

The following FOIS-related projects are functional in ECoR. A brief outline of their scope & objective is given below.

01. Freight Operations Information System (FOIS):

It has two modules, namely Rake Management System (RMS) and Terminal Management System (TMS). Rake Management System captures the data pertaining to the operational activities such as running of goods trains, placement and drawn-out of rakes in the terminals. Basically, all such relevant activities related to movement of rolling stocks involving the freight services. Terminal Management System (TMS) deals with the whole gamut of commercial transactions pertaining to sale of freight service to all users. TMS is providing on line Railway Receipts (RRs) to the customers and has paved the way for electronic transfer for money for payment of freights. At present system generated RRs are being turned out /printed and handed over to customers at all locations of ECoR as well as in Indian railways. This has been implemented wef 01.04.2011. Provision for tracking the status of consignment through SMS is available by giving the FNR (Freight Number Record) printed in each RR. At present customers can register indents through internet without leaving their office or home through e-RD (Electronic Registration of Demand).

All the rakes loaded are handled in TMS on a daily basis.

Apart from Divisional HQ, exclusive RMS terminals are provided at big yards & terminals where the volume of work warrants installation of separate RMS data-entry points. Division-wise, numbers of RMS installations are as given below.

Division	Locations
WAT	6
KUR	5
SBP	1
TOTAL	12

02. Control Office Application (COA):

Controlling of Train movement is the prime function of Railway Operation. Preparation of the control chart is an integral part of train operation as it provides a visual tool for making operational decision. Computerized Control Charting system handles all the traffic volume in the Indian Railways efficiently. The objectives of Control Office Application are

- To serve as a backbone system for sharing of data between allied systems.
- To be used as a visual tool for operational decisions making by the controller.
- Real time information on train operations without human dependence.
- To handle high volume of traffic in Indian Railway effectively.
- To keep a close and strict supervision on train operation on 24x7 basis.

In ECoR, all the three divisions, namely, SBP, WAT and KUR have been provided with the computerized COA.

03. Integrated Coaching Management System (ICMS):

This system has three modules, namely, Punctuality, Stock and Time Tabling. Stock module provides for monitoring of each coach ranging from running of trains to undertaking its periodic maintenance, augmentation of existing train service. Punctuality module seeks to monitor timely running of coaching trains as per schedule; it provides for on line information regarding trains to the passengers. Time Tabling module will assist the decision makers to identify possible areas of improvement like introducing or extending trains, speeding up train services and so on. Integrated

Coaching Management System (ICMS) has been installed in 3 divisional controls at Waltair, Khurda road and Sambalpur along with Zonal HQs and 3 coaching depots of ECoR viz. Puri, Bhubaneswar, and Visakhapatnam and Mancheswar Work Shop.

Location-wise ICMS data-entry points in ECoR as on Jan-2016

Zone/Division	Location	Mode of Connectivity	Functional Status
ECoR	ECoHQ	OFC	Working
KUR	KUR	OFC	Working
	BBS	OFC	Working
	PUI	V-SAT	Working
	MCSW	V-SAT	Working
WAT	WAT	OFC	Working
	VSKP	OFC	Working
SBP	SBP	OFC	Working

04. Crew Management System (CMS):

Driver, Assistant Driver and Guard form the essential running staff of a train and their availability is absolutely crucial, especially at a time when train services, both goods and coaching have been going up steadily. To ensure the accurate information regarding their timely availability as well as all safety parameters linked to their functioning, such as mandatory rest, periodic refresher training and medical tests etc. Crew Management System (CMS) has been implemented at all crew booking points. 11 crew booking lobbies have been operationalized for this purpose. All the lobbies are working as integrated lobby. The mileage bills of the crew are being generated through CMS and payment is effected accordingly.

Crew Management System (CMS) as on Jan 2016:

Division	Lobbies	Functional Status
KUR	KUR	Working
	TLHR	Working
	PRDP	Working
	BHC	Working
	PSA	Working
WAT	MIPM	Working
	VSKP	Working
	BCHL	Working
	RGDA	Working
SBP	SBP	Working
	TIG	Working

05. Rake Allotment System (RAS):

Indents of Iron Ore/ Iron Pellet /HB Iron are being allotted through RAS system which is entirely automated. The allotment programme can be viewed by the customers in CRIS Home page by accessing <http://www.fois.indianrail.gov.in/> and visiting the menu **Rake Allotment for KUR**. The RAS module of KUR & CKP has been integrated with effect from 01.11.2015.

06.TPMS- (Terminal Pipeline Management System):

With the objective of optimizing the Loading *vis-a vis* Unloading the FOIS-based TPMS was introduced w.e.f 01.11.2011. The purpose of this module is to ensure that there is no overlapping Loaded Rakes for a terminal awaiting unloading and simultaneously the terminal capacity is not wasted for want of Load. The unloading capacity of the terminal, transit time, average release time, working hours of the terminal are factored in at the time of generating TPMS report, on the basis of which priority to indents are accorded. This is functional in ECoR.

07.e-ACT-(Electronic Allotment for Congested Terminal):

The pilot version of e-ACT is running from 16-02-2015, it adopts methods to make the allotment procedure more refined & accurate with the objective of minimizing the detention to loaded rakes at the unloading points. Initially 05 terminals over IR were identified as the unloading points. At present 30 unloading terminals/stations are covered in the ambit of e-ACT. The report is generated twice a day i.e at 09.00hrs & 16.00hrs.

08.i3MS- (Integrated Mines & Mineral Management System):

TMS has been interfaced with the i3MS module of Government of Odisha. This module assists the Government in making end-to-end tracking of minerals (Iron Ore), besides the quantity of minerals transported over Railway to a particular destination can be found out from the Railway Receipt (RR) issued for this. The 'L' form & 'I' form issued to a customer for a particular Indent is also being authenticated by this system.

09.Wagon Census:

The data of B.G Wagon Census for the year 2015 has been uploaded in FOIS. Further segregation of the data will be done as per guidelines of RB.

Forthcoming Projects-

01.eT-RR (Electronic Transmission of Railway Receipt):

Electronic Transmission of RR is envisaged as a user-friendly way of transmitting RRs which would save the customer the trouble of physically sending the RRs to the destination point for effecting delivery. The Pilot project is being undertaken at Loni of Central Railway. RB will take a decision for its proliferation in other zones.