

### Chapter 3 – Engineering – Open Line and Construction

The Engineering Department of Indian Railways is responsible for maintenance of all fixed assets of Indian Railways such as Tracks, Bridges, Buildings, Roads, Water supply etc. vis-à-vis for construction of new assets such as new lines, gauge conversion, doubling and other expansion and developmental works. Major policy decisions of the Engineering Department are taken by the Railway Board under supervision of Member Engineering who is assisted by Additional Member (Civil Engineering) and Additional Member (Works) and Advisor (Land & Amenities).

At Zonal level, the Engineering Department is headed by Principal Chief Engineer (PCE) under General Manager of the concerned Zonal Railway. The PCE is assisted by various chief engineers for track, bridge, planning, track machines, general matters etc. In addition, each Zonal Railway has a construction organization headed by a Chief Administrative Officer/Construction who is responsible for major construction works including survey works within concerned Zone and is assisted by various chief engineers (construction).

The total expenditure of the Civil Engineering Department during the year 2012-13 was ` 48640.82 crore. During the year, apart from regular audit of vouchers and tenders etc., 1438 offices of Engineering department including Construction Organization of the Railway were inspected by Audit.

This chapter includes a Thematic Audit on "**Works implemented under Material Modification**" conducted across 12 Zonal Railways. Audit scrutiny revealed that Ministry of Railways has, in a number of cases, flouted the procedure laid down for both formulation and approval of projects. Even preliminary procedures like conducting a Techno Economic Survey have not been followed. In fact the standard procedure of taking approval of the Planning Commission before inclusion of a work in the Annual Works Programme was also not followed. Audit also revealed that the cost of the Material Modification works even exceeded the cost of the original sanctioned projects.

In addition, this chapter includes eight Paragraphs, highlighting cases of individual irregularities/deficiencies pertaining to construction works, non-recovery of dues, excess payment on account of price escalation and purchase of ballast etc.

### 3.1 Works implemented under Material Modification in Indian Railways<sup>124</sup>

#### Executive Summary

The procedure laid down by the Indian Railways for approval of projects emphasises the need for taking up only financially remunerative projects. Several Parliamentary Committees have also in the past reiterated the need to take up only those new projects which are financially viable and do not lead to the spreading of Railway's scarce resources thinly across a large number of projects. The Twentieth Report of the Standing Committee on Railways on the Demands for Grants for the year 2013-14 also pointed out that some of the projects were sanctioned more than 10 years ago and some of them were sanctioned even 20 years ago and are still in limbo and lying incomplete.

Material Modification (MM) refers to a substantial change in the scope of a sanctioned work or scheme which was not thought of at the initial stage but which is subsequently considered necessary. Independent works/schemes/ projects do not fall in the category of Material Modification as these would require separate sanction of the competent authority. This Audit focuses on the extent to which Railway Board complied with codal provisions and guidelines while sanctioning Material Modifications for already sanctioned projects.

Audit scrutiny revealed that 91 MMs were sanctioned against 38 original projects. None of these could be classified as MMs as these projects were on adjoining/ separate alignments. In fact in some cases, these MMs did not even touch a station on the original alignment. 31 MMs (34 per cent) were approved after completion of the original project. In fact in some cases the MMs were sanctioned as late as eight years (Northeast Frontier Railway) after completion of the original project. It was seen that 44 MM projects (48 per cent) were sanctioned as New Line projects against Gauge Conversion (GC), Track Doubling Project which is totally irregular as they fall under different Plan Head and require separate sanction as per laid down procedure for investment decision. The Zonal Railways generally failed to follow its own codes and manuals for approval of projects. In 37 MMs (41 per cent), the Rate of Return (ROR) of MMs were either not assessed or they were negative. Further, they failed to re-assess ROR for the entire project after including the MMs. It was seen that Detailed Estimate/ Final Location Survey had not been prepared/ carried out in 15 per cent of the MMs. Audit further noticed that 26 MM projects (ER-24 and SER-7) were declared as Special Railway projects during the year 2010-11 but in none of the projects land had been acquired (January 2014).

From the above it can be seen that Ministry of Railways flouted the procedures laid down for both formulation and approval of projects. Even preliminary procedures like conducting a Techno Economic Survey were not followed. In fact the standard procedure of taking approval of the Planning Commission before inclusion of a work in the Annual Works Programme was in the main also not followed. Further, the MoR has failed to prioritise projects and is undertaking new

<sup>124</sup> Includes 12 Zonal Railways viz., NR, NWR, NER, NFR, ECR, ER, SER, SECR, ECoR, SR, SC, WR

*projects. as MMs. The slow progress of works indicates the budgetary problems being faced by MoR and that the works sanctioned do not abide with National Plan priorities.*

### **3.1.1 Introduction**

Indian Railways (IR) draws up its development plans within the framework of the Five year Plans. Construction of New Lines (NL), Gauge Conversion (GC), Track Doubling and electrification of track constitute a major part of their Plan Outlay. A perusal of Planning Commission's Approach Paper to the Twelfth Plan reveals the emphasis on much faster expansion in transport infrastructure than seen in the past. This requires the Railways to expand its rail network rapidly.

The procedure laid down by the IR for approval of projects emphasizes the need for taking up only financially remunerative projects. Several Parliamentary Committees<sup>125</sup> have also in the past reiterated the need to take up only those new projects which are financially viable and do not lead to the spreading of Railway's scarce resources thinly across a large number of projects. The Twentieth Report of the Standing Committee on Railways on the Demands for Grants for the year 2013-14 highlighted that the sanctioning of new projects annually by the Ministry, much beyond the resources available, has resulted in increment of the throw-forward<sup>126</sup> of railway infrastructure projects. They also noticed that some of the projects were sanctioned more than 10 years ago and some of them were sanctioned even 20 years ago and are still in a limbo and lying incomplete. Despite this, it was seen that the Working Group Report for XII Plan-Railway Sector had estimated the throw forward for ongoing projects relating to New Lines, Gauge Conversion, Track Doubling and Electrification of tracks as `124250 crores as on April 2011.

As per Para 1110 of the Indian Railway code for the Engineering Department, Material Modification (MM) refers to a substantial change in the scope of a sanctioned work or scheme which was not thought of at the initial stage but which was subsequently considered necessary. The desired change/ modification should pertain strictly to the sanctioned work or scheme and not to the other adjoining alignments/ sections as these should be sanctioned separately as a new work. Independent works/schemes/ projects do not fall in the category of Material Modification as these would require separate sanction of the competent authority.

### **3.1.2 Earlier Audit Report**

Audit Paragraph on Planning, Approval and Material Modification (MM) to ongoing projects appeared in the Report No. 9 of 2004 of Comptroller and Auditor General of India which highlighted that new projects were sanctioned as Material Modifications against original works. These projects were undertaken without preliminary survey/ investigations. Ministry of Railways (MoR) bypassed the approval of the Planning Commission/ Expanded Board<sup>127</sup>/ Cabinet Committee on

<sup>125</sup> The Ninth Report of the Standing Committee on Railways on the Demands for Grants for the year 2001-02, the Twentieth Report of the Standing Committee on Railways on the Demands for Grants for the year 2013-14

<sup>126</sup> Throw forward of railway infrastructure projects

<sup>127</sup> Expanded Board for Railways comprises of Chairman, Railway Board, Financial Commissioner (Railways), all members of the Railway Board, Secretary (Expenditure), Ministry of Finance, Secretary (Programme Implementation), Ministry of Statistics and Programme Implementation and Secretary, Planning Commission

Economic Affairs (CCEA)<sup>128</sup> by irregularly sanctioning and including independent projects as Material Modifications to the ongoing projects.

In the Action Taken Note vetted by audit in August 2013 through appending their observations, audit observed that Ministry of Railways (Railway Board) itself had decided (February 2001) that clearance of the Planning Commission, Expanded Board and Cabinet Committee on Economic Affairs (CCEA) may be obtained in cases, (i) where introduction of MM costs more than ` 50 crore or 10 per cent of the cost of project originally sanctioned, whichever is higher, (ii) where the cost of the works as originally sanctioned was less than ` 50 crore but as a result of MM, the original cost of the project exceeds ` 50 crore or more than 20 per cent of the cost of the project originally sanctioned, whichever is higher and (iii) if a number of MMs are carried out to a project and the combined value exceeds ` 50 crore or 10 per cent of the cost of project originally sanctioned, whichever is higher.

Ministry of Railways (Railway Board) also appended their comment to the Action Taken Note which was as under:-

1. Railway Board's decision of February 2001 is not applicable as the threshold cost of the projects requiring clearance of Planning Commission, Expanded Board and Cabinet Committee on Economic Affairs has undergone upward revision to ` 150 crores and further to ` 300 crores.
2. MMs were sanctioned when during course of execution of projects it was realised that some addition and alteration would be desirable with a view to enlarge the coverage to realise full benefit of the projects. As per practice, these MMs were approved by competent authority i.e. Ministry of Railways.
3. Subsequent to the Ministry of Finance's OM dated 1<sup>st</sup> April 2010, no instructions regarding approval of Material Modifications have been issued by the Ministry of Railways.

It is clear from the above that the approval of the MMs by the Expanded Board and CCEA with monetary limit of ` 50 crore and ` 100 crore and above as per Ministry of Railways OMs of February 2001 and January 2004 still exists.

### 3.1.3 Scope of Audit

The audit focuses on extent to which Railway Board complied with codal provisions and guidelines while sanctioning and implementing projects and covers the period from 2008-09 to 2012-13.

### 3.1.4 Audit Objectives

Audit examined whether the Material Modification included in a project is actually a MM or a new work introduced as a MM. The present audit was under taken with the following objectives –

- (i) Whether works sanctioned as Material Modifications could be defined as such under the codal provisions of the Indian Railways;
- (ii) Whether the above works were approved by the competent authority.

<sup>128</sup> CCEA is one of the Standing Committees of the Cabinet Constituted by the Government of India

**3.1.5 Audit Criteria**

Audit adopted the following Criteria:-

As per Para 1109, 1110 and 1113 of Indian Railways Code for the Engineering Department:

No material modification in a work or scheme as sanctioned should be permitted or undertaken without the prior approval of the authority, who sanctioned the estimate. In the case of estimates sanctioned by the Railway Board or higher authority, instances of what will be considered to be material modifications of a sanctioned project or work are given below.

The following may be taken as material modifications on lines under construction and open line works estimated to cost rupees one crore and over.

- (a) Any change in the alignment likely to affect the facilities offered to the public in the neighbourhood or likely to increase or decrease the length of the line by over one kilometre.
- (b) Introduction of any new station or omission of any station.
- (c) Any alteration in the type or number of engines or vehicles provided in an estimate for rolling-stock.
- (d) A change in the layout of a yard affecting the general method of working or increasing or reducing the number of trains that can be dealt with.
- (e) Any departure from the standards of construction as prescribed in Chapter II or as accepted by the Railway Board in the Abstract Estimate or use of any second hand material, if it affects the speed of trains or the number of trains to be dealt with than contemplated originally.
- (f) The introduction or omission of any work or facility involving a sum of ` 5 lakhs and over.
- (g) Any modification of a sub-work provided for in the estimate of a sanctioned work involving an additional outlay on that sub-work of more than ` 5 lakhs.
- (h) The introduction of the new sub-work not provided for in the estimate of a sanctioned work involving an outlay of more than ` 5 lakhs.
- (i) Any alteration in the standards of interlocking.

If the introduction of a material modification becomes necessary in a project sanctioned by the Railway Board before the work is actually commenced, an amended abstract estimate should be prepared for the project and submitted for the approval of the Railway Board. When the introduction of a material modification in a project as sanctioned by the Railway Board or higher authority becomes necessary during the progress of the work, a revised abstract estimate should be submitted to the Railway Board, even when no excess in the amount of the sanctioned estimate is likely to result. No liability should be incurred on the modification, nor, if a saving is likely to be affected by its introduction, should the

saving be utilised for any other purpose, until the proposed modification has received the approval of the Railway Board.

### 3.1.6 Methodology and Sample Selection

Audit Methodology included review of records relating to the works/ projects sanctioned as material modification as maintained by the Zonal Railways and Railway Board. List of works reviewed is given in **Annexure I**. Out of 42 ongoing works to which 108 MMs<sup>129</sup> were sanctioned, audit selected for review 38 ongoing works<sup>130</sup> of 12 Zonal Railways<sup>131</sup> for which 91 MMs were sanctioned and included in the Annual Works Programme of Indian Railways during the period 2008-09 to 2012-13. Status of the eight original works<sup>132</sup> included in Audit Report No. 9 of 2004 was also examined.

### 3.1.7 Procedure of Project Approval

All major investment proposals<sup>133</sup> such as New Lines, Gauge Conversion, Railway Electrification etc. before being listed in the Annual Works Programme of IR need approval of the Competent Authority. As per provisions of the Indian Railway Code for Engineering Department (Paragraph 203 E), the Zonal Railway is required to conduct a Techno Economic Survey (TEC) of the section and estimate its Rate of Return (ROR) and forward the same to the Railway Board for approval. This is in the form of a pre-investment decision and also examines the viability of a project. The benchmark ROR for establishing the viability of a project has been fixed as 14 per cent<sup>134</sup>.

As per Ministry of Railways O.M. of January 2004, projects of Ministry of Railways costing less than ` 100 crore need concurrence of Planning Commission and approval of Minister of Railways. Projects costing `100 crore and above would be referred to CCEA for approval with the recommendations of the Expanded Board after appraisal by the Planning Commission.

Review by Audit revealed that out of 91 MMs selected for review, for 59 MMs (65 per cent) costing ` 100 crore and above necessary approval of the Cabinet Committee on Economic Affairs (CCEA) were not obtained.

After approval of these projects by the Competent Authority a Final Location Survey (FLS) is carried out. Based on this the Detailed Estimates are prepared and

<sup>129</sup> ER-13 MMs, SER-1 MMs and NFR-3 MMs. 91 MMs (+) 17 MMs = 108 MMs (Total MMs out of 42 ongoing works)

<sup>130</sup> Out of 42 ongoing works (including 8 old works of Audit Report No. 9 of 2004), 38 works were selected (75 per cent of works selected for Eastern, South Eastern and Northeast Frontier Railways and for other Railways 100 per cent of the works were selected)

<sup>131</sup> In the rest of the 4 Zonal Railways no MM works were undertaken

<sup>132</sup> GC of Bankura-Rainagar, Doubling of Kalinarayanpur-Krishnanagar, NL of Deogarh-Sultanganj, NL of Ekhalakhi-Balurghat, GC of Rajkot-Veraval, Restoration of Fatuha-Islampur, GC of Kanpur-Kasganj-Mathura & Kasganj-Bareilly and GC of Mansi-Saharsa

<sup>133</sup> IR draws up its development plans within the framework of National Five Year Plans. Construction of New Line, Track Doubling, Gauge conversion, etc. form a part of the Indian Railways development plans and constitutes a substantial portion of their Plan outlay.

<sup>134</sup> As per Para 204 of Indian Railway Financial Code, volume-I

sanctioned. The actual work can commence only after approval of the Detailed Estimates by the Railway Board.

Any excess to the sanctioned estimates on account of general inflation, introduction of new items such as for Material Modification would require the revised estimates to be sanctioned by the authority that had sanctioned the original estimate.

### 3.1.8 Audit findings

#### 3.1.8.1 Irregular sanction of works as Material Modification

The Annual Works Programmes for the period 2008-09 to 2012-13 were reviewed. A test check by audit revealed that 91 MMs were listed separately against 38 of the existing works. Since a MM is part of the work, these are not normally listed separately. The results are tabulated in Table 3.1:

**Table 3.1**

**Number/ Nature of each Material Modification work against each original work**

Name of the Railway	No. / Nature of original work	No. /Nature of MM Work
Northern	1-DOUB	2-NL
North Western	2- GC	5 (4-GC, 1-NL)
North Eastern	2 (1-GC, 1-NL)	2 (1-GC, 1-NL)
Northeast Frontier	4 (3-GC, 1-NL)	9 (5-NL, 3-GC, 1-OTH)
East Central	2 (1-OTH, 1-GC)	10 (4-NL, 3-GC, 3-OTH)
Eastern	16 (5-NL, 9-DOUB, 1-GC, 1-OTH)	32 (28-NL, 2-GC, 1-OTH, 1-DOUB)
South Eastern	4 (1-GC, 3-NL)	14-NL
South East Central	1 – GC	1 - NL
East Coast	1-DOUB	2 (1-NL, 1-GC)
Western	2-GC	5 (3-GC, 2-NL)
South Central	1-NL	1-NL
Southern	2-GC	8 (6-NL, 2-OTH)
<b>TOTAL</b>	<b>38</b> (11-NL, 14-GC, 11-DOUB, 2-OTH)	<b>91</b> (65-NL, 17-GC, 1-DOUB, 8-OTH)

NL- New Line, GC- Gauge Conversion, DOUB- Track Doubling, Others include-New BG Rail Link, Conversion of MG Coaching Depot, Restoration of Dismantled line, Construction of new bridge, Construction of guide bund, Removal of cause ways, Construction of 3<sup>rd</sup>/ 4<sup>th</sup> line, Additional Facilities work, etc.

Examination of the above table reveals the following:

- 91 Material Modifications (MMs) were listed as separate works against 38 original works, even though the MMs are an integral part of a work and are not required to be listed separately. Further, these MMs did not originally appear in the Annual Works Programme<sup>135</sup> but were added subsequently.
- The maximum numbers of such MMs were sanctioned in Eastern Railway followed by South Eastern Railway, East Central, Northeast Frontier Railway, etc.

<sup>135</sup> As per Railways Annual Works Programme – Works, Machinery and Rolling Stock Programme for Railways

- It is seen that mostly New Line works were sanctioned as MMs against the original Gauge Conversion Works.

**3.1.8.2** Audit examined in detail 91 MMs. The results are discussed in the following paragraphs.

### 3.1.8.2.1 Northern Railway

From Table 3.2 it is seen that in Northern Railway, two New Line (NL) projects were sanctioned as MMs against one Track Doubling project. The details are given below:

**Table 3.2 - Track Doubling Project of Utratia-Sultanpur-Zafrabad**

Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the MM
Track Doubling work was sanctioned in 2006-07. The Detailed Estimate was sanctioned in July 2006 at a cost of `369.90 crore with stipulated date of completion as 2013-14. As on January 2014 the physical progress was 31 per cent.	1.Akbarganj-Rae Bareli New Line (46.90 km)	Work sanctioned at an estimated cost of `295.67 crore in February 2011. Reconnaissance cum Engineering Survey (RET) was completed in February 2011 <sup>136</sup> and estimated ROR as (-) 8.79 per cent. Detailed Estimate not sanctioned and the work had not yet started (January 2014).
	2.Sultanpur – Amethi New line (29.22 km)	The work was sanctioned at an estimated cost of `153.83 crore in February 2011. Preliminary cum Engineering Traffic survey (PET) completed in July 2010 <sup>137</sup> and estimated the ROR as (-) 7.93 per cent. Detailed Estimate not sanctioned and the work had not yet started (January 2014).

