

CHAPTER 3: WORKS AND CONTRACT MANAGEMENT

3.1 Doubling Works

3.1.1 East Coast Railway: *Non-realisation of anticipated savings in a doubling project*

The Railway Administration failed to achieve anticipated savings of Rs.19.15 crore due to continued deployment of banking engine in the sub section of Dhenkanal and Rajathgarh even after completion and commissioning of doubling work of Talcher – Rajathgarh section

Estimate for the doubling work in Talcher – Rajathgarh section sanctioned by the Railway Board provided for restricting the gradient to obviate the need for banking engine. The projected ROR for the doubling work had taken into account savings due to withdrawal of banking engine being deployed on the single line section of Talcher–Rajathgarh.

Audit scrutiny (February 2004), however, revealed that even after doubling and commissioning of the entire Talcher-Rajathgarh section (1995-96), banking engine continues to be deployed in the section between Dhenkanal and Rajathgarh (km.443.8 to km. 423.6) till date (July 2004) for which a banking engine is stationed at Dhenkanal exclusively for this purpose.

In this connection, the following observations are made:

- The savings anticipated due to withdrawal of banking engine could not be achieved. As per the Railway's own estimate savings towards withdrawal of banking engines worked out to Rs.2.76 crore during the year 2000-01. Using the Railway's method of calculation of savings, audit assessed Rs.19.15 crore as unrealised savings during 1996-97 to 2003-04 due to continuous deployment of banking engine.
- In June 2002, productivity test was carried out for the doubling from Hindol Road to Joranda Road (a part of the section). A savings of Rs.1.09 crore was assessed for the Hindol Road to Joranda Road section on account of withdrawal of banking engine. The savings projected was misleading as banking engine was still being used in part of the section (Dhenkanal–Joranda Road) on which productivity test was carried out.

When the matter was taken up (April 2004), the Railway Administration stated (September 2004) that provision of banking engine cannot be considered as irregular since it is an accepted fact that a little overpowering helps in better operation and productivity. Hence cost of utilisation of banking engine cannot be considered as loss. The calculation presuming utilisation of banking engine continuously round the clock for 365 days in a year is also not correct.

The reply is not tenable because:

- For the better operation and productivity, the rising ruling gradient in the loaded direction was to be changed to 1 in 150 during execution of

doubling work in Talchar-Rajathgarh section so as to obviate the need for banking engine. However, desired gradient of 1:150 was not ensured at the time of doubling work because of which deployment of banking engine continued and could be termed as avoidable.

- The loss assessed by Audit was based on the Railway's own calculations of savings in the productivity test.

The matter was brought to the notice of the Railway Board in September 2004 and their reply has not been received (December 2004).

3.1.2 Southern Railway: Loss due to delay in acquisition of land

Failure to pursue the State Government for land under emergency clause of the Land Acquisition Act resulted in non-completion of a doubling project. This led to detention of stock and loss of earning capacity of Rs.2.13 crore besides blocking up of an amount of Rs.5.25 crore deposited for land

Irugur (IGU)–Coimbatore North (CBF)–Coimbatore (CBE) section is on a single line alignment situated between double line sections of Erode - Irugur and Podanur – Shoranur. Most of the goods traffic bound for CBE area is being dealt with on this corridor. As utilisation of the section had crossed saturation level, goods trains at IGU and on the sections were unduly delayed for want of passage. The Railway Administration, therefore, proposed to provide a double line to maintain free flow of traffic. A proposal was included in the 1996-97 Works Programme. Initially, due to paucity of funds, the work was frozen by the Railway Board in January 1998. But pleading non-availability of sufficient passage and space constraints, the small stretch between CBE and CBF alone was taken up (October 2001) for doubling and completed by February 2004.

Audit scrutiny revealed that the stretch between CBF and IGU involved land acquisition. Therefore, a part detailed estimate for the land requirement proposed for Rs.4.11 crore was approved in September 2000. Meanwhile, the Railway Administration requested (August 2000) the State Government to proceed with acquisition of land invoking emergency clause of the Land Acquisition Act. An amount of Rs.5.25 crore was deposited in three installments during July 2002, October 2002 and May 2003 as value of the land and incidental expenses. However, no progress could be made in execution of doubling work between CBF and IGU, except for some earthwork and bridgework. Process of land acquisition is still only in the preliminary stage as of July 2004.

In this connection, the following observations are made:

- As per Section 17 of Land Acquisition Act governing special powers for emergency land acquisition, maximum period of 15 months is necessary for completion of acquisition proceedings. Preliminary notice is yet to be issued. Ineffective pursuance has, thus, led to blocking of funds of Rs.5.25 crore, without achieving the purpose for which it was deposited.
- A test check of the records at CBF, Peelamedu (PLMD) and IGU revealed that during 2001-02 to 2003-04, 4 goods trains on an average per day were

detained for duration of 48 minutes and above resulting in loss of earning capacity of Rs.2.13 crore.

When the matter was taken up (April 2004), the Railway Administration stated (July 2004) that the amount had been deposited as required for acquisition of land under emergency clause. They, however, argued that:

- The process of land acquisition could not progress because of the official procedures/ formalities involved therein.
- Average number of goods trains handled on CBF – IGU are lesser than what has been stated. The average number of goods trains detained per day was only 2.5 (2001-02) to 1.80 (2003-04), which shows only loss to the extent of Rs.0.84 crore.

These arguments are not tenable because:

- The Railway Administration had sought acquisition of land under emergency clause. The formalities, therefore, enumerated by the Railway Administration are not relevant.
- The loss of earning capacity worked out by Audit was based on the Railway records showing actual details of detentions suffered by trains at IGU, PLMD and CBF. In fact the figure adopted by Audit is less than the average number of goods trains per day of six adopted by the Railways while justifying the doubling work.

The matter was brought to the notice of the Railway Board in September 2004 and their reply has not been received (December 2004).

