not shared) for a customer.
- It is a non switched line, i.e., it is a non-exchange line.
- It passes through transmission systems only.
- Leased lines can be used for telephone (voice), data or Internet services.

However, dedicated voice circuits which were popular earlier are not in vogue now. Now a day, leased lines are mainly used for data services. Internet leased lines (ILL) is a separate service in itself.

Services on offer:

- **Speech Circuits (Hot lines or Private Wire):** Between two locations in one city/ different cities for the same applicant. The terminating equipment at both ends is telephone without dialling facility.
- **Data Circuits:** To transmit data between computers or any other type of electronic information devices.

Features

Full dedicated bandwidth available for exclusive use of the subscriber

- Complete privacy/ secrecy of data
- From low to high, full range of bandwidth available – 64 Kbps, n x 64 Kbps, 2, 4, 8, 34, 45, 140, 155 (STM-1) Mbps, STM-4/16, etc
- Bandwidth available on-demand in most cities – no registration charges
- For low speed circuit, modem (Network Termination Equipment, NTE) is to be arranged by the customer

19.4.6 INTERNET LEASED LINE (ILL):

- ILL is an always on Internet connection based on leased line access (i.e. dedicated access).
- Leased lines provide the last mile access from the user premises to BSNL equipment.
- Required by heavy users like educational institutes, big cyber café, small and medium corporate house who need to constantly remain online with Internet.
- Permanent Internet connection as compared to the temporary connectivity through dialup access.
- Far superior quality as compared to dialup, thanks to digital signalling, less noise, fewer exchanges etc.
- A scalable access method - Bandwidths starting from 64 Kbps to 2 Mbps to 8 Mbps, 10/100Mbps Ethernet connectivity, 34/45/155 Mbps and beyond can be deployed.
- Leased Internet bandwidths up to 2Mbps are provided using modems on copper pair, however, large bandwidths are provided using OFC in the last mile.

Service level:

1. 100% Network uptime 24*7*365
2. State of art GPRS/EDGE/3G Network

3. Only services provider of 3G Blackberry in India
4. Guaranteed Service level through dedicated Technical Support center, walk in Engineer, BES Engineers

19.4.7 3G MOBILE BROADBAND DEVICE (DATA CARD):

- 3G are the next generation of mobile communication system. It enhances the services like multimedia, high speed mobile broadband, internet access etc.
- 3G Data Card offers High speed internet and data service while on move.
- Data rate downloading 3.6 Mbps & 7.2 Mbps.
- Simple Plug and Play type of devices.
- Single band and Tri-Band operation.

Service level

- 100% Network uptime 24*7*365
- Multimode support GPRS/EDGE/GSM/UMTS
- Guaranteed Service support through dedicated service centre provided by Data card vendors.

19.4.8 FREE EPABX SCHEME:

- BSNL provides a scheme to provide bundled telecommunication services through the provision of Voice & Data EPABX systems at customer location connected to the telecom backbone on BSNL's nationwide telecom network.
- Free deployment of EPABX systems wherein the supply, installation, operation and maintenance of the entire system are done by BSNL through its appointed and empanelled vendor(s).
- Service for all customers including Housing complexes etc. requiring Voice & Data EPABX facility for the area of operations of BSNL.
  DID enabled EPABX; (with Unlimited Free Calls within EPABX extensions).
- Rentals to be charged on a per extension basis

Service level

- State of the art fully functional full featured Voice & Data EPABX System connectivity at the customer premises
- FCBC & Batteries for adequate Power Backup
- Fully protected Main Distribution Frame
- Customer Premises Equipment (CPE) i.e. in case of xDSL Connectivity

- All related software such as fault management software, extension wise billing software, subscriber management software etc.
- Connectivity through PRI/EI/DID/CO Junctions

Product variants

Services under the scheme

- Inter Office Voice Connectivity
- Data Connectivity & Internet Access through dialup & xDSL
- Value Added Services (VAS)

19.4.9 WIRE LINE INTELLIGENT NETWORK SERVICES:

- Dedicated IN platform for wire line Network.
- Services available on PAN India basis.
- Both Prepaid and Postpaid Services available.
- Prepaid Services-ITC, CALLNOW, FLPP and ACC
- Postpaid-VPN, TFS, UAN, UPN, Televoting and PRM
- Four GPIN platforms to support all IN services except Televoting.
- One dedicated MCIN platform to support Televoting Service.
- 11digit number beginning with 18.

Following Services are available through wire line Intelligent Services

- **Free Phone Service** – Charges, borne by the service subscriber, Eleven digit No. Beginning with 1800.
- **Universal Access no. –** The payment either born by called party or shared, eleven digits no. Start from 1860.
- **Universal Personal no.** – Incoming and outgoing calls can be made on any landline BSNL mobile as well as vice-versa to UPN. The call charges shall be levied UPN subscriber. Eleven Digits no. Start from: 1868. Subscriber will get Eleven digits service management no. for management function.
- **Premium Rate Service:** Eleven Digit no. on PAN India basis to the service subscriber start from 1867, call charges to be paid by calling party. Call are billed at Premium rate and shared between service subscriber and BSNL
- **VPN Network:** Combined voice VPN can be provided for fixed line telephone for MTNL/BSNL and BSNL Mobile.
- **Account Calling Card/ ITC Card:** These services are also available.

19.4.10MANAGED ENTERPRISE SERVICES SOLUTION:

- 24x7x365 proactive monitoring for Complete peace of mind.
- Guaranteed SLA
- Lower Total Cost of Ownership (TCO)
- Known cost for management & fixed price • Single point of contact
- Single supplier instead of multiple vendors
- No cost of building own management & reporting system Solution
- Private Players are having everything except Reach of Network and End Link Options.
- BSNL has nothing except Reach of Network and End Link Options.
- BSNL Advantage – Building up allied things are much easier than extending reach and scaling up end link options, provided we have proper focus for the same.
- BSNL is providing solutions for Enterprise customers as BSNL Managed services.

Managed Services

- Traditionally Bandwidth used to be taken from Service Providers and Enterprises used to keep SI (System Integrators) for taking care for Customer Premises Equipments.
- Today Enterprises want One Interface – TSP (Telecom Service Provider) that will take care of all requirements.
- This trend is growing worldwide as well as in India.
- Managed Services concept is getting popular because of these changing requirements.

BSNL Provides Managed Solutions as Under:

BSNL Managed Enterprise Solutions:

➢ BSNL Managed Service - Product:

- EasyCom - Broadband Networking. (Broadband with Router and ADSL modem)
- BizCom - 64 Kbps to 1 Mbps (MPLS or lease internet bandwidth with CDMA/GSM/ISDN backup)
- EntCom - 2 Mbps and above (up to 155 Mbps). (MPLS or lease internet bandwidth with CDMA/GSM/ISDN backup)

➢ BSNL Managed Global Network Services:

Global MPLS provides BSNL's customers with instant global reach, enabling them to use IP-VPN services globally over IPVPN QoS network, by interconnecting BSNL MPLS network with cable & wireless, which has reach to more than 153 countries.

Global MPLS is a high-speed wan service with advanced customer reporting via a web portal. It runs over a secure, dedicated, multi-protocol label switching (MPLS) backbone (cable & wireless).

The network can carry any type of traffic in ip format. It offers class of service (cos) mapping, so that time- sensitive or business-critical prioritization can be maintained across the network.

BSNL Managed SaaS (Software as a Service):

BSNL Software as a Service (**SaaS**) is a model of software deployment wherein an application is licensed to you for use as a service on demand. On-demand licensing and use would alleviate your burden of equipping a device with every conceivable application. On-demand licensing enables software to become a variable expense, rather than a fixed cost at the time of purchase. Managed Business Mail is first product in the series.

BSNL Managed Business Mail:

BSNL Managed Business Mailis the email solution designed to help companies:

- Access information, even when out of the office.
- Get more out of an email system so that employees can get more done.
- Gain the peace of mind that comes from a professionally managed service.

With Microsoft Exchange as the mail server and Microsoft Outlook as your client, your employees can do more than send and receive email – they can share calendars, folders and contacts. Outlook is available for desktop, browser, and mobile access so you're always connected, whether you're in the office, traveling, or working at home and since you always connect to the same Exchange server, your inbox stays synchronized, no matter which Outlook client you're using.

19.4.11BSNL GLOBAL CONFERENCING:

- A reservation less, automated conferencing service designed for ad hoc quick meetings.
- Connects multiple participants across geographies simultaneously, even while some are on move.
- Over fixed line or mobile phone (GSM/WLL/CDMA)
- No investments required at customers end.
- Quick & Easy way to communicate, any time.
- An ideal tool with range of features for effective communications.
- Designed for local, national & international conference.

