Overview

The Audit Report consists of audit findings relating to compliance issues in respect of the Ministry of Railways and its various field units including Railway Public Sector Undertakings and Autonomous Bodies. The Audit Report includes two thematic audits, two long paragraphs and 32 individual Paragraphs. A brief overview of the important audit findings and conclusions is given below:

Para 2.1: Flexi fare system in Rajdhani, Shatabdi and Duronto trains

Ministry of Railways implemented the flexi-fare scheme in all Rajdhani, Duronto and Shatabdi trains in September 2016, irrespective of the demand and occupancy. The scheme resulted in decrease in occupancy in all classes except Sleeper class in Duronto trains. The occupancy increased only in a few Premier trains. Though the Railways had introduced enhanced/dynamic fare in various formats (Enhanced Tatkal fare in Premier trains, Suvidha trains and Special trains with Tatkal fare) before introducing the flexi fare scheme, they did not take into consideration the fact that the occupancy in all classes (except sleeper class in Suvidha Trains) where enhanced/dynamic fare were implemented was very low and AC 2 and AC 3 in these trains were not finding adequate patronage. In AC 3 class also, which was one of the most profitable classes, the occupancy dropped significantly after introduction of flexi fare and the vacant berths increased from 0.66 *per cent* in pre-flexi period to 4.46 *per cent* in post-flexi period. Thus, introduction of flexi fare in AC 3 Tier class was not fair.

In terms of absolute numbers, the Premier trains carried 2,40,79,899 passengers during post flexi period as compared to 2,47,36,469 passengers during pre-flexi period. There was de-growth of 2.65 *per cent* despite availability of higher number of berths/seats, which resulting in sub-optimal utilisation of national assets. Railway, however, earned ₹ 552 crore from passenger earnings from the Premier trains post flexi fare system during 9 September 2016 to 31 July 2017. Thus, there is a need for review and fine tuning in the scope of the scheme so that not only more revenue is earned but number of passengers also increase, thus, further enhancing revenue.

The occupancy of Mail/Express Trains in the routes where Premier trains run, was found to be much more than the Premier trains during the months test checked by Audit (October 2016 and February 2017). This indicated that instead of paying higher fare, passengers preferred to travel by Mail/Express trains over the Rajdhani/ Duronto/ Shatabdi trains despite a higher travel time for Mail/Express trains.

A comparison with air fare for different Advance Reservation Periods in 13 sectors also showed that air fares were cheaper than the respective train fares for a large number of routes/sectors. When compared to the cost and time taken for travel by Premier trains, air fare became a cheaper and preferable mode of travel. While in air fares the prices of tickets increase with increase in demand, in flexi fare, there is a fixed increase in fares after every 10 *per cent* of the tickets booked irrespective of the demand. By paying a higher price for an air ticket, a passenger is ensured a confirmed seat, but a passenger who purchases a waitlisted train ticket by paying a higher amount does not have an assurance of confirmed ticket. Thus, charging a higher fare without providing confirmed seat/berth has forced passengers to explore other available alternatives.

Railway Board introduced a few measures such as reducing the Tatkal quota from 30 *per cent* to 10 *per cent*, discounted fare in AC Chair Car of two Shatabdi trains and 10 *per cent* rebate in the last fare on the vacant berths/seats after preparation of first chart during December 2016. These measures improved the occupancy of the Premier trains to some extent. This shows that rail passengers did not perceive value for their money in flexi fare system in Premier trains.

Passenger Survey by Audit showed that passengers expect better quality services commensurate with enhanced fare. At present, many of them feel that they have not derived value for money and time spent in the Premier trains and that they would prefer to switch over to other modes of transport.

It is recommended that

- Railways may review and fine tune the scope of the scheme so that not only more revenue is earned but number of passengers also increase, thus, further enhancing revenue. Instead of enhancing fare across all classes and routes, Indian Railways may consider reviewing the fare structure on the basis of demand and occupancy in different routes.
- Railway Board may explore the possibility of rationalising the fare structure across all types of trains instead of targeting Premier trains which was already having a separate increased fare structure.
- Instead of allotting 90 per cent seats/berths under flexi fare scheme and leaving only 10 per cent seats/berths for normal fare, at least 50 per cent seats/berths should be allotted for normal fare.
- While paying a higher air fare, a passenger is assured a confirmed seat, whereas under flexi fare scheme, when a passenger books a waitlisted ticket at 40 to 50 per cent higher fare, he is not assured of a confirmed seat. It is recommended that for the uncertainty a waitlisted passenger undergoes, he should be compensated by way of a lower fare.