3.1.3 Southern Railway: Non-commissioning of a line after doubling

Poor planning of doubling projects by Railway Administration and avoidable decision to link the commissioning of a completed line to an ongoing project led to idling of assets created at the cost of Rs.6.99 crore

The doubling of Ernakulam – Kayankulam section (via Kottayam) proposed by Southern Railway in November 1996 was not approved by the Railway Board, as the project was not considered financially viable. However, in June 2002, the Railway Board sanctioned doubling of Ernakulam Town (ERN) – Mulanturutti (MNTT) section (17.37 kms.), a part of the Ernakulam–Kayankulam doubling project at an estimated cost of Rs.58.23 crore, without any proposal emanating from Southern Railway.

Separately, in 1999-2000, an adjoining section of 3 kms. between Ernakulam Junction (ERS) – Ernakulam Marshalling Yard (ERM) was approved for doubling. This section was justified for doubling as it was considered a critical section, detention on which would have a cascading effect resulting in detention to trains in the adjoining stations up to Alwaye in Shoranur direction and up to Tripunitura in the Kottayam direction. A saving of Rs.0.38 crore per annum was envisaged as it would result in avoiding detention of three goods trains a day by 30 minutes each.

This line was completed in August 2002 at the cost of Rs.6.99 crore. The Railway Administration, however, decided in January 2003 to postpone its

commissioning and take it up with the commissioning of the ERN – MNTT doubling.

Thus, decision of the Railway Administration, first in shelving Ernakulam – Kayankulam doubling work in November 1996 and then, reviving the doubling of ERN – MNTT section (a portion of shelved Ernakulam – Kayankulam doubling work) and decision to combine the non-interlock working of ERS – ERM with the ERN – MNTT doubling work has resulted in idling of assets created at the cost of Rs.6.99 crore for more than two years and non-achievement of projected savings.

When the matter was taken up (March 2004), the Railway Administration agreed (June 2004) that doubling of ERN - MNTT will take longer time for completion and the work of providing signaling in the dedicated line between ERS – ERM will be completed by early part of 2004-05. They also contended that it was their intention to take up the work simultaneously to avoid repetition of non-interlock working for a period of about 20 days in each occasion, which will create inconvenience to the travelling public.

The above contention is not tenable. The work of doubling on the ERN – MNTT section was sanctioned in June 2002, when work on the ERS – ERM line was almost completed and was ready for non-interlock working in August 2002. As on date (July 2004), the work of ERN – MNTT has physically progressed only 40 per cent. Land required for doubling has not yet been handed over by the State Government. As such, it may possibly take a longer time than envisaged by the Railway Administration to complete the doubling work between ERN – MNTT and synchronise the commissioning of the ERS – ERM line. Till then, the assets created in completing the doubling of ERS – ERM line at the cost of Rs.6.99 crore would remain idle. In the meanwhile, as against the 44 movements of traffic indicated in the justification for ERS – ERM doubling work, the present movement has increased to 56 in this section and the detention to goods trains has increased to four trains (both ways) with an average detention of two hours per goods train per day.

The matter was brought to the notice of the Railway Board in August 2004 and their reply has not been received (December 2004).

3.1.4 Southern Railway: Delay in completion of a project

Due to low priority accorded to a doubling work with high ROR (19.83 per cent) and freezing the project mid-way, the Railway Administration incurred loss of earning of Rs.1.59 crore due to detention of wagons
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Chennai – Bangalore, a busy passenger oriented section is laid on double line, except for a stretch of 81.21 kms. between Whitefield (WFD) and Kuppam (KPN), which has a line capacity of more than 100 per cent that is increasing over the years. With a view to easing heavy detention and introducing additional goods services, doubling of this section was included in the Works Programme 1992-93 at an estimated cost of Rs.108.01 crore, with an ROR of 19.83 per cent. After completion of the project, introduction of POL traffic of 75 wagons per day and removal of bottleneck in the section by reducing

detention to wagons and saving of Rs.1.23 crore was envisaged. The project was proposed for completion in March 1999.

As on 31 March 1999 (the target date for completion of project), fund allotment was only Rs.56.82 crore. By April 1999, the section could, therefore, be commissioned only for the length of 47 kms. from WFD to Bangarapet (BWT). The Railway Board froze (September 1999) the project stating that there were only 7.5 goods trains per day on the section (almost all of them four-wheelers) and that Thermal Power Plant at Chamalpura was still a distant possibility and may not materialise at all.

The Railway Administration made a strong plea to defreeze the project as leaving out a stretch of 35 kms. between BWT and KPN on single line would create an artificial bottleneck and capacity utilization would reach a high of 162 per cent. Taking into consideration these facts, the Railway Board revived the project in October 2000. Doubling between BWT and Bisanatham (BSM) - 20 kms. has been completed and commissioned in February 2004. The doubling on the remaining stretch between BSM – KPN (15 kms.) is yet to be completed (September 2004).

Audit scrutiny of the project revealed that fund allotment was meagre and not commensurate with the time frame set up for the completion of the project. Further a number of projects with ROR much less than this project, some even with negative ROR were taken up after 1992-93 and completed. But doubling of WFD – KPN, with a projected ROR of 19.83 per cent has not been completed, 12 years after its commencement. This resulted in loss of earning of Rs.1.59 crore during 2000-01 to 2003-04, due to detention of wagons for want of path, based on the test check made by Audit.

The matter was brought to the notice of the Railway Administration and Railway Board in May 2004 and August 2004 respectively and their reply has not been received (December 2004).

3.2 Gauge Conversion (GC) Works

3.2.1 East Central Railway: Wasteful expenditure on GC

Use of unserviceable materials in the work of GC from MG to BG necessitated CTR (24.14 kms.) and TRR (7.42 kms.) within a couple of years of GC and consequential wasteful expenditure of Rs.2.72 crore

GC of 37.42 kms. MG track to BG in Samastipur–Darbhanga section with second hand materials was sanctioned in September 1993. The work was completed with second hand 90 R rails and CST 9 sleepers and opened for traffic (February 1996) with a maximum speed of 50 kmph. Later, speed limit was raised to 75 kmph. in September 1996 and to 100 kmph in December 1996. With the increase of speed limit (viz. 100 kmph), bad running reports started coming in and casual renewal works were required to be carried out at some critical locations. However, the same could not arrest the deteriorating condition of the track. Finally, the Railway Board had to sanction a CTR –

Primary for 24.14 kms. during 1999-2000 and a Through Rail Renewal (TRR) of 7.42 kms in 2001-02.