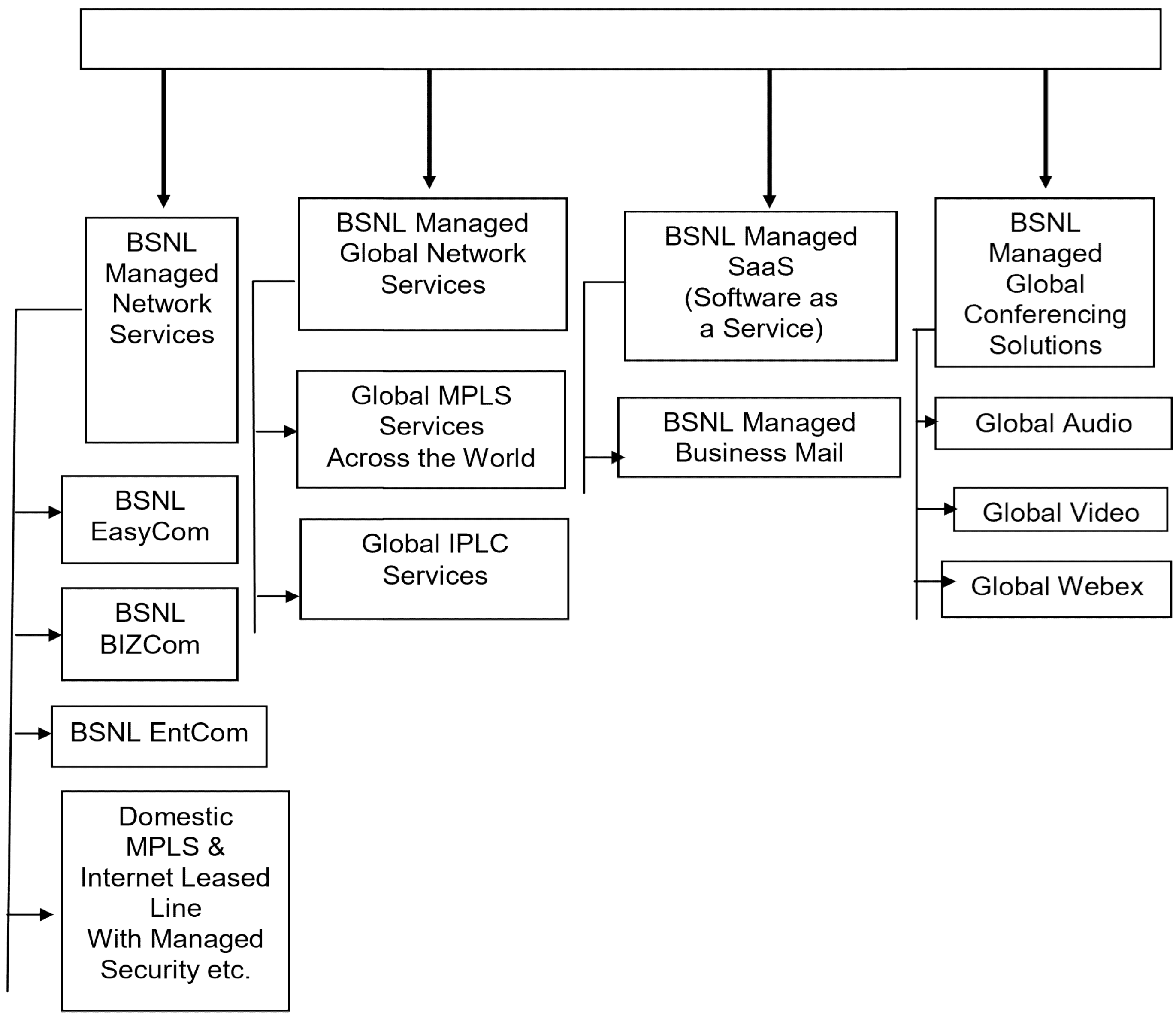


Figure 30: BSNL Enterprise Services

19.5 ENTERPRISE VERTICAL TECHNOLOGY OVERVIEW:

19.5.1 NATIONAL INTERNET BACKBONE:

The National Internet Backbone is planned on Router / Frame Relay based design. The design of the network shall allow wider usage of frame relay and ATM in the network at present or at a later date. The equipment and the network design is based on carrier scale solutions with a high degree of redundancy. Future expansion and scalability has been kept in mind with the view of easy up-gradation.

The NIB architecture is on the centralised servers at few places with distributed POPs (Points of Presence) at various places. The architecture provides sufficient scope for easy expansion and decentralised working. Most of the popular Internet applications will be supported with the option of introduction of value added services. Roaming within the country will be possible without the need of making any change in the accessing methodology.

The equipment consists of Routers (and / or optional frame relay switches), remote access servers, LAN switches, application servers, Network Management System, Help Desk, Access Devices and Billing system. BSNL's NIB is a broad based access network meant to provide convenient and easily accessible Internet Access Points (IAPs) for BSNL Internet Service Providers (ISP) as well as private ISPs so that they can connect their Internet Points Of Presence (POP) to the Internet.

The NIB provides the following services to its end customers:

- Provide connectivity to Internet.
- Provide Internet accounts to customers. The accounts shall be of types-Shell, TCP/IP dial-up, Leased line, and Virtual Private Networks (VPNs).
- Provide different Internet services like E-mail, FTP, Telnet, Chat, WAIS etc.
- Network Management and Billing functions.
- Automatic Roaming Facility within the country.
- Multi-Homing facility for the E-mail users.

The network also gives the flexibility for the administrators to implement the following additional features in the network without additional investments:

- Saleable Security architecture which gives a framework to implement the finalised security policy.
- Global Roaming Facility
- Distributed / Centralised billing.
- Centralised NMS.
- Proxy servers for caching (to save on international bandwidth) and implementing security with the help of access list.
- Free Home Page for all the customers.
- Centralised Radius and Directory Servers.

Customer Access Mechanism:

The NIB network can be access by following means:

- PSTN Dial-up access to Internet.
- ISDN Dial-up at Basic rate interfaces (BRI).
- X.25 access through Internet Gateway.
- Frame Relay (FR) and Asynchronous Transfer Mode (ATM) access.

- Leased line access to Internet at 64 Kbps, N X 64 Kbps and 2 Mbps, N x 2 Mbps speeds using appropriate modems.

Salient Features of NIB:

NIB has been planned with the whole network architecture requirement with a tier architecture and core layer. Carrier class equipment have been planned with high redundancy features. The scalability and expandability issues have been the main factors in designing the backbone. All the equipment have been asked to be hot swappable and support high redundancy features. The entire solution is asked on the rack or chassis based. The equipment has been asked to conform to as many less chassis as possible.

The Network is planned with a structure, which can implement the security plan, which will be evolved for Internet by the Government. The firewall architecture is able to define a single, integrated security policy distributed across multiple firewall gateways and managed remotely from the central place. The architecture is also able to give central integration, configuration and management for the firewall as well as other third party security applications.

NIB is a mission to build world-class infrastructure to help accelerate the Internet revolution in India. It has following features:

1. It provides a diversified range of Internet access services including support for VPN (Layer-2, Layer-3 and Dialup and Broadband services)
2. It also offers SLA Reports including security, QoS (quality of service) and any to any connectivity.
3. Offers fully managed services to customers.
4. It offers services like bandwidth on demand etc. over the same network.
5. The network is capable of on-line measurement and monitoring of network parameters such as latency, packet loss, jitter and availability so as to support SLAs with customers
6. The routers support value added services such as VPNs, Web and content hosting, Voice over IP, Multicast etc.
7. **Value Added Services**

a. Encryption Services
b. Firewall Services
c. Multicast Services
d. Network Address Translation (NAT) Service that will enable private users to access public networks

8. Messaging Services
9. **Internet Data Centre Services at Bangalore, Delhi and Mumbai**.
10. **Broad Band Services**

a. Broadcast TV using IP Multicasting service .
b. Multicast video streaming services
c. Interactive Distant learning using IP multicasting Services
d. Video on demand
e. Interactive gaming service

Table 37. NIB-II has been implemented in four projects

Name of project	Description
Project 1	MPLS based IP Infrastructure (The backbone consisting of Core & Edge Routers)
Project 2.1	Narrowband Access (Dialup Remote Access)
Project 2.2	Broadband Access (DSL Access)
Project 3	Messaging, Storage, Provisioning, Billing, Security, Order Management, Enterprise Management, Help Desk and Inventory Management.

19.5.2 WHAT IS MPLS?

Multi Protocol Label Switching (MPLS) is a data-carrying mechanism in packet-switched networks and it operates at a TCP/IP layer that is generally considered to lie between traditional definitions of Layer 2 (data link layer) and Layer 3 (network layer or IP Layer), and thus is often referred to as a "Layer 2.5" protocol. It was designed to provide a unified data-carrying service for both circuit-based clients and packet-switchingclients, which provide a datagramservice model. It can be used to carry many different kinds of traffic, including IP packets, as well as native ATM, SONET, and Ethernet frames. The Internet has emerged as the network for providing converged, differentiated classed of services to user with optimal use of resources and also to address the issues related to Class of service (CoS) and Quality of Service (QoS). MPLS is the technology that addresses all the issues in the most efficient manner.
MPLS is a packet-forwarding technology that uses labels to make data forwarding decisions. With MPLS, the Layer 3 header analysis (IP header) is done just once (when the packet enters the MPLS domain).

MPLS Applications: MPLS addresses today's network backbone requirements effectively by providing a standards-based solution that accomplishes the following:

1. Improves packet-forwarding performance in the network
2. MPLS enhances and simplifies packet forwarding through routers using Layer-2 switching paradigms.
3. MPLS is simple which allows for easy implementation.
4. MPLS increases network performance because it enables routing by switching at wireline speeds.
5. Supports QoS and CoS for service differentiation
6. MPLS uses traffic-engineered path setup and helps achieve service-level guarantees.
7. MPLS incorporates provisions for constraint-based and explicit path setup.
8. Supports network scalability
9. MPLS can be used to avoid the N2 overlay problem associated with meshed IP – ATM networks.
10. Integrates IP and ATM in the network
11. MPLS provides a bridge between access IP and core ATM.

12. MPLS can reuse existing router/ATM switch hardware, effectively joining the two disparate networks.
13. Builds interoperable networks
14. MPLS is a standards-based solution that achieves synergy between IP and ATM networks.
15. MPLS facilitates IP – over –**synchronous optical network (SONET)** integration in optical switching.
16. MPLS helps build scalable VPNs with traffic-engineering capability.

MPLS VPN:
MPLS technology is being widely adopted by service providers worldwide to implement VPNs to connect geographically separated customer sites. VPNs were originally introduced to enable service providers to use common physical infrastructure to implement emulated point-to-point links between customer sites. A customer network implemented with any VPN technology would contain distinct regions under the customer's control called the *customer sites* connected to each other via the *service provider (SP)* network. In traditional router-based networks, different sites belonging to the same customer were connected to each other using dedicated point-to-point links. The cost of implementation depended on the number of customer sites to be connected with these dedicated links. A full mesh of connected sites would consequently imply an exponential increase in the cost associated.
Frame Relay and ATM were the first technologies widely adopted to implement VPNs. These networks consisted of various devices, belonging to either the customer or the service provider, that were components of the VPN solution. Generically, the VPN realm would consist of the following regions:

Customer network— Consisted of the routers at the various customer sites. The routers connecting individual customers' sites to the service provider network were called *customer edge (CE)* routers.
Provider network— Used by the service provider to offer dedicated point-to-point links over infrastructure owned by the service provider. Service provider devices to which the CE routers were directly attached were called *provider edge (PE)* routers. In addition, the service provider network might consist of devices used for forwarding data in the SP backbone called *provider (P)* routers.
Depending on the service provider's participation in customer routing, the VPN implementations can be classified broadly into one of the following:

Overlay model:
1. Service provider doesn't participate in customers routing, only provides transport to customer data using virtual point-to-point links. As a result, the service provider would only provide customers with virtual circuit connectivity at Layer 2.
2. If the virtual circuit was permanent or available for use by the customer at all times, it was called a permanent virtual circuit (PVC).
3. If the circuit was established by the provider on-demand, it was called a switched virtual circuit (SVC).

4. The primary drawback of an Overlay model was the full mesh of virtual circuits between all customer sites for optimal connectivity.

Overlay VPNs were initially implemented by the SP by providing either Layer 1 (physical layer) connectivity or a Layer 2 transport circuit between customer sites. In the Layer 1 implementation, the SP would provide physical layer connectivity between customer sites, and the customer was responsible for all other layers. In the Layer 2 implementation, the SP was responsible for transportation of Layer 2 frames (or cells) between customer sites, which was traditionally implemented using either Frame Relay or ATM switches as PE devices. Therefore, the service provider was not aware of customer routing or routes. Later, overlay VPNs were also implemented using VPN services over IP (Layer 3) with tunnelling protocols like L2TP, GRE, and IPSec to interconnect customer sites. In all cases, the SP network was transparent to the customer, and the routing protocols were run directly between customer routers.

