

### **South East Central railway (SECR-INet) & East Central Railway (ECR – ITPO)**

South East Central Railway (SECR) with its Zonal Headquarters at Bilaspur (CG) has three divisions at Bilaspur, Raipur and Nagpur. Offices of different section in charges are spread over the railway in Chhattisgarh and part of Maharashtra and Madhya Pradesh.

East Central railway with its Zonal headquarter at Hajipur (BH) has three divisions at Sonapur, Danapur, Samastipur, Mugalsarai and Dhanbad. Offices of different section in charges are spread over the railway in Bihar and part of Uttar Pradesh and Jharkhand.

Since inception, ECR & SECR have been thriving to become an IT-enabled railway. They have taken some major steps towards automating the process of decision-making by effectively using Information Technology tools such as e-mail, shared folders and various departmental MIS. Further, ECR & SECR have planned to computerise the entire workflow process of railways to reduce the paper work and quicken the process by e-working.

#### **Infrastructure**

To meet the IT needs of the zone, huge infrastructure having more than 1000 terminals, 20 servers of various configurations and network spread over the zone covering Zonal and Divisional Head Quarters and field units at 45 other locations are to be covered.

#### **Applications**

Shared Folders  
e-Tour Program  
e-Working  
MIS Implementation

The various MIS like AFRES, PRIME, PMIS, MMIS, COMIS, IPMS and OSS on a common platform with Central Database Server at BSP had been completed successfully. All the applications have gone online by May 2006.

ECR & SECR has been the first zonal railway to implement OSS, IPMS and MMIS up to the depot level by connecting all the stores depots to centralised servers.

#### **Major highlights**

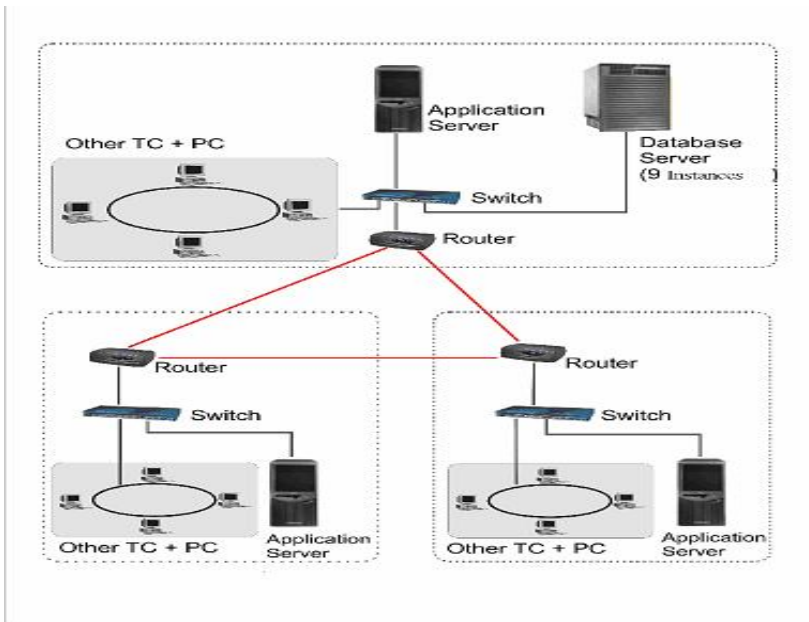
- Centralised database server system.
- Online applications: 7 nos.
- No of databases : 8
- 1 out of 8 is 24\*7 Application.
- 4 application having one database each for entire zone and rest 3 having separate data base for zone and three

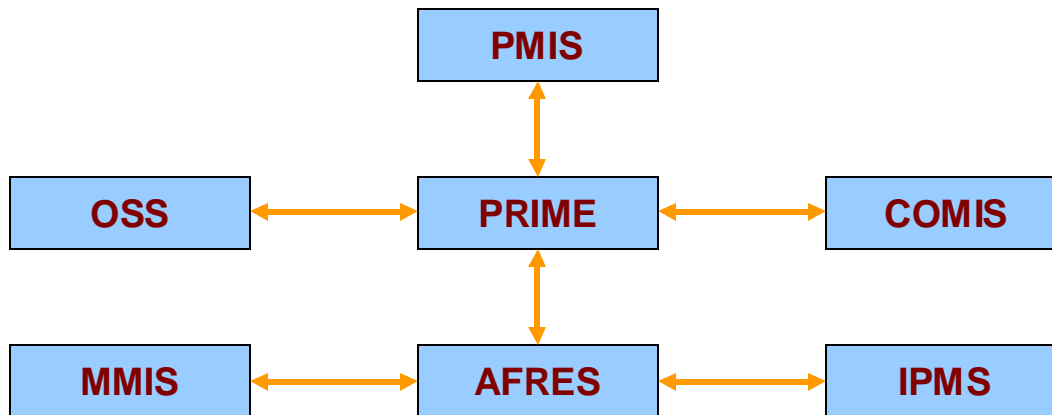
divisions.

