# Chapter 2 – Status of Achievement of Objectives of CMS

**Audit Objective 1**

***To evaluate the extent to which the CMS was effective in improving the train operations***

**Audit Sub-objective**: Whether inventory of crew, loco, stations, route etc. was properly maintained and scheduling and assignment of train crew was effective.

An analysis of CMS master data as well as physical records revealed that wrong/incomplete MIS were generated, crew members were booked on the basis of manual records and there was manual intervention in CMS operations as the inventory of crew was incomplete, personal and professional details of crew were inaccurate and incomplete and master data related to locos, routes and stations was also incomplete and inaccurate. In this regard, audit test check revealed the following instances of deficiencies:

### 2.1.1 Discrepancy in sanctioned strength/men-in-position as shown in CMS vis-à-vis manual records

A comparison of crew's sanctioned strength and men-in-position populated in CMS with the manual records available in the selected lobbies of 16 zones revealed that there were differences between actual sanctioned strength and sanctioned strength as per CMS. Discrepancies were also seen in the men in position.

Over NR, one of the reasons noticed for differences between two sets of records was that crew deputed to other lobbies for temporary duties were shown in CMS as men in position of the lobby to which they were deputed for temporary duty but were shown in the manual records of their parent lobby as men-in-position. Instances of non-updation of CMS data pertaining to sanctioned strength and men-in-position were also noticed over NR and other zones.

This clearly indicated that data in the system was not updated and transfer/retirement entries were not done in time. Such discrepancies are bound to affect management's ability to ascertain the effective deployment of crew.

***(Annexure - 2)***

In reply (September 2015), RB stated that zonal railways have been advised to update the database.

### 2.1.2 Incorrect/Irregular inventory of crew

The CMS database was populated with incorrect personal details of the crew, database was not updated and there was lack of adequate validation controls to prevent booking of superannuated crew which has resulted in making superannuated crew available for booking, allowing signing on/off using Identification (ID) number of superannuated crew as well as charging mileage allowance.

Data analysis of CMS database of 16 zonal railways (ZRs), available as on 5 December 2014 revealed instances where age of the crew was less than 18 years (Boy Service), difference between date of birth and date of appointment of crew was more than 50 years, dates of appointment and promotion of crew were same and there were instances where crew had dates of birth and dates of appointment as same.

Instances were noticed over NR and SCR where crew members who had crossed their retirement age but were still found to be active in CMS, available for booking and were booked for duty. However, they did not work the trains. The details of the above observations are given in ***Appendix –II.***

A test check of physical records of active crew having crossed superannuation age revealed that:

- CMS database of superannuated crew of Nizamuddin (NZM) and Tuglakabad (TKD) lobbies of Delhi (DLI) division was not updated and at Moradabad (MB) lobby, year of birth of one crew was wrongly recorded in CMS as 1951 instead of 1957 and in another case, superannuated crew was actually booked after a period of more than three months from his retirement, had signed on/off record in CMS and his mileage was also allowed/computed by CMS.

In a reply to audit (July 2015), MB lobby admitted the mistake of entering sign on and movement details of retired crew by the CMS operator and rectified the mistake on detection.

This indicates that CMS did not have adequate controls to validate the correctness of data pertaining to dates (age etc.) leading to populating inaccurate data which results in generation of wrong MIS which may distort the decision making process. Booking of superannuated crew entailed the risk of wrong payment of mileage allowances and security risk to the System as well.

***(Annexure–3)***

### 2.1.3 Incomplete Particulars of crew

Effective control over master files is essential to ensure integrity of the data as the reliability of the system depends heavily on the correctness and completeness of the master data. During the evaluation of master files of CMS, it was observed that crew details such as contact number, promotion date, traction etc. were either unavailable or were incomplete. The details are given in ***Appendix – III.***

During test check of records, it was noticed that the details in important fields of CMS such as mobile number/address, promotion date, Loco Inspector Name, traction details were not captured/updated necessitating parallel running of manual system and this could affect the smooth operations relating to crew booking/operations, crew allowances and could also affect the overall effectiveness of CMS. Further, it leads to generation of incomplete MIS.

***(Annexure-4)***

### 2.1.4 Incorrect/Invalid data pertaining to pay particulars

It was found in audit that values in the fields *viz.* Basic Pay, Availability Date, Increment Date, Officiating Date and PF Number, were either incorrect or invalid which could affect calculation of allowances and various MIS reports pertaining to deployment of crew. The analysis of data pertaining to above fields for all the 16 zones was as under:

| Sr. No. | Field Name | No. of incorrect/ invalid records for the fields | Highest incorrect records and zone name |
|---|---|---|---|
| 1 | Availability Date | 280 | 87 in NR |
| 2 | Increment Date | 31725 | 5905 in SECR |
| 3 | Basic Pay | 3615 | 916 in SER |
| 4 | Officiating Date | 83829 | 12106 in NCR |
| 5 | PF Number | 4810 | 1796 in NR |

***(Annexure-5)***

The CMS lacked adequate controls to validate basic details of a crew which results in generation of wrong MIS and may affect integration of the CMS with other applications, besides affecting calculation of correct allowances. In this regard, observations are as under:-

- In the master table containing crew Bio-data, the field for PF code was found to be defined as character with length as 25. As PF number needs to be unique 8 digit number for identification of a crew, the provision of 25 characters length was incorrect leading to invalid PF numbers getting entered in the table. Over NR, PF numbers consisted of one to 16 alpha-numeric characters.

- During test check of records, it was noticed that presently the data pertaining to basic pay, increment date and PF number was not in use and manual records were being relied upon. However, incorrect data pertaining to officiating date leads to wrong or non-booking of crew for officiating purposes and wrong PF number may affect the integration of CMS with payroll application, besides generation of wrong MIS.

In reply (September 2015) to the observations contained in paragraph numbers 2.1.2 to 2.1.4 mentioned above, RB endorsed CRIS remarks that the provision for a number of fields, which are not necessary for crew booking, has been made on user request so as to have complete crew particulars at one place and at the same time it was stated by RB that instructions have been issued to all users for correct and complete data updation.

The reply of RB is not acceptable. As stated above, CMS lacks requisite controls to validate data which includes fields having relevance for crew booking and needs requisite controls for ensuring complete and correct capturing of data to achieve the desired objectives.