Peer-to-peer model:

The *peer-to-peer model* was developed to overcome the drawbacks of the Overlay model and provide customers with optimal data transport via the SP backbone. Hence, the service provider would actively participate in customer routing. In the peer-to-peer model, routing information is exchanged between the customer routers and the service provider routers, and customer data is transported across the service provider's core, optimally. Customer routing information is carried between routers in the provider network (P and PE routers) and customer network (CE routers). The peer-to-peer model, consequently, does not require the creation of virtual circuits. The CE routers exchange routes with the connected PE routers in the SP domain. Customer routing information is propagated across the SP backbone between PE and P routers and identifies the optimal path from one customer site to another.

Dial VPN Service:

Mobile users of a corporate customer need to access their Corporate Network from remote sites. Dial VPN service enables to provide secure remote access to the mobile users of the Corporate. Dial VPN service, eliminates the burden of owning and maintaining remote access servers, modems, and phone lines at the Corporate Customer side. Currently accessible from PSTN (127233) & ISDN (27225) also from Broadband.

19.5.3 V-SAT NETWORK:

Most of V-SATs are customer based and support mainly digital networks. Entire network can be controlled from a single hub through appropriate commands. The network can be defined operated from the hub. The hub also takes care of billing etc.

The V-SAT application started with receive only terminals for receiving TV broadcast signals in C band. Small dishes measuring 1.5M to 3M are being widely used for receive only applications for TV broadcast for DTH services. With deregulation coming in number of private operation have been given license to operate high speed data networks.

Network Topology:

V-SAT networks can be arranged in point to point, star, mesh, star/mesh, and broadcast configurations. The preferred arrangement depends on the kind of information flow the network will service.

- **Point to PointNetwork** allows two-way communications between two V-SAT sites.
- **Star Network** allows any number of V-SAT sites to have two-way communication with a central hub.
- **Mesh Network** allows two-way communications between any V-SAT sites in a network. A central hub is not necessary. Each site communicates to another site with a single satellite hop.

19.5.4 RADIO MODEMS:

Similar to our usual microwave systems, these links work on the wireless principle based on line of sight operation. It comprises of Transmitter-receiver on both sides with necessary interface for feeding in and taking out data of appropriate rate. Since there is shortage of frequency spectrum as it is already being used by so many agencies, this system uses only those bands which are available or some free bands which do not need any permissions. The design of these systems is such that they are low cost and work on easily available infrastructure at these locations.

Features of radio modem used in BSNL:

The radio modems in BSNL are of RADWIN make and the broad features are as follows:

1. Frequency band: 2 GHz (free band)
2. Data transmission: Data is transmitted in the form of ethernet on the system.
3. Interface required for interconnection: Convertors are used to connect data into the system from user side. V35 to Ethernet convertors have been used in the systems deployed.
4. Data speeds: it supports speeds upto 10 Mbps, however, it has been used for data rates upto 4 Mbps in our applications so far.
5. Distance range: upto 10 kms, but extendable. It depends on line of site and option taken from vendor.
6. Antenna height:

a. BSNL end: either exchange or BTS tower is used to give maximum height as per need. The needed height is decided by survey calculations. It also depends on the height of antenna at customer site. This varies from case to case.

b. Customer end: Antenna at customer end is fixed on roof top or any structure available. If height needed is more and no structure is available, a tripod type mast is erected for the antenna. It is available in lengths upto 20 metres. Normally the antenna height at customer end varies from 3m to 20m.

7. In the systems commissioned so far, speed upto 4 Mbps is working over distances in the range of 10-12 km.

19.5.5 SDH (SYNCHRONOUS DIGITAL HIERARCHY):

It is a standard for telecommunications transport formulated by the International Telecommunication Union (ITU). SDH was first introduced into the telecommunications network in 1992 and has been deployed at rapid rates since then. It is deployed at all levels of the network infrastructure, including the access network and the longdistance trunk network. It's based on overlaying a synchronous multiplexed signal onto a light stream transmitted over fiber-optic cable. SDH is also defined for use on radio relay links, satellite links, and at electrical interfaces between equipment.
The increased configuration flexibility and bandwidth availability of SDH provides significant advantages over the older telecommunications system. These advantages include:

- A reduction in the amount of equipment and an increase in network reliability.
- The provision of overhead and payload bytes – the overhead bytes permitting management of the payload bytes on an individual basis and facilitating centralized fault sectionalisation.
- The definition of a synchronous multiplexing format for carrying lower-level digital signals (such as 2 Mbit/s, 34 Mbit/s, 140 Mbit/s) which greatly simplifies the interface to digital switches, digital cross-connects, and add drop multiplexers.
- The availability of a set of generic standards, which enable multi-vendor interoperability.
- The definition of a flexible architecture capable of accommodating future applications, with a variety of transmission rates.

Logical composition of SDH equipment:

SDH transmission network is made up of different types of NEs connected via optical fiber cable and performs the transmission function of an SDH network via different NEs. These functions are add/drop services, cross-connection services, network self-healing, etc. Few of these NEs in an SDH network are Terminal Multiplexer (TM), Add-drop Multiplexer (ADM), Regenerator (REG) and Digital Cross-connection System (DXC).
7.1 Terminal Multiplexer (TM)
A TM is used at a network terminal node, as shown in Fig. 2

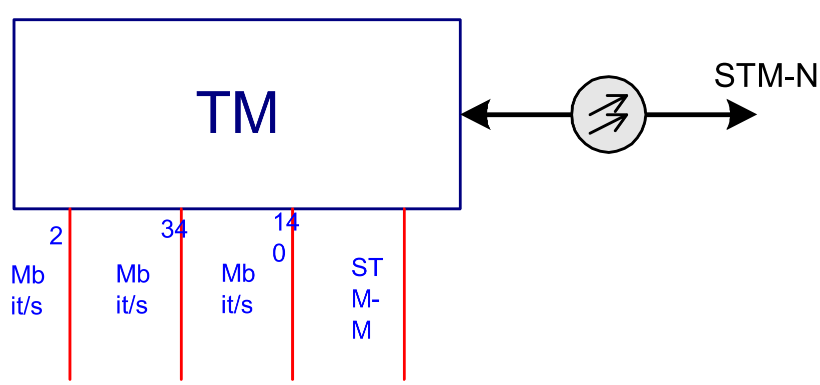


Figure 31: Schematic diagram of model of a TM

The function of a TM is to multiplex the low-speed signals of a tributary port to high-speed signal STM-N of a line port or to de-multiplex low-speed tributary signals from STM-N signals. 1-channel STM-N signals are input/output to its line port while multi-channel low-speed tributary signals can be output/input at a tributary port. When low-speed tributary signals are multiplexed into the STM-N frame of line signals, the locations of tributary signals in the line signals STM-N can be specified arbitrarily.

Add-Drop Multiplexer (ADM): ADM is used at the middle node of a link or a node in a ring, and is the most important NE used most frequently in an SDH network, as shown in Fig. 3

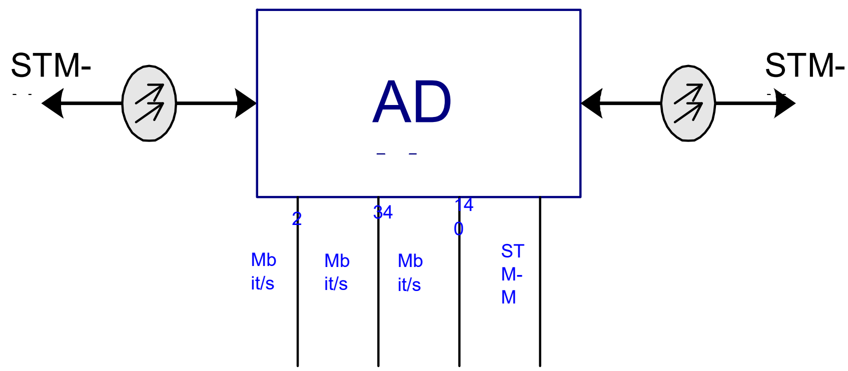


Figure 32: Schematic diagram of model of an ADM

ADM has two line ports and one tributary port. The two line ports are connected with optical cables on their respective sides (two trans-receiving optical fibers on each side). For the sake of description, we specify them as the West (W) line port and East (E) line port. The function of ADM is to multiplex low-speed tributary signals to lines (line singles) in cross-connection mode or de-multiplex low-speed tributary signals from the line signals received from line ports. In addition, cross-connection of the STM-N signals on Eastward/ westward line sides can be implemented. ADM is the most important NE in an SDH network and can be equivalent to other NEs, i.e., it can perform the functions of other NEs. For example, ADM may be equivalent to two TMs.

Regenerator: There are two kinds of regenerators in an optical transmission network. One is the pure optical regenerator, mainly used to amplify optical power so as to extend the optical transmission distance. The other is an electric regenerator used for pulse regeneration shaping and it can achieve the goal of accumulating no line noise and ensuring complete waveforms of transmission signals by means of Optical/electric (O/E) conversion, sampling of electric signals, regeneration, reshaping, Electric/optical and other processing. Described here is the latter one, which has only two line ports, as shown in Fig. 4.

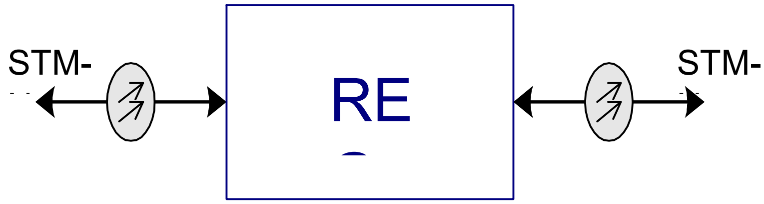


Figure 33: Schematic diagram of model of a regenerator

An REG in real sense only needs to process RSOH in the STM-N frame and needs no cross connection function. However, ADM and TM need to process both RSOH and MSOH because they are to insert low-speed tributary signals into STM-N. In addition, both ADM and TM have the cross-connection function.

Digital Cross-connection System (DXC): The DXC is mainly responsible for the crossconnection of STM-N signals and is actually equivalent to a cross-connect matrix, which implements the cross-connection of various signals, as shown in Fig. 5.

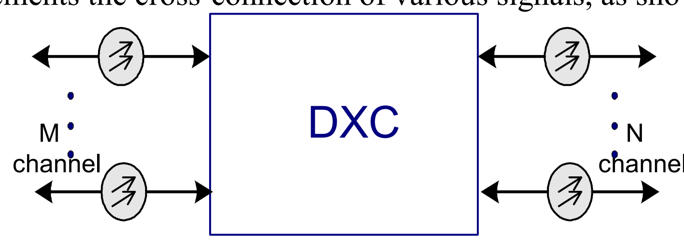


Figure 34: Schematic diagram of model of DXC

DXC can implement cross-connection of the input M-channel STM-N signals to the output N channel STM-N signals. The core of DXC is a cross-connect matrix and the powerful DXC can implement the low priority cross-connection of high-speed signals in a cross-connect matrix.