Para 2.2: Management of commercial plots and parking spaces near stations by Commercial department in Indian Railways

While a large area of land in the railways falls under the jurisdiction of the Engineering Department, Commercial Department is responsible for managing the commercial plots and parking spaces near stations. Audit observed that there was no land management cell for commercial plots managed by Commercial Department at any level. The existing land management cell under the Engineering Department was not dealing with or having records of commercial plots. Land records were poorly maintained and not digitized. There was no

database for land under the control of Commercial Department. The mechanism of Standing Committee to examine fresh cases of licensing of commercial plots and monitoring them was not being used effectively in the selected seven Zonal Railways. The records related to licensing of land, fixation of license fee, renewal of license agreement and recovery of license fee etc. were not available with the Railways in respect of a significant number of stations to monitor timely collection of license fee from the licensees. The Station Managers did not ensure proper maintenance of records, timely realisation of rent and timely reporting of events to the divisional office in the stations test checked by Audit. License agreements were not executed and renewed timely and information about the land available under the jurisdiction of Commercial Department available with the railways was incomplete. License fee had not been revised based on market value of land.

Railway plots were being used for purposes other than the purpose for which it was allotted initially to the plot holders. Railways had not undertaken any survey to assess the present use of the plots and take action to cancel the land allotment. The plot holders were also not paying license fee in a number of cases and huge amount was outstanding in the selected Zonal Railways.

Significant number (33 *per cent*) of plots were occupied by persons other than the original allottee. Large numbers of plots were occupied unauthorisedly by persons/firms. Commercial plots were illegally transferred by original allottees to others by way of sale, donation deed, power of attorney etc. During joint inspection, permanent structures were found built on commercial plots by the allottess/unauthorized persons. These plots were being used for commercial/ private purposes. Zonal Railways neither took action to give one time opportunity for change of name of allottees nor auction the same.

As regards parking lots, railways did not execute agreements promptly in many cases and also did not enter into agreement in some places. The contractors were managing the parking lots in an un-professional manner and the railways were not able to ensure that they provide service as per the agreements and recover dues from contractors. In a number of stations, though the State police was running the pre-paid auto/taxi booths, Railway Administrations did not take suitable action/pursue the matter with the authorities concerned for collection/sharing of parking charges for running of pre-paid booths. Due to non-settlement of the court cases, the plot holders were earning revenues/enjoying benefits from the plots without paying any license fee to the Railways.

It is recommended that

• Railways may consider putting in place a mechanism for management of commercial plots, wherein comprehensive survey and demarcation of commercial plots, maintenance of records and data base of land records and their digitization, examination of cases of licensing and their monitoring is ensured. This may be done either by forming an exclusive Land Cell for management of commercial plots or the Land Cells which manage the plots

under the jurisdiction of Engineering Department may be entrusted with the responsibility of managing them.

- Railways may strengthen the monitoring mechanism for licensing of land, fixation of license fee, renewal of license agreement and recovery of license fee, settlement of the court cases, maintenance of records etc. at Divisional and Zonal levels.
- Zonal Railways may take action to get vacated and occupy the commercial plots which are **not** occupied by the original allottees and execute fresh agreements for recovery of license fee at rates prescribed by the Railway Board, within a fixed time frame as land is precious resource which Railway can ill-afford to use sub-optimally.
- Railway may strengthen the monitoring mechanism and ensure that parking lots are managed professionally following the terms and conditions of the agreements by the contractors. Railways may also take suitable action to take up matter with the authorities concerned for collection/sharing of parking charges for pre-paid booths being managed by State police or GRP.