### 2.1.5 Incomplete/Incorrect data relating to inactive profiles of crew

The CMS failed to ensure capturing of complete and accurate data pertaining to inactive status of crew, which may hamper proper deployment of crew on day to day basis, besides generation of wrong MIS. In this regard, observations are as under:

- In case of transfer of crew from one lobby to another, new crew IDs get created through system. Old IDs are retained and shown as inactive in the database. An analysis of master data of CMS revealed that, specific reasons for inactive status of 6442crew of 15 ZRs were not recorded.
- It was found that 2339 crew of 16 ZRs were shown as inactive due to superannuation even though they were not due for superannuation.
- During test check of CMS data with manual records, it was noticed at TKD and NZM lobbies of NR that crew marked as superannuated were actually declared medically unfit and were working on locations other than CMS lobbies. Thus, wrong information was recorded in CMS.

***(Annexure - 6)***

In reply (September 2015), RB while endorsing CRIS remarks that the bug responsible for saving record without capturing reasons for inactive status has been removed, issued instructions to users for updation of database.

### 2.1.6 Incorrect/Incomplete family profile data

Maintenance of accurate family profile data is to facilitate further course of action in case of an event in which benefits accrue to the family members. It was, however, observed that correct and complete family particulars such as dependent relation, gender, marital status, father name etc. were not correctly captured.***(Appendix -IV)***

This may result in a situation where benefits due to the dependents are delayed or denied in the absence of manual intervention.

***(Annexure - 7)***

In reply (September 2015),RB, while endorsing CRIS remarks that the provision for capturing family details was made on the request of users and audit observations have been noted for necessary validation controls, issued instructions to all users for data updation.

### 2.1.7 Incomplete/Incorrect/Irregular loco holding details

A comparison was made in audit of loco master data as available in CMS with manual stock records/target fixed for loco availability for Electrical & Mechanical departments by RB for November/December 2014 and differences in two sets of records of locos in terms of total number, type and shed were noticed.

As per the RB targets for maintaining loco holding for each ZR for the month of November/December 2014, holding of Diesel[16] and Electric[17]locos was 4259 and 4600 whereas CMS database had 5182 and 4407 Diesel and Electric locos respectively.

The differences in manual and CMS records indicated that either dummy data has been populated in CMS or records of locos were not updated which could lead to wrong usage of loco numbers resulting in non-validation of crew's competency for a particular loco.

In CMS Loco master table, 1700 locos were not having corresponding zone code to group them and make them available when any query based on the Zone was made on the master data.***(Appendix - V)***

***(Annexure - 8)***

Thus, the data available in the CMS was inconsistent and was not reliable for operational and analytical purposes. Such inaccurate data would prevent the system from validating the loco competence of staff before booking, thereby compromising the safety of operation of trains.

[16] ***All zones except SCR, ECR and NWR***
[17] ***All zones except NER, NFR, SWR, NWR and ECR***

In reply (September 2015), RB endorsed CRIS remarksthat now the Loco Master is synchronized with FOIS database. User is asked to get the loco details entered in FOIS for it to appear in CMS to maintain the sanctity of loco data.

In view of the fact that CMS had interface with FOIS database, RB needs to confirm the correctness of Loco database of FOIS for it to appear correctly and completely in CMS.

### 2.1.8 Incorrect/Incomplete data of stations and routes

During test check of CMS data as well as scrutiny of physical records, instances were noticed where zone and division codes were not available for stations, stations were not available, stations had invalid codes, routes were not available, routes had incorrect distances etc. Non/incorrect defining of stations, routes in the system was leading to manual correction of mileage allowance, besides generation of incorrect MIS. ***(Appendix - VI)***

***(Annexure - 9)***

In reply (September 2015) to discrepancies in stations, RB endorsed the CRIS remarks that data of station master entered in CMS is as per FOIS database. CMS and FOIS data is synchronized in periodicity of every three months or in case of any user request, whichever is earlier.

In reply to discrepancies in routes, RB endorsed the remarks of CRIS that now routes are created from RBS database. Modifications are still allowed in exceptional cases for correction of kms. and user is encouraged to get the data corrected in RBS database itself.

The reply of RB is indicative of discrepancy in the database which is being corrected on a periodical basis, RB needs to correct and complete the database of stations and routes as a one-time exercise to ensure smooth and efficient CMS operations.

### 2.1.9 Booking of crew using 'Fetch Crew All' option rather than 'Fetch Crew as per Rule' option

As per CMS documentation as well as examination of CMS, there are two options through which list of crew available for deployment is shown by CMS. One is 'Fetch Crew All' option and the other is 'Fetch Crew as per Rule' option. As per CMS documentation, under the first option, CMS validates that crew is not due for Periodical Medical Examination test, REFT/REFD/REFE training, has required loco competency, is not under rest condition etc.

Under the second option, CMS also validates that Road Learning (LR) for the section/route on which the crew has to be booked is not due, Safety Camp training is not due and Automatic Signaling competency is also verified.

For using first option a reason must be entered into CMS. It was seen in audit that booking of crew in majority of the cases was done by using 'Fetch Crew All' option which tantamount to compromising with the safe running of the trains as the additional aspects as mentioned above for deputing crew by using 'Fetch Crew as per Rule' option are overlooked while deputing crew by using 'Fetch Crew All' option.

Analysis of data has revealed that 74 *per cent* of the crew was booked using 'Fetch Crew All' Option. Reasons for using this option were not recorded in large number of cases; more than 8000 types of codes were used for using this option. ***(Appendix - VII)***

There is a need to ensure that only competent crew is booked, fulfilling all the conditions required for train operations.

***(Annexure - 10)***

In reply (September 2015), RB endorsed CRIS remarks that CMS does not allow user to book crew using 'fetch crew all' without entering valid reasons and standard reasons in Dropdown Menu have been provided, to help user select proper reasons, since October 2012.

The reply of RB is not acceptable as no Dropdown Menu facility was available to the CMS user for selecting proper reason.

### 2.1.10 Irregular crew calling time

As per Operating Manual[18], a notice to running staff (Driver/Guard etc.) informing name/description, time etc. of the train in which he/she is booked, is to be served, as far as possible, two hours before he/she is due to report for duty and notice is generally not served to running staff working on fixed links. Further, as per rules[19] different running staff members are generally required to sign on for duty within 10 to 45 minutes before the scheduled/expected departure time of the train.