DWDM: An enormous amount of bandwidth capacity is required to provide the services demanded by consumers. At the transmission speed of one Gbps, one thousand books can be transmitted per second. However today, if one million families decide they want to see video on Web sites and sample the new emerging video applications, then network transmission rates of terabits are required. With a transmission rate of one Tbps, it is possible to transmit 20 million simultaneous 2-way phone calls or transmit the text from 300 years–worth of daily newspapers per second.

One choice is to increase the bit rate using time division multiplexing (TDM), so that more bits (data) can be transmitted per second. Traditionally, this has been the industry method of choice (STM–1, STM –4, STM –16, etc.). However, when service providers use this approach exclusively, they must make the leap to the higher bit rate in one jump, having purchased more capacity than they initially need. Based on the SDH hierarchy, the next incremental step from 10 Gbps TDM is 40 Gbps. Multiple electrical and optical signals are brought into a SDH terminal where they are terminated and multiplexed electrically before becoming part of the payload of an STM–1, the building block frame structure of the SDH hierarchy. The STM–1 payloads are then multiplexed to be sent out on the single fiber at a single rate: STM-4 to STM-16 to STM-64 and eventually to STM-256.

Dense wavelength division multiplexing (DWDM) is a fiber-optic transmission technique that employs multiple light wavelengths to transmit data in parallel through a single fiber. DWDM combines multiple optical signals so that they can be amplified as a group and transported over a single fiber to increase capacity. Each signal carried can be at a different rate and in a different format (SDH, ATM, data, etc.) For example, a DWDM network with a mix of SDH signals operating at 2.5 Gbps and 10 Gbps over a DWDM infrastructure can achieve capacities of over 40 Gbps. A system with DWDM can achieve all this gracefully while maintaining the same degree of system performance, reliability, and robustness as current transport systems. DWDM terminals of up to 80 wavelengths of STM-16, a total of 200 Gbps, which is enough capacity to transmit 40,000 volumes of an encyclopaedia in one second. The technology that allows this high-speed, high-volume transmission is in the optical amplifier. Optical amplifiers operate in a specific band of the frequency spectrum, making it possible to boost light wave signals and thereby extend their reach without converting them back to electrical form. Demonstrations have been made of ultra wideband optical-fiber amplifiers that can boost light wave signals carrying over 100 channels (or wavelengths) of light. A network using such an amplifier could easily handle a terabit of information. At that rate, it would be possible to transmit all the world's TV channels at once or about half a million movies at the same time.

Optical Cross Connect (OXC): As huge amounts of information traveling around an optical network need to be switched through various points known as nodes. Information arriving at a node needs to be forwarded towards its final destination via the best possible path, which may be determined by such factors as distance, cost, and the reliability of specific routes. The conventional way of doing this is to switch the information is to detect the light from the input optical fibers, convert it to an electrical signal, and then convert that back to a laser light signal, which is then sent down the fiber you want the information to go back out on.
However, what we need is to just move the light itself around, without all this OEO conversion to electric signals. This is what an Optical cross connect (OXC) does. The advantages of being able to avoid the conversion stage are significant. Optical switching is cheaper, as there is no need for lots of expensive high-speed electronics. Removing this complexity also makes physically smaller switches and these optical switches are relatively future-proof. An electrically based switch will have electronics designed to detect the incoming light signal. If you increase the speed at which the light signals operate (increasing the bit-rate) then the electronics will need to be upgraded to handle the faster speeds. If you are just rerouting light, however, it doesn't matter how fast the data is coming, so you can accommodate any future upgrades of bit-rate without needing to upgrade the switch.
Optical cross connects (OXC) are designed with simplicity in mind, so that light in one fiber can be moved to a different fiber i.e. redirecting the light. However, to do so, the technology needs a major upgradation. Semiconductor amplifiers, liquid crystals, holographic crystals, and tiny moveable mirrors are few of the available technologies. One of the most common techniques being developed is that of the tiny moveable mirrors known as micro-electro-mechanical systems (MEMS).

19.6 CONCLUSION:-

There is a growing need of connecting various branches of an Enterprise, which might be located across the globe. Lease line & Internet bandwidth has become necessary for networking multi-site business. Today's business owner wants to focus more on its core competencies rather than trying to implement such things of their own. Such a networking solution often requires not just bandwidth, but hardware components, security solution and maintenance also.

20 PROJECT KUBER &ENTERPRISE STRUCTURE

20.1 LEARNING OBJECTIVE:

At the end of session, the trainees will be able to understand:

- Components of Project Kuber
- Commercial & Billing Of Lease Circuits, MLLN & MPLS Etc.
- Exchange Level Circuit Creation Support
- Multiple Payment Options For All Kind Of Circuits
- Background to Project Kuber etc.

20.2 INTRODUCTION:

It is an accepted industry thumb rule that 80% revenue comes from 20% customers. For survival of any organization it must be able to meet its operating expenses i.e. by having sufficient cash in hand. For a telecom operator, this liquidity depends on the billing promptness and revenue collection. For ensured stream of revenue from customers, appropriate degree of quality service with after sales service is also must.

This chapter deals with such aspects related to BSNL"s customers.

20.3 LESSON PLAN

- Components of Project Kuber
- Background to Collection component of Project Kuber
- Billing & Collection strategy

Components of Project Kuber

- Commercial & Billing aspects
- Collection approach

20.3.1 COMMERCIAL & BILLING OF LEASE CIRCUITS, MLLN & MPLS ETC.

BSNL has a vast long distance network and number of equipped circuits is in millions. Typical questions to be handled by the team dealing with circuits are:

- Which circuit is making how much money
- How many are idle

- What path has been built up to provide circuit from X to Y
- Whether the commissioned circuit has been billed
- What is the status of payments received for circuits provided by BSNL
- Which & How many circuits are faulty and who is taking care of that
- What is the mechanism to ensure SLAs and corresponding settlement of bills

BSNL had been using an in-house developed software "TAVARIT" for handling commercial aspects of circuits. However, the features were limited and no linkage with billing & collection system existed. Also the all India inventory of circuits was not uniform and available in a common database. Following actions have been taken:

All circuits in BSNL network have been given unique ID and a database has been created.

A new software for work order management, an integrated commercial & billing application has been got developed and deployed. The salient features of new package are:

20.3.2 A EXCHANGE LEVEL CIRCUIT CREATION SUPPORT

- You can create exchange wise circuits over and above LDCA & SDCA. This feature enables you to create circuits for different exchanges within the same SDCA. i.e. you can precisely mention exchange details of Navarangpura exchange & Naranpura exchange involved in a circuit within the same SDCA (Ahmedabad SDCA)
- It enables you to distinguish circuits created for different exchanges within the same SDCA

Multiple Payment Options For All Kind Of Circuits

- Facilitates users with multiple payment options such as,
- Full
- Partial
- It enables Account Officers to allow the circuits to move to the next stage with or without making full payment for the demand notes

Introduction Of Field Work Module And Field Users

- Field Work module enables users to automate the field work flow in the system and enter details related to field work
- It allows you to create various field work users such as SDE PCM, SDE MLLN etc and assign access rights to them based on their role and designation

- Redirection of activities at any stage in Field Work Module
- This feature enables users to redirect the field work activity to the previous stage of its respective workflow hierarchy at any stage of work flow

  - This feature allows Account Officer to create DNP application for discontinuing the services for the subscribers who hasn"t made payment after the "Pay by date" duration specified in demand note
  - Creation of RNP Application
  - This feature allows Account Officer to create RNP application for reactivating services for the subscribers who has made payment after discontinuation of services
  - Barring direct modification of Demand Note amount

This feature facilitates Commercial Officers to provide discounts in case there is any need to reduce Demand Note amount . Similarly for increasing the demand note amount, the CO can add an additional charge. However, the system does not allow any updates or modification of the amount itself

Preview Page For All Functionalities

- Enables users to preview the details of the entities before creating them
- This facilitates users to verify the details and rectify/modify them prior to creation
- Flat File Amount Calculation for MPLS-VPN Circuits
- This feature facilitates users with calculating flat file amount for MPLS-VPN circuits
- Multiple Search options for all Entities
- This feature facilitates users to search entities with multiple search criteria. For example, you can search an application based on following search criteria:

• Date Range
• Subscriber Name
• Lc Id
• Application No.

- Application Type
- Circuit No.
- End A Exchange
- End B Exchange
- Circuit Type
- MPLS-VPN Id
- Bulk Id
- Automation of Work Flow

–Facilitates users with automating the work flow. Users can assign the application to the next stage once his/her part of job is done. For example, upon selecting "Move to Next stage" check box while making payment for demand note, the system automatically generates the Work Order for the subscriber application which can be issues to Nodal Officer for Feasibility Check

Creation of Time Depended Circuits for existing customers

– Time depended circuits for both new and existing customers

– Converting Temporary Circuit into Permanent Circuit

– Converting Trial Circuit into Permanent Circuit

Extension of Trial & Temporary Type Circuits

– Extend the duration of Trial & Temporary type circuits

This feature enables users to downgrade the bandwidth of circuit (i.e. from 128 Kbps to 64 Kbps) based on customer request

– Upgrading Circuits with change of Class of Service for MPLS-VPN Service

– This feature enables users to upgrade the circuits (i.e. bandwidth of circuit) with changing the class of service (i.e. From "Silver" to

"Gold") for MPLS-VPN Service

Access Rights allocation of Multiple Exchanges to a single user

– Facilitates assignment of access rights of multiple exchanges to a single user. e.g. Commercial Officer of Ahmedabad SDCA can have access rights of Ahmedabad & Sanad SDCA if required

– Miscellaneous Advice Note (Before Commissioning)

– This feature generates Advise Notes in the system upon making any changes in the subscriber application before commissioning such as change of billing & installation address, change of billing cycle, number of NTUs installed etc.

– Allows to make changes in the application (edit application) with redirecting the application to the previous stage

– Performing any changes in the application via edit functionality generates a miscellaneous advise note in the system

Miscellaneous Advise Note (After Commissioning)

- This feature generates Advise Notes in the system upon making any changes in the subscriber application after commissioning such as change of billing & installation address, change of billing cycle, number of NTUs installed etc
- It leads to a separate work flow for circuit updation
- Where is my Circuit Module
- This module acknowledges users about the current status of a particular circuit
- It also provides information on the next task to be performed on the circuit along with the responsible user for performing the particular task.

