

**PROGRESS OF PROJECTS IN CRIS**

**(A) STATUS OF PROJECTS AT A GLANCE**

<b>S. No.</b>	<b>Project Group</b>	<b>Project</b>	<b>Status</b>
1.	Freight Operations Information System (FOIS)	FOIS Phase-II (TMS Expansion)	Information available from CAO/FOIS
		IREPG	Information available from CAO/FOIS.
2.	Passenger Reservation Systems (PRS)	PRS Expansion	2463 locations
		Hand Held Terminal Project Roll out	Sanction of detailed estimate awaited from Railway Board.
3.	Unreserved Ticketing System (UTS)	UTS Expansion	Extended to 5171 locations of Indian Railways. 59.70 Crore passengers booked, earning Rs. 983.62 crore per month.
4.	Control Office Application (COA)	COA	COA Application has gone live in all the 77 divisions/area Control Offices
5.	Crew Management System (CMS)	CMS	Implemented in 334 lobbies. 42500 crews being booked daily.
6.	Integrated Coaching Management System	Coach Maintenance Module (CMM) Pilot	Development in progress. Infrastructure set up has been completed and field testing started in LKO. NDLS and BCT are already using the application.
7.	IR Web Portal	Indian Railway Web Portal	SMS based CMS developed. IRT Web-site is under testing
8.	Material Management	E-procurement System (EPS)	E-Tendering module working on all the Zonal Rlys, 7 Production Units and RDSO. More than 2,75,000 tenders have been uploaded through the system.
		Material Management Information System (MMIS)	Case for consultancy is under consideration in Board.
9.	Asset Management	Locomotive Management System (LMS) - Diesel Locos (pilot project) Freight Management Module (FMM) ó for Freight Stock (pilot project)	Material Management module at TKD shed has been made Go-Live. MM Module is now available for testing and Hands-on at TKD Depot.

		Software for Locomotive Asset Management (SLAM) - Electric Locomotives	Detailed estimate submitted, sanction awaited from Board.
		WISE Phase-II (ERP / EAM based)	<ul style="list-style-type: none"> <li>Two super domes from HP have been physically installed at Data Centre and are under Commissioning.</li> <li>Network execution process is nearing completion at WRS/Raipur.</li> <li>Master data collection from all pilot workshops is under progress.</li> </ul>
		HMIS	MOU signed with WR in January 2011 conditionally. AM/IT held discussions with CRIS and WR officials on 12 <sup>th</sup> December 2011 at Jagjivan Ram Hospital, Mumbai Central.
		ERP in ICF	Out of four modules of Central Application two modules have been offered for User Acceptance Testing to the end users. Lab Load Testing of SAP application was conducted as per tender requirements by porting master data of all modules into production servers.
10.	Parcel Management System (PMS)	PMS Phase-II	Tender for rollout of ph 1 at 77 stations opened on 08/09/2011. Technical evaluation completed..
11	Human Resource Management System (HRMS)	HRMS	A proposal has been sent to the Railway Board for implementing ERP for HRMS on South Western Railway, Board's Approval awaited.
12	IT Infrastructure	Disaster Recovery Data Centre  DR System for PRS	Consultant 3i Infotech has submitted final RFP for DR Datacentre.  PO issued for DR system for PRS at Secunderabad.
13	Automatic Identification of Railway Wagon using RFID	Radio Frequency Identification (RFID)	Tender for AMC has been opened on 16.01.2012 and is under consideration. Detailed estimate for rollout has been prepared.