As per the process of CMS crew booking, call is made to the crew at the time of booking of crew. Data analysis of 2599975 transactions of 16 ZRs revealed that in 6.66 *per cent* transactions, calls were found to be made after train scheduling/ordering time and in 21.52 *per cent* transactions, calls were found to be made more than 165 minutes before/in advance of train ordering time. ***(Appendix - VIII)***

Thus, the CMS lacked adequate control to validate call time as it accepted call time much in advance of the expected time of departure of train/ordering time as well as much beyond the expected time of departure of train/ordering time. Further, as observed under paragraph 3.1, Traffic Advices having accurate/realistic expected departure time/ordering time were not used leading to populating of CMS with

[18] ***Northern Railway Operating Manual***
[19] ***Indian Railway General & Subsidiary Rules/Manual provision,***

wrong data or late trains were not marked as such in CMS, thus, it resulted in generation of wrong information by CMS. Acceptance of call time beyond the expected time of departure of the train by CMS is a major flaw as it establishes that CMS cannot be relied upon fully for ensuring smooth running of trains.

***(Annexure - 11)***

In reply (September 2015), RB admitted the audit observations for remedial action.

### 2.1.11 Irregular crew call received/acknowledged time

After making a call to the crew, the crew is expected to receive/acknowledge the call at the earliest. In the case of call served through SMS, it is expected to be acknowledged within 10 minutes[20]. An analysis of the call serve time and call receive/acknowledge time of 2745140 transactions revealed instances where calls were found to be received even before the calls were made indicating weak application control. In 16.07 per cent transactions, calls were found to be acknowledged 165 minutes after call were made and in 54.21 per cent transactions, calls were acknowledged within 30 minutes.***(Appendix-IX)***

***(Annexure - 12)***

Thus, CMS lacked adequate validation controls as receipt of call prior to the call was being made is very serious flaw in the system and wide variations in call receive time indicates that calls were not acknowledged in-time.

In reply (September 2015), RB admitted audit observations for remedial action.

### 2.1.12 Irregular 'sign on time' of crew

As per Indian Railways General and Subsidiary Rules, various types of running staff (Driver/Guard etc.) are required to 'sign on' within 10 to 45 minutes of the scheduled/expected departure time of the train (depending upon originating/intermediate station of train). The results of analysis of data of 2771169 transactions revealed that in 26 *per cent* cases, crew were found to have signed on or after train ordering time and in 12 *per cent* cases, crew were found to have signed on less than 10 minutes before train ordering time against the requirement of 10 to 45 minutes before expected departure (ordering) time of the train. ***(Appendix - X)***

***(Annexure - 13)***

[20] ***As per CMS Manual***

Thus, the above facts indicate that CMS lacks data entry validation controls because there cannot be any possibility of crew signing in after the train ordering time/expected time of departure of the train or the train was not marked late leading to such an eventuality.

Data analysis further revealed that TA with proper ordering time were not used as is evident from the observations made under Para 3.1.

In reply (September 2015), RB endorsed CRIS remarks that audit observations have been noted for necessary remedial action.

### 2.1.13 Delay in supervisory approval of 'crew sign on' time

'Crew sign on' activity is expected to be approved by the Supervisor immediately at the time of 'crew sign on' for its regularization as it enables crew to 'sign off' at destination location.

Data analysis of 3070897 transactions of ZRs revealed cases where Supervisor approval of 'crew sign on' time was prior to the 'crew sign on' time. In 68 *per cent* cases 'crew sign on' time was approved by Supervisor after 30 minutes or more from 'crew sign on' time. ***(Appendix - XI)***

Thus, CMS lacked adequate data validation controls as it allowed Supervisory approval even prior to 'crew sign on' time. Moreover, delay/abnormal delay in Supervisory approval of 'crew sign on' time raises doubt as to whether the crew had properly signed on by fulfilling all the formalities, besides leading to further delay in 'crew sign off'.

***(Annexure -14)***

In reply (September 2015), RB endorsed CRIS remarks/admission that CMS lacks validation controls.

### 2.1.14 Irregular Supervisory approval time of 'crew sign off'

A cycle of 'crew sign on' and sign off is treated as complete only after the Supervisor has approved the 'crew sign off' activity. Supervisory approval of the cycle of 'sign on' and 'sign off' is very crucial because only after that, a crew comes under rest state and further activities like crew's entitlement for allowances, further booking etc. become active.

Data analysis of 1642377 transactions of 15 ZRs[21]by audit revealed cases where Supervisor was found to have accorded approval even prior to crew sign off'. In 37 *per cent* cases Supervisor was found to have approved 'crew sign off' time after a delay of more than one hour.***(Appendix - XII)***

***(Annexure – 15)***

[21] ***All zones except NER***

This indicates that the CMS lacked adequate data validation controls as it allowed 'Supervisory sign off' approval even prior to 'crew sign off' time and delay in approval of 'crew sign off' by the Supervisor leads to further non-booking of crew, generation of incomplete Crew Mileage Reports/manual preparation/modification of Mileage Reports.

In reply (September 2015), RB endorsed CRIS remarks/admission that CMS lacks validation controls

### 2.1.15 Irregular'crew sign on'*vis-a-vis*'crew sign off' time

An analysis by Audit of crew sign on time and crew sign off time of 1367760 transactions approved by Supervisor pertaining to 15 ZRs[22] revealed instances where 'crew sign on' and 'sign off' time was same, i.e. the sign on/off transactions were wrongly recorded. In 2.82 per cent transactions, a difference of more than 20 hours between the 'sign on' and 'sign off' times indicated that either the crew had not timely performed his sign off duties or dummy sign off times were approved. ***(Appendix - XIII)***

***(Annexure – 16)***

Thus, acceptance of abnormal/untimely activity of 'sign on/off' by CMS indicates that data entry validation controls were not accurately built in into the system which leads to wrong generation of MIS reports related to crew utilization as well as wrong charging/payment of mileage allowances, as highlighted under paragraph 2.5.4.5.

In reply (September 2015), RB endorsed CRIS remarks that an alert is given at login to Supervisor as well as to TNC where crew is at sign on status for more than 36 hours and stated that zonal railways have been advised to take necessary corrective measures in this regard.

**Audit Sub-objective:** Whether Crew Booking through mobile SMS was effective in eliminating the Call boy/Book system

### 2.2.1 Booking through mobile Short Message Services (SMS) – Non-usage of SMS

CMS application has provided a mobile SMS support functionality to its users by using mobiles. SMS facility was mainly for call serving, its acknowledgement and for communicating various other operational alerts.