Channelized E1 Module

– This feature enables users to combine their various circuits having any one end point common into one primary circuit. This reduces their overall charges such as NTU Charges since one 2 Mbps NTU replaces NTUs used for other circuits

– Channelized E1 is special 2 Mbps mapping that is divided into 30 B Channels

– Channelized E1 can replace those circuits that have the bandwidth in multiple of 64 Kbps. At most 30 circuits of 64 Kbps can be provided in a single E1 pipe

Inclusion of De-allocation activities in Post Connection Activities

– Enables users to specify de-allocation activities while performing post connection activities such as upgrade & downgrade bandwidth, shifting, conversion

R & G (Rent & Guaranteed) Application

–This feature supports new provision of special construction & contribution type of circuits

20.4 BACKGROUND TO PROJECT KUBER:

As on 31/3/08 BSNL had accumulated bad debts of Rs 4400 crore from landline, mobile and enterprise segments. Bad debt as a percentage of amount billed for was found to be 3.9% for basic, 4.8% for mobile and 10% for data circuit. Second month collection efficiency in some circles w/s found to be even less than 50%. System for improving collections before Project Kuber is shown below:

1 Agency selection	• Experience of the agencies is proposed to be given increased focus • Organized bodies or agencies are to be selected for the job • Collection agencies shall be chosen based on their financial strength and capabilities to put in concerted effort
2 Segmentation	• Outstanding accounts needs to be segmented based on age, geography and customer type to decide right and timely strategy of persuasion • Collection agencies should be given accounts spread over predetermined, small area • Start the follow up early, do not wait till two years.
3 Commission structure	• Commission structure capped at a higher percentage, to mark it to the market rates
4 Support & monitoring	• Internal BSNL teams need to be created for supporting collection agencies • Strict review and monitoring required

Figure 35: System for improving collections before Project Kuber

As part of Project Shikhar, BSNL launched a project titled "Kuber" to take care of identified issues.

Customer segment	Typical Products	Age of outstanding	Collection methodology
1 Retail (Small and medium ticket size accounts)	Basic Services, CMTS post-paid	• 3 - 6 months • 6 - 12 months • 12 – 24 or 36 month	• Outsource to collection agencies, prioritizing on size • Appoint different agencies based on areas and age of outstanding • In-house team for continuous monitoring of performance
2 Enterprise (Large ticket size accounts)	Basic Services, CMTS post-paid, Telephone & data circuits	• 3 – 36 months	• Create in-house team for follow up on accounts • Prioritize follow up based on size and age • Weekly monitoring of progress
3 Govt. & Defense	Basic Services, Telephone & Data circuits	• All outstanding greater than 3 months	• Create in-house team for follow up on accounts • Weekly monitoring of progress

Figure 36: Collection efficiency was developed on the basis of customer type and age

20.4.1 FOUR STEP APPROACH HAS BEEN DECIDED:

1. **Identification of outstanding accounts and segmentation**
2. **Selection of collection agencies and allocation of outstanding accounts**
3. **Creation of internal teams and systems**
4. **Monitoring and review**

Identification Of Outstanding Accounts And Segmentation

- **Identify outstanding accounts for Basic, CMTS and Data Circuits, b/w 3 months and 3 years[1] old**
- **Segment accounts on the following dimensions**
- **Age:** 3-6 months, 6-12 months, 12-24 months, 24-36 months
- **Size of outstanding:** 0-1000 Rs, 1000 – 20000 Rs, >20000 Rs
- **Geography:** Areas within SSAs
- **Customer type:** Private, Govt. & Defense
- **Account size should be determined after clubbing all outstanding bills for a particular customer**
- **Age should correspond to the age of the latest outstanding bill**
- ***SQL queries will be provided for getting this data for DOTSOFT, TRICHUR and CSMS***
- ***Templates are provided for filling in this data, both at segment level and at individual bill level***
- ***Template 1: "Outstanding Accts – Private"***
- ***Template 2: "Outstanding Accts – Govt, Def"***

Selection Of Collection Agencies And Allocation Of Outstanding Accounts

- **Identify collection agencies in the SSA that are either**
  - Debt Recovery Agents of other Telecom Service providers
  - Debt Recovery Agents of reputed Public Sector Banks/ Financial Institutions
- **Assess identified agencies on following parameters:**
  - Experience of working with other telecom operators
  - Manpower
  - Financial strength
  - Ability to scale up manpower and infrastructure for BSNL requirements

- Geographic area where they have strong presence
- Interest in working with BSNL

- **Based on this assessment finalize the set of 'Competent Agencies'**

Typically, There Should Be One Agency Identified For Every 2000 OutstandingAccounts

- **Take the accounts that are between 0 and 20000 Rs., for private customers only**
- **Divide these accounts to form portfolios as follows:**
  - **Divide the accounts into 3 buckets**
  - Bucket 1 (B1): 3 months – 6 months
  - Bucket 2 (B2): 6 months – 12 months
  - Bucket 3 (B3): 12 months - 24 or 36 months
  - Choice of 24 or 36 months is left to the SSAs. It should be based on the no. of competent agencies available
  - **Divide the SSA into areas, on the basis of SDCA or smaller; Each SSA should be divided into at least 3 areas; Divide the outstanding by Area within the SSA to get the following portfolios (assuming there are 3 areas in the SSA – A1, A2, A3)**
    - Portfolio 1: B1, A1; Portfolio 2: B1, A2; Portfolio 3: B1, A3
    - Portfolio 4: B2, A1; Portfolio 5: B2, A2; Portfolio 6: B2, A3
    - Portfolio 7: B3, A1; Portfolio 8: B3, A2; Portfolio 9: B3, A3
    - **In case an SSA has 4 areas, then there will be 12 portfolios and so on**
- **Allocate portfolios to the 'Competent Agencies' based on area of operation, capacity etc.**
  - Each portfolio of outstanding should be allocated to a minimumof 2 and maximum of 3 agencies
  - Also while allocating, it should be ensured that each agency gets at least one portfolio in each time bucket
- **Invite competent agencies to bid for portfolios allocated to them**
  - Bids contain the commission percentage that the agency will charge on the collections done by them

  - Each portfolio of accounts will have between 2 and 3 agencies bidding for them.
- **Once the bids are opened, the following process should be carried out:**
  - For each portfolio of accounts, the agency with the lowest bid should be selected.
  - If the agency with the lowest bid is unable to take on the contract, then the agency with the second lowest bid should be invited to take over the contract at the L1 rate; In case no agency agrees at L1 rate, then re-bidding should be done
- **While finalizing the allocation the following points should be kept in mind**
  - No agency is allocated more than 2000 accounts for the whole SSA.
  - No agency gets consecutive time buckets
  - Any deviation from these rules should be made only if no competent agencies can be identified.

The entire exercise of identifying and appointing agencies wa<u>s to be completed in 20 days</u>

- **Every month, there will be new outstanding cases generated that exceed more that 3 months in age**
  - Such cases should also be passed onto agencies that have been allocated the 3-6 month bucket
  - Therefore, agencies working on the B1 bucket (3-6 months) will get more accounts added on every month
- **This should be done for 3 months at a stretch; During this time the number of accounts in Bucket 1 will keep on increasing**
- **After 3 months, the accounts should be <u>shifted to the next bucket</u>**
  - Accounts will be moved from 3-6 months bucket to 6-12 months bucket at the end of every quarter; Similarly they will mover from 6-12 month bucket to the next bucket
- **Additional incentives can be provided for achieving specific targets as follows:**
- **The collection should be done in a period of 1 month from date of receiving list to be eligible for incentive**
  - This additional incentive shall apply to the entire amount collected by the agency

– This scheme is to be measured on a monthly basis, taking into account the starting portfolio and the amount collected in that month.

Creation Of Internal Teams And Systems

- **Dedicated team of people required to support, manage and drive the external agencies.** Recommended team structure is given below. All members report to SSA (IFA)

Table 38. Team for Project Kuber

S.No.	Position	Required Designation	# of people required	Full Time/ Part time	Role
1	Agency Manager	DGM / CAO as per availability	1 per SSA	Full Time	Manage all private recovery agencies Conduct weekly reviews Drive agencies towards targets Collect and consolidate daily reports from agencies
2	Database Manager (billing packages)	CAO / AO	1 per SSA	Full Time	Manage database of outstanding accounts
3	Query Handlers	SS/TOA	1 per Area	Full Time	Answer queries raised by agencies in real time
4	Enterprise / Govt. accounts manager	CAO/AO	1 per Area	Part Time	Follow up on large value and govt./defense accounts Repot weekly to IFA on progress

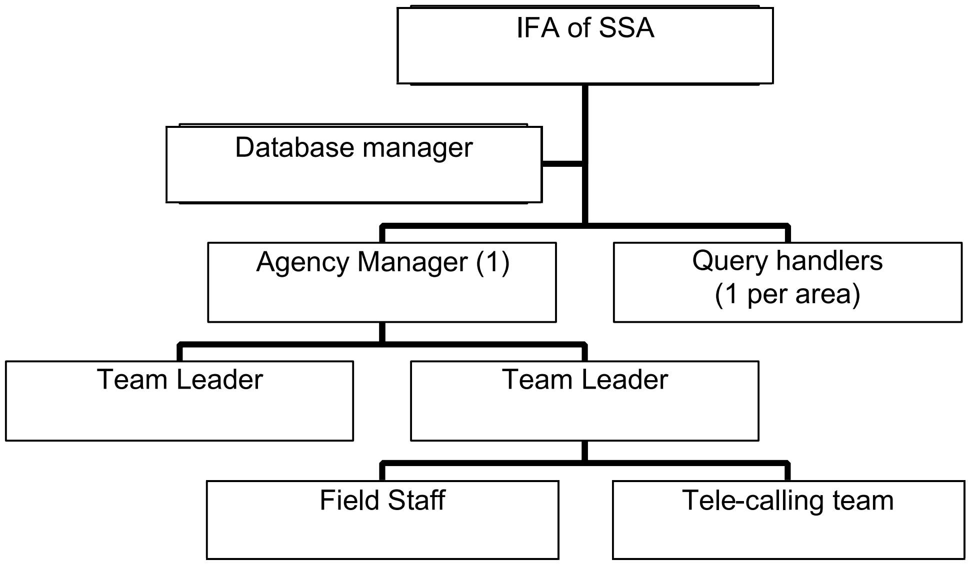


Figure 37: Flow Chart

20.5 MONITORING, REVIEW & CODE OF CONDUCT

- Collection agencies to provide daily reports (hard and soft copy) on the collections done by them
- BSNL to provide collection agencies information on accounts that have been paid up on daily basis
- Query handlers to have access to terminals to answer questions from field agents in real time
- Weekly review to be conducted with the collection agencies
  - Track %age of amount collected (from the total account passed onto them)
  - The amount collected should include the following
    - Cheque payment collected by agencies
    - Payments made by customers directly at counters
  - *Template provided for tracking agency performance – "Agency Performance"*
- Non performing agencies should be given a warning
  - Continuous non performance should result in removal of the agency

– A new agency should be appointed for the accounts that were held by the agency that was removed

- The agencies should provide detailed feedback on the status of the accounts passed onto them
- Mechanisms in place to ensure that agencies follow proper code of conduct

Code of conduct to be followed by collection agencies

- Code of conduct created for the collection agencies in line with TRAI guidelines
  –Code of conduct to be provided as part of the approved legal contract
- Sample audit should be carried out on the customers contacted by the agencies
  –Ensure that the collection agencies are operating as per code of conduct
- Helpline to be created for customers to contact BSNL in case of any complaint
  –Also list of collection agencies put up on the BSNL website
- Any serious complaint against the agency that is substantiated should lead to
  - Immediate cancellation of the contract
  - Forfeiture of the security deposit of Rs. 20000
  - Blacklisting of agency for any future contract with BSNL
- The agency and the agents should be issues with authorization letter and ID card from BSNL
- Collection agencies can collect payments only through cheques
  –Agents to give BSNL receipts to customers on collection of payments

20.6 CONCLUSION:-

For survival of any organization it must be able to meet its operating expenses i.e. by having sufficient cash in hand for -BSNL, this liquidity depends on the billing promptness and revenue collection. Project Kuber is ensured for stream of revenue from customers, appropriate degree of quality service with after sales service is also required.