(Source: Ministry of Railways File No.2006/W2/NR/DL/3, File No.2011/W-2/NR/WP/06 and Northern Railway's File No.101-W/86/W-SPL-estimate/Part-I and File No.101-W/86/W.Spl/Pt.II)

Scrutiny of records by Audit revealed the following:

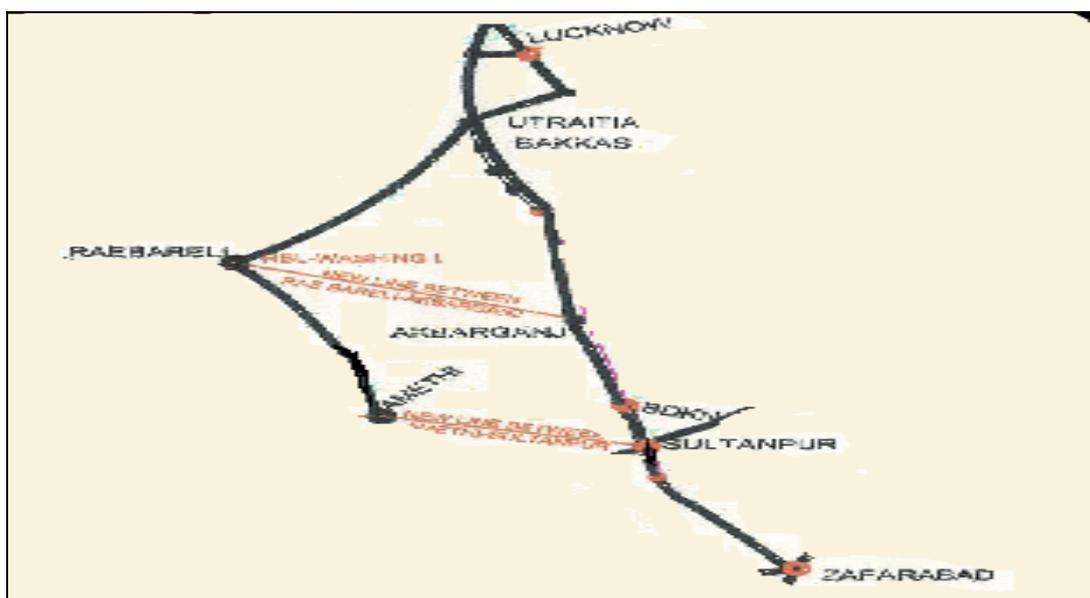
- Both the above MMs were justified by Zonal Railway/ Railway Board on the ground that modifications in the alignment were likely to affect the facilities<sup>138</sup> and change the length of the line. From the schematic diagram below, it can clearly be seen that the Akbarganj-Rae Bareli and Sultanpur-Amethi projects were an off shoot from the original Track Doubling project of Utratia-Sultanpur-Zafrabad.

<sup>136</sup> The Akbarganj-Rae Bareli section was a part of the proposed Faizabad-Lalganj NL project which was surveyed (RET) in February 2011.

<sup>137</sup> Sultanpur-Amethi section was a part of Shahganj-Unchahar rail line project surveyed (PET) in July 2010.

<sup>138</sup> In view of continuous public representations for providing bare minimum rail connectivity in the area, NR has stated that immediate operational need and passenger requirement can be probably be served by providing connectivity between Akbarganj-Rae Bareli and Sultanpur-Amethi.

Fig. 3.1 - Track Doubling of project of Utratia-Sultanpur-Zafarabad



(Source: System Map of Northern Railway)

- Both the MMs sanctioned are NL projects and were sanctioned as MM to a Track Doubling project. This was totally irregular as they fall under different Plan Heads<sup>139</sup>. Further, inclusion of any new line project to a Track Doubling work<sup>140</sup> cannot be termed as a MM.
- It was seen that the Preliminary Engineering cum Traffic Survey (PET) of both the MMs were taken up as part of two different new line projects. The estimated RORs of both the MMs were (-) 8.79 per cent and (-) 7.93 per cent and were non viable.
- Further financial reappraisal of the original projects was not done again duly taking into account the cost of MM.
- Sanction of these MMs led to an additional commitment of `449.50 crore [ `295.67 crore for Akbarganj-Rae Bareli and ` 153.83 crore for Sultanpur-Amethi]. With the approval of these two New lines, the cost of the ongoing

<sup>139</sup> New Line- Plan Head 11, Gauge conversion – Plan Head 14

<sup>140</sup> As per APPENDIX II of Indian Railway Financial Code, Volume-II, for the purpose of link with the Accounts of the Central Government the Plan Heads will form the Minor Heads of Railway Capital under the Major Head.

Track Doubling project increased from `369.90 crore to `819.40 crore (`369.90 crore + `295.67 crore + `153.83 crore) i.e. a percentage increase of 122 per cent.

- Review of files by audit at the Zonal Headquarters and Railway Board revealed that the Akbarganj-Rae Bareli and Sultanpur-Amethi NL projects were proposed for approval as MM of Utratia-Sultanpur-Zafrabad line by General Manager, Northern Railway and also approved within five days bypassing the prescribed system of project approval laid down in their own codes and manuals and the system laid down by the Ministry of Finance i.e. approval of the Planning Commission, Expanded Board of Railways and the CCEA.

### 3.1.8.2.2 North Western Railway

From Table 3.3 it is seen that in North Western Railway, five MMs were sanctioned against two GC works. The details are given below:

**Table 3.3 - Udaipur-Chittaurgarh-Ajmer GC work**

Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the MM
<p>(a) Udaipur-Chittaurgarh-Ajmer GC work</p> <p>The work was sanctioned in 1996-97 at a cost of ` 433.39 crore. The work was executed in two phases. The Chittaurgarh-Udaipur City section was completed and opened in August 2005 and the Ajmer-Chittaurgarh section was opened in July 2007.</p>	1.Udaipur City-Umra GC work (10.50 Km)	1. Sanctioned at an estimated cost of `21.79 crore in August 2002 without assessing the ROR. However, the work was dropped by Railway Board in December 2004. This was commented in Paragraph No.3.1.4 of the Audit Report No.6 of 2006.
	2.Mavli-Nathdwara GC work (15.27 Km)	2.Sanctioned at an estimated cost of `31.94 crore in November 2008 (15 months after completion of the main project) without assessing the ROR. The Detailed Estimate was sanctioned in November 2008. The line laid at a cost of ` 29.70 crore and was opened for traffic in September 2013 after two and half years of its completion in March 2011.
	3.Mavli-Badisadri GC work (82.01 km)	3.The project approved in February 2013 at an estimated cost of `290.66 crore despite an assessed ROR of (-) 5.24 per cent. The project was approved in February 2013 (5 years and 8 months after completion of the main project in July 2007). The detailed estimates are however yet to be sanctioned (March 2014).
	4. Nathdwara – New Nathdwara New Line (10.82 km)	4.The project was approved hurriedly within two days by RB in June 2013 at an estimated cost of `107.19 crore without assessing the ROR. The project was approved in June 2013 (70 months after completion of the main project). The Detailed Estimate is yet to be sanctioned and work has not yet started (January 2014)
		Due to addition of the MMs, the cost of the original project has increased from `433.39 crore to `884.97 crore, an increase of 104 per cent. Although, the original project was completed and opened for traffic in July 2007, the project as a whole remains incomplete even after six years.

<p>(b) Rewari-Sadulpur GC work The project was sanctioned in September 2001 at a cost of ` 100 crore. It was completed and opened for traffic in 2008-09 at a cost of ` 419.32 crore</p>	<p>Sadulpur-Hissar GC work (70 km)</p>	<p>The Ministry approved the work as a MM to the Rewari-Sadulpur section in February 2001. Combined Detailed Estimate of Rewari-Sadulpur-Hissar was sanctioned at a cost of `364.19 crore in September 2006 without assessing ROR. The work was sanctioned in February 2001 prior to sanctioning of the original work. The project was completed and opened for traffic in 2008-09 at a cost of `419.32 crore.</p> <p>Due to addition of the MM, the cost of the original project has increased from `100 crore to ` 419.32 crore, an increase of 319 per cent.</p>
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(Source: Ministry of Railways File No.2003/W2/GC/NWR/1, File No.93/W-II/GC/WT/AU-UD/2, File No.2009/W-I/NWR/GC/1 Survey and North Western Railways File No.T/IE/SDLP-HSR/09, File No.496T/GC/RE-SDLP-HSR/2008/TGP, File No.NWR/S&C/UDZ-HMT/335/1 and File No.CAO/JP/W/Misc/MVJ-BI)

Scrutiny of records by Audit revealed the following:

- As can be seen from the schematic diagrams below, the above MMs were an offshoot from the original Gauge Conversion projects as they were separate lines not falling in the alignment of the original project. Hence they cannot be classified as MMs. Further a NL project (Nathdwara-New Nathdwara) was sanctioned as MM to a GC project (Ajmer- Chittaurgarh-Udaipur GC) which was irregular as the two fall under different Plan Heads<sup>141</sup>.

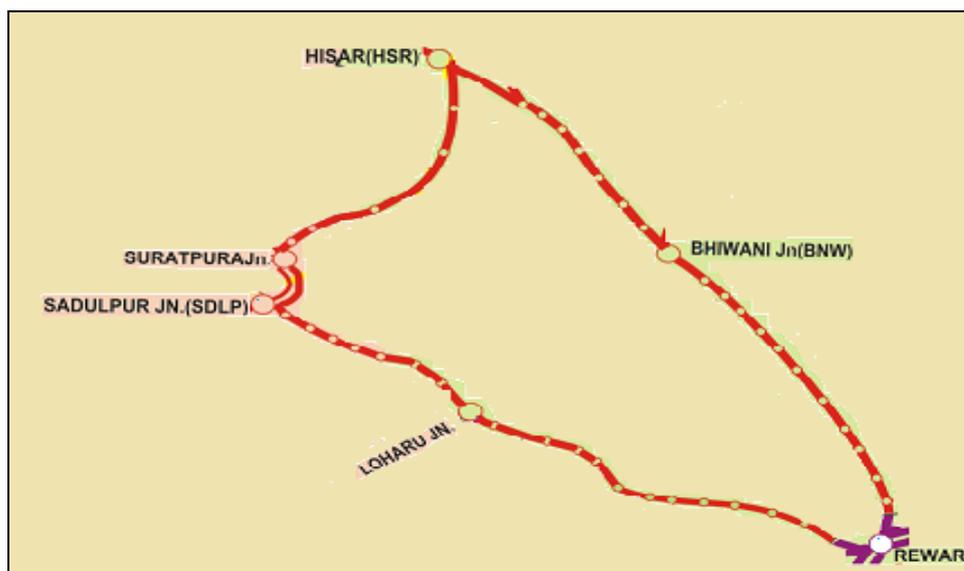
**Fig. 3.2 - (a) Udaipur-Chittaurgarh-Ajmer GC work**



(Source: System Map of North Western Railway)

**Fig.3.3 - (b) Rewari-Sadulpur GC work**

<sup>141</sup> New Line-Plan Head 11, Gauge Conversion-Plan Head 14



(Source: System Map of North Western Railway)

- Three<sup>142</sup> out of the four MMs were sanctioned after completion of the main project.
- In four MM projects, the ROR was not assessed. In the remaining MM project though the ROR was assessed it was negative. Financial reappraisal of the original projects was not done again duly taking into account the cost of MM.
- The above procedure bypassed the prescribed system of project approval laid down in their own codes and manuals and generally of the procedure laid down by the Ministry of Finance<sup>143</sup>.

### 3.1.8.2.3 North Eastern Railway

From Table 3.4 it is seen that two MMs (one GC and one NL) were sanctioned against two main works in North Eastern Railway. The details are given below:

**Table 3.4**

Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the MM
<p>(a) Kanpur-Kasganj-Mathura and Kasganj-Bareilly GC project</p> <p>It has been commented in Report No.9 of 2004 (Railways) that although the work was rejected by the Expanded Board in 1996, yet, RB got CCEA approval in February 1997. The work was sanctioned at a cost of `395 crore. The project was opened for traffic except the section from Kasganj to Bareilly. As</p>	<p>Bareilly-Lalkuan GC work (83.85 km)</p>	<p>A comment was made in the Audit Report No.9 of 2004 that despite Railway Board's decision of April 1998 not to pursue the project in view of its un-remunerativeness, it was sanctioned in February 2003 at a cost of `658.11 crore. The work was completed and opened for traffic in January 2013.</p> <p>Due to inclusion of MM, the total cost of the original project increased from `395 crore to ` 1053.11 crore, an increase of 167 per cent.</p>

<sup>142</sup> Mavli-Nathdwara, Mavli-Badisadri and Nathdwara-New Nathdwara

<sup>143</sup> Ministry of Finance O.M. No.1(26)/E.Ii(A)/02, dated 21.12.2002

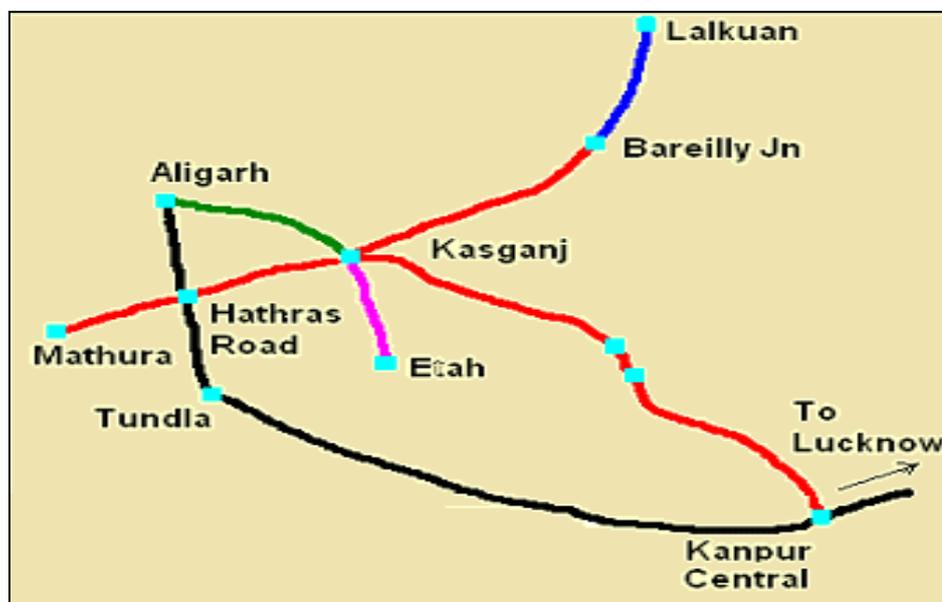
on February 2014 overall progress of this section was 87 per cent.		
(b) Maharajanj-Masrakh New Line project  The work was sanctioned in 2003-04 at a cost of `134.42 crore. As on February 2014, the work has been completed to the extent of 27 per cent.	Masrakh-Rewa Ghat New Line (30 km)	The Planning Directorate shelved the project in February 2007 due to low returns and no operational requirement. The proposal was reconsidered in October 2007. While reconsidering the project, the Finance Directorate opined that work of this magnitude and scope does not qualify to be considered as MM and recommended shelving of the project. Subsequently, in February 2008, the project was approved at `94 crore.  Due to inclusion of MM, the total cost of the original project increased from `134.42 crore to `228.42 crore i.e. an increase of 70 per cent. The target date for completion of the original work as well as the MM work has not been fixed (March 2013).

(Source: Ministry of Railways File No.2007/W-I/NE/NL/81 and North Eastern Railway's File No.W/Con/98/306/W-I, No.W/Con/348/Masrakh-Rewa Ghat/Survey and File No.W/Con/348/154/Survey, No.W/Con/362/01/W-1)

Scrutiny of records by Audit revealed the following:

- As can be seen from the schematic diagram below, the Bareilly-Lalkuan GC was an offshoot from the original GC project and was on a separate line not falling in the alignment of the original project and cannot be classified as a MM of the original project.

Fig. 3.4 – (a) Kanpur-Kasganj-Mathura and Kasganj-Bareilly GC project



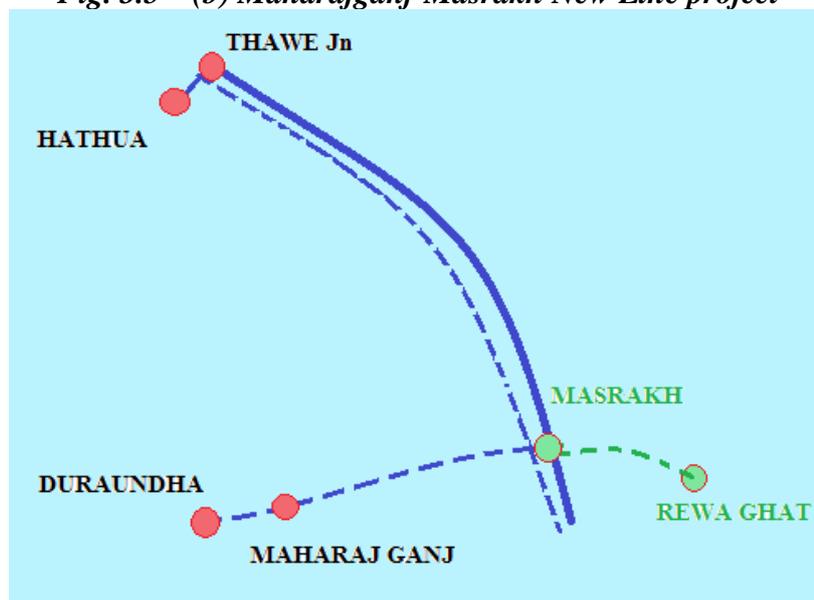
(Source: System Map of North Eastern Railway)

- Bareilly-Lalkuan project was initially referred to the Planning Commission and the Expanded Board as a separate project. After rejection by these bodies

it was sanctioned by the Railway Minister as a MM to the Kanpur-Kasganj-Mathura and Kasganj-Bareilly GC project.

- This is a unique case where the MM of Bareilly-Lalkuan has been completed, whereas the original project of GC of Kanpur-Kasganj-Mathura and Kasganj-Bareilly has been completed upto Kasganj only. Thus the Bareilly-Lalkuan line stands isolated creating operational difficulties for the Railways. This deprived a direct and shorter connectivity from Mathura and beyond to Western and Central Railways.
- The schematic diagram below of Masrakh-Rewa Ghat New Line (NL) project revealed that the Masrakh-Rewa Ghat NL was an offshoot from the original NL project of Maharaj Ganj – Masrakh and was a separate line. Hence, it cannot be classified as MM of the original project.