### TECHNOLOGY USED

<b>Front End :</b>	Oracle 10g Developer Suite/ Oracle 9i Developer Suite/ Oracle Developer 2000 (Oracle Forms & Reports 6i ) /HTML/Java Servlets
<b>Back End :</b>	Oracle 10g / Oracle 9i
<b>Operating System :</b>	HP True 64/ AIX / Red hat Linux/Windows 2003 Server

### Schematic Representation of INet System





**AFRES:**

Advanced Finance and Railway Expenditure System –Finance and Accounts Department

- AFRES is an integrated system that covers the working of the accounts office at the zone level and at the division level. The system handles payments made by the railway and accounts of railway earnings apart from regular finance and account functions. A number of associated activities are also covered.
- AFRES is organised into modules, each module handling a category of activities. The different modules are Books, Cash & Pay, E-Suspense, Internal Check, Pension, PF and Suspense etc.
- Using this module, the details of assets held by Railways can be maintained.

**PRIME:**

Payroll and Related Independent Module - Personnel Department

- The Payroll & Related Independent Modules or PRIME for short is an integrated system that covers all payments to employees and related items of work at the Zonal Headquarters, at the division and at the workshop levels.
- PRIME software covers data capture for all career events that affect various payments, recoveries during the service of an employee. Payments include monthly payroll, leave regularisation and other supplementary employee claims. This application has interfaces with Advanced Financial & Railway Expenditure Management System (AFRES).

**MMIS:**

Materials Management Information System – Stores and Depot Department

- MMIS is a state-of-art solution tailored to the business requirements of the organisations where procurement of material is done centrally and the materials are stocked in warehouse spread across at different locations. Materials Management Information System is an online system for exchange of information between various warehouses and central purchase office.
- The aim of the project is to provide system for exchange information regarding availability of material, inventory position, receipt / issue of materials to respective consignees as per the requisitions, etc., between workshop, warehouses and central purchase office. The

## Transportation

### Railways

#### ECR-ITPO & SECR-INet

#### Case Study

product is designed on the latest client server platform using state-of-art technologies and tools and it has extremely easy-to-use and intuitive GUI. MMIS is a solution consisting of a suite of products like Purchase, Finance, Depot, Sales & Auction, Uniform and ADMIN module which are seamlessly integrated.

#### PMIS:

Personnel Management Information System) – Personnel Department

- PMIS (Personnel Management Information System) is the system developed to automate all the HR functioning of RAILWAYS earlier which is done manually.
- PMIS eases the pressure of the organisation to check now and then every time, reducing the searching time for any policy formulation related to HR functioning of the RAILWAYS.
- PMIS is a web-based application that can be easily accessed through any computer through intranet.

#### OSS

Operating Statistical System - Statistical Department

- Operating Statistics System (OSS) is generating the major components of annual reports for Railway Board following the guidelines of the Manual of Statistical Instructions developed by the Ministry of Railways.
- The main sources of inputs for the Operating Statistics System are Combined Train Report (CTR) and Shunting Voucher (SV). The data obtained from these are compiled with some inputs from stations, sheds, Divisions etc. (Lateral Inputs) and statistical reports are generated.

#### COMIS

Commercial Management Information System– Commercial Department

- COMIS is an integrated package which allows computerisation of all aspects of works relating to functioning of commercial department and enable a seamless flow of information across departments, field units and headquarters.
- The package covers preparation of passenger earning reports, passenger complaints and its related reports, public demands and reports, Ticket checking performance reports, commercial contract reports, compilation of freight traffic earnings, compilation of station outstanding reports etc...

#### IPMS

Integrated Project Management System – Project/Construction Department

- IPMS is an integrated package which allows computerisation of all aspects of work relating to Project Management and enables a seamless flow of information across departments, field units and headquarters.
- The package has been developed with the objective of doing away with the present system of manual maintenance of records in the execution of projects by the Construction Organizations of Indian Railways. The networked application would allow generation, storage and analyses of data relating to all aspects of Project Management.

## Benefits of the System

Railway MIS project is running successfully in ECR & SECR Zone and divisions from last 5 years.

The benefits of the systems are:

- Integrated system
- Avoids manual processing
- Fast
  - Processing
  - Queries
  - Report Generation
- Organized Maintenance of Voluminous Data
- Data Archival easy
- Any Time Audit Feasible
- System is not Person Dependant
- Customer Satisfaction is Augmented