A review of CMS database pertaining to crew and SMS from 5 September 2014 to 5 December 2014 revealed that only 10.63 *per cent* of the SMSs sent were acknowledged/replied and 54.30 *per* cent of the SMSs sent to the crew were shown as 'Pending', SMS service was not

[22] ***All zones except NER***

used at 43 lobbies and Closed User Group (CUG) mobile status was not correctly depicted. Over CR, NR, NWR and SCR, only in 16.01*per cent* of total sign on transactions, SMS were sent. In 13983 cases, even though Closed User Group (CUG) mobile status was shown as Y, the mobile number was shown as zero on 13 ZRs. ***(Appendix - XIV)***

***(Annexure - 17)***

From the findings brought out above, it is clear that SMS services were not being used effectively and comprehensively despite the fact that CMS application has provided a strong SMS support functionality to its users by using mobiles.

In reply (September 2015), RB while admitting the audit observations and endorsing CRIS remarks that remedial action will be taken in respect of observations pertaining to pending cases and zero mobile status, stated that necessary instructions have been issued to zonal railways in respect of audit observations.

**Audit Sub-objective:** Whether CMS was generating computerized mileage reports for direct submission to Personnel Branch for payments and the extent to which lobbies became paperless through CMS.

### 2.3.1 Incorrect generation of mileage reports

One of the primary objectives of development and implementation of CMS was to generate Mileage, Over Time (OT) Allowance and other statements for payment to running staff. In order to assess the accuracy of CMS in generating the mileage, OT and other allowances' statements for payment to the crew, a test check of monthly Mileage Statements called Crew Sign On Details (CSOD) was carried out by Audit in selected lobbies. It was observed that the mileage statements generated through CMS needed to be corrected manually prior to sending the final figures to Personnel department for payment. Instances were noticed where though CMS was in use but mileage statements were prepared manually[23] which was against the extant orders of RB; further the CMS generated statements had to be manually corrected due to following reasons:

- Either crew sign on or sign off was manual through the register because of non-working of CMS/operational reasons at the location.(All Zones except NER and NWR)
- Complete details of leave were not entered in CMS.

[23] ***At CMS BWN (DSL) lobby of ER, mileage of crew was manually computed. At majority of the lobbies of Delhi division mileage of guards was being computed manually***

- All the routes pertaining to the lobby were not defined over five ZRs[24] in CMS.
- Data entry errors/Wrong sign on/off time entry by outsourced/railway staff over eight ZRs[25].
- Missing transactions due to CMS failures/inaccurate/non-updating of crew details (CR, SR, SER, ECoR, NR, WCR and NCR).

***(Annexure-18)***

### 2.3.2 Manual Maintenance of Records

One of the prime objectives of automation through CMS is to make the lobbies paperless. However, audit of selected lobbies revealed that:

i. Almost all lobbies were found to be taking printouts of Mileage Reports/Summary Mileage Reports from CMS which were being corrected manually and modified data was being manually populated in Payroll and Related Independent Module (PRIME).

ii. At Jind, GZB and TKD lobbies of NR, OT Allowances were computed manually and it was informed (March 2015) that CMS was not configured to generate OT Allowance Report as per extant orders.

iii. Following manual records were also being simultaneously maintained in one or more lobbies of the selected divisions of twelve Zones:

| **Records** | **Zonal Railways[26]** |
|---|---|
| Sign on and Sign off Register/Crew Booking Diary | CR, WCR, SR, WR, SWR, NR, SER, SECR, NCR, ECoR, NWR and NFR (12 ZRs) |
| Abnormality Register | CR, WR, SWR, NR, SER, SECR, NWR, SCR and NFR (nine ZRs) |
| List of staff due for PME | CR, SR, NR, ER, SER, NWR and SECR (seven ZRs) |
| List of Crew Due for Training and Refresher Courses | CR, SR, NR, SER, SECR, NWR and ER (seven ZRs) |
| Crew Bio data | CR, SR, NR, SER, NWR and ER (seven ZRs) |
| Pre-departure Detention | CR, NR, NWR and SER(four ZRs) |
| Circulars and Caution Order Register | SWR, NR, SER, SR and NFR (five ZRs) |

Thus, from the above it can be seen that to a large extent manual records were being maintained defeating the CMS objective of making the lobbies paperless.

[24] ***CR, ECR, WCR, SCR and, ER***
[25] ***CR, SR, WCR, SWR, SCR, ER, NR and SECR***
[26] ***See glossary***

In reply (September 2015), RB, while endorsing remarks of CRIS that CMS provides for generation of mileage data in XML format which can be taken in soft form (copy) to prime servers, stated that necessary instructions have been issued to zonal railways regarding audit observations.

**Audit Sub-objective:** Whether monitoring of crew training, crew grading, crew counseling etc. was effective.

### 2.4.1 Failure in monitoring Crew Road Learning Training

As per the training requirement of Running Staff, before a crew is deployed on a train, he must be familiar with the route he is going on. For this, every new crew is required to be given three trips for familiarizing himself with the section. If a driver has not operated on a section for over three months, he should be given 'Road Learning Trips' as below:

| Duration of Absence | Number of Trips |
|---|---|
| 3 months to 6 months | 1 |
| 6 months to 2 years | 2 |
| Over 2 years | 3 |

Over five zones[27], audit found from data analysis that in respect of 3349489 cases, next due date was prior to last drive date.

In reply, RB endorsed CRIS remarks that due date is shown based on the last run 'plus' periodicity (if lapsed). In such case crew is required to complete three runs as per statutory requirement. The LR due date is not changed till all three runs have been completed. Till such time even though drive date is changed based on the run, due date remains the same and will be prior to drive date.

However, the reply of RB is not acceptable due to the fact that instances were noticed where trips were not due but CMS did not compute the next due date as per extant orders. Similarly, instances have been noticed where trips were due still CMS computed next due date which was irregular.***(Appendix –XV)***

***(Annexure 19)***

### 2.4.2 Failure to provide effective MIS reports for monitoring crew training

An analysis of CMS database revealed that CMS was depicting next due date for training though the Crew did not require the concerned training and the Business Logic of CMS for reckoning next due date for Automatic Signaling (ASIG) training was not in accordance with

[27] ***NR=1317478. ECoR=27069, , ER=25460, SCR=1895560 and SER=83922***

the Indian Railway General and Subsidiary Rules (NR-2011). ***(Appendix XVI)***

Thus, CMS training reports/database were not properly designed to be effective in monitoring crew training.

In reply(September 2015), RB while endorsing CRIS remarks that the issue pertains to data entry errors by the users, stated that necessary instructions have been issued to zonal railways for correct and complete data updation.