**Fig. 3.5 – (b) Maharajganj-Masrakh New Line project**



(Source: System Map of North Eastern Railway)

- The MM of Masrakh-Rewa Ghat was justified on socio-economic grounds. But the work could not be started (March 2013) even after six years of its sanction.
- Financial reappraisal of the original projects was not done again duly taking into account the cost of MM sanctioned.

- The above procedure by passed the prescribed system of project approval laid down in their own codes and manuals and generally of the procedure laid down by the Ministry of Finance.

### 3.1.8.2.4 Northeast Frontier Railway

From Table 3.5 it is seen that in Northeast Frontier Railway, nine MMs (five NL, three GC and one other) were sanctioned against four main works. These are discussed below:

**Table 3.5**

Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the work
(a) Eklakhi-Balurghat New Line The Detailed Estimate of the work was sanctioned in 1983-84 at a cost of `36.38 crore. The section was opened for traffic in December 2004.	Raiganj-Itahar New Line (21.82 km)	The MM was sanctioned at an estimated cost of `129.30 crore in May 2011, after seven years of completion of the original work. ROR of the project was assessed as (-) 9.45 per cent. Final Location Survey (FLS) of this work was not completed (January 2014).
	Itahar-Buniadpur New Line (39 km)	The MM was sanctioned at an estimated cost of `287.95 crore in September 2012, after eight years of completion of the original work. ROR of the project was not assessed. FLS of this work was not completed (January 2014).  Due to inclusion of the above MMs, the total cost of the original project increased from `36.38 crore to `703.17 crore i.e. an increase of 1932 per cent.
(b) Gauge Conversion of Lumding-Silchar including Migrendisa-Dittockchera extension from Badarpur-Baraigram  The work was sanctioned in 1996-97 at a cost of `648 crore. As on January 2014 the work is in progress.	Baraigram-Dullabcherra GC (29.4 km)	The MM was sanctioned at an estimated cost of `103.84 crore in 2011-12. ROR of the project was (-) 4.90 per cent. Land acquisition is in progress (January 2014).
	Karimganj-Maishashan GC (10.3 km)	The MM was sanctioned at an estimated cost of `55 crore in 2011-12. ROR of the project was estimated as (-) 228.14 per cent. Land acquisition is in progress (January 2014).  Due to inclusion of the above MMs the total cost of the original project increased from `648 crore to `4027.93 crore i.e. an increase of 521.59 per cent.
(c) Gauge Conversion of Katihar-Jogbani including Katihar-Barsoi-Radhikapur  The work was sanctioned in 2000-01 at a cost of `402.98 crore. The section was opened for traffic in three phases between February 2006 and June 2008.	Katihar-Teznarayanpur GC (34 km)	The MM was sanctioned at an estimated cost of `65.08 crore in 2007-08. ROR of the project was estimated as (-) 9.13 per cent. Work was completed and the section was opened for traffic in two phases in October 2011 and March 2013 .
	Raiganj-Dalkhola NL (43.43 km)  Conversion of MG coaching Depot at Katihar	The MM was sanctioned at an estimated cost of `291.53 crore in May 2011 after three years of completion of the original project. ROR was not assessed. The work was at a very initial stage (January 2014).

<p>(d) Gauge Conversion of New Jalpaiguri-Siliguri Jn-New Bongaigaon along with Branch line</p> <p>The work was sanctioned in 1999-2000 at a cost of `123.88. The section was opened for traffic in December 2003.</p>	<p>Chalsa-Naxal New Line (16 km)</p>	<p>The MM was sanctioned at an estimated cost of `10.99 crore in 2006-07. The work was completed and handed over to Open Line in December 2009.</p> <p>Due to inclusion of the above MM,s the total cost of the original project increased from `402.98 crore to `1015.84 crore i.e. an increase of 252.11 <i>per cent</i>.</p>
	<p>Rajabhatkhowa-Jainti New Line (15.13 km)</p>	<p>The MM was sanctioned at an estimated cost of `292.93 crore in 2011-12 after completion of the original work in December 2003. The ROR of the project was (-) 9.37 <i>per cent</i>. Land acquisition has been completed (January 2014).</p> <p>The MM was sanctioned at an estimated cost of `180.16 crore in 2012-13 after completion of the original work in December 2003. ROR was not assessed. FLS as well as Preliminary Engineering cum Traffic (PET) survey has not yet been completed (January 2014).</p> <p>Due to inclusion of the above MM,s the total cost of the original project increased from `123.88 crore to `1489.06 crore i.e. an increase of 1202 <i>per cent</i>.</p>

(Source: Ministry of Railways File No.2000/W-1/GC/NF/(KIR-JBN), File No.97/WLGC/NF/1(DE)/C-N, File No.2011/W1/NF/WP 11-12/Raiganj-Dalkhola (MM), File No.2011/W1/NF/WAP11-12/Karimganj-Maishashan (MM) and Northeast Frontier Railway's File No W/98/CON/Rajabhatkhuwa-Jainti, GM/CON/MCDO of March 2013, File No. W/155/CON/NJP-NBQ)

Scrutiny of records by Audit revealed the following:

- The above MMs were an off shoot from the original project and cannot be classified as MMs.
- Three NL project (Raiganj-Dalkhola, Chalsa-Baxal and Rajabhatkhowa-Jainti) were sanctioned as MM to a GC project which was irregular as the two fall under different plan heads<sup>144</sup>. Similarly, one traffic facility work (Conversion of MG coaching Depot at Katihar) was also sanctioned as MM to a GC project which was irregular as they fall under different plan heads<sup>145</sup>.
- RORs of the projects were either negative or not assessed at all. In one case the ROR was assessed as (-) 228.14 *per cent*<sup>146</sup>.
- Financial reappraisal of the original projects was not done again duly taking into account the cost of the MM.
- The above procedure bypassed the prescribed system of project approval laid down in their own codes and manuals and generally of the procedure laid down by the Ministry of Finance.

### 3.1.8.2.5 East Central Railway

<sup>144</sup> NL-Plan Head 11 and GC-Plan Head 14.

<sup>145</sup> Traffic facility work-Plan Head 16 and GC-Plan Head 14

<sup>146</sup> Karimganj-Maishashan GC- ROR (-) 228.14 per cent

From Table 3.6 it is seen that in East Central Railway, ten MMs (four NL, three GC and three other) were sanctioned against two main works. The details are given below:

**Table 3.6**

Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the work
<p>(a) Fatuha-Islampur Restoration of dismantled line</p> <p>The work was sanctioned in 1998-99 at a cost of `78.04 crore. The section was opened for traffic in 2003.</p>	Daniawan-Biharsharif New Line (38.28 km)	<p>The MM was sanctioned at an estimated cost of `104.79 crore in 2001-02. The cumulative net earnings of the project in 30 years was estimated as (-)`45.38. crore and the initial investment for this project is estimated to ` 12.84 crore without assessing the ROR. The overall progress was 81 <i>per cent</i> as of December 2013.</p>
	Biharsharif – Barbigha New Line (26 km)	<p>The MM was sanctioned at an estimated cost of `103.86 crore in 2001-02. ROR was not assessed. The overall progress was 40 <i>per cent</i> as of December 2013.</p>
	Barbigha – Sheikhpura New Line (26 km) and Neora/Danapur – Daniawan New Line (36 km)	<p>Both the MMs were sanctioned in 2001-02. RB sanctioned the combined Detailed Estimate costing `516.41 crore in January 2013. ROR was not assessed. These works are now being carried out by Rail Vikas Nigam Limited (RVNL). The MMs were sanctioned in the year 2001-02 and even after 12 years, they had not been started. The work of land acquisition, planning and designing is in progress (October 2013).</p>
		<p>Due to inclusion of the above MM,s the total cost of the original project increased from `78.04 crore to `803.10 crore i.e. an increase of 929 <i>per cent</i>.</p>
<p>(b) Mansi-Saharsa GC work</p> <p>The work was sanctioned in 1996-97 at a cost of `43.39 crore which was revised to `111.86 crore in 2004.</p> <p>The work was completed in 2005.</p>	Saharsa-Dharam Madhepura GC	<p>The MM was sanctioned at an estimated cost of `40.19 crore in 2003-04 without assessing the ROR. The work was completed in June 2010.</p>
	Dharma Madhepura-Purnia GC	<p>The MM was sanctioned at an estimated cost of `129.75 crore in 2003-04 without assessing ROR (March 2013). As on February 2014 the work has been completed to the extent of 80 <i>per cent</i>.</p>
	Construction of new Bridge No.53 and allied work in Mansi-Badala Ghat section.	<p>The MM was sanctioned at an estimated cost of `4.27 crore in 2004-05. The work was completed (2005).</p>
	Banmakhi-Bihariganj GC.	<p>The project was sanctioned in 2005-06 at an estimated cost of `36.80 crore without assessing ROR. Target date of completion has not been fixed (February 2014).</p>
	Construction of guide bund of Bridge No.45,50,52 and 53.	<p>The MM was sanctioned at an estimated cost of `8.16 crore in 2006-07 without assessing. The work was not completed due to shortage of funds (February 2014).</p>
	Removal of cause ways between Saharsa and Purnia.	<p>The MM was sanctioned at an estimated cost of `2.39 crore in 2007-08 without assessing ROR. The work was not completed</p>

		due to shortage of funds (February 2014).  Due to inclusion of the above MM,s the total cost of the original project increased from `111.86 crore to `803.10 crore i.e. an increase of 198 <i>per cent</i> .
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(Source; Ministry of Railways letter No.97/W2/SE/GC/SY/14 and File No.2010/W-2/SECR/SY/37/Pt.I)

Scrutiny of records by Audit revealed the following:

- The above MMs do not fall on the alignment of the original project and were an off shoot from it and cannot be classified as MMs. In fact four NL projects were sanctioned as MM to the Restoration of a dismantled line project, which is totally irregular. These works fall under different Plan heads<sup>147</sup> respectively and hence the MMs cannot be a part of the original project.
- Out of the above ten MMs, in respect of nine MMs, ROR was not assessed; in one MM, the ROR assessed was negative.
- Financial reappraisal of the original projects was not done again duly taking into account the cost of MM.
- The above procedure bypassed the prescribed system of project approval laid down in their own codes and manuals and generally of the procedure laid down by the Ministry of Finance.

#### 3.1.8.2.6 Eastern and South Eastern Railways

Eastern and South Eastern Railways are headquartered in Kolkata and hence dealt with together. The maximum numbers of MMs out of the 91 selected for the review by Audit were approved in these two Zones; thirty two MMs were approved in Eastern Railway and fourteen in South Eastern Railway. The list of MMs and the main work against which they have been sanctioned is given at *Appendix I*.

Audit scrutiny of records revealed the following:

##### (i) Eastern Railway

- In Eastern Railway 32 MM projects (28 NL, 2-GC, 1-Other and 1-Track Doubling) were sanctioned (2001 to 2013) against 16 main works (5-NL, 9-Track Doubling, 1-GC and 1-Other).
- The MMs were a distinct off shoot from the original project and only touched a station on the original project and were hence on a separate alignment. Further, in two cases these MMs did not even touch any station on the originally sanctioned projects. Thus they cannot be classified as MMs. In addition, against nine original Track Doubling projects, 14 New Line projects and two Gauge Conversion works were sanctioned as MMs which is totally irregular as they fall under different Plan heads<sup>148</sup>. Five original projects were completed between 2006 and 2010, however their respective MMs were sanctioned almost

<sup>147</sup> New Line-Plan Head 11, Restoration of dismantled lines-Plan Head 13

<sup>148</sup> Track Doubling-Plan Head 15, New Line-Plan Head 11, Gauge Conversion-Plan Head 14, Other work (Traffic facilities-yard remodelling and others)-Plan Head16

five to six years after completion of the original work<sup>149</sup>. Due to addition of 32 MMs against 16 original works, the estimated cost of the works increased from `2613.92 crore to `8415 crore; an increase of 322 per cent.

- 27 of the 32 MMs were sanctioned in the period 2009-10 to 2011-12. Of these three MMs were directly announced in the Railway Budget itself. It was further noticed that 18 MMs proposals were sent to Railway Board in January 2011 and February 2011 and were included in the Budget for the year 2011-12 (details are given in *Appendix I*).
- Eastern Railway Administration assessed a negative ROR in 20 MMs approved. In the remaining 12 cases, ROR had not been assessed at all (details are given in *Appendix II*).
- Financial reappraisal of the original projects was not done again duly taking into account the cost of the MMs.
- Audit noted that the Detailed Estimates had been sanctioned for 10 MMs, where no Final Location Survey had been conducted. In respect of 20 MMs no details are available. It was further seen that Detailed Estimate had yet been sanctioned for the remaining 2 MMs (details are given in *Appendix I*).
- Out of 32 MMs, estimates in respect of 17 MMs<sup>150</sup> were more than that of the original work.
- 24 MM projects were declared as Special Railway Projects. However, land acquisition has not been completed in any project (January 2014).
- The above procedure bypassed the prescribed system of project approval laid down in their own codes and manuals and generally of the procedure laid down by the Ministry of Finance.

#### (ii) South Eastern Railway

- In South Eastern Railway, 14 NL projects were sanctioned (2002-2012) as MM against 4 main works (1-GC and 3-NL) (*Appendix I*). All the 14 works were sanctioned as MM against four main works were on adjoining/ separate alignments and hence cannot be classified as MMs. Further, in six cases these MMs did not even touch any station on the originally sanctioned projects. Two original projects were completed between 2004 and 2008, however their respective MMs were sanctioned almost five to six years after completion of the original work.<sup>151</sup>

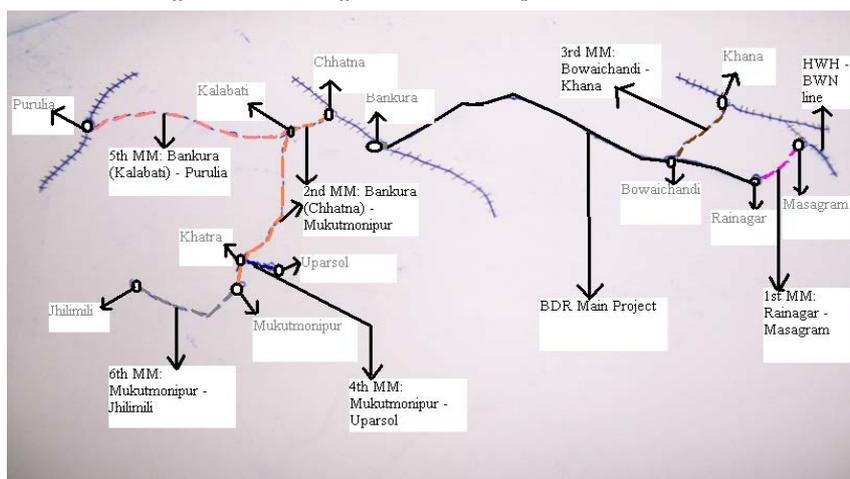
<sup>149</sup> Main work of Lakshmikantapur-Namkhana sanctioned in 1987-88 and completed in 2006, however, its MMs were sanctioned between 2009-10 to 2011-12, Main work of Chandpara-Bongaon sanctioned in 2003-04 and completed in 2012, however, its MMs were sanctioned between 2009-10 to 2011-12, Main work of Chinpai-Sainthia sanctioned in 2005-06 and completed in 2010, however, its MMs were sanctioned between 2009-10 and 2010-11, Main work of Sonarpur-Ghutiarihariff sanctioned in 2000-01 and completed in 2006, however, its MM was sanctioned in 2011-12, Main work of New Alipur-Akra sanctioned in 1996-97 and completed in 2004, however, its MMs were sanctioned between 2009-10 to 2011-12

<sup>150</sup> Chandranar-Bakkhali NL, Bongaon-chandabazar NL, Bongaon-Poramaheshtala NL, Chandabazar-Bagadh NL, Prantik-suri NL, Chowrigacha-Sainthia NL, Katwa-Bazarsau trak doubling, Katwa-Manteswar NL, Negum-Mangalkot NL, Kalikapur-Minakhan NL, Ahmedpur-Katwa GC, Budge Budge-Pujali NL, Pujali-Uluberia NL, Pujali-Bakrahat NL, Joynagar-Raidighai NL, Joynagar-Durgapur NL and Krishnanagar city-Charatala NL

<sup>151</sup> Main work of Bankura-Damodar river valley sanctioned in 1998-99 and completed in three phases between 2005 and 2008, however, its MMs were sanctioned between 2011-2012, Main work of Tamluk-Digha sanctioned in 1984-85 and completed in two phases between 2003 and 2004, however, its MMs were sanctioned between 2009 to 2011.

- Six New Line projects were sanctioned as MM against one Gauge Conversion main works which is totally irregular as they fall under different Plan heads and require separate sanction as per the laid down procedure for investment decisions. Such projects cannot be termed and approved as Material Modifications. Due to addition of 14 MM projects to the four original works, the estimated cost of the work increased from `912.82 crore to `3086.54 crore, an increase of 238 per cent.

**Fig 3.6 - BDR Gauge Conversion Project with six MMs**



(Source: System Map of South Eastern Railway)

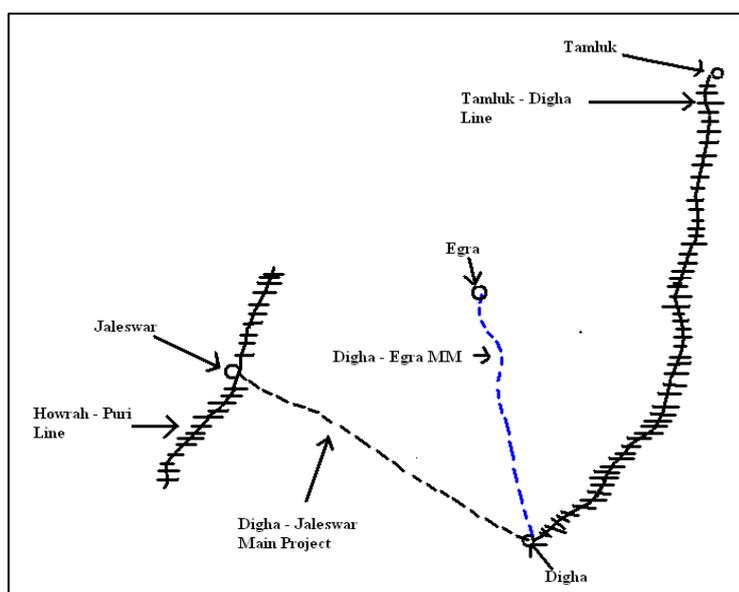
- Nine of the 14 MMs were sanctioned in the period 2009-10 to 2011-12. 13 of the 14 MMs were announced in the respective Railway Budget. Further, only one MM was proposed by the SER (details are given in Appendix III).
- Out of 14 MMs sanctioned, no Techno Economic Survey was conducted for six MMs (January 2014). In two MMs, Final Location survey had not been carried out. In seven MMs a negative ROR was assessed. In six cases, ROR had not been assessed at all. In only one MM project (Amta-Bagnan-ROR-19.69 per cent), the ROR assessed was more than the prescribed benchmark of 14 per cent (details are given in Appendix III).
- Financial reappraisal of the original projects was not done again duly taking into account the cost of the MMs.
- Detailed Estimate have been sanctioned by the Ministry of Railways (Railway Board) in all the 14 MMs.
- In respect of Mukutmunipur-Jhilmilli MM project, it was observed that the detailed estimate of the work was prepared and sent by the South Eastern Railway Administration on 23 February 2012, and was approved by the Minister of Railways within 12 days i.e. 6 March 2012. Out of the 14 MMs, for eight MMs costing `100 crore and above<sup>152</sup>, no documents in support of any

<sup>152</sup> Mukutmonipur-Uparsol, Bankura (Kalabati)-Purulia, Mukutmonipur-Jhilmili, Amta-Bagnan, Deshpran-Nandigram, Kanthi-Egra, Nandakumar-Balaipanda and Digha-Egra

approval by the Expanded Board/ Planning Commission have been furnished by SER.