Para 2.3: Loss of revenue of ₹ 13.24 crore due to carrying of freight traffic through weaker sections

When traffic is booked via routes which involve two or more of different types of routes viz. CC+4, CC+6 and CC+8, the chargeable weight will be the permissible carrying capacity of the route for which permissible carrying capacity is the most restrictive i.e. rates applicable for normal, CC+4 or CC+6 route, as the case may be. Audit observed that from Karaikal Port Private Limited siding (KIKP) to four destinations in SR, major portion of the route was upgraded and a small portion was yet to be upgraded. While lengths of these sections ranged from 133 kms to 340 kms, the portion yet to be upgraded ranged was only 15 kms to 89 kms. As a result, the freight was being charged with rate applicable to the lower load. Audit observed that SR Administration sent incomplete proposals to Railway Board by omitting part of sections, which were already fit for carrying higher loads. This led to charging of coal traffic carried on these routes at rates applicable for lower loads and led to loss of ₹ 7.81 crore during 2016-17. The loss would continue till such time the above sections are upgraded and notified for CC+8 loading. Further, food grain traffic was booked from other Zonal Railways to SR on nine sections, wherein small portion (15 kms to 188 kms) of the routes were yet to be upgraded to CC+6. By failing to take timely action to strengthen the weaker sections to CC+6 route, railways incurred a loss of ₹ 5.43 crore during 2013-14 to 2016-17.

It is recommended that these weaker sections may be upgraded so that not only higher revenue is generated, the movement of goods also becomes faster.

Para 2.4: Incorrect entry of train timing of terminating trains in Integrated Coaching Management System (ICMS) led to compromise in data integrity

Railways entered the arrival timing of terminating trains at Allahabad station incorrectly in the ICMS. This led to compromise in data integrity. As the

information fed into ICMS is reflected in National Train Enquiry System (NTES), the incorrect entries caused inconvenience to the passengers by showing wrong timings of arrival of trains in Allahabad station. Similar position i.e. incorrect data entry of arrival/ departure time of trains may also prevail at other stations.

It is recommended that Railways Board may issue strict instructions to all the Zonal Railways to ensure correct entry of the arrival/departure timings in NTES, (either through direct entry in NTES or through entry in Control Office Application or through data loggers) so that the passengers get accurate information on arrival/departure of trains. There is a need for evolving a mechanism of systemic and supervisory check of data entered in NTES with reference to the data in the Train Signalling Register/ Control Office Application/data loggers or through other means.

Para 2.5: Under-utilisation of 3rd line between Mathura and Palwal section of Agra Division

Agra Division of NCR has constructed a 3rd line between Mathura- Palwal (84 kms) for smooth operation of traffic over the section due to saturation of UP and Down Line. The line was opened for traffic two years back, after incurring an expenditure of ₹ 412.65 crore. However, the newly created 3rd line could be utilised only to the extent of 52 *per cent* despite line capacity utilisation being in excess of 100 *per cent* on both UP and Down directions, of the other two lines. Smooth operation through 3rd line required yard remodelling work at Kosi Kalan station, which was not included in the detailed estimate of the work. The non-optimal utilisation of 3rd line adversely impacted train punctuality and causes inconvenience to passengers. Though the proposal for yard remodeling work has been included in the work of 4th line sanctioned in 2015-16, the same is in very early stages and the detentions would continue till the work of yard remodelling at Kosi Kalan station is completed. Till such time, Railways will continue to lose potential revenue of ₹ 16.38 crore annually.

It is recommended that Railway may take up the work of Kosi Kalan yard remodeling on priority basis for smooth movement of traffic in this section and optimal utilisation of newly created 3rd line between Mathura-Palwal.

Para 2.6: Loss due to Non/short-realization of Way Leave Charges (WLC) from parties/firms

Way leave facilities/easement rights on Railway land involve occasional or limited use of land by a party for specified purpose like passage etc. without conferring upon the party any right of possession or occupation of the land and without any way affecting the Railway's title, possession, control and use of land. Permission for way leave should be granted in genuine and un-avoidable cases after execution of proper agreements. Thirteen railway divisions under six Zonal Railway Administrations did not comply with the guidelines laid down by the Railway Board with regard to granting of way leave facilities /easement rights. This resulted in loss due to non/short realization of way leave charges of ₹ 65.20

crore from 954 parties/firms for the period from year 1998 to March 2017. These Railway Divisions also failed to execute/ renew agreements in a number of cases with the parties/firms for allowing them to avail the way leave facilities/easement rights.

Para 2.7: Unfruitful expenditure of ₹ 62.15 crore due to procurement of microprocessor based LED destination boards

Ministry of Railways announced installation of microprocessor controlled LED destination display boards in the Budget speech 2008-09. Thereafter, Railway Board made frequent revisions in specifications for LED based destination boards. These necessitated reversal of instructions to Zonal Railways to initiate bulk purchase. However, LED destination boards which had been procured by the Zonal Railways at a cost of ₹ 98.26 crore could not be used fully due to failure of Zonal Railways to update the train data base in the Coach Control Unit and to ensure provision of remote control unit at the time of their procurement. As a result, LED destination boards worth ₹ 62.15 crore remained unutilised.