In this connection, the following comments arise:

- As per para 320 of Permanent Way Manual, released rails should be graded according to their weight and condition into groups suitable for re-use in running lines, non-running lines etc. Similarly, sleepers should be sorted into various grades suitable for re-use in the track or as unserviceable materials not fit for use in track works.

Audit scrutiny revealed that the concerned Assistant Engineer failed to properly classify released materials resulting in materials unfit for use for running lines being declared fit. Further, the construction organisation went ahead and used the materials when their poor condition was known to them.

- As per para 246 of the Manual, CST9 sleepers, are not recommended for use in high speed BG routes. Having laid CST9 sleepers in violation of existing instructions, speed limit for traffic on the converted BG track was enhanced to 100 kmph. Further, age and condition of rails used for this track were known to the construction organisation. Thus, increase in speed was not in the Railways' safety interest and only aggravated the poor condition of track and precipitating CTR and TRR works.
- Improper use of very old and unserviceable released materials not only defied manual provisions and jeopardised safety of passengers, but also resulted in undertaking CTR works and avoidable expenditure of Rs.2.23 crore on items like carriage and handling charges on released materials, tools and plants, signalling works, labour etc., which were done twice. Similarly, the Railway incurred an avoidable expenditure of Rs.0.49 crore on TRR of a stretch of 7.42 kms. Besides, expenditure on casual renewal works to keep trains in operation would be extra.

The matter was brought to the notice of the Railway Administration and the Railway Board in April 2004 and September 2004 respectively and the reply has not been received (December 2004).

3.2.2 South Central Railway: Provision of excess ballast in a GC project

Provision of ballast in excess of the requirement of the category of route as per existing yardsticks resulted in avoidable expenditure of Rs.2.33 crore
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The quantity of ballast required per metre of running track should be provided as per the provisions of Indian Railway Permanent Way Manual (IRPWM). Minimum depth of ballast cushion to be provided for Group-D and Group-E routes of BG track, not open to BOXN wagons, is 250 mm. when Long Welded Rails (LWR) panels are used and 200 mm. when SWR panels are used.

The Railway Board sanctioned (August 1998) GC of main line Secunderabad – Nizamabad – Mudkhed (SC-NZB-MUE) – 249 kms. and branch line

Jankampet – Bodhan (JKM-BDHN) – 20 kms. at an estimated cost of Rs.276.28 crore. Of this, except for stretches of Bolarum - Secunderabad (14 kms.) and Manoharabad – Kamareddi – NZB (120 kms.), remaining stretches were converted and opened for traffic by December 2003. Maximum permissible speed notified for passenger trains in the converted sections is ranging from 30 kmph. to 80 kmph. Projected traffic after conversion was 0.94 gross million tonnes (GMT) and the two sections (SC-NZB-MUE and JKM-BDHN) would qualify as Group D and Group E routes respectively.

Review by Audit revealed that in the sanctioned detailed estimate, the Railway Administration provided for ballast cushion of 300 mm. for the entire stretch of the main line (249 kms.) and 250 mm. for the branch line (20 kms.). Going by this, excluding 400 cum. available on the existing MG alignment, total quantity of ballast required for the entire project works out to 5,55,521 cum., whereas quantity of ballast required as per provisions of IRPWM (250 mm. ballast cushion for main line and 200 mm. for branch line) works out to 5,00,151 cum. Thus, provision of ballast was in excess of requirement by 55,370 cum., involving avoidable expenditure of Rs.2.33 crore.

When the matter was taken up (May 2004), the Railway Administration, in their reply (5 July 2004) and in a meeting held on 13 July 2004 agreed that the route falls under Group D category for which ballast provision is required to be made only to the extent of 250 mm. They, however, argued that:

- With the completion of these GC projects, alternative route will be available for carrying coal from mines to Parli powerhouse and also for movement of heavy haul locomotives with 58 BOXN heavy mineral loads. It is advisable to provide for ballast cushion, especially where BOXN wagons are to be hauled.
- BCN rakes, which are having similar bogies as BOXN have already started running on this route for food grain loading at NZB.

These arguments are not tenable because:

- This route was projected as an alternative for hauling heavy loads in BOXN wagons only in April 2004, when conversion of 115 kms. (out of 249 kms.) had already been completed with 52 kg rails. Replacement of 52 kg rails is not on the anvil and hence hauling of BOXN wagons is not likely to take place. Moreover, diverting the traffic from the existing route (SC to Parli), which involves only 340 kms. to the route being discussed above which is 396 kms. is also unlikely as it would mean a recurring extra expenditure of Rs.2.88 crore per annum on haulage of loads for an additional distance of 56 kms. The reasons afforded are not the ones projected in the original justification and are not valid grounds even now.
- BCN and BOXN wagons cannot be treated at par as BOXN wagons are permitted to be carried with 58 plus two tonnes and they tend to be overloaded even above the tolerance as the wagons are open wagons and commodities are loaded in loose condition.

The matter was brought to the notice of the Railway Board in September 2004 and their reply has not been received (December 2004).

3.2.3 North Eastern Railway: Injudicious use of SWRs

Decision to convert Gorakhpur-Valmikinagar MG section into BG section with SWRs and thereafter failure to crop rails before welding resulted in avoidable expenditure of Rs.1.72 crore

GC of Gorakhpur - Valmikinagar MG section into BG was done with SWRs and ordinary fish plates were provided in the track. The line was opened in April 1999. In October 1999 (within six months of opening of section with SWRs), conversion of the section into LWRs was taken up. While converting the section into LWRs, the ordinary fish plates were removed and complete running track joints were welded at a cost of Rs.0.55 crore.