- Detailed estimate in respect of one MM (Digha-Egra)<sup>153</sup> was approved more than one year before approval of the estimates of the main project (Digha-Jaleswar). Further, approved estimated cost in respect of six MMs<sup>154</sup> were more than that of estimated cost of the original work.

*Fig. 3.7 - Digha – Jaleswar New Line with MM of Digha – Egra*



(Source: System Map of South Eastern Railway)

- No specific target was fixed for 13 out of 14 projects, In one project, where the target date was set, the project was completed after a delay of 52 months.
- Out of 13 projects, where no target were fixed, in respect of seven project conditional target date were envisaged, i.e. a tentative date after availability of land.
- Eight (considering Amta-Bagnan and Champadanga-Tarakeswar as separate projects) MM projects were declared as Special Railway Projects. However, land acquisition has not been completed in any project (January 2014).
- The above procedure bypassed the prescribed system of project approval laid down in their own codes and manuals and generally of the procedure laid down by the Ministry of Finance.

There was thus acceleration in the sanction of MMs especially in Eastern and South Eastern Railways during the period 2009-10 to 2011-12. A total of 36 new projects were sanctioned as MMs out of a total of 46 MMs during this period. Apart from sanctioning New Projects as MM of projects which are already completed a number of projects had not even been proposed for approval by the

<sup>153</sup> Detailed Estimate of Main work-Digha- Jaleswar NL was approved in July 2012, while the Detailed Estimate of MM work-Digha-Egra was approved in May 2011

<sup>154</sup> Mukutmonipur-Uparsol, Bankura-Purulia, Mukutmonipur-Jhilimili, Amta-Bagnan, Champadanga-Tarakeswar and Janghipara-Furfura Sharif

concerned Zone. Audit further noted that a total of 25 MMs were declared Special Railway projects<sup>155</sup>. This empowered the Railway Administration to acquire land in a time bound manner. However, in none of these cases was land acquired. It was also seen that physical progress in most of these MMs approved was minimal.

### 3.1.8.2.7 South East Central Railway

From Table 3.7 it is seen that in South East Central Railway, one MM (NL) was sanctioned against one main GC work. The details are given below:

**Table 3.7 - Jabalpur-Gondia Gauge Conversion (285.45 km)**

Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the work
The work was sanctioned in September 2010 at an estimated cost of `1037.90 crore. As of February 2014, the work has been completed to the extent of 69 per cent.	Katangi-Tirodi New Line (15.36 km)	The Detailed Estimate was sanctioned at a cost of `119.64 crore in June 2011 with ROR of (-) 1.54 per cent. Physical progress is minimal as Land acquisition is under process (February 2014).  Due to inclusion of the above MM, the total cost of the original project increased from `1037.90 crore to `1157.54 crore i.e. an increase of 12 per cent.

(Source; Ministry of Railways letter No.97/W2/SE/GC/SY/14 and File No.2010/W-2/SECR/SY/37/Pt.I)

Scrutiny of records by Audit revealed the following:

- The MM was an offshoot from the original Gauge Conversion project and cannot be classified as a MM.
- The MM was sanctioned as a NL to a GC work which was irregular as they fall under different Plan Heads<sup>156</sup>. Inclusion of any new line to a gauge conversion work or vice-versa which are independent projects requiring separate sanction as per the laid down procedure for investment. Such projects cannot be termed and approved as Material Modification.
- Financial reappraisal of the original projects was not done again duly taking into account the cost of MM.
- The above procedure bypassed the prescribed system of project approval laid down in their own codes and manuals and generally of the procedure laid down by the Ministry of Finance.

### 3.1.8.2.8 East Coast Railway

From Table 3.8 it is seen that in East Coast Railway<sup>157</sup>, two MMs (1-GC, 1-NL) were sanctioned against one main work. These are discussed below:

**Table 3.8 - Raipur-Titlagarh doubling work (203 km)**

<sup>155</sup> In other Zones no project was declared a Special Railway project

<sup>156</sup> NL-Plan Head 11, GC- Plan Head 14

<sup>157</sup> Original work is under the jurisdiction of ECOR and executed by RVNL. The MM works were in the jurisdiction of SECR.

Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the work
<p>The Detailed Estimate of the work was sanctioned in June 2010 at a cost of ₹758.10. As of February 2014, only 7 per cent of the physical progress of the work has been achieved.</p>	<p>Mandir Hasaud-New Raipur New Line (20 km)</p> <p>GC of Kendri-Dhamtari including Abhanpur – Rajim (67.20 km)</p>	<p>The Detailed Estimate was sanctioned at a cost of ₹100 crore in 2012-13 without assessing the ROR. FLS was completed but there is no physical progress (February 2014).</p> <p>The MM was sanctioned at an estimated cost of ₹283.85 crore in 2011-12 with ROR of 14.38 per cent. The Detailed Estimate not sanctioned. FLS was completed but there is no physical progress (February 2014).</p> <p>Both the above projects were approved by the Railway Board without obtaining the approval/ appraisal of the Planning Commission/ Expanded Board.</p> <p>Due to addition of the above MMs to the original work, the estimated cost of the work increased from ₹758.10 crore to ₹1141.95 crore, an increase of 51 per cent.</p>

(Source: PCDOs of CON/BBS, RVNL and CON/SECR)

Scrutiny of records by Audit revealed the following:

- As can be seen from the schematic diagram below, both the MMs were an off shoot from the original Gauge Conversion project and cannot be classified as MMs.

Fig. 3.8 - Raipur-Titlagarh doubling work



(Source: System Map of East Coast Railway)

- The MMs were sanctioned as a New Line (Plan Head 11) and Gauge conversion (Plan Head 14) against Track Doubling (Plan Head 15). Inclusion of any new line/ gauge conversion to a Track Doubling work or vice-versa which are independent projects requiring separate sanction as per the laid down procedure such projects cannot be approved as Material Modification.
- The original track doubling work is being executed by Rail Vikas Nigam Limited (RVNL) through Asian Development Bank (ADB) loan while the MM works are being executed by South East Central Railway Administration.
- In both the above MMs, the FLS work was completed but there is no physical progress (February 2014).
- Financial reappraisal of the original projects was not done again duly taking into account the cost of MM.
- The above procedure by passed the prescribed system of project approval laid down in their own codes and manuals and generally of the procedure laid down by the Ministry of Finance.

### 3.1.8.2.9 Western Railway

From Table 3.9 it is seen that in Western Railway, five MMs (3-GC and 2-NL) were sanctioned against two main works. These are discussed below:

**Table 3.9**

Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the work
(a) Rajkot-Veraval GC project		
The work of GC was sanctioned in 1994-95 at a cost of `100 crore. The work was commissioned in November 2004.	Wanasjaliya to Jetalsar Gauge conversion	The work was sanctioned at an estimated cost of `98 crore in October 2002. Detailed Estimate not sanctioned. It was completed in March 2011.
	Somnath to Veraval New line	The work was sanctioned at an estimated cost of `14.52 crore in October 2002. Detailed Estimate not sanctioned. It was completed in October 2008.

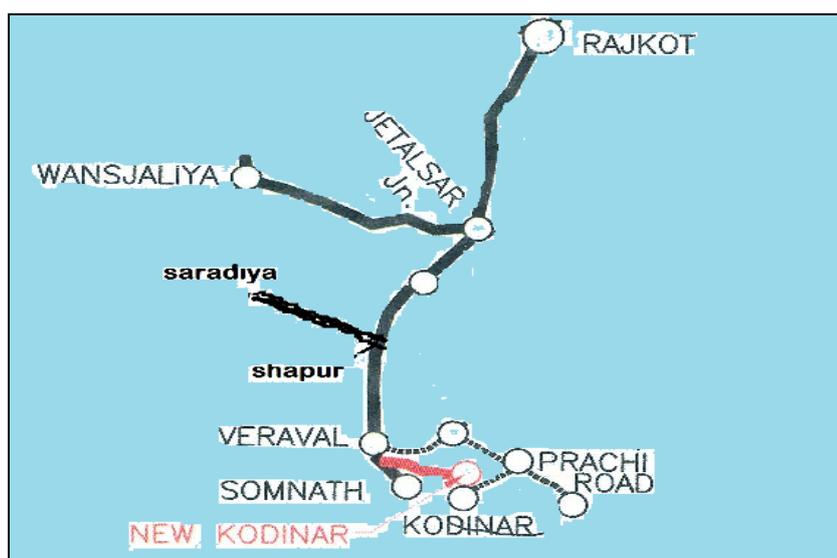
	<p>Shapur-Saradiya Gauge Conversion (46 km)</p> <p>Somnath-Kodinar New line (36.91 km)</p>	<p>Both the above MMs were executed irregularly and without requisite approvals. This was commented on in the Railway Audit Report No.9 of 2004</p> <p>The work was sanctioned at an estimated cost of `196.30 crore in April 2011 after completion of the original work. Detailed Estimate not sanctioned (January 2014).</p> <p>The work was sanctioned at an estimated cost of `252.68 crore in April 2011 after completion of the original work. Detailed Estimate not sanctioned (January 2014)</p> <p>Both the works are yet to commence as Detailed Estimate have not been sanctioned (January 2014).</p> <p>Due to addition of the above MMs to the original work of Rajkot-Veraval work the estimated cost of the works increased from `100 crore to `661.50 crore, an increase of 561 per cent.</p>
<p>(b) Bhildi-Viramgam GC + NL project The project was sanctioned in 1990-91 at a cost of `155.66 crore. It involved GC of Viramgam-Patan (104.6 km) and New line from Patan to Bhildi (51.03 km). GC works were completed in March 2008 and work of New Line is in progress (25 per cent) (January 2014)</p>	<p>Mahesana-Taranga hill Gauge Conversion (57.4 km)</p>	<p>The work was sanctioned at an estimated cost of `191.14 crore in April 2011. ROR of the project was assessed as (-) 1.40 per cent. The Detailed Estimate has not yet been sanctioned (January 2014).</p> <p>Due to addition of the above MM to the original work of Bhildi-Viramgam project the estimated cost of the work increased from `155.66 crore to `346.80 crore, an increase of 123 per cent.</p>

(Source: Ministry of Railways File No.2011/W-1/WR/M/3)

Scrutiny of records by Audit revealed the following:

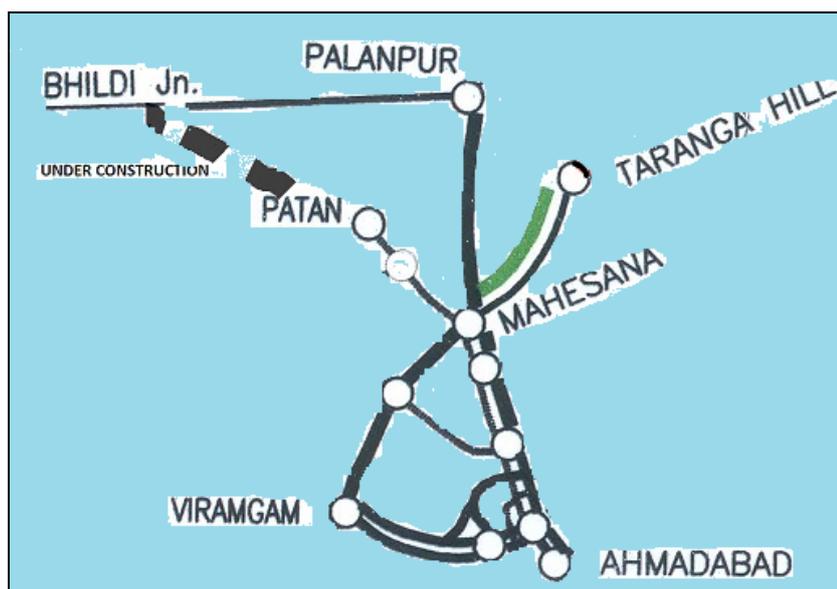
- As can be seen from the schematic diagrams below, all the above mentioned MMs were an offshoot from the original Gauge conversion Project and these were separate lines not falling in the alignment of the original project and cannot be classified as MM of the original project.

**Fig. 3.9 – (a) Rajkot-Veraval Gauge Conversion Project**



(Source: System Map of Western Railway)

**Fig.3.10 – (b) Bhildi-Viramgam Gauge Conversion Project**



(Source: System Map of Western Railway)

- The Railway Administration proposed the above works as MM instead of new works.
- In two cases, the works were sanctioned after completion of the original work. These works were yet to commence as the Detailed Estimates had not yet been sanctioned (January 2014). This indicates the lack of necessity of undertaking the work.
- Financial reappraisal of the original projects was not done again duly taking into account the cost of MM.

- The above procedure by passed the prescribed system of project approval laid down in their own codes and manuals and generally of the procedure laid down by the Ministry of Finance.

**3.1.8.2.10 South Central Railway**

From Table 3.10 it is seen that in South Central Railway one MM was sanctioned against one main work. This is discussed below:

*Table 3.10*

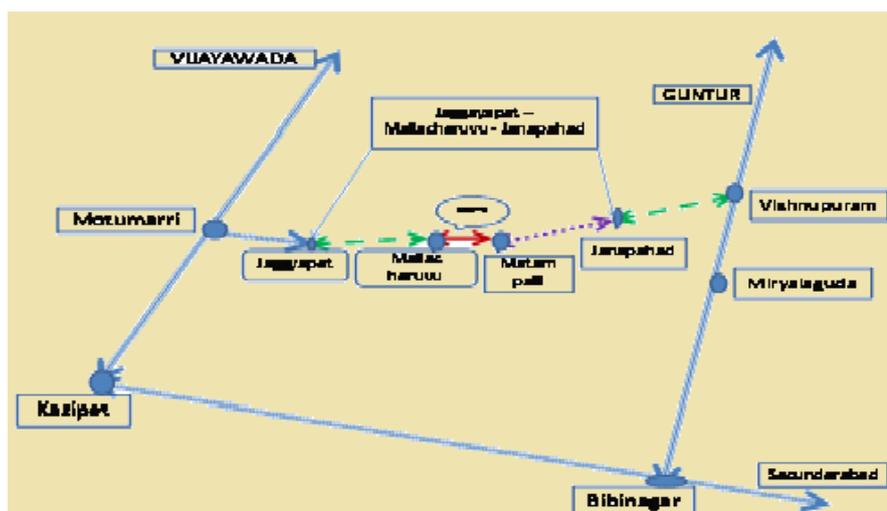
Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the work
Jaggayapeta-Mellacheruvu New Line (19.10 km) The original work was sanctioned in 2006-07 at a cost of ₹53.21 crore. The work was completed (March 2012).	Mellacheruvu-Janpahad New Line (24 km)	The work was sanctioned at an estimated cost of ₹174.56 crore in May 2011. The project was sanctioned by the Railway Board despite apprehensions regarding low volume of traffic expressed by the Zonal Railways. Land acquisition work has been started (January 2014).  Due to addition of the above MM to the original work the estimated cost of the work increased from ₹53.21 crore to ₹227.77 crore, an increase of 328 per cent.

(Source: Ministry of Railways File No 2006/W-2/SC/NL/JM and Extract of PCDO of CAO (C) and File No.C.221/97/J of South Central Railway)

Scrutiny of records by Audit revealed the following:

- As can be seen from the schematic diagram below, the MM was an off shoot from the original New line project and cannot be classified as a MM.

*Fig. 3.11 - Jaggayapeta-Mellacheruvu New Line (19.10 km)*



(Source: System Map of South Central Railway)

- The project did not fall in the category of MM as it fell on a separate alignment and should have been sanctioned separately as a new work.

- The MM was sanctioned by Railway Board despite objections regarding low volume of traffic raised by the Zonal Railways.
- Financial reappraisal of the original projects was not done again duly taking into account the cost of MM.
- The above procedure by passed the prescribed system of project approval laid down in their own codes and manuals and generally of the procedure laid down by the Ministry of Finance.

