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ENTERPRISE RESOURCE PLANNING

ERP Project of BSNL

Contents

- 1. What is ERP?
- 2. Why ERP at BSNL
- 3. ERP Project Current Status
- 4. ERP implementation approach
- 5. ERP implementation Team structure

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

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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.

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 vision "To become the largest telecom Service Provider in Asia"

ERP Project – Current Status

Purchase order for POC completion has been placed on 23rd May'09 on M/s HCL Infosystem Ltd. The Important partners for this project are M/s HCL Infosystem as SI, M/s SAP as ERP Solution Provider and M/s E&Y as BPR consultant. Business Process Re-engineering has been taken up along with ERP implementation. The Final Integration testing of different modules is in progress and expected to be completed by 31st March 2011. TF Mumbai has declared to Go Live with ERP. Meanwhile ALTTC and WTP are expected to Go Live with ERP shortly.

ERP Covers....

ERP system shall be touching all the functions of the organization such as finance, marketing, MM, Maintenance, Projects, HR, Planning and procurement, civil electrical, etc. ERP shall be implemented in all the BSNL units including training centers, telecom factories and stores etc. as well. ERP system is broadly proposed to have the following modules:



- Finance And Management Accounting (FICO)
- Materials And Inventory Management including e-procurement (MM)
- Plant/Equipment Maintenance (PM)
- Human Resources Management & Administration (HRM)
- Sales And Distribution(S&D)
- Project Systems (PS)
- Real Estate And Telecom Infrastructure Management (REM)
- Production Planning (PP)
- Supply Chain Management (SCM)
- Business Information System (BIS)

- Business Intelligence & Analytics (BIA)
- Strategy Enterprise Management (SEM)
- Quality Control (QC)
- Enterprise Portal (EP)

ERP implementation approach

Two of the CDR Project data centers are to be used. Hyderabad is be primary ERP site and Kolkata is DR site. ERP is being deployed like another application of CDR Project to be deployed in CDR Data center. Security systems, Access Control System, Identity Management, UPS, and Storage etc of CDR system are being used. Intranet being rolled out in CDR Project is the default network for ERP as well. There will be a need for additional network for non CDR units of BSNL.

Development Centre for ERP is setup at ALTTC Ghaziabad.

Centralized Architecture

ERP will be Centralized Installation with a single database. All units will access the central server. They will have secure access to their own set of data & processes. Corporate Office will be having view of BSNL as a whole across circles.

Implementation Time frame

- POC phase completion : 22nd May'10 (12 months from PO date)
- Roll out completion (as per PO) :22nd Nov' 10 (18 months from PO date)

POC Phase of ERP implementation shall cover corporate Office, Karnataka Telecom Circle, MH telecom circle, STR, WTP, ALTTC and Telecom Factory Mumbai.

| Milestone | | Status |
|-----------|------------------------|--------------------------------------|
| 1. | Project Kick off | 1. Done on 8^{th} June 2009 |
| 2. | As-IS Business Process | 2. Completed on 04.09.2009 |
| | Documentation | |
| 3. | BPR Exercise | 3. Completed on 08.10.2009 |
| 4. | Business Blueprint | 4. Completed on March 31, 2010 |
| 5. | Realisation | 5. Completed |
| 6. | FIT | 6. In Progress |
| 7. | POC Go Live | 7. In Progress |

The implementation status is as under:

ERP implementation Team structure

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Implementation of ERP system is a huge exercise for any organization and is a highly focused resource intensive activity. ERP implementation is around 14 modules as listed above. These modules represent key business functions. Different Modules teams, which are also subject Matter Experts (SMEs) for that particular functions shall assume the responsibility of System Requirement Specifications (SRS) finalization, carrying out BPR Exercise and then association in implementation in the ERP system.

IT Cell/ IT Project Circle will act as a facilitator for this exercise, setup, validate and maintain data center with required hardware, network and upkeep of ERP software as well.

Stake holders and participants in the POC phase



Project Sponsors

- BSNL : CMD & Corporate Office Directors
- HCL Infosystem CEO,
- VP M/s SAP
- VP M/s E&Y (BPR Management Consultant)
- Key Role:
 - To drive the engagement and giving overall direction to the Project team.
 - Ensuring implementation meets set Goals based on best practices

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- Review of progress and timelines
- Ensuring appropriate and adequate resources are assigned
- Final authority to resolve Project Issue / Conflict resolution (if escalated)

• Engagement

- Formal project review meetings at-least once a month
- Consultation by the Project teams during the course of the Project may be more in the form of informal meetings,

IT Cell/ IT Project Circle will act as a facilitator for ERP implementation in BSNL.

• Role and Responsibilities

- Setup the ERP data center,
- 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.

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

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

Various guidelines issued from time to time in this regard are available at ERP Portal which can be accesses from BSNL Intranet.