14	Software Aided Timetable Management System	SATSaNg / TTMS	SATSaNG Version 1:0 application was released on 11.11.11 and the same will be deployed as soon as the new Hardware is up and ready.
15	Track Management System (TMS)	Implementation of Track Management System on balance divisions of IR	<ul style="list-style-type: none"> <li>• -The detailed estimate amounting to Rs. 39.67 cores has been sanctioned by Rly. Bd. for implementation of TMS on IR.</li> <li>➤Tender opened on 18.7.2011 has been finalized for procurement of 1876 nos. mini laptops and PO No. 2011/CRIS/1113113 dated 17.10.2011 placed on M/S Wipro Limited. Supply is expected from January, 2012.</li> </ul>

**(B) PROJECT STATUS**

**1 FREIGHT OPERATIONS INFORMATION SYSTEM (FOIS)**

Information available from CAO/FOIS

**2 PASSENGER RESERVATION SYSTEM**

PRS is working at 2463 locations with 8677 terminals. On an average, 4.52 crore passengers per month are being booked in PRS with average Passenger Earnings of Rs. 1852.34 crore per month.

**TTE hand-held terminal project**

In addition to 6 trains covered in Pilot Phase, HHT working for TTEs has been introduced on 2953/2954 August Kranti Express, New Delhi ó Ahmedabad Swaran Jayanti Rajdhani Express (2957/2958), 9109/9110 Gujarat Queen between Valsad and Ahmedabad, Gujarat Sampark Kranti Express 2917/2918 and 2425/2426 Jammu Rajdhani Express.

**3 UNRESERVED TICKETING SYSTEM**

Position as on	31.12.2011
UTS Location	5171
UTS Counter	9267
No. of passengers / month	59.70 crores
Earnings / month	983.62 crores

662 ATVMs have been installed in Central, Eastern, Northern, Southern, South Central, South Eastern and Western Railways till 31.12.2011.

**4 COMPUTERIZED CONTROL CHARTING**

COA Application has gone live in all the 77 divisions/area Control Offices of the Indian Railways. Integration between COA and FOIS, adjoining COA, NTES and ICMS is completed in all 68 divisional control offices.

**5 CREW MANAGEMENT SYSTEM (CMS)**

Number of lobbies commissioned	334
Daily call served through CMS system at present	42500
Crew Bio data in CMS system	108500

4 more lobbies (SBT of SBT division of WR, MTMI and PRPI lobby of SC division of SCR and KI of BZA division of SCR) have been commissioned by reallocating equipment from existing lobbies.

## 6 INTEGRATED COACHING MANAGEMENT SYSTEM (I.C.M.S.)

The ICMS application is hosted on central server located in CRIS, Chanakyapuri accessed over FOISNET. It is a browser based application and can be run from any client on FOISNET. Approx. 1000 clients are running on FOISNET on thin clients/PCs. This has three applications as

- a. Punctuality Analysis and Monitoring (PAM)*
- b. Coaching Operations Information System (COIS)*
- c. Coach Maintenance Management (CMM)*

First two modules of application are already deployed over IR, third module for mechanical portion of work is being implemented in three pilot locations, New Delhi. Coaching Depot, Mumbai Central and Lucknow depots. Infrastructure setup in NDLS and LKO depots has been completed. Application is under field testing in LKO, NDLS and BCT depots. For electrical portion of work, user requirements have been gathered. System has been offered for field testing to Electrical users. New Delhi field testing for both electrical and mechanical user has started.

## 7 IR WEB PORTAL

### i. Complaint Management System (CMS) proliferation across Railway

- The Web Complaint Management System (Web CMS) can be accessed through the IR Portal home page, [www.indianrailways.gov.in](http://www.indianrailways.gov.in), complaint and suggestion section by clicking on the SUBMIT button. It can also be directly accessed through the URL, [http:// www.customercare.indianrailways.gov.in](http://www.customercare.indianrailways.gov.in). Divisional Work Flow has been made online so that divisional level escalation can be configured.
- SMS based CMS has also been developed.

### ii. Cloak Room:

Application is running smoothly at New Delhi (Ajmeri Gate and Paharganj side).

### iii. Journey Planner:

Launched on 07<sup>th</sup> July 2011. On 21<sup>st</sup> July, under directions from Railway Board, due to issues being faced in E-ticketing module, it is temporarily put under maintenance.