### 3.1.8.2.11 Southern Railway

From Table 3.11 it is seen that in Southern Railway, eight MMs (6-NL and 2-Oth) were sanctioned against two main GC works. The details are given below:

**Table 3.11**

Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the work
(a) Tiruchchirappalli-Thanjavur-Nagore GC  The project was included in the Works Programme of 1995-96 at an estimated cost of ₹109.05 crore. The work was completed and opened for traffic in three phases between January 1998 and February 2009.	Nagore-Karaikal New Line (11 km)	The work was sanctioned at an estimated cost of ₹33.78 crore in November 2002. The Detailed Estimate was sanctioned in June 2010. The work was completed and the section was opened for traffic in January 2010 and December 2011 respectively. As on June 2010 the completion cost of the project was ₹86.44 crore which was more than 100 per cent of the originally sanctioned cost.
	Nagapattinam-Velankanni New line (10 km)	The Detailed Estimate was sanctioned at a cost of ₹23.69 Crore in May 2002. Though the scheduled period of completion as per survey was one year only, the work could be completed in December 2010 with time overrun of 84 months due to delay in finalizing the alignment. The revised estimated cost of the work was ₹48.35 crore (June 2010) which was more than 100 per cent of the originally sanctioned cost.
	Nagapattinam-Tiruturaipundi New Line (35 km)	The work was sanctioned at an estimated cost of ₹126.14 crore in 2009-10 after the completion of the original project in February 2009. Detailed Estimate was sanctioned in June 2010. The ROR of the project was assessed as (-) 0.345 per cent. The work is in progress (February 2014).
	Karaikal-Peralam New Line (23 km)	The work was sanctioned at an estimated cost of ₹110.19 crore in 2013-14 after the completion of the original project in February. Detailed Estimate not sanctioned. Financial reappraisal/revision of ROR was not done duly taking into the cost of MM. The work is yet to be taken up (February 2014).
	Additional facilities at Nagore and Nagapattinam	The work was sanctioned at an estimated cost of ₹4.17 crore in 2000. This is the only work which fall under the category of MM. Due to addition of the above MMs to the original work of Tiruchchirappalli-Thanjavur-Nagore GC project the estimated

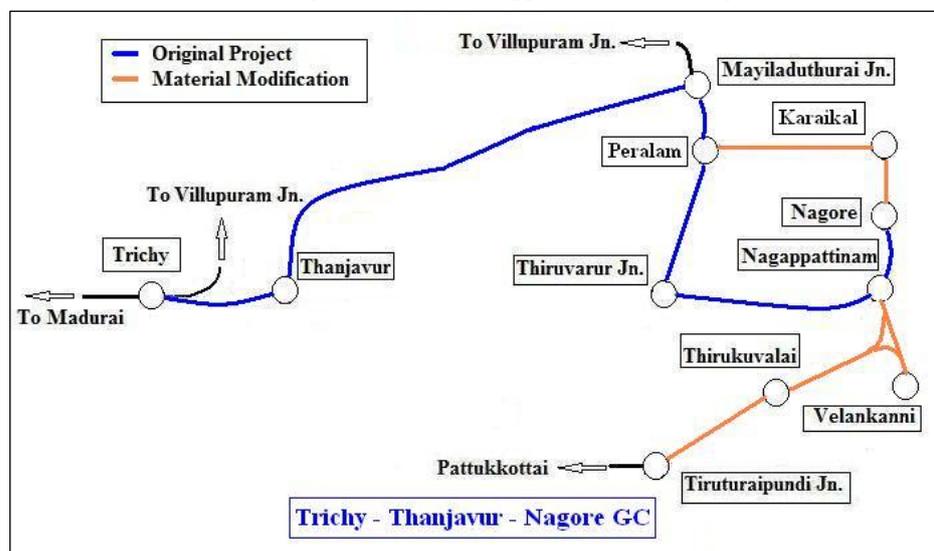
		cost of the work increased from `109.50 crore to `486.34 crore, an increase of 344 per cent.
(b) Mayiladuthurai-Thiruvarur-Karaikudi and Tiruturaipundi-Agasthiampalli GC	Restoration of dismantled line Nidamangalam-Mannargudi (13.25 km) Mannargudi-Pattukkottai New line (41 km)	The work was sanctioned at an estimated cost of `62.17 crore with ROR of 4.5 per cent in 2010-11. Detailed Estimate was sanctioned. It was completed and opened for traffic in September 2011.  The work was sanctioned at an estimated cost of `215.59 crore with the ROR of 4.59 per cent in 2010-11. The Detailed Estimate not sanctioned. The MM work is at initial stage as FLS work is in progress (February 2014).
The original work was included in the Budget of 2007-08 at a cost of `404.19 crore. Work between Mayiladuthurai and Thiruvarur was completed and opened for traffic in July 2012. The balance work is in progress for which no target date of completion has been fixed (February 2014).	Thanjavur-Pattukkottai New line (47 km)	The work was sanctioned at an estimated cost of `290.05 crore with the ROR of 14.18 per cent in January 2013. Detailed Estimate not sanctioned. FLS work is in progress (February 2014).  Due to addition of the above MM to the original work of Mayiladuthurai-Thiruvarur-Karaikudi and Tiruturaipundi-Agasthiampalli GC project the estimated cost of the work increased from `109.05 crore to `484.34 crore, an increase of 344 per cent.

(Source: Ministry of Railways File No.2006/W-1/GC/SR/MKA/TP, File No 92/W2/GC/S/25 and Southern Railway's File No.W 182/CN/MS/Survey/217, File No.W.227/1/133/CN, File No.W182/MS/Survey/180 and File No.W.337/1/176/CN)

Scrutiny of records by Audit revealed the following:

- As can be seen from the schematic diagram below, the MM projects of Nagore-Karaikal New Line (11 km), Nagapattinam-Velankanni New line (10 km), Nagapattinam-Tiruturaipundi New Line (35 km) and Karaikal-Peralam New Line (23 km) were an off shoot from the original GC project of Tiruchchirappalli-Thanjavur-Nagore GC. These were separate lines not falling in the alignment of the original projects and cannot be classified as MMs to the original projects.

Fig. 3.12 - Tiruchchirappalli-Thanjavur-Nagore GC



(Source: System Map of Southern Railway)

- The above MMs have no connection with the original project except the fact that it touched a station on the alignment of the original project and the work was required to be sanctioned as a new work.
- Booking of expenditure of restoration of dismantled line / New Line to Gauge Conversion work was a wrongful accounting disclosure procedure as these two fall under different Plan Heads<sup>158</sup>.
- In one case, ROR was not assessed and in another case the ROR assessed was negative.
- Financial reappraisal of the original projects was not done again duly taking into account the cost of MM.
- The above procedure bypassed the prescribed system of project approval laid down in their own codes and manuals and generally of the procedure laid down by the Ministry of Finance.

### 3.1.9 Payment of Dividend

Ministry of Railways is required to pay dividend to the Ministry of Finance on its<sup>159</sup> capital investment. It is also allowed to defer dividend on New Lines taken up on other than financial consideration during the period of construction and for the first five years after opening of the lines for traffic. Out of the 91 MM projects, 44 New Line projects (Plan Head 11) costing `7149.71 crore were sanctioned as MM to Gauge Conversion project (Plan Head 14)/Track Doubling (Plan Head 15) /Restoration of Dismantled lines (Plan Head 13). This misclassification will lead to payment of dividend to General Revenues of `5719.20 crore at the rate of four *per cent* per annum which was avoidable in view of the existing provisions.

### 3.1.10 Summary of Audit Findings

Audit analysis revealed that while 38 original projects were sanctioned at a cost of `9212.92 crore, as many as 91 projects costing `13383.86 crore were sanctioned as MM. Thus the cost of the MM works was even more than the cost of the original projects. In two Zonal Railways viz. Eastern Railway and South Eastern Railway, there were 20 original projects costing `3526.74 crore (38.28 *per cent* of total cost of original works of all the zones) which alone accounted for 46 MMs costing `7484.22 crore (55.92 *per cent* of total cost of MMs of all the zones).

Audit scrutiny revealed that Ministry of Railways has in a number of cases flouted the procedure laid down for both formulation and approval of projects. Even preliminary procedures like conducting a Techno Economic Survey have not been followed. In fact the standard procedure of taking approval of the Planning Commission before inclusion of a work in the Annual Works Programme was also not followed. The slow progress of works indicates the budgetary problems being

<sup>158</sup> Dismantled Line (Plan Head 13)/ New Line (Plan Head 11), Gauge Conversion (Plan Head 14)

<sup>159</sup> As per Annexure C of Ministry of Railways Circular No.2013/AC1/6/1, dated 22/03/2013

faced by MoR and that the works sanctioned do not abide by National Plan priorities.

The main issues emerging from the audit are summarised below:-

- During the period of review it was seen that as many as 53 projects<sup>160</sup> were sanctioned during the period 2009-10 to 2011-12.
- Works were sanctioned as MMs against a main work even though they did not fall under the category of MMs; these new projects were on adjoining/separate alignments. Further, in 11 cases (SER-7, ER-2, NWR-1 and SECR/ECOR-1) these MMs did not even have any station on the originally sanctioned project.
- 32 MMs<sup>161</sup> were approved after completion of the original project. In fact in some cases the MMs were sanctioned as late as eight years<sup>162</sup> (Northeast Frontier Railway) after completion of the original project. Further, 2 MM projects (Sadulpur-Hissar-NWR and Digha-Egra-SER) were approved even before approval of the main projects.
- In a number of cases even the original scrutiny at the Zonal Railway level was not carried out.
- 55 MM projects were sanctioned as New Line projects against Gauge Conversion project, Track Doubling, Restoration of Dismantled line projects. This is totally irregular as they fall under different Plan heads and require separate sanction as per laid down procedure for investment decision. It was seen that mostly New Line Projects were sanctioned as MM against Gauge Conversion projects.
- Railway codes prescribe that before sanctioning a MM its Rate of Return (ROR) has to be assessed and the ROR of the entire project also has to be re-assessed. Further a project can be accepted as financially remunerative only if it gives a rate of return not less than 14 *per cent*. It was seen that 39 MMs<sup>163</sup> were sanctioned without assessing the ROR of the project; the ROR assessed was negative in 35 MMs<sup>164</sup>, in 14 MMs though the ROR was evaluated it was less than the prescribed 14 *per cent*. In, only three MMs<sup>165</sup> the assessed ROR was more than the prescribed benchmark. It was seen that no de novo techno economic survey was conducted either to assess the ROR of the project or the impact of the MM on the main project.
- As on January 2014, out of 91 MMs test checked, in 37 MMs, Detailed Estimates had not been not sanctioned<sup>166</sup>. For 20 MMs of Eastern Railway, no

<sup>160</sup> ER-27, SER-9, NR-2, NFR-5, SECR-1, ECOR-2, WR-3, SCR-1, SR-3

<sup>161</sup> North Western Railway-3, Northeast Frontier Railway-5, East Central Railway-5, Western Railway-2, Southern Railway-2, Eastern Railway-8 and South Eastern Railway-7

<sup>162</sup> The MM of Itahar-Buniadpur NL was sanctioned in September 2012 while the main work of Eklakhi-Balurghat NL was completed in December 2004.

<sup>163</sup> North Western Railway-4, Northeast Frontier Railway-4, East Central Railway-9, Eastern Railway-12, South Eastern Railway-9 and East Coast Railway-1

<sup>164</sup> Northern Railway-2, North Western Railway-1, Northeast Frontier Railway-5, Eastern Railway-20, South Eastern Railway-4, South East Central Railway -1, Western Railway-1, Southern Railway-1

<sup>165</sup> MM work of Thanjavur-Pattukkottai NL (14.18 per cent) on Southern Railway, MM work of Kendri-Dhamtari including Abhanpur-Rajim GC (14.38 per cent) on East Coast Railway and MM work of Amta-Bagan NL (19.69 per cent) on South Eastern Railway

<sup>166</sup> Northern Railway-2, Western Railway-5, Southern Railway-3 and Eastern Railway-27

- details are available. Even the Final Location survey had not been carried out (SER-2, NFR-2 and ER-10) in 14 projects.
- In respect of 31 MM projects (Eastern Railway-24<sup>167</sup> and South Eastern Railway-8<sup>168</sup>) although these were declared as Special Railway Project<sup>169</sup> (2010-2011), no land had been acquired (January 2014).
  - In Eastern and South Eastern Railway, 16 MMs were announced in the Railway Budget<sup>170</sup>. No ground work was done in these projects before they were announced.
  - It was seen that 67<sup>171</sup> of the 91 MM projects were not proposed by the Zonal Railway Administrations.

The status of implementation of the test checked works sanctioned as MM during the period 2003-04 to 2012-13 is tabulated below-

**Table 3.12**

Sl. No.	Particulars	No. of works
1.	Number of works sanctioned as MM	91
2.	Out of 91 MMs, number of works completed	15
3.	Number of works not completed <sup>172</sup>	76

From the above table it is seen that during the period of the report, only 15 works (16.48 *per cent*) were completed out of the 91 works sanctioned as MM. Nine of these works was sanctioned between 2000 to 2002, five works were sanctioned between 2003-2008 and only one work was sanctioned in 2010-11. Test check by audit revealed that in 32 MMs (NR-2, NWR-2, NFR-3, ECR-2, E Coast-2, WR-3, SR-1 & ER-17) work has not even started as of January 2014.

<sup>167</sup> Chandnagar-Bakkhali, Tarakeswar-Dhaniakhali, Irphala-Ghatal, Arambagh-Champadanga, Bongaon-Chandabazar, Bongaon-Poramaheshtala, Chandabazar-Bagdah, Prantik-Suri, Chowringacha-Sainthia, Baruipara-Furfura Sharif, Katwa-Manteswar, Negum-Mangalkot, Manteswar-Mermari, Kalikapur-Minakhan, Budge Budge-Pujali, Pujali-Uluberia, Pujali-Bakarahat, Joynagar-Raidighi, Joynagar-Durgapur, Namkhana-Chandranagar, Dhubulia-Charatala, Arambagh-Irphala, Ranaghat (Aranghata) – Dutta Phulia and Bira-Chakla

<sup>168</sup> Mukutmonipur-Uparsol, Bankura-Purulia, Amta-Bagnan, Champadanga-Tarakeswar, Jangipara-Furfura Sharif, Deshpran-Nandigram, Kanthi-Egra and Digha-Egra

<sup>169</sup> Special Railway Projects are those projects which are declared under Railways (Amendment) Act, 2008 which empowers the Central government to acquire land in a time bound manner.

<sup>170</sup> Railway Budget 2009-10 to 2012-13

<sup>171</sup> E Rly-32, SE Rly-13, NE Rly-2, SC Rly-3, NF Rly-9, SEC Rly-5, NW Rly-3

<sup>172</sup> Delay period ranged from – For main work – 6 years (Mayiladuthurai-Thiruvavur-Karaikudi and Tiruturaupundi-Agasthiampalli GC work on SR) to 23 years (Bhildi-Virangam GC & NL work on WR). For MM work – 1 year to 11 years (Bihar Sharif-Barnigha NL on E Central Rly)

### Appendix –I

#### Statement showing the number of MMs sanctioned against main works in Eastern and South Eastern Railways

##### Eastern Railway

Examination of Annual Works Programme reveals that in Eastern Railway, thirty two MMs (28 NLs, two GCs, one other and one Track Doubling) were sanctioned against 16 main works (5-NL, 9-Track Doubling, 1-GC and 1-Other). The details are given below:

Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the work
<p>(a) Lakshmikantapur-Namkhana New Line (46.61 km)</p> <p>The work was sanctioned in 1987-88 at a cost of `100.89 crore and opened for traffic in 2006.</p>	Namkhana-Chandranagar New Line (14 km)	The work costing `78.90 crore was included in the Budget for 2009-10. ROR has not been assessed. Detailed Estimate not sanctioned. The FLS was completed and work is in progress (January 2014).
	Kakdwip-Budakhali New Line (5 km)	The work costing `61.85 crore was included in the Budget for 2011-12. Detailed Estimate not sanctioned ROR has not been assessed. The FLS has not yet been completed (January 2014).
	Chandranagar - Bakkhali New Line (17.2 km)	The work costing `165.35 crore was included in the Budget for 2011-12. Detailed Estimate not sanctioned ROR has not been assessed. The FLS has been completed (January 2014).
<p>(b) Tarakeshwar-Bishnupur New line (82.47 km)</p> <p>The work was sanctioned in 2000-01 at a cost of `479.20 crore. As of January 2014, the overall progress was 70 <i>per cent</i>.</p>	Tarakeshwar-Dhaniakhali New Line (19 km)	The work costing `133.58 crore was sanctioned in November 2009. FLS had been completed except 2 km near Dhaniakhali where there are heavy settlements. ROR of the project was not assessed. Detailed Estimate not sanctioned. No target date of completion has been fixed (January 2014). Work was held up due to non-availability of land (January 2014).
	Arambagh-Irphala New Line (18.3 km)	The work costing `149.53 crore was sanctioned in 2010-11. The FLS was completed and ROR was assessed at (-) 4.88 <i>per cent</i> . Detailed Estimate not sanctioned. There was no physical progress (January 2014).
	Irphala – Ghatal New line (11.2 km)	The work costing `95 crore was sanctioned in 2011-12. The FLS was not completed and ROR was assessed at (-) 4.88 <i>per cent</i> . Detailed Estimate not sanctioned. There

	Arambagh – Champadanga New line (23.3 km)	<p>was no physical progress (January 2014).</p> <p>The work costing `288.81 crore was sanctioned in 2011-12. Detailed Estimate not sanctioned. The FLS was not completed and ROR was not assessed. There was no physical progress (January 2014).</p> <p>Due to addition of the above MMs to the original work, the estimated cost of the work increased from `479.20 crore to `1146.12 crore (an increase of 139 <i>per cent</i>).</p>
(c) Tarakeshwar-Magra New Line (51.95 km) The work was sanctioned in 2010-11 at a cost of `365.17 crore. There is no progress so far (January 2014). The ROR was assessed as (+) 6.12 <i>per cent</i> .	Tarakeshwar – Furfura sheriff New Line (21.75 km)	<p>The MM was sanctioned in 2012-13 at an estimated cost of `162.37 crore. Detailed Estimate not sanctioned. ROR was assessed as (-) 10 <i>per cent</i>. Detailed Estimate has not yet been sanctioned (January 2014) as the FLS has not yet been completed (January 2014).</p> <p>Due to addition of the above MM to the original work, the estimated cost of the work increased from `365.17 crore to `527.25 crore (an increase of 44.46 <i>per cent</i>).</p>
(d) Chandpara – Bongaon Track Doubling (9.77 km) The work was sanctioned in 2003-04 at a cost of `22.23 crore. The ROR was assessed as 1 <i>per cent</i> . The section was opened for traffic in July 2012.	<p>Bongaon – Chandabazar New Line (121.5 km)</p> <p>Bongaon – Poramaheshtala New Line (20 km)</p> <p>Chandabazar – Bagdah New Line (13.86 km)</p>	<p>The MM was sanctioned in September 2009 at an estimated cost of `57.16 crore. Detailed Estimate not sanctioned. FLS was completed and the ROR of the project was highly negative (March 2013). At present the work of earthwork, minor bridges etc. Is in progress. No target date of completion has been fixed (January 2014).</p> <p>The MM was sanctioned in 2010-11 at an estimated cost of `140.81 crore without assessing the ROR (March 2013). Detailed Estimate not sanctioned. FLS has not been completed. No target date of completion has been fixed (January 2014).</p> <p>The MM was sanctioned in 2011-12 at an estimated cost of `117.77 crore assessing the ROR as (-) 14 <i>per cent</i> (March 2013). Detailed Estimate not sanctioned. FLS has not been completed. No target date of completion has been fixed (January 2014).</p> <p>Due to addition of the above MMs to the original work, the estimated cost of the work increased from `22.23 crore to `337.97 crore (an increase of 1420.33 <i>per cent</i>).</p>
(e) Chinpai-Sainthia Track Doubling (31.61 km) The work was sanctioned in 2005-06 at an estimated cost of `86.66 crore. The work was completed and commissioned in May 2010.	<p>Prantik-Suri New Line (33.98 km)</p> <p>Chowrigacha – Sainthia via Kandi New Line (56.50 km)</p>	<p>The MM was sanctioned in 2009-10 at an estimated cost of `149.55 crore assessing the ROR as (-) 6 <i>per cent</i>. Detailed Estimate not sanctioned. No target date of completion has been fixed (January 2014).</p> <p>The MM was sanctioned in 2010-11 at an estimated cost of `302.15 crore assessing the ROR as (-) 24 <i>per cent</i>. Detailed Estimate not sanctioned. No target date of</p>