### 2.4.3 Discrepancies in loco details used for validating crew competency

An analysis of Traffic Advice (TA) data by Audit for the period 5 September 2014 to 5 December 2014 revealed that loco type was shown as zero, however, no loco of such type was available in the master data. Similarly data analysis over different railways revealed that dummy numbers of locos like 111, 123, 147, 1111 etc. were used by one or more than one lobby for generation of multiple TAs. Booking of crew against such TAs having dummy loco numbers raises suspicion whether crew competency for actual loco was validated. ***(Appendix - XVII)***

In reply (September 2015), RB endorsed CRIS remarks that validation for correct entry of loco number with respect to loco type has been introduced in system. However, action taken to prevent usage of same (dummy) loco number in different TAs by different lobbies/same lobby at the same time has not been communicated.

### 2.4.4. Lack of provision for Safety tools sign on/off

As per rule 4.19 of Indian Railway General and Subsidiary Rule (NR), a Loco Pilot or Guard shall carry the prescribed equipment while on duty with the train and will report the deficiency to his Supervisors for making good the deficiency. However, Audit noticed that CMS did not prompt the crew for confirming whether he had the required safety tools with him when he was signing on duty, though in the CMS database, fields necessary for capturing the requisite details were available.

In reply (September 2015), RB endorsed the comments of CRIS that the issue was not within the scope of CMS. However, the reply is not acceptable because as per manual/codal provision, a crew (Driver/Guard) is required to ensure availability of prescribed tools during duty.

### 2.4.5 Non-feeding of caution orders/circulars

Over SWR, NFR and NCR[28], no circular/caution orders were uploaded in the system. The system of maintenance of registers of circulars/caution orders continued to prevail over all the lobbies of these railways.

In reply (September 2015), RB stated that necessary instructions have been issued to the zonal railways.

### 2.4.6 Booking of crew on continuous running duties beyond 10 hours

As per Appendix 'B' of NR Operating Manual, running duties of loco/traffic running staff should not ordinarily exceed 10 hours at a stretch. As per review of Working Hours Reports of CMS pertaining to December 2014 to February 2015, it was noticed that out of 23835 crew members, 1948 crew members (*eight per cent*) were on running duties for a continuous period of more than 10 hours.

Booking of crew beyond a period of 10 hours for continuous running duties could affect safe train operations.

### 2.4.7 Grading of crew by loco Inspectors – Discrepancies thereof.

As per Drivers' Grading Booklet pertaining to their safety categorization circulated by RB in March 2007, Loco Inspectors (LI) have to keep monitoring their allocated drivers as per the periodicity and schedule prescribed by the concerned railway and every driver is to be graded as 'A', 'B', 'C' or 'D' by his LI at the end of the prescribed periodicity.

Newly entered and those promoted as Goods Train drivers are initially put in 'C' category and are re-evaluated at an interval of one year. A crew having a grading of 'B' is to be monitored again for grading at an interval of two years and crew having a grading of 'A' is to be monitored again for grading at an interval of three years.

Analysis of CMS data for 16zones revealed that out of 37690 loco pilots, 28254 were graded and remaining 9436 (33.39 *per cent*) were not graded as per prescribed periodicity by their concerned Loco Inspectors (LIs).

Analysis from CMS data set shows that 2343 crew belonging to A, B and C categories of five ZRs[29] were graded 3 to 49 times within a period of five to six years. Data analysis revealed that 4316 LPGs were graded within one year of their promotion in nine ZRs[30].

***(Annexure – 20)***

[28] ***After 27.08.2012 over NCR***
[29] ***NR=585, SCR=1486, WCR=6, SECR=260, ECoR=6***
[30] ***ECoR=216, NFR=40, SCR=241, NR=744, SER=516,WCR=1159, SWR=812, WR=108, SECR=480***

Thus, periodicity of grading of LPGs has not been followed in accordance with the extant orders as is evident from the data thrown by CMS or the grading has not been timely and accurately recorded/updated in CMS. Thus, CMS has not fully facilitated the decision making based on the results shown.

In reply, RB stated that necessary instructions have been issued to ZRs for proper grading of Loco Pilots/Crew and their monitoring accordingly.

### 2.4.8 Counseling of Crew – Discrepancies thereof.

In order to increase the knowledge base of a crew, various methods are used like deputing crew to various training courses, their counselling by their LIs etc.

Audit found during the review of the CMS data pertaining to periodicity of the counseling of crew (Grade A, B and C) by their Chief LI/LI for the period prior to 6 December 2014 that around 29 percent crew over NR, 88 per cent crew over NFR and six per cent crew over NWR were not counselled as per the prescribed periodicity.***(Appendix – XVIII)***

Out of total 7840 active crew on CR, data pertaining to counselling of only 1593 crew had been captured in CMS. The number of times the counseling had been done ranged between one to157.

Over six zones[31] there were 2167 instances where crew were counseled by Loco Inspector, but IDs of Loco Inspectors, who counseled the crew, were not available on CMS record.

During a comparison of CMS grading and counselling data with Loco Inspector's manual records/divisional records, mismatch were noticed between the two sets of information over NR (Delhi division) and NFR.

Thus, periodicity of counseling was not followed in accordance with the extant orders which could affect smooth train operations or the counselling has not been timely and accurately updated in CMS which may affect decision making based on counselling data available in CMS.

During visit to Delhi Division Headquarters of NR, it was noticed that Loco Inspectors were forwarding manually, monthly reports of crew grading and counselling to Divisional Headquarters and the same details were being further manually compiled for decision making, though the relevant details were already available in CMS and CMS was also generating reports containing relevant data.

***(Annexure - 21)***

[31] ***CR=529, ECOR=773, SECR=446, NR=101,NFR=98, NWR=220 (Total =2167)***

In reply (September 2015), RB stated that necessary instructions have been issued to ZRs.

### 2.4.9 Poor usage of QUICK as a tool for upgrading crew knowledge

QUICK implies Quiz for improving crew knowledge. This option has been provided in the CMS which is a crew knowledge evaluation and improvement game wherein the user is offered a question with four alternatives. Utility and effectiveness of this tool was examined in audit by analyzing the Quiz transaction data and which revealed that out of 63729 active crew analysed over 16 ZRs, only 16401 (25.74 per cent) crew had taken the on line quiz to check their knowledge.

***(Annexure - 22)***

In reply (September 2015), RB stated that necessary instructions have been issued to zonal railways.

### 2.4.10 Poor Implementation of Breath Analyzers (BA) units

As per revised policy on drunkenness on duty issued by RB in December 2001, no running staff is to be allowed to sign on for the duty without undergoing breath analyzer test and reading of the breath analyzer test is to be recorded in the signing register. Similar standards are also to be maintained at the time of duty 'sign off'.