In July 2002, at the time of taking over the section, the Open Line Organisation pointed out that SWRs section was converted into LWRs section without cropping the ends of SWRs with fish bolt holes at their ends. These fish bolt holes would need to be plugged with joggled fish plates and clamps.

The Construction Organisation advised (December 2002) the Open Line Organisation to procure requisite number of joggled fish plates and clamps for plugging fish bolt holes and pass on the debit. The Open Line Organisation procured 7,820 joggled fish plates and 15,640 clamps at a cost of Rs.1.17 crore and raised a debit against Construction Organisation (May 2003).

In this connection, the following comments arise:

- Conversion of the MG section into BG with SWRs initially instead of LWRs was injudicious. It gave rise to the inevitable necessity of converting the section into LWRs shortly after its opening with SWRs. This resulted in avoidable expenditure of Rs.0.55 crore.
- According to Para 4.4.3 of Way and Works Manual and the Railway Board's clarificatory instructions of March 2001, welding of any rails which have fish bolt holes at their ends should not be done without cropping of such rail ends. The Construction Organisation violated these instructions and converted the section into LWRs by welding without cropping the ends of the SWRs which had fish bolt holes at their ends.
- The Open Line Organisation and Construction Organisation decided between themselves to plug these fish bolt holes with joggled fish plates and clamps procured at a cost of Rs.1.17 crore. When instructions regarding the necessity to crop rails having fish bolt holes were unambiguous, the decision to plug the holes with joggled fish plates and clamps was another violation to cover the earlier mistake.
- Joggled fish plates and clamps procured to plug holes have not yet been used and the line is being used with rails having un-covered fish bolt holes. Operating the section in this manner is a serious compromise to Railway safety.

When the matter was taken up (April 2004), the Railway Administration (in their reply to the para and during discussion) stated (July 2004) that:

- Ballast required for LWRs section could not be obtained due to limited output of ballast at Tanakpur Quarry and closure of quarries in Mirzapur

range and Nepal area. Due to scarcity in supply of ballast and urgency of opening, completion of the section with SWRs became unavoidable.

- If joggled fish plates and clamps are used to plug fish bolt holes, on replacement of rails in future, released joggled fish plates and clamps could be reused elsewhere as wear and tear of these items is almost negligible.

The reply is not tenable because:

- The work of GC of Gorakhpur – Valmikinagar was sanctioned in year 1995-96 and the section was opened for traffic in April 1999. There was sufficient time with the Railway Administration to plan and procure ballast from different agencies. If it was difficult to procure ballast from Tanakpur, it could have been procured from Lalkuan, a nearby quarry where there was adequate capacity for production of ballast. Quarries in Mirzapur range and in Nepal areas were not regular sources of ballast.
- The section was opened with new 52 kg. rails. The question of replacement of rails would not arise before a period of about 60 years. The rails as well fish plates (if used) would deteriorate almost simultaneously. The released joggled fish plates and clamps would have, therefore, completed their codal life and would not be fit for reuse.

The matter was brought to the notice of the Railway Board in September 2004 and their reply has not been received (December 2004).

3.2.4 South East Central: Unproductive expenditure on Railway creation of block station Chichpalli

Conversion of Chichpalli, an un-economical passenger halt, in the erstwhile NG section to a block station during execution of GC work led to unproductive expenditure of Rs.1.02 crore
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A Preliminary Engineering-cum-Traffic Survey alongwith detailed estimate for the conversion of Narrow Gauge (NG) section between Gondia – Chandafort to BG was sent (July 1992) to the Railway Board. It was proposed that after conversion, existing Chandafort station on NG would be closed and in lieu Chichpalli (CIP) a passenger halt (PH)¹ would be converted to a block station² to connect Babupet station on Central Railway.

Later in November 1993, the Railway Administration made a provision for a BG block station at Chandafort through a MM for smooth interchange of traffic, which was sanctioned in June 1996. The original proposal for conversion of the CIP PH to a block station was, however, retained despite inclusion of block station at Chandafort. All the infrastructure required for conversion of CIP to a block station were also thus created. The project was completed in three phases during 1994 to 1999. The BG Section from

¹ PH is a station where no operating staff is posted as the same is situated between two block stations. Also no commercial staff is posted and passenger tickets are booked through the commission agent employed by the Commercial Department.

² At block stations, drivers must obtain an authority to proceed under the system of working to enter the block sections with his train.

Nagbhir to Chandafort (third phase) was opened to traffic on 13 January 1999. CIP was operated as a PH and closed down for passenger traffic with effect from 1 December 2002 due to poor sale of tickets.

In this connection, following observations are made:

- CE (GC) went ahead with creation of infrastructure at CIP for converting it into a block station, despite decision to convert Chandafort into a block station. Additional infrastructure created at CIP PH for a block station at a cost of Rs.1.02 crore became redundant when it was decided to open it as a PH (BG) and not as a block station. Annual liability of paying dividend to general revenues would be extra.
- Even when the NG route was operational, CIP was an un-economical PH. Continuance of the same as PH after BG conversion was not warranted and it had to be closed down after a period of about 4 years.

When the matter was taken up (September 2004), the Railway Board accepted (November 2004) all the audit observations as factually correct, including that of creation of assets at CIP as unproductive. They further stated that assets already created will be used after the traffic goes up in this section.

Thus, poor planning by the Railway Administration in conversion of un-economical PH to a BG block station during execution of GC work led to creation of idle assets worth Rs.1.02 crore and running of financial unviable PH at CIP for about 4 years.

3.3 Other Works

3.3.1 Northeast Frontier Railway: *Non- realisation of cost of deposit works*

Failure to obtain additional allotment of funds before incurring expenditure on deposit works in excess of deposits made by parties resulted in non-recovery of Rs.7.54 crore, besides interest of Rs.4.12 crore on the outstanding dues

Rules provide that Executive Engineer in his monthly review of the register of Deposit Works should see that no expenditure in excess of either the sanctioned estimate or the sanctioned allotment of the deposit made is incurred on any work. Further expenditure on the works should be restricted to the utmost extent possible till the acceptance of the party is obtained and additional funds are allotted or deposited. If in any case the amounts due to the Railway have not been realised within a month from the date on which the demand for payment is made, the Railway Administration is entitled to recover interest at the specified rate on such sums.