Para 2.15: Undue advantage taken by Jansadharan Ticket Booking Sewaks (JTBSs) by depositing de-monetised specified bank notes with the Railways post-demonetization

Government of India vide their Gazette Notification dated 08 November 2016, demonetized currency notes of denomination of five hundred rupees and one thousand rupees and these notes ceased to be legal tender on and from 09 November 2016. Railway Board, on 09 November 2016, clarified that the specified bank notes would not cease to be legal tender with effect from 09 November 2016 until 11 November 2016 to the extent of transactions at railway ticketing counters for purchase of tickets, for which complete records were required to be maintained. Audit observed that no specific directives/instructions were issued by the Railway Board in respect of cash deposited by the Jansadharan Ticket Booking Sewaks (JTBSs) in Railway's Deposit Accounts essential for issue/sale of unreserved tickets through computerised Unreserved Ticketing System. 132 Jansadharan Ticket Booking Sewaks in six Zonal Railways took undue advantage of the facility provided by the Government of India to allow transactions at railway ticketing counters and deposited specified bank notes with the Railways post demonetisation instead of depositing the cash in the banks.

Para 2.17: Deficiencies in remittance of cash by the Ticket booking staff and Ticket Examiners

There was accumulation of admitted debits in various divisions of Central Railway, as codal provisions for clearance of admitted debits were not implemented by Railway Administration. Staff misappropriated cash and did not remit cash in full. System of recovery of outstanding amount, in convenient monthly installments, also encouraged continuance of the practice of short remittance of cash by the staff. Non-deposit of cash collection amounts to temporary embezzlement. Railway Administration failed to take disciplinary action against the employees who were habitual defaulters.

It is recommended that all Zonal Railway Administrations may issue Joint Procedure Order expeditiously to put in place a mechanism for streamlining the system of remittance of cash by staff and minimizing the cases of misappropriation of station earnings. Railways also need to take stringent action against defaulters which will act as a deterrence against such practices. Considering the number of ticket booking and ticket checking staff across Indian Railways, the risk of mis-appropriation and continued practice of short remittance of cash would be manifold.

Para 3.1: Undue favour to firm in awarding contracts by violating Railway Board's instructions on financial capacity and capability

For exercising better quality control and proper monitoring/supervision, Northern Railway Construction Organisation divided the work of doubling between Meerut and Muzaffarnagar into two Zones. However, they awarded both the works to the same firm by allowing the same set of documents in respect of Plant and Machinery/resources available and credentials for proof of receiving of payments in both the tenders simultaneously. Railways, thus, awarded the contracts to a firm without examining its financial capacity and capability. Railways also favoured the firm by granting extensions without penalty. The performance of the contractor was mentioned as 'satisfactory' in both the works and he was not made responsible for the delays while granting extensions. This adversely affected the progress of Doubling work between Meerut and Muzaffarnagar and resulted in non-achievement of intended benefit of increasing the line capacity for movement of freight and passenger traffic in the section.

Para 3.2: Blocking-up capital in execution of Gauge Conversion work

Railway Board undertook an exercise to study the reasons for inordinately long mega block time for Gauge Conversion Works and find means and ways to carry out the works of Gauge Conversion in about a months' block time. Based on the study Railway Board issued instructions that the works in connection with Gauge Conversion projects such as earthwork, minor bridges and certain major bridges on diversions should be started two to three years in advance and completed before the block. Railway Board viewed that it will be desirable to complete all the works in a mega block of not more than 60 days although 30 days would be ideal.

In respect of the Gauge Conversion work of Sakri-Nirmali and Jhanjharpur-Laukaha bazar section (94 km) over Samastipur Division of ECR Railway, Audit observed that out of these 28 contracts, only four were completed, 12 contracts were in progress after extensions and the remaining 12 contracts were terminated/fore-closed. An expenditure of ₹ 32.69 crore was incurred on seven of these contracts. Further, pre-mega block works in respect of Gauge Conversion project, which should be completed as per a pre-determined plan two to three years in advance of mega block, could not be completed even after lapse of nine years from the date of sanction of detailed estimate. Contracts were foreclosed/terminated on the ground of non-availability of mega block. The firms failed to start the work even after the scheduled date of completion and action was taken by the railways to terminate/ foreclose the contract after significant delays. Poor execution and inefficient contract management on part of Railway Administration led to delay in completion of the project and blockage of capital of ₹ 47.98 crore. The overall cost of civil works in the project also increased by ₹ 551.68 crore due to price escalation.