		<p>completion has been fixed (January 2014).</p> <p>Due to addition of the above MMs to the original work, the estimated cost of the work increased from `86.66 crore to `538.36 crore, an increase of 521 <i>per cent</i>.</p>
<p>(f) Shantipur-Kalinarayanpur Track Doubling</p> <p>The work was sanctioned in 2010-11 at a cost of `104.80 crore with an estimated ROR of (-) 10 <i>per cent</i>. 90 <i>per cent</i> of the work has been completed (January 2014).</p>	<p>Ranaghat (Aranghata) – Duttaphulia New Line (8.17 km)</p>	<p>The MM was sanctioned in 2011-12 at an estimated cost of `69.76 crore assessing the ROR as (-) 13 <i>per cent</i>. Detailed Estimate not sanctioned. FLS has not been completed (January 2014).</p> <p>Due to addition of the above MMs to the original work, the estimated cost of the work increased from `104.80 crore to `174.56 crore, an increase of 67 <i>per cent</i>.</p>
<p>(g) Sondalia-Champapukur Track Doubling (23.64 km)</p> <p>The work was sanctioned in 2010-11 at a cost of `136.55 crore with negative ROR. Progress of work is only 35 <i>per cent</i> (January 2014).</p>	<p>Bira-Chakla New Line (11.5 km)</p>	<p>The MM was sanctioned in 2011-12 at an estimated cost of `129.97 crore assessing the ROR as (-) 13 <i>per cent</i>. Detailed Estimate not sanctioned. As of January 2014, the MM work was in progress.</p> <p>Due to addition of the above MM to the original work, the estimated cost of the work increased from `136.55 crore to `266.52 crore (an increase of 95 <i>per cent</i>).</p>
<p>(h) Dankuni-Chandanpur 4<sup>th</sup> line (25.41 km)</p> <p>The work was sanctioned in August 2010 at a cost of `198.88 crore. The ROR of the project was not available on record. The work is in progress (January 2014)</p>	<p>Baruipara – Furfura Shariff New Line (12.30 km)</p>	<p>The MM was sanctioned in 2011-12 at an estimated cost of `97.56 crore assessing the ROR as (-) 16 <i>per cent</i>. Detailed Estimate not sanctioned. FLS has not been completed (January 2014).</p> <p>Due to addition of the above MM to the original work, the estimated cost of the work increased from `198.88 crore to `296.44 crore (an increase of 49 <i>per cent</i>).</p>
<p>(i) Bardhaman-Katwa Gauge conversion (51.22 km)</p> <p>The work was sanctioned in 2007-08 at an estimated cost of `245.15 crore. The ROR was assessed as 10 <i>per cent</i>. Physical progress is only 50 <i>per cent</i> (January 2014).</p>	<p>Katwa-Bararsau Dubling (30.59 km)</p> <p>Katwa (Dainhat) – Manteswar New line (34.4 km)</p> <p>Negum-Mangalkot New Line (8.60 km)</p> <p>Manteswar-</p>	<p>The MM was sanctioned in 2011-12 at an estimated cost of `271.39 crore assessing the ROR as (-) 9 <i>per cent</i> and the work was in progress (January 2014). Detailed Estimate was sanctioned.</p> <p>The MM was sanctioned in 2011-12 at an estimated cost of `256.20 crore. Detailed Estimate was not sanctioned. The ROR of the project was not assessed. FLS has been completed (January 2014).</p> <p>The MM was sanctioned in 2011-12 at an estimated cost of `251.50 crore. Detailed Estimate was not sanctioned. The ROR of the project was not assessed. FLS of work has not been completed (January 2014).</p>

	Memari New Line (35.6 km)	<p>The MM was sanctioned in 2011-12 at an estimated cost of `82.11 crore assessing the ROR as (-) 16 <i>per cent</i>. Detailed Estimate was not sanctioned. FLS of work has not been completed (January 2014).</p> <p>Due to addition of the above MMs to the original work, the estimated cost of the work increased from `245.15 crore to `1106.34 crore (an increase of 351.31 <i>per cent</i>).</p>
(j) Manderhill-Dumka-Rampurhat New Line (130 km) The work was sanctioned in 1995-96 at a cost of `259.34 crore. The ROR of the project was assessed (-) 11 <i>per cent</i> . Physical progress is only 40 <i>per cent</i> (January 2014) even after 18 years of its sanction.	Rampurhat-Murarai 3 <sup>rd</sup> line (29.48 km)	<p>The MM was sanctioned in 2011-12 at an estimated cost of `224.05 crore. The ROR of the project has not been assessed (March 2013). Detailed Estimate has not yet been sanctioned (January 2014).</p> <p>Due to addition of the above MM to the original work, the estimated cost of the work increased from `259.34 crore to `483.39 crore (an increase of 86.39 <i>per cent</i>).</p>
(k) Sonarpur – Ghutiarishariff Track Doubling The work was sanctioned in 2000-01 at a cost of `30.47 crore. The ROR of the project was assessed as (-) 11 <i>per cent</i> . The work was commissioned in November 2006.	Kalikapur-Minakhan via Ghatakpur New Line (38 km)	<p>After five years of commissioning of the original project, the MM was sanctioned in 2011-12 at an estimated cost of `268.55 crore. The ROR of the project was (-) 20 <i>per cent</i>. Detailed Estimate was not sanctioned. The work of FLS has not been completed (January 2014).</p> <p>Due to addition of the above MM to the original work, the estimated cost of the work increased from `30.47 crore to `299.02 crore (an increase of 881.35 <i>per cent</i>).</p>
(l) Katwa-Patuli Track Doubling (17.70 km) The work was sanctioned in 2010-11 at a cost of `121.95 crore. The ROR of the project was not available. Physical progress is only 40 <i>per cent</i> (January 2014).	Ahmedpur-Katwa Gauge Conversion (51.92 km)	<p>The MM was sanctioned in 2011-12 at an estimated cost of `357.08 crore assessing the ROR as (-) 6 <i>per cent</i>. Detailed Estimate was sanctioned. The work is in progress (January 2014).</p> <p>Due to addition of the above MM to the original work, the estimated cost of the work increased from `121.95 crore to `479.03 crore (an increase of 292.80 <i>per cent</i>).</p>
(m) New Alipur-Akra Track Doubling (9.76 km) The work was sanctioned in 1996-97 at a cost of `18.09 crore. The the work was commissioned in September 2004.	Budge Budge-Pujali New Line (11 km)  Pujali-Uluberia (Birshivpur) New Line (10.25 km)  Pujali-Bakrahat New Line (9.75 km)	<p>After five years of the completion of the original project, the MM was sanctioned in 2009-10 at a cost an estimated cost of `97.17 crore assessing the ROR as (-) 16 <i>per cent</i>. Detailed Estimate was not sanctioned. FLS has not been completed (January 2014).</p> <p>After seven years of the completion of the original project, the MM was sanctioned in 2011-12 at an estimated cost of `295.84 crore assessing the ROR as (-) 17 <i>per cent</i>. Detailed Estimate was not sanctioned. FLS has not been completed (January 2014).</p> <p>After seven years of the completion of the original project, the MM was sanctioned in 2011-12 at an estimated cost of `83.48 crore assessing the ROR as (-) 20</p>

		<p><i>per cent</i>. Detailed Estimate was not sanctioned. FLS has not been completed (January 2014).</p> <p>Due to addition of the above MMs to the original work, the estimated cost of the work increased from `18.09 crore to `494.58 crore (an increase of 2634 <i>per cent</i>). As can be seen from the above, all the MMs were sanctioned after five years of completion of the original work.</p>
<p>(n) Dakshin Barasat – Laxmikantapur Track Doubling (19.68 km)</p> <p>The work was sanctioned in 2009-10 at a cost of `119.05 crore. The work was completed but has not yet been opened even after CRS inspection (January 2014).</p>	<p>Joynagar – Raidighai New Line (19.68 km)</p> <p>Joynagar – Durgapur New Line (32 km)</p>	<p>The MM was sanctioned in 2009-10 at an estimated cost of `140.46 crore. Detailed Estimate not sanctioned. ROR of the project was not assessed. As of January 2014, there was no physical progress.</p> <p>The MM was sanctioned in 2011-12 at an estimated cost of `273.87 crore assessing the ROR as (-) 14 <i>per cent</i>. Detailed Estimate not sanctioned. FLS has not been completed (January 2014).</p> <p>Due to addition of the above MMs to the original work, the estimated cost of the work increased from `119.05 crore to `512.06 crore (an increase of 330 <i>per cent</i>).</p>
<p>(o) Krishnagar-Kalinarayanpur Track Doubling (21.99 km)</p> <p>The work was sanctioned in January 2002 at a cost of `43.49 crore. The project was completed and commissioned in November 2010. The ROR of the project was (-) 21 <i>per cent</i>.</p>	<p>Krishnanagar-Shantipur Gauge Conversion (15.29 km)</p> <p>Krishnanagar City (Dhubulia)-Charatala New Line (13 km)</p>	<p>The MM was sanctioned in 2001-02 at an estimated cost of `34.85 crore assessing the ROR as (-) 23 <i>per cent</i>. Detailed Estimate was sanctioned. The work was completed and commissioned in February 2012.</p> <p>The project was sanctioned at an estimated cost of `119.38 crore assessing the ROR as (-) 13 <i>per cent</i> in 2001-02. Detailed Estimate was sanctioned. The work has not yet been started (January 2014).</p> <p>A comment was made in Chapter 1 of Audit Report No.9 of 2004 (Railways) regarding irregularly sanctioning of the above projects as MMs to the original work.</p> <p>In addition to the above, the Railway Board further sanctioned five more MMs to the original work viz. Gauge Conversion of Krishnanagar-Nabadwipghat (12.2 Km) costing `73.09 crore (September 2010), Nabadwipghat-Nanadwip Dham (9.58 Km) New line with bridge over river Hooghly along with extension to BB loop costing `250.83 crore, Strengthening of Bridge No. 2A of the original Track Doubling project costing `9.32 crore (November 2009), Krishnanagar-Chapra New line (19.2 Km) costing `171.39 crore and Providing third line between Naihati and Ranaghat (35.54 Km) costing `243.09 crore (September 2011). RORs of these MMs were not assessed/ not available.</p>

		With the sanction of seven MMs, the total cost of Track Doubling between Kalinarayanpur and Krishnanagar estimated to cost `43.49 crore now comes to `945.46 crore (increase by 2074 per cent).
(p) Deoghar-Sultanganj New Line (119.12 km) The work was sanctioned in 2000-01 at a cost of `282 crore. The ROR of the project was (-) 7.58 per cent. Physical progress is only 45 per cent (January 2014).	Banka-Barahat New line (15.53km)  Banka – Bitia road New line (22 km)	The project was sanctioned in 2001-02 at an estimated cost of `48.72 crore. Detailed Estimate was sanctioned. The work was completed and commissioned in August 2006.  The project was sanctioned in 2001-02 at an estimated cost of `48.72 crore. ROR was not assessed. Detailed Estimate not sanctioned. The work has not yet been started (January 2014).  A comment was made in chapter I of the Audit Report No.9 of 2004 regarding irregular inclusion of the above projects as MMs.

(Source: Ministry of Railways File No.2008/W-2/ER/NL/22 and Eastern Railway's File No.Accts./Con/FX/CDP-BNJ/Doubl and File No.Accts./Con/FX/LKPR-NMK-Chandranagar-Bakkali/NL)

### South Eastern Railway

Examination of Annual Works Programme reveals that in South Eastern Railway, 14 NL MMs were sanctioned against 4 main works (1-GC and 3-NL). The details are given below:

Present status of the main work	Nature/ Name of the MM work	Cost involved and present status of the work
(a) Bankura-Damodar river Valley Railway GC project  The work was sanctioned in 1998-99 at a cost of `100 crore and opened for traffic in three phases between September 2005 and January 2008.	Rainagar-Masagram New Line (20.9 km)	The Detailed Estimate was sanctioned at a cost of `46.25 crore in September 2002 with stipulated date of completion as December 2008. ROR was not assessed. The work was completed in April 2013 against the scheduled date of December 2008 (time overrun of 53 months). Cost of the project was increased from `46.25 crore to `144.36 crore (more than 3 times of the original estimate).
	Bankura (Chhatna)-Mukutmonipur New Line (48.25 km)	The Detailed Estimate was sanctioned at a cost of `85.63 crore in June 2005. ROR was not assessed. Physical progress is only 20 per cent (January 2014).
	Bowaichandi-Khana New Line (24.40 km)	The Detailed Estimate of `81.38 crore was sent by SE Rly in January 2005 and Railway Board sanctioned the part Detailed

	<p>Mukutmonipur-Uparsol New line (26.7 km)</p> <p>Bankura (Kalabati) – Purulia via Hura New line (65 km)</p> <p>Mukutmonipur-Jhilimili New Line (20.9 km)</p>	<p>Estimate of `38.92 crore in August 2005. ROR was not assessed. No PET survey was conducted. Physical progress is only 20 <i>per cent</i> (February 2014).</p> <p>The Detailed Estimate was sanctioned at a cost of `211.51 crore in July 2011 assessing the ROR as (-) 5.05 <i>per cent</i>. The target date for completion was fixed as December 2016 subject to the availability of full land before December 2013, however, as of February 2014 no land was acquired.</p> <p>The Detailed Estimate was sanctioned at a cost of `294.89 crore in July 2011. ROR was not assessed No techno-economic survey was conducted. Physical progress is only 1 <i>per cent</i> (February 2014)</p> <p>The Detailed Estimate was sanctioned at a cost of `239.36 crore in March 2012 by Minister of Railways, within a period of 12 days of initiating the proposal. ROR was not assessed The project was approved without undertaking any PET survey. Except opening of a FLS tender in August 2012, no other work has been done and no target date for completion has been fixed (February 2014).</p> <p>Due to addition of the above MMs to the original work, the estimated cost of the work increased from `111.90 crore to `1028.47 crore (an increase of 819 <i>per cent</i>).</p>
<p>(b) Howrah-Amta BG line with a branch New Line Bargachia-Champadanga line</p> <p>The work was sanctioned in 1974-75 and the Detailed Estimate was sanctioned in February 1984 at a cost of `31.42 crore which was subsequently revised to `154.30 crore (July 2001). Howrah-Amta section was completed in phases and commissioned between 1984 and 2004. The branch line from Bargachia to Champaganda has been kept abeyance till</p>	<p>Amta-Bagnan New Line (15.8 km)</p> <p>Champadanga-Tarakeswar New Line (8 km)</p> <p>Janghipara-Furfura Sharif New line (12.3 km)</p>	<p>The Detailed Estimate was sanctioned at a cost of `103.20 crore in October 2009. ROR was assessed as 19.69 <i>per cent</i> The work was inaugurated by the Minister of Railways in January 2010 and was notified as a 'Special Railway project'. In absence of availability of land and due to paucity of funds, contracts awarded for several works in connection with the Project were proposed to be foreclosed. The progress of the work was only 3 <i>per cent</i> (February 2014). Due to non-availability of fund the the work has been kept in abeyance (February 2014).</p> <p>The Detailed Estimate was sanctioned at a cost of `38.73 crore in October 2009. ROR was assessed with a net loss of `40.49 crore. Physical progress is only 2 <i>per cent</i> and land acquisition was held in abeyance due to shortage of funds (February 2014).</p> <p>The Detailed Estimate was sanctioned at a cost of `97.23 crore in July 2011 assessing the ROR as (-) 4.40 <i>per cent</i>. The FLS work was in progress and land plans were under preparation. As of February 2014, the physical progress was 1 <i>per cent</i>. The project has been proposed for shelving.</p> <p>Due to addition of the above MMs to the original work, the estimated cost of the work increased from `154.30 crore to `393.46</p>

further commitment of fund from RB (February 2014).		crore (an increase of 154 <i>per cent</i> ).
<p>(c) Tamluk-Digha BG Rail Link</p> <p>The construction of Tamluk-Digha Rail Link was taken up in 1984-85 at an anticipated cost of `43.72 crore. The Detailed Estimate of `293.97 crore was sanctioned in April 2000. The New Line was completed and commissioned in two phases in November 2003 and December 2004.</p>	<p>Deshpran-Nandigram New Line (17 km)</p> <p>Kanthi-Egra New Line (26.2 km)</p> <p>Nandigram-Kandiamari New line (7 km)</p> <p>Nandakumar-Balaipanda New Line (17 km)</p>	<p>The Detailed Estimate was sanctioned at a cost of `121.43 crore in October 2009. ROR was not assessed. The project was approved without undertaking any PET. Despite acquiring 90 <i>per cent</i> of land, physical progress is only 30 <i>per cent</i> (February 2014).</p> <p>The Detailed Estimate was sanctioned at a cost of `247.27 crore in July 2011 assessing the ROR as (-) 4.60 <i>per cent</i>. The work was notified as a 'Special Railway project'. Physical progress is only 2 <i>per cent</i> (February 2014). The project has been proposed for shelving.</p> <p>The Detailed Estimate was sanctioned at a cost of `75.62 crore in July 2012. ROR was not assessed. Physical progress is only 1 <i>per cent</i> (February 2014). The project has been proposed to be shelved.</p> <p>The Detailed Estimate were sanctioned at a cost of `275.14 crore in June 2012. ROR was not assessed. A contract was awarded for FLS in September 2012 and the same was discharged subsequently. Target date of completion was not fixed as land is not yet available (March 2013). Physical progress is only 1 <i>per cent</i> (February 2014). The project has been proposed to be shelved.</p> <p>Due to addition of the above MMs to the original work, the estimated cost of the work increased from `293.97 crore to `1013.43 crore (an increase of 245 <i>per cent</i>).</p>
<p>(d) Digha-Jaleswar New Line- Minister of Railways in Budget Speech of 2009-10 announced a New Railway Line Digha-Jaleswar-Puri. Though the PET survey envisaged ROR of (-) 5.04 <i>per cent</i>, the project was sanctioned at a cost of `352.65 crore in July 2012. No target date of completion was fixed. Work is in progress.</p>	<p>Digha-Egra NL (31 km)</p>	<p>The Detailed Estimate were sanctioned in May 2011 at a cost of `298.52 crore assessing the ROR at (-)5.07 <i>per cent</i>. Land acquisition was stopped due to shortage of funds. Physical progress was only 2 <i>per cent</i> (February 2014). The project has been proposed to be shelved.</p> <p>Owing to addition of the above MM to the original work, the estimated cost of the work increased from `352.65 crore to `651.17 crore (an increase of 85 <i>per cent</i>).</p>

*(Source: Ministry of Railways File No.2011/W-2/SER/NL/11, File No.2010/W-2/SER/NL/18, No.2012/W-2/SER/NL/05 and South Eastern Railway's File No.CAO(C)/GRC/MCDO/2013/01-15 and File No.PD/W/746/Spl., No.PD/W/255/E/761)*

**3.2 South Western: Acceptance of substandard formation  
Railway (SWR) works in construction of a new line  
endangering safety**

The commissioning of a new line (cost `351.48 crore) without rectifying the major deficiencies in 'formation work' resulted in opening of a new line section for regular traffic compromising the safe operation of trains/ safety of travelling passengers

'Formation' is the bank formed for laying the railway track by utilizing earth (soil). It is an integral part of the Railway track structure. A stable and strong 'formation' is, therefore, essential for the safety of track/ safe running of trains. As such, earthwork<sup>173</sup> for the construction of formation is very important. Research, Design and Standard Organisation (RDSO), Lucknow is the technical advisor to Railway Board/ Zonal Railways. The Organisation develops designs/ standards of materials, conducts technical tests/ investigations and gives statutory clearances. When the construction of a Railway line is complete, it is offered for inspection of Chairman Railway Safety (CRS) for obligatory permission to open the line for Passenger traffic.