Audit scrutiny of records revealed that in gross disregard of codal provisions, in respect of 11 public sector sidings, the Railway Administration incurred expenditure much in excess of amount deposited by the parties. Though the parties were requested to make the payment, the Railway Administration continued to carry out works, without getting adequate funds deposited by them. An amount of Rs.9.52 crore over and above deposits available was incurred.

When the matter was taken up (June 1999), the Railway Administration contended (July 2000) that these sidings were Government owned. Attempts were being made to get the outstanding amount. There seemed to be no risk of not recovering the amount.

Audit review (May 2004), however, revealed that no serious attempt had been made to recover the dues from the siding owners and as of March 2004, an amount of Rs.7.54 crore is still outstanding. As the siding owners had not deposited the amounts due, the Railway Administration was entitled, under existing rules, to recover an amount of Rs.4.12 crore also as interest on the outstanding dues.

The matter was brought to the notice of the Railway Administration and the Railway Board in May 2004 and September 2004 respectively and their reply has not been received (December 2004).

3.3.2 North Eastern Railway: Non-provisioning of departmental charges in a deposit work

Non-provision of departmental charges in the estimates in respect of deposit works resulted in loss of Rs.11.10 crore

River Gandak has a long history of changing its course from year to year. A rail bridge with an MG rail link connecting Chhitauni (UP) and Bagaha (Bihar) was out flanked in 1925 by the floods and could not be restored. A Gandak High Level Committee (GHLC) appointed by the then Irrigation Minister recommended (1973) to protect the Guide Bunds of the abandoned rail-bridge, which was already there to help in controlling floods.

In 1989, in a high level meeting attended by Central Ministers of Agriculture and Water Resources and Chief Ministers of UP and Bihar, it was decided to start the work as per sharing basis of 5:3:2 among Ministry of Water Resources, State Governments of UP and Bihar as decided by the Planning Commission in 1980. In January 1990, the demand for restoration of Chhitauni – Bagaha link was made by public and later the Governments of Uttar Pradesh and Bihar requested for conversion of the rail bridge into a rail-cum-road bridge, both of which were accepted. The flood control measures were to be carried out by the Railways as a deposit work.

Rules provide that when a deposit work is undertaken by the Railways for outside parties including other Railways, Government Departments, Public Bodies and employee(s) of the Railways, departmental charges at the rate of 12.5 per cent on the total outlay of the work should be levied to cover the cost of tools and plants and establishment supervision.

Audit scrutiny (August 2003) revealed that the project (Chhitauni-Bagaha link restoration) was commissioned in June 2002 at an outlay of Rs.182.42 crore. The cost borne by the Central Government (Rs.29.63 crore) and State Governments of UP (Rs.32.53 crore) and Bihar (Rs.26.60 crore) was Rs.88.76 crore. The departmental charges leviable as per codal provision, which works out to Rs.11.10 crore, were neither levied nor recovered.

When the matter was brought to the notice of Railway Administration (March 2004) and Railway Board (October 2004) they stated in June and November 2004 respectively that the work of restoration of Chhitauni – Bagaha rail link was carried out by Railways as there was persistent demand from the public and not as flood control measures. It has also been stated that since construction of guide bunds was an essential technical requirement for the protection of the bridge, the entire expenditure was to be borne by the Railway. However, on persuasion of the Central Government, the Ministry of Water Resources and State Governments of Uttar Pradesh and Bihar had agreed to bear the cost of guide bunds. Therefore, the departmental charges were not recoverable.

The reply is not tenable because apart from strengthening the bridge, the construction of guide bunds was required to control floods which were to benefit the State Governments of Uttar Pradesh and Bihar. Since these works were undertaken on 'deposit terms', the Railway was required to levy departmental charges as per provisions of the Engineering Code to cover the cost of staff engaged in supervision of these works.

3.3.3 Western Railway: Augmentation of homing capacity of Valsad Electric Loco Shed

Non-utilisation of the newly created facilities at Valsad Electric Loco Shed rendered the expenditure of Rs.3.98 crore thereon unproductive besides non-realisation of projected savings of Rs.6.40 crore per annum

The Railway Board approved (October 1995) the augmentation of homing capacity of Valsad electric loco shed from existing 75 locomotives to 100 locomotives. The work included in the works programme of 1996-97 at a total cost of Rs.8.30 crore was justified on the ground that it will provide Intermediate Over Haul (IOH) and Annual Over Haul (AOH) to additional nine and 16 locomotives respectively in a year. A saving of Rs.6.40 crore per annum was projected on this account alone. Provision was also made for Pit Wheel Lathe for wheel turning as at that time locomotives having defective wheels were sent to Vadodara. The work was completed in March 2001 at a cost of Rs.8.46 crore.

Audit scrutiny of records of Valsad electric loco shed revealed that as against the augmented homing capacity of 100 locomotives, the actual holding remained static at 72 locomotives.

When the matter was taken up with Railway Administration (May 2004) and Railway Board (September 2004) they stated in August 2004 and December 2004 respectively that besides realisation of savings of Rs.1.43 crore per annum on account of utilisation of Pit Wheel Lathe and rewinding shop, ten out of twenty new locos received have been homed at Valsad. Remaining ten have been homed at Vadodara due to shortage of men and material at Valsad and will be shifted soon. It was also stated that the work load of AC/ DC locos is 1.3 times more than that of normal locomotives and as such the actual locomotives maintained at Valsad works out to 94.

The reply is not tenable because the stated savings of Rs.1.43 crore per annum realised from creation of Pit Wheel Lathe and rewinding shop constitute only 22.34 per cent of the projected savings of Rs.6.40 crore per annum. The fact that work load of AC/ DC locos is 1.3 times more than normal locomotives is not relevant as the additional facilities were created to home 25 AC/ DC locomotives as against this only ten have been sent that too after three years of creating the facilities. Further, the shortage of staff and material for utilisation of the additional capacity indicate improper investment and poor planning.