Para 3.3: East Central Railway (ECR): Deficient planning and execution of contracts related to New Line project

In the New Line project from Hajipur to Sagauli (148.3 kms), ECR Administration took a decision to first complete the work up to Vaishali for better use of resources and decided to foreclose all the existing contracts beyond Vaishali. However, deviating from this decision, terminated contracts were re-awarded at a cost of ₹ 86.14 crore, thereby committing investment without completing the work up to Vaishali. The action defeated the purpose of decision taken to first complete the new line up to Vaishlai, optimizing use of resources.

Para 3.4: Northeast Frontier Railway: Blocking up of capital due to construction of a Road Over Bridge without ensuring encumbrance free land

Between Mathabhanga and New Coochbehar Station on State Highway No. 12A of West Bengal, a Road Over Bridge (ROB) was constructed by NEFR Administration without ensuring encumbrance free land for the approach road. Due to incomplete approach road the ROB could not be commissioned even after four years of its construction resulting in blocking up of capital of ₹ 20.03 crore.

Para 4.1: Setting up of diesel locomotive manufacturing unit at Marhowra, Bihar

Ministry of Railways proposed setting up of diesel locomotive manufacturing unit at Marhowra, Bihar in September 2006. The contract was awarded to M/s GE Global Sourcing India Pvt. Ltd in November 2015 for setting up of diesel locomotive manufacturing unit along with maintenance depot at Roza and Gandhidham. As a long time has elapsed, there was a need to reassess the necessity of setting up of new diesel locomotive manufacturing unit, before awarding the contract. Audit analysis showed that the diesel locomotives available with the Railways are sufficient in numbers to take care of the present needs. Indian Railways is planning to shift to complete electrification of its BG routes by 2021 and would also run the freight trains in dedicated freight corridors (DFCs) on electrified routes. Even if, Railways do not go for 100 per cent electrification, it is expected that most of the high traffic routes would definitely be electrified and the need for diesel traction would remain only for low traffic routes, for which high horse power diesel locos are not likely to be used optimally. Consequently, need for high power diesel traction in Indian Railways is going to diminish in the years to come. Indian Railways has realised this eventuality and decided to significantly reduce the production of diesel locomotives at Diesel Locomotive Works (DLW), Varanasi from 2018-19 onwards. Also, the production plan of Diesel Loco Modernisation Works (DMW), Patiala, does not include any plan for production of diesel locomotive in 2018-19. As such, the diesel locomotives procured under this agreement would have no scope for productive utilisation in the Indian Railway network in future. Railways themselves have decided to significantly reduce in-house production of diesel locomotives at DLW, Varanasi from 2019-20 onwards. Thus, setting up of a new infrastructure for production of diesel locomotives and incurring a huge liability of ₹ 17126.08 crore is not in sync with the overall strategic vision of Railways.

It is recommended that Railways may revisit the issue and examine whether it will be prudent to create assets and infrastructure for which Railways may have no useful requirement in future, as they have planned for large scale electrification and dedicated freight corridor is also going to be completely electrified; Railways have already considerably scaled down their own in-house production programme of diesel locomotives.

Para 4.2: Utilisation of Diesel Locomotive in completely electrified section

North Central Railway administration allowed utilization of diesel locomotives in completely electrified electric sections of Allahabad-Ghaziabad (606.88 kms) and Palwal-Bina (505.31 kms). On these two electrified sections, during 2013-14 to 2016-17, a total 350 freight trains were run using diesel locomotives under electric wire. This led to extra operational cost of ₹ 5.74 crore besides negative impact on environment and increased dependency on petroleum based energy.