Safety Directorate (Railway Board) opined that BA test at sign on/off stage is deterrent as well as initial proof of drunkenness. It is possible if during sign on, a crew is found drunk, he may report sick. Further, if the crew is found drunk during sign off, DAR action can be taken against him. Thus, integration of BA equipment in CMS makes it foolproof against the impersonation and strengthens the checks. It is helpful in checking the menace of alcoholism on duty among the crew and enhances safety in train operations.

It was, however, observed in Audit that BA units have not been integrated with CMS resulting in manual intervention leading to inconsistent values being recorded in CMS, besides leaving a possibility of collusion between the crew and the Supervisor.

Despite knowing the importance of BA testing for the safe running of trains, the Railway Administration/CRIS did not provide for integration of BA units with CMS at the time of System Design stage in 2006, to mitigate the associated risks. The BA units were not integrated in 12 ZRs. The number of lobbies where it has been integrated is miniscule. The details of lobbies where it has been integrated and irregularities due to non integration are given in the ***Appendix – XIX.***

***(Annexure - 23)***

In reply (September 2015), RB endorsed CRIS remarks that CMS final phase, stage-I only has been sanctioned with BA devices, provision has been made available in CMS application to cater to bio-metrics and BA test requirement and newly developed client image needs to be loaded on the kiosk thin clients. Regarding inconsistent values, CRIS remarked that these are data errors generated through trials. RB, in its reply, also stated that necessary instructions have been issued to zonal railways.

However, RB did not elaborate reasons for not sanctioning BA devices for lobbies implemented under phase I, phase-II and stage II of final phase. Moreover, CRIS remarks were not acceptable as data inconsistency transactions pertained to a period of two to three months and remedial action taken in the matter has not been communicated.

**Audit Sub-objective:** Whether CMS was effective in controlling payment of overtime and kilometer allowance, monitoring of crew productivity and cases of acts of malingering

Audit noticed that incorrect/non-configuration of CMS as per extant orders, delay in timely updating of crew database, lack of adequate means to validate crew sign on/off time, authenticity of crew and inadequacy of application controls led to generation/computation of abnormal/wrong mileage allowance as well as payment of excess mileage allowance thereby defeating the CMS objective of preventing excess payment of mileage allowance. Audit observations in this regard are as under:

### 2.5.1 Wrong configuration of allowances for non-running duties/training at headquarters/outstation

As per Para 907 of Indian Railways Establishment Manual, when running staff is engaged in or employed for non-running duties (such as Training, Enquiry etc.), they are entitled for payment of an Allowance in lieu of Kilometrage (ALK) for every calendar day for such non-running duties as they may be required to perform. When such non-running duties are performed by the running staff at their Headquarters, they shall be paid the pay element of running allowance, i.e. 30 *per cent* of the basic pay applicable for the day (*viz.*one *per cent* per day). When such non-running duties are performed at outstation, they shall be paid ALK as may be specified (i.e. 160 kilometrage per day). A provision has been made in CMS which enables different lobbies to configure the various allowances which are to be paid to different crew members for performing non-running duties at outstation and at headquarters.

A review of the allowances configured in the CMS revealed that lobbies configured the CMS in violation of the rules and there were

cases of charging of 80/120/160 kilometrage per day to crew for attending non-running duties/training at their headquarters. The wrong configuration of CMS resulted in computation of mileage allowance of approx. ₹ 485 lakh. Instances were also noticed where crew was shown to perform non-running duties at other than headquarter, however, his headquarters locations and outstation locations were exactly the same, In CMS, 98 types of non-running duties were defined in the master data of CMS, however, 100 types of non-running duties were found processed under CMS. During physical verification instances of actual payment of kilometrage allowance were noticed though non-running duties were performed at the headquarters. ***(Appendix - XX)***

***(Annexure - 24)***

In reply (September 2015), RB stated that necessary instructions have been issued to zonal railways.

### 2.5.2 Inconsistencies in configuration of admissible kilometrage for outstation duties in CMS

CMS has been configured to pay 'admissible kilometrage' to crew members. Review of configuration of CMS for allowing admissible kilometrage to crew of various lobbies[32] revealed major inconsistencies in admissible kms. (to and fro) between two stations *e.g.* from NZM to CH it was 160 kms., from DLI to CH it was 204 kms. and from NDLS to CH it was 320 kms. Thus, it varied between 160 and 320 kms. between the pair of lobbies/stations of the same cities. The other examples of inconsistencies over NR and other ZRs are given in Annexure 25. During test check, instances were noticed where mileage allowance reports generated by CMS were manually corrected due to wrong configuration of admissible kms. ***(Appendix -XXI)***

***(Annexure - 25)***

Thus, the above establishes that the CMS has not been configured properly for charging 'Admissible Kilometrage' due to which manual corrections are being made in the mileage reports and possibility of wrong payment cannot be ruled out.

In reply (September 2015), RB stated that necessary instructions have been issued to zonal railways.

### 2.5.3 Incorrect charging of mileage allowance

During analysis of mileage reports of November 2014 of Pakur (PKR) lobby of ER, Audit found that system generated mileage allowance of 160 kms. over route number 10151 and 210 kms. over route number 10150 for traversing same distance of 4 kms. between PKR to PKR.

[32] ***NR, ER, CR, SECR and NFR***

Route No. 10151[33] and route number 10150[34] created in the CMS were fixed mileage route and it was noticed in audit that route number 10151 was used as default for booking of Pilots and route number 10150 was used as default for booking of Guards. This resulted in charging of different mileage for pilots and guards. Orders/instructions in support of the above practice were not produced to audit. Payment to the crew of PKR lobby was made on the basis of mileage allowance generated by the CMS.

***(Annexure - 26)***

In reply (September 2015), RB stated that necessary instructions have been issued to zonal railways.

### 2.5.4 Generation of Mileage Allowance – Non-validation of/delay in sign on/off time, wrong configuration of allowances etc.

As per paragraph 914 (ii) of IR Establishment Manual, each railway shall identify such sections and circumstances which do not have the potential for enabling the running staff to earn adequate kilometrage within the stipulated duty hours. For these identified sections and circumstances, the running staff shall be paid at the rate of 120 kms. for the full stipulated duty hours and such section will be considered as 'minimum guarantee section'. However, this rule was not properly followed/implemented. Further, system also did not validate crew sign on/off time which resulted in wrong generation of mileage allowances. Instances found in this regard are given below:

#### 2.5.4.1 Same crew sign on/off time from same lobby – generation of irregular mileage allowance

- Over ER, Audit found during test check of CMS data as well CMS Mileage Reports that in seven transactions, where time and lobbies/locations of crew sign on and sign off were same *viz.* the crew duty hours were zero, no mileage allowance should have been computed by the system. However, a mileage of 120 kms. was allowed in each case by CMS as the routes were marked as Minimum Guarantee section.
- Over NR, in respect of seven cases, crew had signed on/off from same station/lobby and at the same time but CMS had computed mileage allowance in the range of 40 kms. to 248 kms even though six out of seven routes were not marked as Minimum Guarantee section. In one of the seven cases, the TA was prepared for zero mileage allowance but mileage of 120 kms. was computed by the CMS which was irregular.