3.3.4 North Western Railway: Delay in providing direct connection to a siding

Failure to execute work as per approved plan coupled with delay in execution of the work resulted in avoidable detention to rakes leading to loss of earning capacity of Rs.8.45 crore
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The Railway Board issued instructions (December 1986) for providing new sidings with the facility of direct entry and exit to and from the sidings so as to eliminate the handling of trains at the serving station or in the exchange yard.

In February 1991, Rajasthan State Electricity Board (RSEB) requested Railways to provide a siding for their Thermal Power Station (TPS) which was under construction near Birdhwal Station on Bikaner Division of Northern Railway (now North Western Railway). As the TPS was likely to be commissioned in phases from March 1996, RSEB had requested to provide facilities for direct entry and exit also in a phased manner. The work was accordingly planned and executed by the Railway and the siding was opened for goods traffic in October 1995.

Audit scrutiny of records revealed that all the rakes meant for TPS siding, Birdhwal were suffering detention at the serving station as the siding was not connected with the Main line No.2 as per approved plan. Instead, a temporary connection was made from loop line No.4. This arrangement required rakes meant for TPS siding to be first taken to Main line No.3 and then moved to loop Line No.4 for onward movement to TPS siding, causing avoidable detention to wagons and use of power for an extra period of approximately one hour in each case. Further scrutiny revealed that temporary connection was made due to the Railway Administration's indecisiveness for over a period of eight years regarding type of signaling arrangements to be made. Loss of earning capacity of wagons and avoidable extra expenditure on use of power during 2000-01 to 2002-03 has been assessed at Rs.8.45 crore.

When the matter was taken up (April 2004), the Railway Administration admitted in July 2004 that extra time of 30 to 45 minutes per rake was taken for placement of rakes in the siding on account of non-provision of direct connection for want of approval of Signaling plan (SIP) and sanction of Commissioner of Railway Safety (CRS). From the reply it is clear that indecisiveness of the Railway Administration in approval of SIP led to avoidable detention and extra time in placement of wagons in the siding. Detailed analysis of actual period of detention revealed that the average time

indicated by Railway Administration is an underestimation and the figures adopted by Audit more realistic.

The matter was brought to the notice of the Railway Board in September 2004 and their reply has not been received (December 2004).

3.3.5 South Central: Non-recovery of seigniorage fee from Railway contractors

Non-incorporation of a suitable clause in agreements led to non-recovery of seigniorage fees of Rs.4.05 crore from contractors besides additional liabilities of Rs.2.52 crore in respect of balance quantity yet to be supplied
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In terms of existing rules of Andhra Pradesh Minor Mineral Concession Rules, 1966 (APMMCR), when land is leased for mining purposes, seigniorage fee or land rent, whichever is higher, is to be charged on the minerals consumed from the land at the specified rate. For Moorum, Gravel and ordinary earth, the rate of seigniorage fee is Rs.13 per cum. Recovery of this fee is the statutory liability of the Railway Administration.

South Central Railway Administration issued instructions (January 2000) to incorporate a suitable clause in all future agreements with contractors for recovering seigniorage charges from their bills and remitting the same to Government of Andhra Pradesh.

Review of 115 agreements entered into by the Railway (100 by Construction Organisation and 15 by Open Line Organisation) with contractors supplying earth and moorum after August 2000 revealed the following position:

- In 97 agreements, no suitable clause for recovery of seigniorage fee was incorporated and hence no recoveries were made.
- The Railway Administration failed to recover the amount, even where the clause was incorporated.

This resulted in non-recovery of seigniorage fee of Rs.4.05 crore on earth and moorum supplied till December 2003 and additional liability of Rs.2.52 crore in respect of the balance quantity to be supplied by the contractors as per the agreements in these 115 contracts.

When the matter was taken up (March 2004), the Railway Administration agreed (July 2004) that though seigniorage fee is leviable on ordinary earth, field units did not have any instructions/ guidelines for incorporating a clause thereto in the agreement. They also stated that the Department had proposed to incorporate a suitable clause in future tenders for recovery of this fee as per rates advised by Government of Andhra Pradesh from time to time. As far as old agreements are concerned, as one of the clauses stated that rates should be inclusive of all taxes/ duties payable to the State Government, seigniorage fee was proposed to be recovered under this clause.

Review of the agreements, however, revealed that at least in respect of 18 agreements, which have either been terminated (8 agreements) or where final bills have been passed and SDs released (10 agreements), recovery of seigniorage fee to the extent of Rs.1.08 crore is remote.

The matter was brought to the notice of the Railway Board in August 2004. The Railway Administration, with the approval of the Railway Board reiterated, in November 2004, their earlier stance, which is not tenable.

3.3.6 East Coast Railway: Awarding work based on wrong design

Awarding of contracts for earthwork based on wrong design led to re-tendering of contracts involving extra expenditure of Rs.4.48 crore

To enhance the factor of safety and maintenance without extra expenditure, RDSO issued guidelines (September 1991) stating that sandwich type of construction for laying of permanent way should be preferred for all the cohesive banks of height more than 3 m and a layer of coarse sand 200 to 300 mm thick should be provided at 2 to 3 m height interval.

Five contracts were awarded (8/ 9 March 2001) for execution of earthwork in Tomka – Banspani rail link project (between Km. 147.00 and Km. 151.00) based on RDSO's guidelines of 1987. Review of records in audit revealed that tenders were called and finalised for conventional type of earth work but Chief Administrative Officer (Construction), Bhubaneswar directed in April 2001 that sandwich type of construction in the embankment, based on suggestion made by Sr. Executive Director, RDSO during his inspection on 29/ 31 January 2001 of Daitari – Keonjhar – Banspani (DKB) Project, be adopted. Accordingly, the earthwork commenced with sandwich type of construction. Since sandwich type of construction was different from that of conventional type of earthwork for which contracts were awarded, the contractors demanded extra rates. The contractors were asked (September 2001) to submit non-schedule (NS) rates for the sandwich type of construction. No consensus regarding the rate could, however, be arrived at. Ultimately all the contracts were closed under Clause 61.1 of General Condition of Contracts without liability on either side.