### iv. E-Ticketing/ Mobile Ticketing:

Launched on 07<sup>th</sup> July 2011. On 21<sup>st</sup> July, under directions from Railway Board, due to issues being faced in E-ticketing module, it is temporarily put under maintenance. Bugs are being fixed. Application, database and Accounting modules are being re-architected. **Load testing for 5000 Users has been done.**

a) For Mobile ticketing application, the revised mobile APIs with detailed integration document are awaited from SBI.

v. **Retiring Room:**

Now the application is running fine at 18 locations namely JBP, BPL, New Delhi, Lucknow, Varanasi, Amritsar, Jammu, Shimla, Mumbai óCSTM(CR), Bangalore, Haridwar, Madurai and Mumbai (WR) óBCT, Kota, BDTs, MAS, MS and BRC.

vi. **Portal websites**

- IRT Web-site is under testing.

## 8 MATERIAL MANAGEMENT

### **E- PROCUREMENT SYSTEM (EPS)**

Implementation of E-Procurement System on all 16 Zonal Railways, 7 Production Units (viz. RCF, ICF, DLW, CLW, DMW, RWF and RCF/RBL) and RDSO is completed. So far 2,75,000 tenders have been uploaded by different Railways. More than 12,040 vendors have registered on the system.

E-Auction module software is under "User Acceptance Testing"

### **MATERIAL MANAGEMENT INFORMATION SYSTEM**

Tender for consultancy is opened on 29.06.10. Recommendations of TC sent to Rly Board on 14.03.11 for approval. Query raised by CRB replied on 18.05.11.

## 9 ASSET MANAGEMENT

### **LOCO SHED MANAGEMENT SYSTEM (LMS)**

- Material Management module at TKD shed has been made Go-Live successfully on 02/01/2012.
- Three applications viz. Train Arrival at ICP/Station and Train Departure at ICP/Station have been tested successfully and is finally integrated with the ROAMS-LMS application.
- Failure Reconciliation screen shown to SSE/Control/Dsl and feedback obtained. Suggestions/ feedback received from users is being incorporated in the application.
- Fuel process and trip card process is available for testing.
- Testing of Central Application is being conducted at DLI Division.

### **SOFTWARE FOR LOCOMOTIVE ASSET MANAGEMENT (SLAM)**

Work of Electrical Loco Management System (SLAM) has been entrusted to CRIS for execution. The project detailed estimate is awaiting sanction of Board.

## WISE PHASE II (ERP / EAM BASED)

- Two super domes from HP for CRIS Data Centre received in July have been physically installed at Data Centre and are still under Commissioning.
- Master data collection from pilot workshops is in progress.
- Network execution process at WRS/Raipur is nearing completion and is under progress at PL/WR Mumbai. It would be followed up with Lallaguda/SCR, which will start soon.
- Based on the inputs received from core users, user friendly screens and transactions have been developed and are under refinements.
- Steady progress has been made on specification of development objects of SAP and central application as well. Features like Premature failure, POH, training module is under progress in HR ESS, on the portal and refinement is in process.
- Based on the latest inputs received from core users BBP document for central application as well as ERP was updated and submitted to CWMs on 09.11.11 for their further review and comments. For the finalization of sign off of BBP, comments and suggestions coming from the users are being incorporated.

## HMIS APPLICATION FOR RAILWAY HOSPITALS

MOU with WR has been signed conditionally, subject to Board's decision on use of FOISNET as proposed by CRIS against the use of RAILNET proposed by WR. The requirements in respect of LAN/WAN/internet and Security etc. submitted to Railway Board have since been conveyed by Board to WR, seeking their response. User requirements have been again shared with ED/Health for final review. Time line for the project has also been discussed. It was clarified in the meeting that the network to be adopted would be Railnet. The server for the project would be stationed in the data centre under Sr. EDPM CCG. The uptime required by the project should be decided by CMD WR and methods to monitor it should be in place. The pilot project was initially to cover only JRH BCT in the available funds of Rs 188.5 lakhs. It was decided in the meeting to include the Divisional Hospital, PRTN and Anand Health Unit, BRC Division in the same pilot as was originally planned.