The Construction of new Broad Gauge (B.G.) line between Kottur - Harihar included inter alia earthwork and blanketing<sup>174</sup> for which Construction Organisation, South Western Railway, Bangalore Cantonment (CNBNC) awarded 11 contracts. When the contractors had almost completed the work (January 2009), soil tests results indicated that the soil utilised on the works were not of required specifications. Therefore, the Chief Engineer/ Construction (East-General), Bangalore Cantt requested RDSO (January 2009) to conduct tests for soil and blanketing material utilized. After conducting tests, Senior Executive Director/ Geo Engineering, RDSO communicated the test results (April 2009) as under-

- (i) The compaction<sup>175</sup> of earth was not as per the specifications in terms of degree of compaction. Proper compaction of sub-grade<sup>176</sup> as well as blanketing material was required to be ensured before laying the ballast<sup>177</sup>;
- (ii) Since no berm<sup>178</sup> had been provided for banks of more than six meters height, slope stability of embankment<sup>179</sup> would need to be re-checked before the opening of Railway line for traffic;
- (iii) The blanketing material utilised was not as per RDSO's specifications and had more fines<sup>180</sup> with reference to permissible limits. As such, minimum

<sup>173</sup> Formation of bank on plain topography and formation of cuttings on elevated topography.

<sup>174</sup> Covering with hard material the top of bank formed. The objective of this activity is to provide stability to the formation.

<sup>175</sup> Rolling of utilised earth to bring it in dense form.

<sup>176</sup> Earth of formation just beneath the blanket material.

<sup>177</sup> Granite Stone pieces (50 mm size) spread over the formation and packed below the sleepers to act as shock absorber.

<sup>178</sup> A step provided in the bank if its height is more than nine meters

<sup>179</sup> Bank formed above the ground.

<sup>180</sup> Granular blanket material.

100 cm thick blanket material conforming to specifications should be provided in stretches having SC type<sup>181</sup> of soil. Further, provision for additional 30 cm blanket thickness would be required over and above 100 cm in view of section being proposed for 25 tonne axle load traffic,

- (i) Longitudinal cracks appeared on top of the formation due to improper amalgamation<sup>182</sup> /bonding<sup>183</sup> between old and new earthworks.

Audit observed that-

- Despite the fact that RDSO had brought out serious deficiencies about the quality of the work, and Construction Authorities had an opportunity to get the defects rectified free of cost, the Chief Administrative Officer (CAO), CNBNC Authorities allowed the contractors to continue the work of spreading of ballast and linking of track between April 2009 and June 2010.
- Though the contracts provided for the execution of all the works as per RDSO's specifications, the Chief Administrative Officer (CAO) did not direct the contractors to rectify the defects free of cost. He instead engaged (July 2010) a private agency<sup>184</sup> to test the blanketing material. During tests, all the 20 samples failed to meet the required quality standards. Even after this, the CAO nominated a committee of Junior Administrative Grade officers (August 2010) to study the blanketing material. The Committee reported (September 2010) that the blanketing material did not meet with any of the prescribed specifications. Construction Authorities of South Western Railway also got the blanketing material tested (August 2010) from Civil Engineering faculty of Bangalore University (University). The University observed that most of the soil samples failed to qualify as per RDSO's specifications; however, the utilised soil fulfilled the primary and secondary functions<sup>185</sup> intended to be satisfied by the blanketing material. The base soil was found to be well graded and of adequate strength and with suitable drainage characteristics. They ultimately viewed that the base soil and blanketing provided in the Railway line was suitable as sub-base<sup>186</sup> and blanket.
- Considering the opinion of the University, the CAO decided (June 2012) to avoid incurring extra liability to rectify the deficiencies in the track works. He issued order (June 2012) that (a) payment to contractors for executing blanketing work would be restricted to the cost of earth brought by the

<sup>181</sup> Sandy clay soil having plastic index more than seven. Plastic index denotes the elasticity.

<sup>182</sup> Merging for harmonisation.

<sup>183</sup> Adhesion due to intermediate forces.

<sup>184</sup> M/s Civil Aid Techno clinic Pvt. Ltd.

<sup>185</sup> Primary function is stress reduction function which reduces the traffic induced stresses at the bottom of ballast layer to a tolerable limit on the top of sub-grade.

Secondary functions are separation function (prevents the penetration of ballast into the sub-grade and the upwards migration of fine particles from sub-grade into ballast), drainage function (intercept water coming from the ballast away from the sub-grade and at the same time permit drainage of water flowing upward from the sub-grade) and prevention of mud pumping (prevents mud pumping by checking the attrition of sub-grade particles by ballast)

<sup>186</sup> Upper layer of soil formation.

contractor only and (b) a penalty equal to 10 *per cent* of the value of the blanketing work as per contract rate would be imposed. The total amount recoverable from the contractors was `2.36 crore (`1.91 crore and `0.45crore).

- The Railway Administration offered the line for CRS inspection (December 2013). During CRS inspection, the Railway Administration certified that the formation in bank was made of good soil conforming to RDSO specifications and there had not been any deviation in design, material and construction of the works. Construction Authorities did not bring to the notice of the CRS the major deficiencies pointed out by the RDSO and non-rectification thereof either by the contractors or by the CNBNC itself.
- The CRS authorized the new line section for running passenger trains as “One Train Only System” and the train services commenced (March 2014). No document was available with the construction Authorities to show the reasons for introduction of ‘One train only system’.

Although RDSO, the ultimate technical Advisor of Indian Railways had detected serious deficiencies with reference to the prescribed standards/ specifications, CNBNC Administration failed to get the defects rectified free of cost from the contractors thus compromising the standards of safety fixed for safety of track formation. The CNBNC Administration instead proceeded to complete ballasting and track linking works. Moreover, even though RDSO had pointed out serious deficiencies in ‘formation work’ Construction Authorities certified the execution of work as acceptable at the time of CRS’s inspection. Further, instead of directing the contractors to rectify the defects, a penalty of ` 2.36 crore only was levied on the contractors towards deficient working. CNBNC also did not rectify the work themselves.

Thus, the track has been left with inherent major deficiencies. The commissioning of the new line (cost `351.48 crore) without rectifying the major deficiencies in ‘formation work’ resulted in opening of a new line section for regular traffic compromising the safe operation of trains and safety of travelling passengers.

The matter was brought to the notice of Railway Board in May 2014; their reply has not been received (July 2014).

### **3.3 North Western Railway (NWR): Loss due to non-preferring of bills for way leave charges**

Failure of NWR Administration to prefer bills for way leave charges for the railway land occupied and utilized by Jaipur Development Authority resulted in loss of revenue to the tune of `30.02 crore for one year alone (2012-13)

As per Para 1033 of the Indian Railway code for the Engineering Department (2012 edition), way leave facilities/ easement rights on railway land involve occasional or limited use of land by a party for a specified purpose like passage etc. without conferring upon the party any right of possession or occupation of the

land and without in any way affecting the railway's title, possession, control and use of the land. Sub-Para 5 (ii) of the above Para also provides that way leave charges at the rate of six *per cent* of the market value of the land per annum subject to revision every five years should be recovered for passage/ road, public road by local bodies/ State Government/ Autonomous Bodies/ Charitable/Welfare Organisation, etc.

During review by Audit (June 2013), it was noticed that four pieces of railway land (as given in the *Table 3.13* below) at Jaipur were occupied by Jaipur Development Authority (JDA) and roads were constructed on all of them.

**Table 3.13**

Sl. No.	Name of the site of the Railway land	Patches of land	Area (in sqm)	Rate of land (as of November 2012) ( ` per sqm)	Value of land as on 2012-13 (in crore of `)	Occupied since	Present status
1.	Closed Jagatpura-Shivdasapura line	Revenue Village I.Jagatpura II.Tilawala III.Shri kishanpura IV. Jeerota V. Ramchandrapura	27300 94100 78500 46100 51700	20880 20880 14620 14620 7320	473.49	1998	Railway Administration had approached (March 2002 to May 2013) Government of Rajasthan for exchange of land
2.	Near Durgapura Station	In front of Durgapura Railway Station	759.25	68880	5.23	2008	
3.	Near Gandhinagar Railway Station	Between LC No.217 and 218 near Gandhinagar Railway Station	1316.095	96000	12.63	2008	
4.	Near Bais Godam Railway Station	Near Bais Godam Railway Station	1742.55	52190	9.09	2008	Railway in November 2012 desires return of land from JDA.
<b>Total</b>			<b>301518</b>		<b>500.44</b>		

(Source: Joint Note of Divisional Engineer (South), DRM/Jaipur and Dy. Commissioner, JDA/Jaipur)

Thus, the JDA is in unauthorized occupation of the Railway's above land measuring 301518 sqm worth `500 crore.

Railway Administration (NWR) instead of protecting its assets and levying way leave charges approached the State Government (November 2005 and November 2012) for an alternate land in place of the land occupied by the JDA in three cases and return of land was sought in only one case i.e. Bais Godam Railway station. Secretary, JDA in August 2009 confirmed that they were using Railway's land as they had constructed road on all the above mentioned land and in principle agreed to provide alternate land in exchange of Railway land. However, neither were any way leave charges levied nor has any alternate land been allotted. Thus, failure to prefer bills for way leave charges for the railway land occupied and utilized by Jaipur Development Authority resulted in loss of revenue to the Railways. The loss of revenue for the year 2012-13 only is estimated at `30.02 crore<sup>187</sup>.

<sup>187</sup> Way leave Charges for one year i.e. 2012-13 @ six *per cent* of cost of land (District Level Committee rates) = `500 crore (x) 6 per cent = `30.02 crore

When the matter was brought to the notice of NWR Administration in June 2013 and July 2013 respectively, they stated (December 2013) that the issue of unauthorized occupation of railway land by JDA had been taken up at the highest level and a meeting was held in (August 2012) and a decision was taken to transfer JDA land at Bhatasari village measuring 51.46 hectare in lieu of the encroached land of Jagatpura-Shivdaspura closed line. The Railway land encroached by JDA would be exchanged on equivalent cost basis after sanction of Railway Board.

The reply is however not acceptable. The use of Railway land by any other entity for construction of road is covered under Para 1033 of the Indian Railway code for the Engineering Department (2012 edition), which clearly provides for levy of way leave charges.

Exercise of required vigilance by NWR Administration to check unauthorized occupation of Railway land and preferment of the bills for way leave charges could have resulted in avoidance of loss of `30.02 crore for the period 2012-13 alone.

The matter was brought to the notice of Railway Board in February 2014; their reply has not been received (July 2014).

### **3.4 Northeast Frontier: Loss due to inordinate delay in Railway (NFR) construction of Pit Line**

Delay in construction of Pit Line at Kishanganj of NFR resulted in avoidable haulage cost of ` 22.18 crore of empty rake of 'Garib Nawaj' from Kishanganj to New Jalpaiguri

In August 2005, Railway Board announced the introduction of a train service between Kishanganj (Bihar) and Ajmer (Rajasthan). Ministry of Railways (Railway Board) directed (August 2005) Northeast Frontier Railway to examine the feasibility of introducing the train service together with the construction of a new pit line<sup>188</sup> at Kishanganj to facilitate cleaning during primary maintenance of rakes.

In Para 2.2.9 of Railway Audit Report No.19 of 2009, mention has been made that due to non-construction of pit line facility at Kishanganj, the rake of 'Garib Nawaj' express train (5715/ 5716) between Kishanganj and Ajmer was being hauled empty to New Jalpaiguri which involved a distance of 176 kms (both ways) for providing pit line examination after termination at Kishanganj. The loss towards avoidable empty haulage of the rake was worked out by Audit as ` 1.15 crore for the period August 2006 to March 2008.

The Ministry of Railways, in their Action Taken Note stated (October 2010) that the work could not be taken up immediately due to change in drawings and delay in dismantling of Metre Gauge (MG) line. They further stated that since the train cannot be run without primary maintenance, the empty haulage and expenditure was absolutely unavoidable to ensure safety.

Further scrutiny in June 2013 revealed that till date the work is incomplete as per the following details:

<sup>188</sup> A full rake comprising of various types of coaches is cleaned during primary maintenance on a pit line.

- (i) NFR sent the proposal for development of Train Examination facilities at Kishanganj on 'Out of Turn' basis to Ministry of Railways in August 2005 and the work was sanctioned in the Annual Works Programme of 2006-07. The actual work commenced in May 2007.
- (ii) After execution of 75 per cent of the sanctioned work, the Construction Organisation of NFR in January 2010 expressed their inability to continue the construction work due to lack of funds and the contract was short closed in April 2010.
- (iii) For execution of the balance 25 per cent work, a tender was finalized by NFR and Letter of Acceptance (LOA) was issued to another contractor in January 2012 stipulating that the work be completed within six months after issue of LOA. However, the contractor started the work belatedly in November 2012. As of January 2014, the contractor could achieve only 50 per cent of the balance work.

In reply to the above, NFR Administration in November 2013 stated that the balance works of pit line could not be completed due to inadequate allotment of funds. They further stated that this particular train would be extended to New Jalpaiguri (as announced in budget 2013-14) and as such there will be no empty haulage of the rake.

The contention of NFR Administration is not acceptable. The delay in construction of pit line was not due to fund constraints as seen in audit. The work of Pit Line work was proposed by NFR for ` 7.96 crore in August 2005. The work was sanctioned by the Ministry of Railways (Railway Board) in the Annual Works Programme (2006-07) for ` 3.5 crore. As of May 2013, ` 5.2 crore was incurred for this work. For the balance 25 per cent of the work, ` 98.34 lakhs have been sanctioned and out of which ` 37.15 lakhs have been spent till January 2014. Further, audit observed that till date the Train viz. Kishanganj-Ajmer Garib Nawaj Express was running only upto Kishanganj and had not been extended up to New Jalpaiguri.

Thus, non-completion of pit line facility at Kishanganj resulted in the rake being hauled empty to New Jalpaiguri for a distance of 176 kms (both ways) to avail pit line examination after termination at Kishanganj. This resulted in an avoidable expenditure of ` 22.18 crore during the period April 2008 to January 2014 and the same was likely to be compounded till commissioning of the pit line facility at Kishanganj.

The matter was brought to the notice of Railway Board in February 2014; their reply has not been received (July 2014).

<b>3.5</b>	<b><i>Northeast Frontier: Railway (NFR)</i></b>	<b><i>Excess payment on purchase of ballast on account of incorrect measurement/ under-loading of ballast</i></b>
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Payment for ballast as per the quantity recorded in the measurement book, instead of actual weight recorded in Railway Receipts led to excess payment of ` 3.38 crore and avoidable loss of ` 10.06 crore due to non-recovery from the contractor on account of under-loading of ballast

As per Para 65 (2) of the Railways Act, 1989 (No.24 of 1989), the quantity recorded in the Railway Receipts (RRs) should be the prima facie evidence of the actual weight of the commodity.

Test-check by Audit of 12 contracts in respect of procurement of ballast in office of Sr. Divisional Engineer, Katihar of NFR in October 2011 revealed that payment to the contractors for procuring ballast were being made on the basis of quantity recorded in the ballast challans. The quantity recorded in the ballast challans<sup>189</sup> was being prepared on the basis of quantity recorded in the measurement book<sup>190</sup> on the basis of volumetric measurement (total volume of the quantity). This quantity when computed by Audit was found to be much more than the quantity recorded in the RRs. Thus, payment of ballast as per ballast challans, instead of actual weight recorded in RRs led to excess payment of ` 3.38 crore<sup>191</sup> during the period February 2008 to March 2013.

It was also noticed during the above test-check (October 2011) by audit that as per the contract condition, the contractors were required to load wagons to the full carrying capacity, including permissible overload and in case of under-loading by more than one tonne, proportionate recovery of freight was to be effected from their bills. Contradiction in above provisions made in the contract condition resulted in under-loading of 1,22,434.60 cum of ballast by the contractors during the period February 2008 to March 2013. This has resulted in avoidable loss of `10.06 crore<sup>192</sup> during the period February 2008 to March 2013 to the Railway. Further, NFR Administration failed to make the proportionate recovery from their bills.

<sup>189</sup> Para 1332 of the Indian Railway code for the Engineering Department – It is not usually convenient to record in measurement books detailed measurement of work done by contractors in connection with the working of ballast and material trains e.g. loading and unloading of ballast, permanent way and other construction materials. In such cases ballast train or material train challans in the Form E-1332 should be prepared in four copies by the subordinate supervising the loading of ballast or material.

<sup>190</sup> The measurement books should be considered as very important record. All the books belonging to a division should be numbered serially and a register of them (form E.1314) should be maintained in the divisional office.