Thereafter, the work was re-tendered and contracts were awarded afresh. It was noticed that except for extra efforts required for spreading sand in 1 in 20 lateral slope in filling, the items were the same in both the tenders. The rates quoted and finally accepted in the re-tendered work were, however, unreasonably higher.

Railway Administration's failure to incorporate sandwich type formation in the initial tender led to the termination of contracts, re-tendering and avoidable extra expenditure of Rs.4.48 crore.

When the matter was taken up (April 2004), the Railway Administration stated (August 2004) that:

- sandwich type of construction was to be adopted for banks with cohesive soil of height more than 3 m. The existing contracts were, therefore, closed and fresh contracts were awarded with new specifications; and
- the extra expenditure by comparing rates obtained in the previous tender for conventional type of earthwork with rates obtained in the new tender

for sandwich type of earthwork is not correct. As a result, extra expenditure as contended by the Audit is not involved.

The reply is not tenable because

- RDSO's guidelines were issued way back in 1991. As per para 1201 of Indian Railway Works Manual (Chapter XII) RDSO's publications should be kept with Dy. CE/ Divisional Engineer for reference and compliance. The tenders should have been initiated for sandwich type of earthwork in the first place. They failed to take note of the RDSO's instructions even after the same were brought to their notice in January 2001 by the Sr. Executive Director, RDSO which was before the five contracts were awarded. Thus, the whole exercise of re-tendering was clearly avoidable.
- While deliberating on new rates before re-tendering of the work, the TC had held that technically no extra amount was payable to the contractors for earthwork with changed methodology except an extra rate of Rs.9 per cum to take care of extra effort for spreading sand in 1 in 20 lateral slope in filling. All the items included in the new tender were the same as in the old tender. Since the contractors had agreed to carry out the work at 45 to 54 per cent below the basic rate against these items it is reasonable to expect that had the tender been called for based on sandwich type earthwork in the first place, similar rates with some additional amount only for the extra effort of spreading sand would have been quoted. The audit methodology of applying rates offered at the time the tender was first awarded to assess extra expenditure is, therefore, in order.

The matter was brought to the notice of the Railway Board in October 2004 and their reply has not been received (December 2004).

3.3.7 Central Railway: Defective construction of a siding

Defective construction of a siding led to its non-utilisation and consequential loss of earning capacity of Rs.2.98 crore due to detention to wagons besides rendering the expenditure of Rs.0.89 crore on its construction unproductive

The work of yard re-modeling of Kurduwadi inclusive of construction of a jumbo rake siding was completed in February 2001 as a MM to the work of GC of Kurduwadi-Miraj section.

Audit scrutiny of records of Kurduwadi station revealed that construction of jumbo rake siding and inclusion thereof in the MM was to facilitate handling of rake load traffic. But goods traffic is still being handled in the old goods siding instead of newly constructed jumbo rake siding because circulating area of ten metres provided in the platform was not adequate for loading and unloading. Since the old siding is not having facilities to handle a jumbo rake, detention to wagons is taking place. Further, as against projected traffic of fifteen rakes per month, the average receipt was about ten rakes per month in 2001 and that has come down to three to four rakes per month since August 2002.

In this connection, following audit comments arise:

- The work was taken up without waiting for the MM to be sanctioned. Further, the traffic far from reaching the projected figures reduced drastically. The declining trend of traffic indicates that requirement of Jumbo rake siding was not assessed correctly and expenditure thereon was not fully justified.
- Having incurred the expenditure, non-provision of platform with 15 metres wide circulating area resulted in non-utilisation of Jumbo rake siding and rendered entire investment of Rs.0.89 crore as unproductive.
- Handling of rakes in the old goods line even after construction of Jumbo rake siding, has resulted in allowing of extra time of 17,128 days on account of free time allowance and for performing additional placement during the period February 2001 to March 2004, resulting in loss of earning capacity of Rs.2.98 crore.

When the matter was taken up (April 2004), the Railway Administration stated (June 2004) that the ten metres wide platform was constructed due to non-availability of land. They further contended that loss worked out by audit is notional because the siding is being used for stabling/ halting of goods trains.

The reply is not tenable. The jumbo rake siding was constructed for handling rake load traffic. The same could not be used as envisaged for want of adequate width of the platform because of which the goods traffic is being handled in the old siding causing avoidable detention by way of extra time for placement and additional free time given for multiple placements.

The matter was brought to the notice of the Railway Board in September 2004 and their reply has not been received (December 2004).

3.3.8 East Coast Railway: Improper planning in execution of a project

Defective planning in execution of work of optical fibre cable (OFC) and radio trunking system (RTS) in the section of Raipur – Rayagada led to provision of two communication systems and avoidable expenditure of Rs.3.54 crore

The Railway Board sanctioned (July 2000) a detailed estimate of Rs.21.16 crore for provision of OFC and RTS for eliminating frequent interruptions in block working and control communications in Raipur – Rayagada section of Sambalpur division against the work included in the Pink Book of 1998-1999 (Item No. 362).

Review of records revealed that the work of OFC system in the sections of Raipur-Nawapada Road and Nawapada-Rayagada was awarded (June 1999) to M/s. Supreme Tele Ltd., Kolkata and M/s.Kalindee, Jaipur respectively with date of completion as June 2000. Work for provision of RTS in the entire section of Raipur-Rayagada was awarded (June 2000) to M/s. Simoco Telecommunications Ltd. (value of Rs.3.54 crore), with date of completion as 8 March 2001.