## RFPs UNDER PREPARATION

Project	Status of RFP	Approx. tender value (Rs. Crore)
Health Management Information Systems	MOU signed with WR in January 2011 conditionally. Draft RFP forwarded to WR for comments. Comments from WR have since been received.	1.8746

## FREIGHT MANAGEMENT MODULE (FMM)

- Connectivity at DER is provided from CRIS data centre.
- MM Module is now available for testing and Hands-on at TKD Depot.

- Depot application is being tested by users at DER from 2nd week of December 2011.
- Yard module is under trial and testing since last two months at TKD yard. BPC is being generated on system.
- Three applications viz. Train Arrival at ICP/Station and Train Departure at ICP/Station have been tested successfully and is finally integrated with the ROAMS-FMM application.

### **TURNKEY IMPLEMENTATION OF ERP AT ICF, CHENNAI**

- Dry run (trial) was organized on 25th October 2011 by releasing a Production programme and Sale Order in SAP. Issues surfaced during the dry-run due to master data inconsistencies were addressed.
- Lab Load Testing of SAP application was conducted as per tender requirements by porting master data of all modules into production servers.
- A Project Review Meeting was held with G.M/ICF along with PHODs on 01.12.2011. A presentation on the present status of the project was presented to G.M. /ICF. It was decided in the meeting that ICF ERP Project Go-live
- G.M/ICF also visited ICF IT Data Centre on 10.12.2011. This happened to coincide with culmination of the successful lab load testing of SAP Application as configured for ICF Business landscape. Turnkey implementation partner, Lnt InfoTech made a presentation to GM ICF on Load runner Software tool and Business Intelligence solutions which was very well appreciated. Keen interest was shown by GM ICF to incorporate these features in SAP Business Dashboards to extent feasible in current scope of project or propose it as an enhancement for future upgrades. Asset Management Module of SAP which incorporates GIS Mapping of Work place to suggest Optimized Workflow for Men and Material movement in work places also came up for discussion in this meeting. This has to be perused further with Lnt InfoTech/SAP AG.
- End-user training for all modules has started by ICF.
- SAP HR Module does not support multiple wage periods and thus could not cater to multiple wage periods of ICF Payroll. The issue was raised to SAP and SAP had agreed to provide project specific solution for the same after many deliberations with them. However bugs have been noticed while testing the solution and the same has not been resolved till date. SAP consultant is currently working on the bugs and rigorous testing is being undertaken to resolve the issue. This issue is the single critical factor which has delayed Project Go-live and may delay the project go-live further if the solution could not be arrived at in time.
- Out of four modules of Central Application two modules have been offered for User Acceptance Testing to the end users.

## **10 PARCEL MANAGEMENT**

### **PARCEL MANAGEMENT SYSTEM (PMS)**

Tender for roll out of Phase-I of Parcel Management System on 77 stations of four corridors and CCM/FM offices, Traffic Accounts offices and 67 divisional headquarters of all railways opened on 08/09/2011 and Technical Evaluation is completed.

## TENDER OPENED

Project	Status of Tender	Approx. tender value (Rs. Crore)
Parcel Management System Rollout & Upgradation of Central Infrastructure and Hardware and Training at Zonal / Divl offices and stations	Technical Evaluation completed.	30.00

### 11. HUMAN RESOURCES MANAGEMENT SYSTEM

A proposal has been sent to the Railway Board for implementing ERP for HRMS on South Western Railway, Board's Approval awaited.

### 12. IT INFRASTRUCTURE

#### Disaster Recovery Data Centre at Secunderabad

- Draft tender specifications for the DR datacentre at Secunderabad have been drawn up by 3i-Infotech, the consultant, and are under finalization.
- A meeting was held between AM-IT and GM/ SC Railway regarding the DR datacentre to be set up in Secunderabad and implementation committee was formed. Meeting at Hyderabad was held on 22/07/2011.