Para 5.1: Implementation of Mobile Train Radio Communication (MTRC) system over Indian Railways

The MTRC system has been introduced to replace the existing (Very High Frequency) VHF based communication system over IR. It aims at better traffic management over Indian Railways through data transfer (regarding location and movement of trains) and secured communication amongst drivers, guards, maintenance staff, etc. MTRC to be effective required implementation on complete routes, dedicated locomotives with cab radios for the routes, provision and maintenance of MTRC infrastructure, stakeholder identification and role assignment, skill identification and upgradation, revision of recruitment rules and change management. However, no road map for implementation of the system has been prepared by the railways. Due to absence of a comprehensive time bound road map, implementation of MTRC system could not take place. As on 31 March 2017, only on 1470 RKMs out of 19,512 RKMs planned, the MTRC project has been implemented. Wherever implemented, the system is not being utilised as complete routes have not been covered for implementation and dedicated locomotives with cab radios for the routes have not been provided. Besides, due to deficient support system in terms of maintenance contracts and faulty Mobile Service Switching Centre at Agra, the system remains unutilised. Thus,

expenditure of ₹ 181.73 crore incurred on MTRC system so far has remained unfruitful.

It is recommends that a full scale review of the MTRC projects may be taken up by the Railway Board and completed within a reasonable time frame. Till such time all fresh procurements and agreements related to MTRC may be put on hold. This may exclude agreements/tenders which are necessary to maintain the health of existing assets. A road map indicating activities, time lines, stake holder identification with role assignment may be prepared, addressing issues of change in technology, support system and skill requirement etc. India has undergone a telecom revolution in the last decade and Railway administration should consider if the requirement of secured communication envisaged through MTRC could be met through specialized telecom providers (existing in India) in place of creating an independent telecom infrastructure for MTRC within IR.

Para 5.2: Unwarranted procurement of Operational Purpose Handsets and General Purpose Handsets led to blockage of capital of ₹ 17.77 crore

North Central Railway Administration procured costly Operational Purpose Handsets (OPH) and General Purpose Handsets (GPH) equipment worth ₹ 17.77 crore without proper and realistic need analysis and hence these could not be utilised. Quotes were called from the firm without any basis and rational. The Tender Committee went out of its way to obtain documentation pertaining to the earlier tender from RDSO, to prove the eligibility of the firm for the current tender. As these handsets are not being used, the amount of ₹ 17.77 crore spent for procuring these handsets remains blocked.

Para 5.3: Avoidable liability on account of Spectrum Charges due to failure to review the use of Walkie Talkie sets

Walkie Talkie sets are used in Railways as an emergency communication tool for which Railways have to pay spectrum charges to Department of Telecommunication. Consequent to proliferation of CUG mobile phone, Railway Board directed Zonal Railways to review the use of Walkie Talkie sets. Audit observed that SER Administration did not review the use of Walkie Talkie sets to declare the unusable and non-repairable sets as condemned for avoiding payment of spectrum charges. This has led to avoidable liability of ₹ 30.36 crore towards payment of Spectrum charges. As SER Administration has not paid the spectrum charges due as yet, they would also be liable to pay ₹ 20.29 crore towards surcharge on delayed payment of spectrum charges.

Para 6.1: Receipt of wagons not due for POH in Dahod Workshop led to detention and consequent loss of earning capacity of these wagons

Only wagons due for POH should be sent to the workshops. These should be accepted, after due inspection and approval by the workshop staff. However, from June 2013 to March 2017, 434 wagons not due for POH were received in

Dahod workshop. Inspection and approval was not being carried out by workshop staff before accepting the wagons for POH. These wagons hindered operational activities as they occupied track inside the workshop and were returned back to the Zonal Railways without carrying any work on them after being detained at the workshop for long periods. This led to avoidable loss of potential earning capacity of ₹ 16.46 crore due to detention.

It is recommended that Railways may strictly follow the laid down instructions and ensure that wagons which are not due for POH are not accepted by the workshop authorities. By exercising the check of inspection and approval, the detention to wagons could be reduced and efficiency in operations can be achieved.

Para 7.1: Development of railway land for commercial use by Rail Land Development Authority