***(Annexure - 27)***

[33] ***PKR-PKR-KSIK---/160***
[34] ***PKR-PKR-PKRZ----/210***

This implies that CMS lacks adequate controls to validate crew sign on/off time and mileage allowances generated by it.

In reply (September 2015), RB while endorsing remarks of CRIS that cases pertain to fixed mileage routes and no validation are proposed as there is no minimum run time, issued necessary instructions to zonal railways.

The remarks of CRIS are not acceptable as necessary validations are required to prevent charging of mileage allowance for zero duty hours.

#### 2.5.4.2 Crew sign on/sign off at the same time from two different lobbies – generation of irregular mileage allowance

Over two ZRs[35], audit found, during test check of CMS data as well as CMS Mileage Reports, 732 instances/transactions where crew had signed on and signed off from two different lobbies/locations at the same time, though it was not feasible as the lobbies were physically apart from each other and in these cases, test check revealed that CMS has also allowed mileage allowance without validating sign on/off time.

Thus, lack of logical controls in CMS to validate sign on and sign off time from two physically apart lobbies for the same crew at the same time has resulted in irregular generation of mileage allowance.

In reply (September 2015), RB while endorsing remarks of CRIS that validation for duty hours are not proposed as there is no minimum run time, issued necessary instructions to zonal railways.

The remarks of CRIS are not acceptable as necessary validations are required to prevent wrong charging of mileage allowance for zero duty hours.

#### 2.5.4.3 Wrong configuration of minimum guarantee/handicapped section

As per codal provision[36], each Railway shall identify such sections and circumstances which do not have the potential for enabling the running staff to earn adequate kilometrage within the stipulated duty hours. For these identified sections and circumstances, the running staff shall be paid at the rate of 120 kms. for the full stipulated duty hours.

- In Hubli division of SWR, six sections were identified as handicapped sections in August 2008 effective from April 2004. During May 2011, four sections were also identified as handicapped/minimum guarantee section effective from April 2011 up-to March 2012.

[35] ***NR=728 cases, ER=4***
[36] ***Paragraph 914 (ii) of Indian Railways Establishment Manual***

It was noticed in audit that no orders were issued by SWR to extend the validity of identified handicapped sections after March 2012. This resulted in irregular payment of kilometrage allowance of ₹ 13.40 lakh (approximately) for handicapped section during September 2014 to November 2014 by SWR.

***(Annexure - 28 - Table-A & B)***

- As per NR letter dated 21 October 2008, Narwana-Kurukshetra (NRW-KKDE) section has been defined as minimum guarantee section but has been marked in CMS as only one way on Route No. 1097 between NRW to KKDE and has not been marked as such on route No. 1760 between KKDE to NRW.
- Over ECoR, KDJR-NYG-PRNR-GADH[37] and KDJR section was defined as a minimum guarantee section. However, the same was not marked as such in CMS which resulted in computation of mileage allowance on the basis of actual kms. rather than computing of minimum guaranteed mileage allowance.

In reply (September 2015), RB stated that necessary instructions have been issued to zonal railways.

### 2.5.4.4 Wrong calculation of ghat allowance

As per extant orders[38], Lalkaun-Haldwani (LKU-HDW) and Haldwani-Kathgodam (HDW-KGM) sections over NER have been selected as special ghat sections. Ghat allowance for ghat section is to be calculated at twice of actual distance for LKU-HDW section and at thrice of actual distance for HDW-KGM section. As per CMS database, the section between LKU-HDW (having distance of 16.09 kms) has been defined as type-II ghat section under route number 890 and 1464 and mileage for type-II ghat section is computed by CMS at thrice the actual distance (two times of normal working plus actual length) instead of at twice of actual distance. Moreover, under route numbers 890 and 1464, the section between Haldi Road (HLDD) and Lalkaun (LKU) (having distance of 7.63 kms.) has been marked as type-II ghat section *viz.* the mileage for this section is also computed at thrice of actual distance. However, the section between HLDD and LKU is not a ghat section.

Hence, mileage computed under route number 890 and 1464 for HDW to LKU and HLDD to LKU was not computed as per extant orders and payment was made as per the mileage generated by the CMS.

In reply (September 2015), RB stated that necessary instructions have been issued to ZRs.

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[37] ***See glossary***
[38] ***DME/(O&F)/IZN letter no. Mechanical/539/3/4/ Part I dt. 1 June 2011***

### 2.5.4.5 Computation/Payment of excess shunting mileage allowance due to late signing off

As per CRIS documentation on CMS, a Shunter is allowed a mileage of 15 kms. for a shunting duty of one hour (rounded off to 30 minutes). Shunters are generally booked for eight hours' duty in one shift or for 16 hours' duty in two shifts of eight hours. It was, however, observed in Audit that CMS has not been configured to highlight cases where the mileage allowance is for excessively high hours of duty, thereby denying an opportunity to the Railway Administration for taking corrective measures and the mileage allowance as calculated by CMS is being paid to the Shunters (except for the few cases where the Lobby staff was vigilant and manual intervention was made). In this regard, observations are as follows:

- Audit found during data analysis over NR & CR that in 1772 cases[39], the CMS allowed shunting mileage allowance @ 15 kilometers per hour for performing shunting duties for a period beyond 17 hours to 270 hours[40] which resulted in computation of shunting mileage allowance of 7,60,095 kms[41], pertaining to duty exceeding a period of 17 hours. This occurred probably due to poor supervisory control over approving abnormal 'crew sign on'/sign off time'.

- Scrutiny of physical records at TKD lobby revealed instances where crew was paid shunting mileage allowance as computed by CMS. For example, a crew (ID TKD1456) booked for a duty of eight hours shift on 11 October 2014 was allowed shunting mileage allowance for a duty of 32 hours and against the entitlement of shunting mileage allowance for 120 kms. was paid shunting mileage allowance for 480 kms. A crew (ID TKD1441) deputed for 16 hours duty (two shifts of 8 hours) was paid for 32 hours' duty and against the entitlement of shunting mileage allowance for 240 kms. was paid shunting mileage allowance for 480 kms.