<sup>191</sup> Quantity as per Ballast Challan (-) Actual quantity as per RR = Gross inflated quantity (-) [0.595 (page 23) (x) No. of wagons] = Net inflated quantity (x) Rate of ballast = Excess payment made

<sup>192</sup> Net Loadable weight (MT) (-) Actual weight (MT) as per RR = Under loading (MT) – (A), Freight per MT (Freight paid/charged weight) – (B), Loss due to under loading of ballast = Freight per MT (x) Under loading (MT) = (A) (x) (B), February 2008 to July 2011 = Loss due to under loading of ballast = `40742613.5 – (I) = Annexure B(1), August 2011 to March 2013 = Loss due to under loading of ballast = `59883417.25 – (II) = Annexure B(II) , Therefore, total loss due to under loading of ballast (February 2008 to March 2013) = (I) + (II) = `4,07,42,613.5 + `5,98,83,417.25 = Rs.10,06,26,030.7 or `10.06 crore

When the matter was brought to the notice of the Ministry of Railways (Railway Board) in February 2014, they stated (June 2014) that the Railway Receipts (RRs) are prepared basically for booking of ballast for transportation to sites through railway wagons and are not basic documents of ballast supply contracts. As per provision laid down in the agreement, quantity of ballast is being measured in cum (volumetric) for payment purposes. In regard to loading of ballast, it was stated that the weight of ballast will depend on the percentage of water content in it. In different seasons the weight of same content will be different. Moreover, if rain takes place the weight will go up.

The above replies are not acceptable because as per Para No.65 (2) of the Railways Act, 1989, payment of freight for carriage of ballast is made on the basis of weight of the consignment as recorded in the RR. Further, while replying to Audit in October 2013, NFR Administration had accepted the fact that the actual weight depicted in the RR is based on weighment sheet generated at weighbridge and freight was charged on the basis of chargeable weight as depicted in the RRs. As far as accumulation of rain water is concerned, it is stated that had there been no drainage system in open wagons, it would have an adverse impact on the track as well as hauling cost owing to the heavy weight of the accumulated rain water.

Thus due to contradictory provisions made in the contract agreement, Railways suffered a loss of ` 13.44 crore [excess payment of ` 3.38 crore (+) under recovery of freight of ` 10.06 crore] during the period February 2008 to March 2013.

### **3.6 Northeast Frontier Railway (NFR): Non-disposal of surplus engineering stores**

Inefficient inventory management and non-compliance to prescribed procedure resulted in accumulation/ non-disposal of surplus engineering stores to the tune of ` 12.97 crore

As per Para No. 103 of the Indian Railway Code for the Stores Department, Volume I (1990 Revised Edition), all stocks of stores on hand, whether with the Stores Department or other departments of the Railway, represent funds that are not productive. Para No. 2219 of the Indian Railway code for the Stores Department, Volume II (1993 Edition) states that Dead Surplus comprises items of stores which have not been issued for the past 24 months and which it considers, are not likely to be utilized on any railway within the next two years. Para 2221 further stipulates that a Survey Committee should be formed on each Railway for the purpose of inspecting critically the condition of all the stores.

The gauge conversion of Katihar-Barsoi-Radhikapur (KIR-BOE-RDP, 88.61 Kms.) and Katihar-Jogbani (KIR-JBN, 108.3 Kms.) from Metre Gauge (MG) to Broad Gauge (BG) lines were sanctioned in 2002-03. These projects were completed and opened for traffic in phases between February 2006 and June 2008.

During audit (March 2010 and February 2011) of Construction Organization/ Katihar, it was observed that even after completion of Jogbani-Katihar-Barsoi-

Radhikapur and Katihar-Teznarayanpur sections in 2006 and 2008, a large quantity of material valuing `20.02 crore had been lying idle for the period 2008 to 2010. It was also observed that no stock verification was undertaken by the Stock Verifier<sup>193</sup> since 2007. During tri-partite<sup>194</sup> meeting (March 2012), NFR Administration had accepted that out of stores valuing `20.02 crore, the surplus stores of Katihar-Jogbani project is about `12.65 crore and the balance stores valuing `7.37 crore were handed over to different Railway organizations.

The matter was again brought to the notice of NFR Administration in July 2013, wherein it was pointed out that surplus engineering stores valuing `12.97 crore were lying unused from 2008 to 2013. In reply, NFR Administration stated (February 2014) that many items of stores particularly those manufactured for use of Railways only are purchased in bulk to take advantage of economic pricing. They also stated that the remaining materials are being used and may be used in running projects and Open Line etc.

The above reply is very general and not acceptable. The excess material was procured for projects completed and opened during February 2006 to June 2008 and was not utilized even in Katihar-Manihari and Aluabari-Siliguri Jn gauge conversion projects during 2011-12 i.e. within three to five years of the material becoming surplus. Due to procurement of material in bulk, depreciation of the procured items takes place. Moreover, NFR Administration has also admitted (February 2014) that due to non-availability of proper documents as well as detailed papers as required at the time of stock verification, no thorough stock verification had been undertaken since 2007.

Thus, due to inefficient inventory management and non-observance of codal procedures, surplus engineering stores valuing `12.97 crore during the period 2008 to 2013 have been accumulated by NFR, with no appropriate notification being made.

The matter was brought to the notice of Railway Board in February 2014; their reply has not been received (July 2014).

### **3.7 East Central Railway (ECR): Loss due to poor planning in Signaling works**

Poor planning of signaling works related to Route Relay Interlocking System at Patna Junction of ECR led to delay of 10 years in project completion and avoidable loss of `9.65 crore on account of time and cost overrun

The East Central Railway Administration proposed (March 1999) the work of replacement of signaling gears by Route Relay Interlocking (RRI) system to enable

<sup>193</sup> As per Para 3302 of the Indian Railway code for the Stores Department, Volume-II, 1993, the duties of Stock Verifiers consist mainly in verifying stores and tools and plant as per books.

<sup>194</sup> Tri-partite meeting held (22 March 2012) between Deputy Chief Engineer, Construction (Katihar), Deputy Financial Adviser and Chief Accounts Officer, Construction (New Jalpaiguri) and Audit

handling high volume of train movements, maintain train movement continuity and improve the signaling system at Patna Junction, ECR. The work was sanctioned by Railway Board in October 1999.

Review of records by Audit revealed that the ECR Administration awarded (March 2001/ April 2001) contracts for the RRI system separately for Outdoor and Indoor works at the cost of `1.48 crore and `1.75 crore respectively. The completion period of both the contracts was 12 months. Audit, however, noticed that the Signal Installation Plan (SIP)/ Engineering Plan, required for both the Outdoor and Indoor works, was not prepared at the time of awarding the contracts. This was contrary to the Railway Board's instructions of August 1980, which was reiterated from time to time that contract for a work should be awarded only after the completion and approval of drawings etc. to avoid delay in execution of works.

Audit observed that for the contract of Indoor Work, ECR Administration granted three extensions up to December 2003 on account of delay in finalization of Engineering Plan and preparation of SIP. Finally, the contract was terminated (1st October 2003) due to no progress in the work. The contractor was, however, paid `0.09 crore for the material supplied. Meanwhile, in September 2003, Railway Board changed their policy and directed that the interlocking system provided would use metal to metal plug instead of metal to carbon. Audit further observed that ECR Administration awarded (June 2004) the Indoor work at `3.52 crore to another contractor with the changed specifications, again without the finalization of the SIP. However, the work could not be executed due to non-finalization of Engineering Plans/SIP and ECR Administration granted six extensions up to September 2007.

Similarly, in the case of the Outdoor work (awarded in March 2001), Audit observed that ECR Administration granted six extensions of target completion date up to June 2005 on Railways' Account as Engineering Plans/SIP could not be finalized by that time.

Audit noticed that the Engineering Plan was finalized only in November 2005 and the SIP was approved in March 2006. Scrutiny of records of the construction organization revealed that finalization of Engineering Plans/ SIP was delayed mainly due to modification of yard design a number of times. Thereafter, SIP was forwarded (June 2006) to the contractors i.e. after five years of the award of contracts.

Audit further noticed both the works (Indoor and Outdoor) could not be executed further and contractor had applied (December 2005, May 2006, July 2007) for closure of contracts due to long delay and increase in cost of material. Consequently, ECR Administration had short closed (April 2008) both the contracts on 'as is where is basis' giving the reason that the works were at a stand-still for more than two years. It was observed that ECR Administration made payments of `3.14 crore and `1.24 crore to the contractors for materials supplied in respect of Indoor and Outdoor works respectively.

Subsequently, ECR Administration decided to call fresh composite tender for completing the balance works. Accordingly, the contract for the left over works was awarded (September 2008) as a Special Limited Tender on the ground of urgency at a cost of `7.08 crore (Revised value - `8.41 crore). The date of completion of the contract was July 2009. However, it was seen that the work was completed in March 2012 i.e. after 40 months instead of the scheduled time of 10 months at a cost of `8.41 crore. This delay defeated the purpose of ECR Administration in awarding the contract on a Special Limited Tender<sup>195</sup> on urgency basis.

As such, ECR Administration took almost 10 years to complete the RRI work at Patna Junction with a cost overrun of `9.65<sup>196</sup> crore (about 300 per cent of the original cost of `3.23 crore).

The matter was brought to the notice of ECR Administration in March 2013. In reply, they stated (July 2013) that the work was delayed as the associated Engineering and Electrical works, involving both construction as well as open line, could not be completed. They further added that the delay in execution of work will reflect in the increased life span of the asset for 10 years more as the codal life of installation is taken from the date of commissioning.

The ECR Administration instead of taking steps to improve their system of contract management, have merely accepted the substantial cost overrun due to delay in construction of a crucial signalling work. This also delayed the achievement of objectives of handling high volume of train movement, maintaining train movement continuity and improving the signaling system by nine years as against the scheduled completion period of one year. Besides, justifying the delay with increased life span of the asset shows the casual approach of ECR Administration towards timely planning and completion of project as shelf life of the project is not increased with delay in completion of the work.

The matter was brought to the notice of Railway Board in June 2014; their reply has not been received (July 2014).

### **3.8 South Western: Avoidable payment of excess compensation Railway (SWR) for land acquisition**

Casual approach of SWR Administration in following the land acquisition procedures and delayed payment of compensation to the land owners resulted in extra expenditure of ` 6.92 crore for land acquisition which was not justified

<sup>195</sup> Special Limited Tender for a project is called on emergency basis on approval of General Manager after the Finance concurrence.

<sup>196</sup> Total payment made for the work = `12.88 crore (0.09+3.14+1.24+8.41)

Cost of work as per original plan                      `03.23 crore (1.48+1.75)

Excess expenditure                                      `9.65 crore

Construction Organisation, Bangalore Cantonment (CNBNC) planned (1982) to take up construction of goods platform at Yelahanka Railway station<sup>197</sup> as a part of Bangalore-Guntakal Gauge Conversion project and complete the construction of goods platform latest by January 1983. This necessitated urgent acquisition of land. As such, Railway Administration (SWRA) approached (1982) the Special Land Acquisition Officer, Bangalore (SLAO) who issued notification (June 1983) under Section 4 (1) & 17 (1) of the Land Acquisition Act 1894 for acquiring 5 acres 13.25 gunta<sup>198</sup> of land from 12 different land owners. The notification however was vitiated<sup>199</sup> due to discrepancy in survey numbers and delay in the deposit of initial installment of `0.50 lakh by CNBNC with SLAO. The SLAO issued another notification (July 1986) which also was vitiated as CNBNC Authority could not complete in prescribed period the acquisition proceedings including deposit of 50 per cent cost of land to be acquired (`8.50 lakh). The Railway had however taken the possession of the land in 1982.

Land owners served a legal notice to SWRA (October 2006) for payment of compensation towards their land stated to be in the possession of the Railway. As Railway Administration had not deposited any amount with the SLAO, Divisional Railway manager (Works), Bangalore Division advised the land owners to approach SLAO for payment. As a consequence, the land owners filed a writ petition (June 2007) in the Honourable High Court of Karnataka which directed SLAO to consider within three months the legal notice of the land owners. In view of High Court's directives to pay the compensation within three months, the SLAO advised CNBNC Authority (October 2007) to check the status of land under reference as compensation would be payable to land owners with interest from the date of acquisition of land in case the land was in possession of the Railway. However, CNBNC took no action in this regard. As a result, the Land owners filed another writ petition (October 2008). The Court directed (August 2009) the SLAO and SWRA (i) to have the land surveyed within four weeks and (ii) to pay the compensation within six months if the land had been taken over and utilized.

Despite issue of two reminders by SLAO (July 2009 & November 2009) to SWRA bringing out consequences of contempt proceedings, the SWRA did not act. In the absence of any response of SWRA the Land owners filed (March 2010) a contempt of Court petition. The contempt petition was disposed off by the Honourable High Court of Karnataka (December 2010) directing Railway to deposit the compensation with the SLAO within two months and complete the acquisition process within six months. Railway deposited (August 2011) with the SLAO a sum of `7.09 crore towards compensation. The SLAO issued (July 2012 & March 2013) fresh notifications<sup>200</sup> for the authentication of acquired land. Audit observed that Railway's possession of land had not been legalised as yet (April 2014).

<sup>197</sup> Between existing Meter Gauge (MG) and Narrow Gauge (NG) lines on Hindupur end

<sup>198</sup> Gunta is a unit for measuring area of land. One gunta is 1/40<sup>th</sup> part of an acre i.e. 33 feet x 33 feet= 1089 square feet.

<sup>199</sup> Made invalid and ineffectual

<sup>200</sup> Notification 4(1) in July 2012 and Notification 6(1) in March 2013

In this connection, scrutiny further revealed that in 1982, neither any goods shed existed in Yalahanka nor was any planned for construction in the near future. However, SWRA proposed construction of a goods platform there and had taken physical possession of the land 31 years ago. Despite physical possession of the land, SWRA did not take any action to get the possession legalised by paying compensation to land owners totalling `0.17 crore approximately only. As a result, Railway had to pay avoidable additional payment as compensation amounting to `6.92 crore besides legal consequences.

In their reply, Divisional Authority<sup>201</sup>, Bangalore accepted (April 2013) that land acquisition proceedings were not completed by the SLAO in 1982 due to non-deposit of the initial instalment of `0.50 lakh by the CNBNC Authority. This ultimately resulted in contempt of court and higher payment of compensation. He stated that the acquired land would be used for construction of Parcel siding.

The contention of the SWRA is not acceptable. Scrutiny of records by Audit revealed that SWRA does not have (up to September 2013) any proposal for the construction of a Parcel siding at Yelahanka. Further, though this land has been in the possession of Railway for a considerable period, it has not been utilised so far. In fact, Yelahanka is a wayside station and the acquired land lies between two tracks. Moreover, Railway has around 109.02 acres of vacant land in and around Bangalore out of which 2.49 acres of land is available at Yelahanka itself.

Thus, due to casual approach in following the land acquisition procedures and delay in payment of compensation to the land owners, Railway Administration has incurred extra expenditure of `6.92 crore for land acquisition which was not justified.

The matter was brought to the notice of Railway Board in May 2014; their reply has not been received (July 2014).

### **3.9 North Western: Unproductive expenditure on creation of Railway (NWR) an asset with negligible utilization**

Failure of NWR Administration to assess the viability of a new line project resulted in unproductive expenditure of `133.69 crore on construction of Ajmer-Pushkar new Railway line besides incurring an operating loss of `2.60 crore

As per Para No. 204 of the Indian Railway Financial Code, Volume I (1998), investment on a new line project will be financially viable if the average annual cost of service yields a return of not less than 14 *per cent*.

Ministry of Railways (Railway Board) sanctioned (July 1998) a Reconnaissance Engineering cum Traffic survey for the new Broad Gauge rail line between Ajmer-Pushkar. The cost of the project was initially assessed as `69.87 crore with Internal Rate of Return (IRR) of (-) 3.40 *per cent* and the project was planned to be completed

<sup>201</sup> Senior Divisional Engineer (co-ordination)

in five years. The Detailed Estimate was sanctioned in September 2003 with a cost of ₹88.40 crore. NWR Administration, however, started the work for construction of the new line in December 2005 i.e. after two years of sanction due to delay in carrying out field survey, non-availability of land, non-handing over of site, etc. The work of the new line was completed in December 2010 and sanction of Commissioner of Railway Safety (CRS) was accorded for opening for passenger traffic in May 2011. A total of ₹133.69 crore was incurred by the NWR Administration on the construction of this new line.

Review by Audit (January/ February 2012) revealed the following:

- Contrary to the norms laid down in its Indian Railway Financial Code, Volume-I, the Ministry of Railways approved the new line (Ajmer-Pushkar) project which was financially unviable as the IRR was negative at the time of initial assessment. The project was approved on the ground that the projected rail link would help pilgrims coming from Western India to reach Pushkar directly by the shorter route.
- One pair of passenger trains (Ajmer-Pushkar-Ajmer), plying five days in a week, was introduced via Maldar, Makarwali, Budha Pushkar with effect from 23 January 2012 i.e. after a delay of around eight months from the approval of Commissioner of Railway Safety (CRS) for opening passenger traffic.
- During the period from January 2012 to March 2014, the actual earnings from this passenger trains (Ajmer-Pushkar-Ajmer) was only ₹0.05 crore against the operating expenses of ₹2.65 crore during the same period (January 2012 to March 2014). As such NWR had to incur an operating loss of ₹2.60 crore in operating of this new line.
- The traffic survey (July 1998) of the project had assessed gross earnings from passenger traffic for the 1st, 5th and 10th year of the project as ₹1.39 crore, ₹1.45 crore and ₹1.52 crore respectively. However, the actual earning was only ₹0.05 crore during the period January 2012 to March 2014 i.e. only 3.60 *per cent* of the first year's projected earnings.
- The average occupancy during the period January 2012 to March 2014 remained around six *per cent* only for an investment of ₹133.69 crore.

Audit observed further that the distance by the new rail line between Ajmer and Purshkar is 32.30 Km while by road this distance is only 15 km. Moreover, the time taken by road to cover this distance is between 30 to 40 minutes while by train, it takes 80 minutes and the fare both by train and road is the same. Thus, this new rail link offers a poor connectivity in comparison to road link both in terms of time and distance.

When the matter was brought to the notice of NWR Administration in June 2013, they stated (March 2014) that it is a new section and will take time for patronization. The earning of the section will increase as and when long distance trains are introduced. They further stated that introduction of new services in this section will definitely

provide a fillip to carrying people and creating opportunities for faster development in Pushkar Ghati area.

The above reply is not acceptable. In the instant case, both the factors viz., absence of a long distance train and low frequency of trains were known to NWR Administration. Further, no details/ plan related to augmentation of train services in Pushkar Ghati area was provided by NWR Administration in support of their contention. Moreover, the new rail line has not served the purpose of helping pilgrims coming from Western India to reach Pushkar as the average train occupancy was only around six *per cent* during January 2012 to March 2014.

Thus, the investment of `133.69 crore on construction of the new line (Ajmer-Pushkar) was financially not justifiable. Besides, NWR incurred an operating loss of `2.60 crore during January 2012 to March 2014 in operation of the passenger train (Ajmer-Pushkar-Ajmer) on the new line.

The matter was brought to the notice of Railway Board in February 2014; their reply has not been received (July 2014).