The main objective of setting up of RLDA was to generate revenue by non-tariff measures through commercial development of surplus railway land. Audit reviewed development of 17 sites, which were entrusted to RLDA in 2007 when it was constituted and observed that none of these sites have been developed so far. It was noticed that there were delays in engagement of consultants, delay in submission of reports by the consultants, delay in taking permission from State Government for change of land use, deficiencies in entrustment of land to RLDA by the concerned Zonal Railways by providing encumbered land, identifying wrong site or site with incomplete papers etc. which resulted in non-development of 17 sites of 166.996 acres, reviewed in Audit. Out of 17 cases reviewed, in only three cases developers were appointed, but commercial development did not take place. In two cases, the Development Agreements could not be entered into and Letter of Acceptance had to be cancelled as the first instalment of lease premium was not deposited by the parties and in one case the Development Agreement was terminated as the Developer refused to take the land offered by RLDA in exchange of land originally identified by the Railway and railways had to pay back the lease premium of ₹ 43.12 crore along with interest. Out of 17 plots, 13 plots were planned for commercial development with a lease potential of ₹ 282.69 crore. Since being set up, RLDA has been able to earn ₹ 67.97 crore from development of Multi-Functional Complexes (MFCs) at railway stations, which is other than the earnings from commercial development of entrusted lands. As against this, expenditure of ₹ 102.29 crore has been incurred towards establishment, consultancy charges, advertisement etc. during 2006-07 to 2016-17.

It is recommended that

• Railways may take timely action to seek clearance from the respective State Governments for change in land use and open space reservation and also examine the legal implications of change of land use in consultation with the State Governments.

- Following the norms of local authorities, Zonal Railways may identify and entrust only unencumbered sites to RLDA and ensure complete documents/records for the same.
- RLDA may ensure timely appointment of consultants. RLDA may also enforce the terms and conditions of the agreements so that they complete their work on time and take action on their reports expeditiously. RLDA needs to put in place a mechanism to ensure early finalization of development contracts by setting up reasonable time lines for each activity.
- Before attempting to commercially exploit vacant land, railways may consider offering the land to the State Government/Local Bodies/other departments for public purposes, lest they become an impediment for development of land.

Para 7.2, 7.3 and 7.4: Delay in implementation of IT projects by CRIS

Indian Railways Disaster Recovery Data Centre for IT Applications

Railway mooted the proposal for setting up of a Disaster Recovery Data Centre in June 2007. Ten years have passed, but the railways were yet to finalize the same. There were delays at every stage and the decision for entrustment of work of construction was yet to be taken. Though the interim disaster recovery (DR) site for Passenger Reservation System (PRS) and Unreserved Ticketing System (UTS) has been made functional, it is located in the same building as the Railway Reservation Complex.

It is recommended that Railways may set up the DRDC at a remote location on priority, so that it can mitigate the risk arising out of incidents such as serious fire, earthquake or terror attack etc.

Geographical Information System (GIS) Mapping & Geospatial Database for Indian Railway Assets

The project on 'Development of a comprehensive web based databank for land and asset management for optimum utilization of resources' was put forward in June 2012, it remains at initial stages of implementation till date. The main reasons for slow progress were delay in finalization of estimates, delay in execution of MoU, failure to adhere to MoU targets and delay in conducting GPS survey by the Zonal Railways.

It is recommended that railways may expeditiously implement the project, so as to derive the intended benefits of simplified asset management, easy visualization and management of day-to-day operations, assessing location of rolling stock on the GIS map, effective planning for traffic and easy visualization of the affected area during the time of a disaster.

Land Management System over Indian Railways

The proposal for introducing a web based Land Management System on Indian Railways was initiated in January 2011. In view of the large area of land under the

jurisdiction of the railways, the proposal was important as it envisaged conversion of land related matters i.e. land records, land boundary verification, land leasing/licensing, process of prevention and removal of encroachment, commercial exploitation of land etc. into a web based application. However, due to delay in finalization of estimates, delay in execution of MoU, failure to adhere to MoU targets and delay in conducting GPS survey by the Zonal Railways, implementation of the same was yet to be started.

It is recommended that railways may expeditiously implement the project, so that as envisaged the manual register/records can be dispensed with and the railway land plans, State Government Revenue Plan, geographical features of the railway land and adjoining areas are captured on GIS platform.

Para 8.1: Injudicious payment of Mobilization Advance to contractors

MRVC granted mobilization advance of $\overline{\mathbf{x}}$ 6.17 crore to contractors in nine contracts which had an estimated cost of less than $\overline{\mathbf{x}}$ 25 crore, which was the amount prescribed by the Railway Board for grant of mobilization advance. The rate of interest charged by MRVC was also much lower than that prescribed rates. None of the nine works could be completed within the scheduled date of completion. Besides, MRVC was unable to ensure full recovery of Mobilization Advances granted as $\overline{\mathbf{x}}$ 0.09 crore is yet to be recovered. Even the amount recovered involved significant delays.