#### RFPs UNDER PREPARATION

Project	Status of RFP	Approx. tender value (Rs. Cr)
Disaster Recovery Data Centre	RFP under preparation.	16.00

- PO has been issued for the Tender for DR System for PRS.. PRS DR System to be set up in the existing PRS centre at Secunderabad, and which can be shifted to the DR Datacenter on its completion.

### 13 Automatic Identification of Railway Wagon using RFID

Pilot project with Rs. 2 crore provisions from FOIS estimate in Talcher, Paradeep and Vishakhapatnam locations has been executed Tender for AMC opened on 16.01.2012 and is under consideration. Detailed estimate as per revised instruction of Railway Board is in progress.

### 14. SATSaNg / TIME TABLE MANAGEMENT SYSTEM

- SATSaNG Version 1:0 application was released on 11.11.11 and the same will be deployed as soon as the new Hardware is up and ready.
- The spare Hardware lying at UTS Data Centre at Churchgate/Mumbai has been successfully shifted to CRIS Data Centre Chanakyapuri, New Delhi and is being commissioned to host the backend for SATSaNG Application

- Tender for procurement of Oracle Licenses has been opened and is under finalization.
- SATSaNG Software has been enriched for assisting in the IRTTC conference being held in January 2012 at Secunderabad. In addition to the already existing features, following functionalities are also being provided: -
  - A detailed report for each proposal for new trains.
  - Complete details of the trains running between a pair of stations.
  - A utility to generate new routes using the definitions of trains existing in the system.

## **15 TRACK MANAGEMENT SYSTEM:**

### **Phase-I: Development & Implementation of Civil Engineering Management Information System (Track Management System)**

In the works programme for the year 2008-09, a pilot project for introduction of Track Management System of two divisions were extended to six within the same estimated cost and the same has already been implemented in 6 pilot divisions in 2010 viz. Agra, Bilaspur, Waltair, Secunderabad, Salem and Bangalore.

- New functionalities have been developed and deployed like Inspection Module, Transferring Inspection data in exception list (Location needing attention), Compliance of on foot inspection defects and General compliance of on foot inspection done for Foot Plate Inspection.
  - Divisional Security Administration/User Maintenance.
    1. Additional functionality for transferring a post from one Authority to other Authority along with its hierarchy & for entering E-mail ids.
    2. Provision for deletion of gangs and verification of jurisdiction of Gangs with their authorities (JE/SE/SSE).
  - Asset changes pending for confirmation report has been developed & deployed along with alert message for SSE.
  - Enhancement/Modification has been carried out in Push Trolley Inspection, Points & Crossing Master & Change module for switch portion, Level Crossing Master for bifurcation of level crossing in station limits & beyond station limits, Inspection planning has been modified/enhanced because of level crossing master modification and Creation of posts & their logins in Z-Railway for training purposes modules.

### **Phase-II: Implementation of Track Management System (TMS) on Indian Railways**

The scope of phase-II implementation of TMS includes implementation on all the balance divisions of IR. This project has been sanctioned by Rly. Bd. in 2010-11 and is likely to be completed in three years timeframe.

- The detailed estimate amounting to Rs. 39.67 crores has been sanctioned by Rly. Bd. and the MOU for the same has also been signed between CRIS.
  - Tender opened on 18.7.2011 has been finalized for procurement of 1876 nos. mini laptops and PO No. 2011/CRIS/1113113 dated 17.10.2011 placed on M/S Wipro Limited. Supply is expected from January, 2012.
  - PO No. 2011/CRIS/1113105 dated 12.9.2011 has been placed on M/S Targus Technologies Pvt. Ltd. / New Delhi for supply of Intel Servers and RHEL Licenses, Qty. 9 nos each.