- At GZB lobby, crew booked for eight hours duty (one shift) or 16 hours duty (two shifts) were paid mileage for a duty period ranging from 32 hours to 61 hours and against the entitlement of 120 kms. or 240 kms. were paid shunting mileage allowance for 480 kms. to 915 kms. At GZB lobby, system allowed payment of mileage allowance for 1530 kms to a crew (ID GZB1527) for a shunting duty performed continuously from 1 October 2014 to 5 October 2014 (102 hours) even though the crew was absent from 1 October

[39] ***NR=1216 cases, CR=556 cases***
[40] ***CR=17 hours to 264 hours, NR=17 hours to 270 hours***
[41] ***NR= 4,29,195 kms., CR=3,30,900 kms.***

to 2 October 2014 which clearly gives rise to the suspicion that he was logged in by a proxy.

Excess payment of mileage allowance was due to the fact that the concerned crew had not timely signed off in CMS but the same was approved by the Supervisor and CMS also lacked adequate controls/provision to prevent delayed sign off as well as generation of abnormal shunting mileage allowance and the concerned crew members also did not point out excess charging of mileage allowance for payment.

- In 3488 cases, Shunters/crew performed shunting duties for 511 to 539 minutes (i.e. more than 8½ hours to less than nine hours) and were allowed mileage allowance by the system for nine hours, though as per Shunter Roster, Shunter is deputed for eight hours shift. Similarly, in 149 cases, Shunters /crew members were allowed shunting mileage allowance for duty performed for more than 16½ hours and less than 17 hours though as per the Roster, Shunters/crew members are booked for 16 hours (in two shifts cases). Thus, delay in signing off in 3637 cases led to computation of excess mileage allowance by 54,555 kms.
- Further, test check of physical records at GZB and TKD lobbies revealed instances where Shunters deputed for eight hours' duty of one shift or 16 hours' duty of two shifts were paid for nine hours or 17 hours' duty though their duty period of nine or 17 hours was not regularized. During test check of physical records at SSB lobby, Audit found that the CMS allowed excess computation of shunting mileage allowance but the concerned crew who was allowed mileage for a duty period of more than 8½ hours, pointed out the excess mileage for deduction of the same from his pay bill.
- Analysis of NR data also revealed that in 1911 cases, CMS computed shunting mileage allowance of 72495 kms. pertaining to shunting duty performed for a period beyond eight hour *viz.* for duty performed between nine hours to 15 hours which were not as per duty roster hours.
- Over NFR, it was noticed that CMS was not serving as a tool for controlling payment of mileage allowance as was evident from the results of test check of Mileage Summary Report for the period 1 October 2014 to 31 October 2014 which revealed that due to non-approval of TA by Supervisor within time, crew had to sign off manually and improper up-dation of CMS data of manual sign on & sign off by crew at non-CMS locations, resulted in computation of mileage in excess of 1395 kms to 3200 kms by CMS which required manual corrections.

In reply (September 2015), RB while endorsing CRIS remarks that validation can be introduced if parameters are defined by Railways, stated that necessary instructions have been issued to the zonal railways.

#### 2.5.4.6 Time lag in data updation leading to inadmissible computation/payment of officiating mileage allowance

As per CRIS documentation, Senior Assistant Loco Pilot/Loco Pilot Shunters (SALP/LPS) are not entitled for officiating mileage allowance for performing shunting duties. A review of CMS data revealed that between 5 September and 5 December 2014, the CMS computed 7,681 kms. as officiating mileage allowance to SALP and LPS for performing shunting duties.

These kilometers were computed after the date of promotion as SALP/LPS. During test check of records at TKD and SSB lobbies of NR, it was noticed that such inadmissible payment of officiating mileage allowance was made as promotion dates of crew were not timely updated in CMS which led to charging of inadmissible officiating mileage allowance.

In reply (September 2015), RB stated that necessary instructions have been issued to the zonal railways.

### 2.5.5 Increase in percentage of non-programmed utilisation of crew to their programmed utilisation over the years

Efficient utilisation of crew means more deployment of crew in programmed activities as well as reduction in deployment of crew in non-programmed activities. An analysis of CMS's crew utilization data of 13 ZRs[42] pertaining to April 2014 to November 2014 revealed that the percentage of total non-programmed hours (period utilized on leave, stationary duty, training, and other miscellaneous type of duties) to total programmed hours (i.e. period utilized on running duty and rest) was in the range of 5.68 *percent* (SR) to 19.28 *percent* (ECoR).

An year wise analysis of CMS's crew utilization data of these ZRs[43] pertaining to April 2011 to November 2014 revealed that the percentage of total non-programmed hours to total programmed hours indicated an increasing trend over ER, NWR, SECR, WR, WCR, CR, SER, NCR, SR and SWR whereas it indicated a decreasing trend over NR, ECoR and NFR. During April 2011 to November 2014, it increased from 1.75 *per cent* to 8.71 *per cent* over ER and from13.52 *per cent* to 17.12*per cent* over SECR. It decreased from 23.57 *per cent* to 19.28 *per cent* over ECoR and from 8.64 *per cent* to 7.73 *per cent* over NFR.

***(Annexure - 29)***

[42] ***CR, ER, ECoR, NR, NFR, NWR, SER, SECR, SWR, WCR, WR, NCR & SR***
[43] ***CR, ER, ECoR, NR, NFR, NWR, SER, SECR, SWR, WCR, WR, NCR & SR***

Thus, the increasing trend of utilization of crew on non-programmed activities leads to the conclusion that due control is not being exercised to improve the deployment of crew in programmed activities.

In reply (September 2015), RB stated that necessary instructions have been issued to zonal railways.

### 2.5.6 Comparison of crew movement data *vis-a-vis* FOIS/CMS/COA train departure/arrival time

An analysis of data containing details of the crew sign-on/sign-off and FOIS/CMS/COA arrival/departure time was done over eight ZRs which indicated that system lacked adequate control to validate the data input pertaining to crew sign on/sign off time or the COA/CMS/FOIS train movement time was wrong.

Audit noticed instances where the crew signed on after FOIS train departure time, crew signed on abnormally early to FOIS train departure time, crew signed off before FOIS arrival time of the train, FOIS train departure time and crew's sign-on time was same, CMS train departure time was abnormally after train ordering time. Comparison of CMS data with COA data revealed instances where crew sign on time was not regular/within the specified limit. ***(Appendix - XXII)***

***(Annexure - 30)***