21 CDR BILLING

21.1 LEARNING OBJECTIVES:-

- Introduction to CDR Billing
- Components of a Billing System
- CDR Based Customer Care and Convergent Billing System-Project 1 & 2
- Organizational Structure of BSNL for services
- Computer Hardware
- Computer Software
- Single Convergent Bill
- For Management through Enterprise Management System
- Solution Framework

21.2 INTRODUCTION

The telecommunication environment has become very competitive with multiple operators and multiplicity of services by each operator. In order to be more competitive, companies need to identify customer needs and provide high quality services. The company's ability to provide an accurate and simple bill itself will be an ordeal with the increasing number of services and their complexities. With this demanding requirement and to maintain the competitive edge, BSNL has decided to implement the CDR based billing. To understand the billing process the following figure may be studied.

The figure above shows how a basic billing process works. After a call is made the collector gathers data from the switch and builds a call detail record(Call detail record).

The CDR contains the originating number, terminating number, the start and end times of the call, The CDR is then stored until it can be rated. After rating the credits and other charges are added. Thereafter the invoices are produced and mailed to the customer in a simple format. Call data is also shared between different service providers which are commonly known as IUC. Issues that must be addressed while managing billing system are reliability, accuracy and readability. Billing different types of services is also a complex issue.

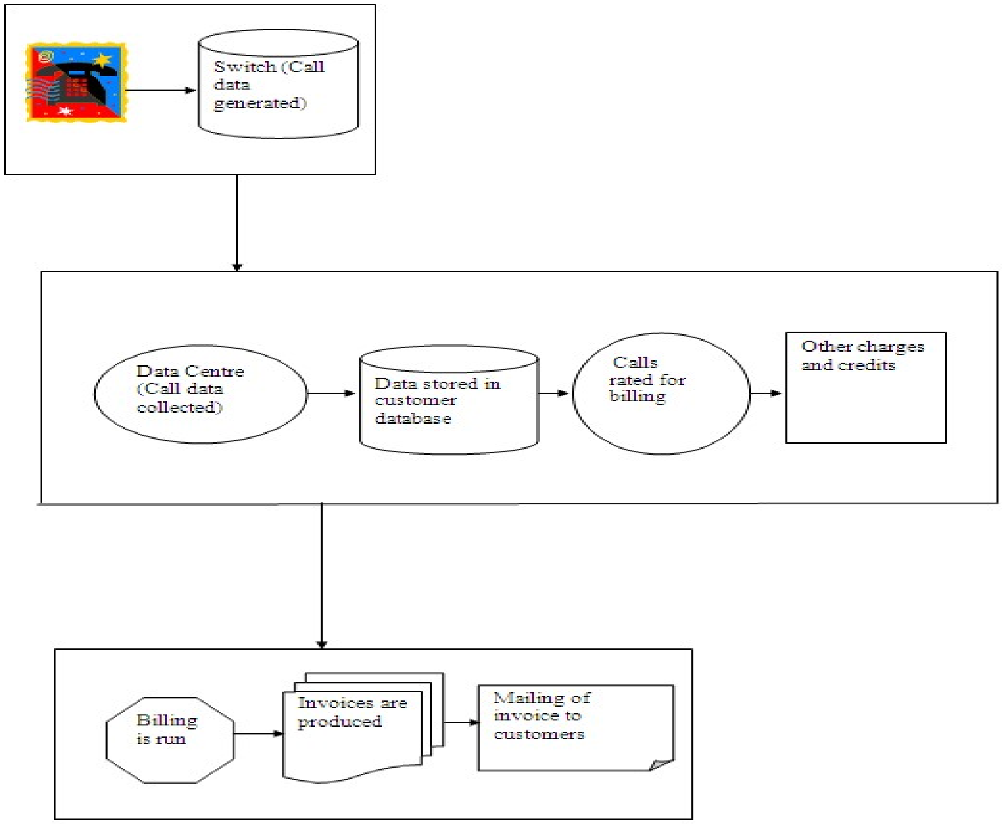


Figure 38: CDR Billing

21.3 COMPONENTS OF A BILLING SYSTEM

A billing system is composed of a series of independent applications that, when run together, are referred to as the billing system. Its major components are as follows:

CDR—This is used to record the details of the call. Usual information on a CDR includes start time of call, end time of call, duration of call, originating number, and terminating number. The CDR is stored until time of billing.

Guiding—This matches calls to customer calling plans. The application uses the start and end number and the duration and time of call to decide what the charge should be, based on the calling plans on the customer's record.

Rating Application—This program applies the rate for the individual. guided calls. Rating gives the call a value to be charged at the time of billing (not including any promotions, discounts, or taxes).

Billing–This is usually performed once a month. This job collects all of the rated calls that have been stored over the past 30 days. The program adds any promotions and discounts that are associated with the customer account. For example, if customers have called over a certain number of minutes, they might get a volume discount. In addition, taxes and credits are applied.

Invoicing—When the billing job is complete, a file is created that includes all of the customer's information. This file is sent to a print house to be converted to paper invoices. These invoices are then stuffed into envelopes, along with specific inserts targeted to the customer. Many companies will also create electronic statements and send customers their invoices via diskette, tape, or even e-mail; alternative billing practice is especially common for business customers.

21.4 CDR BASED CUSTOMER CARE AND CONVERGENT BILLING SYSTEM-PROJECT 1 & 2

Bharat Sanchar Nigam Limited (BSNL) is having countrywide presence with over 55 million wire line & wireless telephone subscribers and offer hosts of other services like Data communication, National long distance, International Long Distance, Internet, Leased Line, etc. The Company has decided to implement next generation State-of-Art Call Detail Record (CDR) based Customer Care and Convergent Billing System. This assignment involves deployment of Centralized Integrated Billing Systems with supporting technological and communication infrastructure.

Convergent Billing would be based on Call Detail Records (CDRs) obtained from different type of Network elements capable of generating billable information, using centralized Mediation System. Since all the switches do not support generation of 100% CDRs, the Billing & Mediation system l also supports meter reading based billing, which is presently in practice in addition to CDR based billing in the same billing system.

The project enables BSNL to face new challenges due to competition by providing effective and efficient Billing & Customer Care Solutions. It envisages building of country wide intranet, reduce the cost of operation, increase revenue realization, stop leakage of revenue besides providing round-the-clock best customer care operations.

The ultimate aim of BSNL is to implement the CDR based Billing and customer care solution through out India with four zones and four data centers. This will be achieved by carrying out implementation in two zone-pairs each to be referred as CDR Project 1 and CDR Project 2..

21.4.1 IMPLEMENTATION PLAN

The implementation plan is indicated below:

Proof of concept Phase– Setting up of data centers at East-South Zones(CDR Project 1) and North-West zones(CDR Project 2) and implementing all the software solutions along with the networking components meant for the SSAs mentioned below.

Roll out Phase – Implementation of CDR based billing and customer care system in all the remaining SSAs.

The two phases can be summarized as below:

Table 39. for Implementation Plan

CDR Sub Project	Data Center	CDR Project	POC Phase	Roll out Phase
1.1	South	CDR Project 1	4 SSA (Hyderabad, Bangalore, Thiruananthpuram, Chennai,	66 SSAs
1.2	East	CDR Project 1	8 SSA (Kolkata, Patna ,Kamrup, Ranchi, Raipur, Shillong, Puri, Kharagpur)	64 SSAs
2.1	North	CDR Project 2	7 SSAs (Chandigarh, Ambala, Lucknow , Noida, Dharamshala, Dehradun, Jammu)*	79
2.2	West	CDR Project 2	4 SSAs (Pune, Ahmedabad, Bhopal, Jaipur)	101

There would be two different Billing Application Software solutions for the two projects.

Table 40. CDR Project Details

CDR Project 1 (South & East Zones)		CDR Project 2(North & West Zones)	
CDR Sub Project 1.1	**CDR Sub Project 1.2**	**CDR Sub Project 2.1**	**CDR Sub Project 2.2**
System Integrator A	**System Integrator A**	**System Integrator B**	**System Integrator B**
CSG Billing System (BS1)	**CSG Billing System (BS1)**	**Billing Solution 2 (BS2)**	**Billing Solution 2 (BS2)**

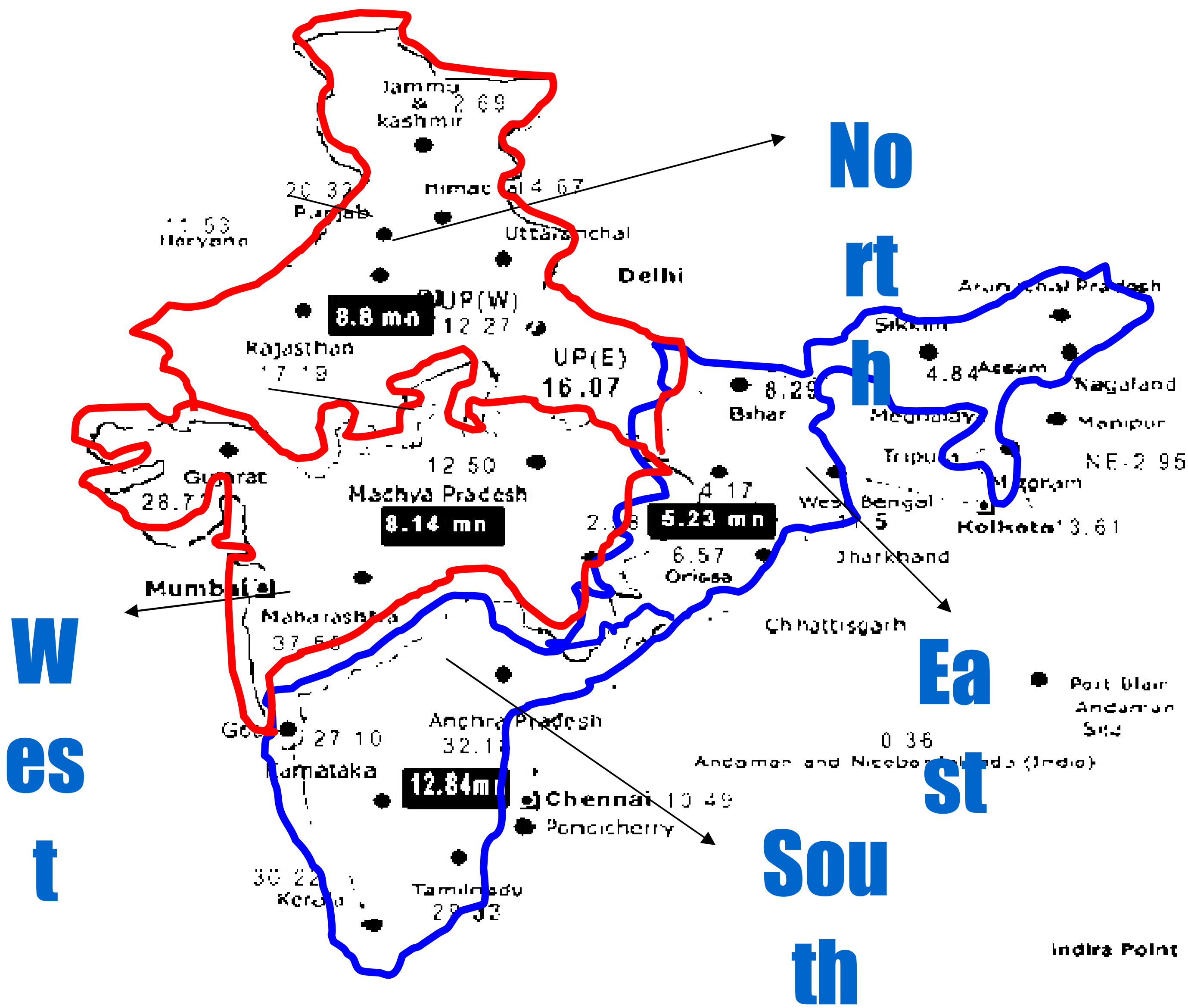


Figure 39: Architecture of CDR

The DEL figures shown in the above figure are approximate figures only. Exact details are furnished elsewhere.

CDR Project I: Region marked in Blue (South and East Zones)	CDR Project II: Region marked in Red (North and West Zones)

21.4.2 FUNCTIONALITY

The overall functionality of the system would have all the functionalities that are available in the existing packages like DOTSOFT. The commercial, Telecom revenue and accounting and FRS functionalities available in these packages would be available in the new system also.

21.5 ORGANIZATIONAL STRUCTURE OF BSNL FOR SERVICES

For the purpose of operations and revenue BSNL is divided into circles and each circle is further subdivided into SSAs (Secondary Switching Area).
While circles are typically same as States, SSAs are same as districts in most of the cases. For the purpose of charging SSA boundary is normally co-terminus with LDCA (Long Distance Charging Area). Each LDCA is further divided into number of SDCA (Short Distance Charging Area). Headquarter of the SDCA in most cases handles complaints and fault repair service pertaining to the area of SDCA.

Each SSA is like a separate profit centre. Typically each SSA is responsible for providing service to the customers and subsequent customer support.

Each SSA has both indoor and outdoor staff. Indoor staff is responsible for Network Element maintenance, provisioning, etc while outdoor staff is responsible for building and maintaining the access circuit from NE to the customers premise.
Customer touch points are Customer support centers located in various SDCAs, which are responsible for Service registration and related commercial formalities followed with collection of payments against demand notes and bills.

Back Office operations are offered through commercial offices, accounts offices, operational & maintenance units. Commercial offices are responsible for different kind of service request.

There are well laid out accounting practices which ensures that a proper record is maintained both at the commercial and accounts office for the customer.
Under Zonal Data Centre, BSNL envisages setting up an OSS(Operation Support system) and BSS (Base-station system) infrastructure, which is centralized but has decentralized roles and privileges based access to Customer Service Representatives (CSR) and Account Managers (all concerned for back office operation) in view of the BSNL's organizational structure described above. Roles and Privileges based access is intended to provide limited access to CSRs/ Account Managers on the system based on different criterion like SSA, Circle and Service center with a permission to carry out one or combination of functions including create, delete, view, print, etc. on different application running at Data Center.

21.6 DATA CENTER

Establishment of data centre to host the hardware and software required for all applications. The Network Operation Center (NOC) and Server room shall preferably be located nearby. All Gigabit connectivity between different Data Center equipment shall be on optical / electrical interface. Provision of CCTV based Surveillance System & Access Control System at the Data Center. A separate enclosure shall be provided for monitoring screens

21.7 COMPUTER HARDWARE

Hardware requirement is categorized in two broad levels for all categories of applications.

First category of servers is of Connection or Presentation Servers for Applications which are multi instance and scale horizontally. For such category of applications, Rack mounted Blade Servers/ Rack mounted Stand Alone Servers shall have to used. These type of servers shall be utilized as: EMS Gateways, HTTP servers, SMTP servers, Print Servers, AAA Servers, Logical Security Elements, Network Device Management Servers, DNS Servers, IVRS, Proxies, etc.

Second category is of Datacenter class Servers for the purpose of Database where persistent data is stored and Application Servers where business logic resides within which data is manipulated in response to a client's request. Here database and application can scale diagonally i.e. scales vertically to an extent and horizontally beyond that. These services can run on multiple mid range servers or on a few high end servers having multiple instances of application running. Following applications shall run on these servers:

Billing and Accounting (Including Rating, OM (if part of Billing) and all other related functionalities), Revenue assurance, Mediation, Provisioning, EAI, CRM (Including CHS, WSC, OM (if part of CRM) and all other related functionalities), Directory Enquiry, EMS, IOBAS ( ), FMS (Fraud Management System), Backup.

Mediation Servers or partitions running Mediation application have X.25 adapters with redundant configuration.. There would be a scenario where X.25 and other type of connectivity are achieved through separate stand alone server to act as collection server and DC class of Server for further processing. Additional collectors would be configured at each data center for the failover site to take care of 100% collection requirement in DR scenario.

System Architecture would be modular in design allowing future expansions. The Hardware design is done in such a way that there would be no single point of failure. Operational and monitoring tools for each and every hardware system would be provided. Hardware System shall provide status information of the various processes to an industry standard EMS (Third party)

21.8 SOFTWARE

Various software applications with functional modules are Data Mediation System, Billing and accounting, Service Provisioning, CRM & Web Self Care, Directory Enquiry, Revenue Assurance, Enterprise Application Integration, Enterprise Management System, Enterprise Reporting, and Security System etc

Customer Relationship Management (CRM) system is the single point customer interface inter-linking Convergent Billing, accounting, commercial, fault control, order and provisioning status, etc. CRM also provides for management of all types of post-paid and prepaid as well as discrete products & services rendered by BSNL. Provision exists for on-line and batch methods of feeding all types of data in each application.

All software modules in OSS are tightly integrated with each other as per BSNL's business requirement. The integration is achieved under EAI (Enterprise Application Interface) framework using industry standard connector/ adapter.
The system is required to be interfaced with existing software application like IVRS, FRS, Billing, Commercial and Directory Inquiry system as per specific need for continuity of the business. Self Care Service through Internet would be provided for identified services by taking due care of system security.

All the software systems would have easy integration capability by supporting industry standard open transport technologies and middleware product. The software systems would offer the capability to import and export information to/from external files or system. The Software System shall support XML and HTML standards for Internet Data Exchange. Software Systems should have capability to apply software or parameter changes without stopping the system.

Software System like Billing, CRM etc would support clear demarcation for the core layer and the customization layer. All business process reengineering would be done through customization layer. All future versions would have backward compatibility to ensure safe upgrades.

The Software Systems would be able to scale both vertically and horizontally in order to utilize in-box capability of Servers (hardware) and if required by deploying additional Servers.

There would be operational and monitoring tools for each and every software & hardware system.

21.9 SINGLE CONVERGENT BILL

A customer Account having multiple services with each service having multiple instance shall have option to get single Bill. It shall also be required to give single bill for multiple of such accounts arranged in hierarchy under a Corporate/individual Account

21.9.1 INDIVIDUAL ACCOUNT

Data consolidation for service and multi instance Customer Account, within a zone , shall be done from existing billing system. Invoice would be generated for each service, the customer has opted for. Individual invoices for a single customer shall be received from different billing system and then a single invoice shall be generated at all four zonal billing centers, after taking in to account bulk discount if any
Extension of Customer care to such customer shall have hierarchical view and the same shall be covered under web self care as well as corporate self care.

21.9.2 CORPORATE BILLING

Three zonal billing centers (South, West and North) and other Billing centers meant for billing other services like GSM based Mobile Telephone, IP Billing, Leased Line Billing, Intelligent Network, etc shall be connected to East Zone to support Corporate Convergent Billing, payment collection etc. In short, BSNL will have multiple Billing System

considering multi service environment, which will continue to be in operation even after full commissioning of proposed system. Hence, it is of utmost requirement for the proposed solution to be able to work in conjunction with other Billing system.
The billing system shall be able to collect processed bills from the billing system of following networks existing in BSNL such as MLLN System, CMTS located at 5 different locations, NIB-II, IN System etc
In addition, Billing of Broadband services, CLI based Internet service and other IP services on same landline is also required. In this scenario usage information (rated CDRs) shall be taken from the billing system of NIB-II. CDMA Technology presently deployed in the BSNL network shall be provisioned and billed through the proposed solution

21.9.3 NETWORK

Country wide exclusive TCP/IP based intranet would be built up for collection of CDRs and/ or meter reading and for other operational requirements. This will cover all the major exchanges having 1000 or more lines (as per the figures indicated above), customer care centers, major BSNL offices including SSA headquaters, major RLU/RSU installations, existing Billing centers of each SSA, etc. TCP/IP Connectivity to the major RLU/RSU shall be either through leased line or through dial up connection depending upon the capacity of the RLU/RSU. The broadband (DSL) connectivity may also be employed.

Billing data aggregation of the remaining exchanges of lower capacity will be done at the existing Billing center of the respective SSA on a computer, which will be connected to TCP/IP network through WAN port. Aggregation infrastructure from lower capacity exchanges to billing centers of SSA will be provided in case it does not exist. TCP/IP network setup for collection of CDRs shall also be used for providing connectivity to remote work stations/CSRs after ensuring system security.

There would be RAS and AAA Server installed at Data centers with prescribed rights to the individual remote terminals and users. Log of the changes made from the remote work stations shall be maintained at the data center.
STM-1 fiber interface shall support wavelength of 1310 nm with single mode fiber of length 15 kms.

21.9.4 DATABASE

For the various applications envisaged in this project, an RDBMS with necessary components with features as enumerated below is required:
Work in failover mode over geographical locations.
Work in a distributed mode across multiple servers.
Work in a cluster mode
For multiple standby (backup) systems
Feature for graceful switchover and switchback between the primary and the standby databases (without any direct intervention from the database administrators)

21.10 FOR MANAGEMENT THROUGH ENTERPRISE MANAGEMENT SYSTEM.

All the APIs for integration with 3rd Party Applications shall be provided.
It would allow the users to use the standby database for read-only access while the synchronization between the primary and standby systems happen simultaneously.
Access to all RDBMS stored procedures shall be available through JDBC, ODBC, C and Active X

Detailed documentation shall be provided for Database Management specific to the project and the applications deployed.
GUI based tool shall be provided to manage, test and tune the database.

All the applications implemented shall have provision for optimizing the number of static connections to the database using connection pooling. All the applications implemented shall also optimize the duration of connection to the database by using techniques like session time out. The database should be able to support partitioning of tables to support linear data scalability and parallel utility processing.

21.10.1INTEGRATION WITH IN:

BSNL presently offers IN Services like Virtual Calling Card (Brand Name – India Telephone Card), Account Calling Card(ACC), Free Phone, Premium Calling Rate, Universal Access Number, Virtual Private Network, Tele Voting, Universal Personal Number etc. The purpose of integration is to dynamically transfer the Pre-paid amount from the IN Platform to increase in credit limit of a subscriber of a landline to enable bill payment for the post-paid services availed by the subscriber etc. . After integration it would be possible to offer following functionalities:-

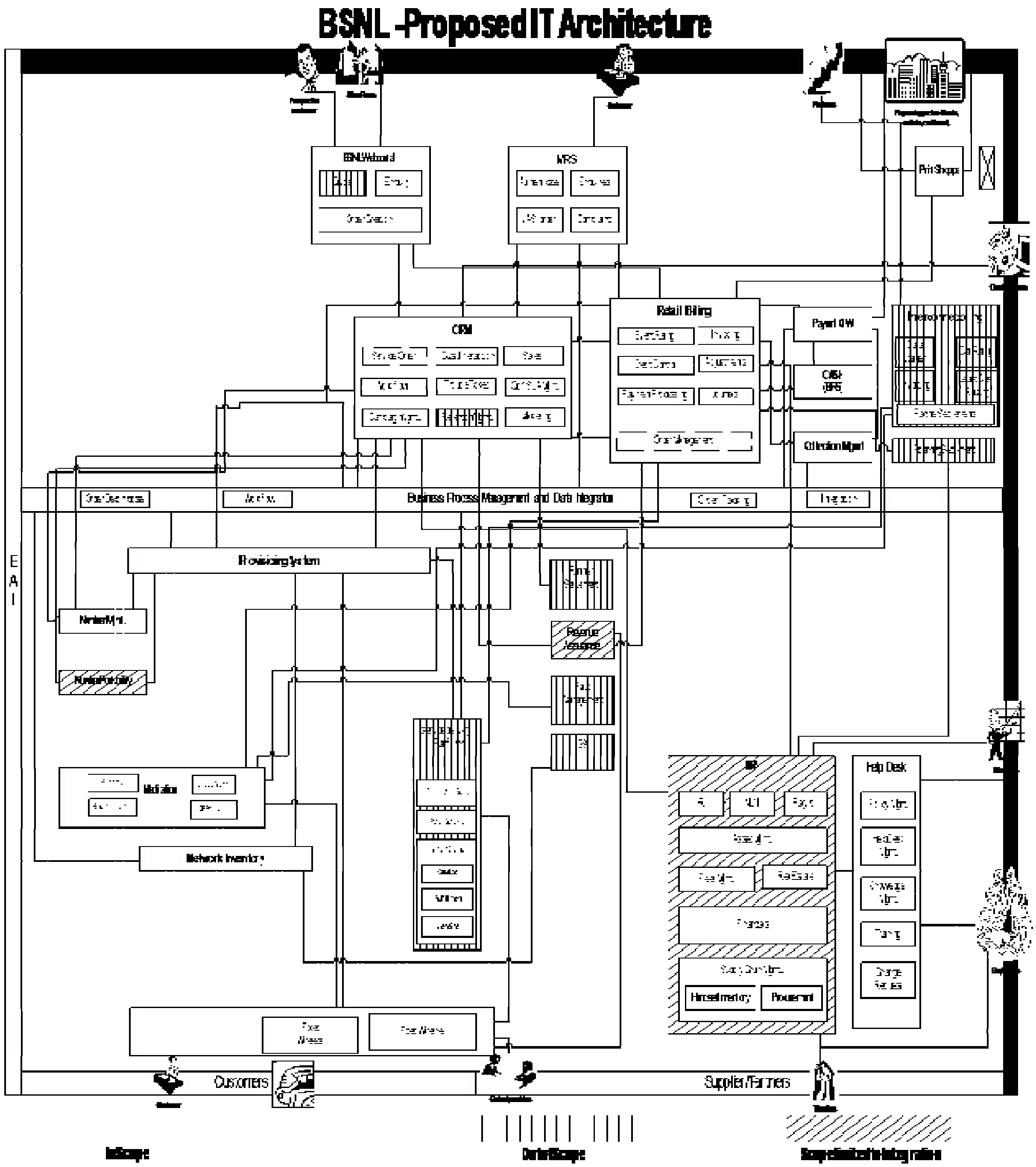
The integrated system would have the capability to accommodate for IN and retail customers in a single customer account hierarchy with dynamic transaction guidance from one account to another account in the hierarchy based on service.

The system would have the ability to transfer the balance from IN service like Virtual Credit Card to post-paid service like landline telephone. This will facilitate landline subscriber to pay his retail bills through a Virtual Calling Card which means VCC amounts have to be debited from IN platform and same has to be credited to the Billing System.
The interface between IN Server and Billing Server shall be on secured layer for any transaction. Proven secured protocols shall be used for the purpose.

It shall be possible to redeem loyalty points earned in post-paid service in terms of Virtual Calling Card etc.

All account transaction shall be accompanied with detail log entry in the billing system and the same in readable format may be required to be given to the customers in their normal monthly bills as information.

21.11 SOLUTION FRAMEWORK



21.12

Figure 40: BSNL Proposed IT Architectural

Billing & Accounting System is the key and important module of overall Billing and Customer Care System. Billing system caters to all the Billing requirements of BSNL, foremost of which is timely issue of accurate bills to the subscriber, at all billing touch points viz. Retail Billing (Prepaid and Postpaid) , Wholesale and third Party Billing, and Content Billing, Corporate Billing, Dealers and Agents Commissions etc. The Billing System shall be convergent and shall cater to the needs of billing for services including but not limited to Wire- line, Wireless (GSM + Fixed Wireless + CDMA), IP Networks, GPRS, Data & content Billing in such a way to ensure quick realization of revenue (IN). Closely associated with the billing system is the Accounting of Telecom revenue realised from the wireline and wireless services. By accounting it is meant that the system should have facility to capture the payment against the invoices raised, marking the bills for dispute, cancellation & write off of bill, maintenance of individual ledger accounts of the subscribers and taking various reports required for Telecom Revenue and for providing various reports which enable the units to pass Journal entries as per the accounting heads issued by the Corporate Accounts section of the BSNL. The system should also provide for capturing the various deposits collected and accounting for the same like account finalisation, adjustments of deposits against bills outstanding and refund of deposits, calculation of interest on deposits, cross verification of deposits collected for one service with another and the facility to set of deposit collected for one service with another etc. It is suggested the vendors should have a thorough understanding of the various reports that are generated by the present Trichur/DOTSOFT packages now deployed in the field and all the reports being generated therein should also be generated in the new system. It should be borne in mind that the reports for accounting is to be generated/processed SSA wise and capable of being consolidated at circle level.

The billing & accounting system shall support the following business processes within the core system for both retail and reseller customers.

Creation and maintenance of tariff plans as per BSNL's requirements.

Management of customer and service data required for billing.

Ordering of services and activation of billing

Workflow creation and order provisioning (in case OM is the part of the Billing application).

Usage event guiding and rating (of any type of usage event).

Charges, pricing and discounts application.

Bill calculation, formatting and despatch.

Maintenance of individual subscriber ledger accounts.

Maintenance of deposit accounts of subscriber, along with adjustments, interest calculation, ability to transfer balances from deposit heads to amount outstanding and deposit collected for one service with another service etc. The system shall also have the ability to calculate security deposit to be collected based on previous calling patterns & account for the security deposits and all other types of deposits and reports pertaining to the same.

Adjustments like bill cancellation, discounts, rebates and other credits and reports pertaining to the same.

Payment noting.

A/R management and open-item balance management.

Collections

Journal calculation and posting.

A portal for communication amongst the field units & data centres and shall be medium through which reports etc can be downloaded by the field units

The software takes care of all cases of cheque bounce; whether the cheque is collected on-line or off-line through other agencies like Post Offices.

The products and services that would be supported by the new billing system would be

21.12.1 WIRE LINE SERVICES:

Basic Telephony (PSTN), WLL Fixed, National Long Distance, International Long Distance, ISDN, ATM and IP Services, IN services like Free phone, VCC, ACC, Premium rate services, etc.),Centrex, PBX & PABX, Leased lines, E1/ ISDN-PRI (in the context of reverse charging),

21.12.2WIRELESS SERVICES:

GSM – (Pre-Paid and Post-Paid),Roaming, GPRSWAP on Mobile including applications like - mobile banking, weather update, news update, Stock update, Travel guide, etc

21.12.3 DATA SERVICES:

Data calls, IP packets, Content Delivery, Internet services (including VoIP), Fax over IP (FoIP), E-mail services, Video on Demand (VoD),Video & audio conferencing,Internet Roaming

21.12.4 OTHER SERVICES:

Unified Messaging Service, Short Messaging Service, Voice Mail Service, INMARSAT,VSAT, Hotline, IVR based customer service, Virtual Private Network (VPN),xDSL access services, QoS, Frame Relay

21.12.5 CALL MANAGEMENT SERVICES:

Caller Line Identification Presentation & Restriction, Call Waiting, Call Barring, Call Forward, Call Conferencing, Call Transfer, Malicious Call Tracking,

21.12.6 MISCELLANEOUS REQUIREMENTS:

Ability to bundle services and the associated default products into one unit so as to make it easy for the CSR to associate it to the Subscription / Customer, Ability to support Number Portability, Grouping of DELs like in ISDN, Level DID, There shall not be any limitation on specifying the number and types of categories for any type of service. For eg. for fixed line services there can be tens of categories such as Residential, Commercial, SME, etc. Similarly there can be sub-categories in each service type eg. In leased line service there may be 64 kbps, nx64 kbps, etc.

21.13 CONCLUSION

Telecom Billing is a process of collecting usage, aggregating it, applying required charges and finally generating invoices for the customers. Telecom Billing process also includes receiving and recording payments from the customers. This tutorial gives you a complete understanding on Telecom Billing.