While the work was in progress, during his inspection, the GM, South Eastern Railway, ³expressed (September 2000) the view that RTS was poorly planned and designed and that it would not serve any purpose. Referring to this view the Chief Signal and Telecommunication Engineer of South Eastern Railway approved (October 2001) a proposal to switch over from RTS to quad cable for emergency communications and block working system which would also bring uniformity of emergency communications on the entire Raipur-Rayagada - Vizianagram line. He also ordered for sending the proposal to the Railway Board for sanction of MM. Simultaneous orders were also passed for floating of tender for laying quad cables in the section.

During this period, however, work of RTS continued although at a very slow pace. Therefore, in December 2001, a seven days notice was issued to the contractor to make good the lapses on his part. But, on a representation made by the contractor directly to the Railway Board, the Railway Board directed (December 2001) the Zonal Railway Administration to revive the contract at the same cost and price up to 31 October 2002. The Railway Administration, however, went further and extended the contract up to March 2003 with a clause that liquidated damages will be levied beyond the period October 2002. At the time of issuing the extension order the physical progress was only two per cent and value of work Rs.0.06 crore.

In August 2002 the Railway Administration appreciating the limitation of RTS, issued general guidelines for laying of quad cables instead of RTS. Following above guidelines, a contract was awarded to M/s. Annapurna Construction for laying of OFC, quad cable and other allied works in entire Sambalpur Division, which also included the Raipur-Rayagada section. Thus, two parallel systems of communication were undertaken in the Raipur - Rayagada section. Quad cable work for this section was completed by February 2004 and work of RTS is still in progress. An expenditure of Rs.2.18 crore has been incurred (January 2004) on the work of RTS and a further amount of Rs.1.36 crore is expected to be expended for its completion.

In this connection, the following observations are made:

- Even after the GM observed (September 2000) that the RTS would not serve any purpose, the Railway Administration failed to terminate the work of RTS which had not even commenced. Again, even after approval of a proposal in October 2001 to switch over from RTS to quad cable and taking of decision to initiate action to obtain sanction for MM from the Railway Board and float tenders for the same, Railway Administration did not terminate the work. Instead, two months later they issued a seven days notice for poor progress.
- In view of the advantages of the quad cable over the RTS and decision to lay quad cable in the section, the Railway Administration should have convinced the Railway Board about the necessity to terminate the RTS contract and approve MM to the sanctioned work. Instead, they complied

³ This section was under South Eastern Railway prior to re-organisation of the Zonal Railways.

with the orders of the Railway Board and continued with the RTS work and separately took up the quad cable work by including it in an another work.

Thus, works for two parallel communication systems were undertaken for this section, leading to avoidable expenditure of Rs.2.18 crore (January 2004) on the RTS work and further commitment to incur avoidable expenditure of Rs.1.36 crore to complete the balance RTS work.

When the matter was taken up (May 2004), the Railway Administration contended (August 2004) that the RTS and Quad Cable systems are complementary and one cannot replace the other. The RTS is being executed as advised by the Railway Board.

These arguments are not tenable. The fact that in the other sections, where quad-cable has been laid, RTS has not been planned clearly shows that two systems are not required. Moreover at the time decision to lay quad cable to bring uniformity in the entire Sambalpur division was taken, work on RTS had hardly commenced and the contract could have been terminated. The Railway Board could have been apprised of their revised views on executing RTS work and thereby avoided providing two communication systems for this section.

The matter was brought to the notice of the Railway Board in September 2004 and their reply has not been received (December 2004).

3.3.9 South Central Railway: Non-realisation of hire charges

Failure to debit hire charges for Railway assets utilised in works executed on cost sharing/ deposit work resulted in non-realisation of Rs.3.51 crore
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Railway Administrations execute the works of construction of ROBs/ RUBs on behalf of State Government/ Local Bodies as deposit works or on cost sharing basis. Such works are executed in the same manner as that of the Railway works and all expenditure incurred thereon is charged direct to the party concerned as per agreement. In case any Engineering Plant Reserve (EPR) is provided to any work, hire charges are levied from the date of delivery of the plant from the Railway stores to the date of its return to the same point and the hirer shall remove and return the plant at his own cost. As per guidelines issued (April 1967) by the Railway Board, hire charges of Rs.10 and Rs.2.50 per day per steel crib and per wooden sleeper respectively are to be levied.

Audit scrutiny of records of 22 works executed by the Railway Administration on cost sharing basis (12 ROBs) and as deposit works (8 ROBs and 2 RUBs), revealed that steel cribs and unserviceable wooden sleepers were supplied for casting PSC slabs. In respect of 2 ROBs executed under deposit terms, hire charges for steel cribs amounting to Rs.0.31 crore were debited to the works; but hire charges for wooden sleepers utilised were not debited. In respect of remaining works (18 ROBs/ 2 RUBs) hire charges were not at all debited to the works concerned. Hire charges for EPR in these 22 cases works out to Rs.4.76 crore. Consequently, Rs.3.51 crore due to the Railway Administration

in respect of works executed for State Government/ local bodies on deposit terms/ cost sharing basis remain unrealised.

When the matter was brought to the Ministry of Railways (Railway Board) in September 2004, they contended (December 2004) that:

- Since wooden sleepers were taken out from scrap, the question of debiting the hire charges to the work does not arise.
- For all cost sharing works, while making the payments to the State Government, the said amounts will be recovered from the Railway share payable to State Government. For the Deposit works, while drawing the CRS such adjustments will be carried out.

These arguments are not tenable because:

- Audit review of the 'statement showing the list of materials issued from DSK/C/NED' for various GC works has revealed that the wooden sleepers supplied were not 'scrap'.
- Test check of records of works relating to ROBs at Ramakrishnapuram station and Fatehnagar revealed that though the works have been completed, no debit had been effected for temporary staging arrangements. Moreover, as per material statement, in the case of the latter an amount of Rs.6.45 lakh on account of actual charges is due. Thus, it is apparent that the Railway's intentions to recover are only on paper and no concrete action has been taken/ nor is possible at this late stage.

3.3.10 Southern Railway: Non-adherence to guidelines for carrying out earthwork

Failure to follow guidelines for carrying out earthwork resulted in infructuous expenditure of Rs.2.88 crore on ground improvement works and earthwork
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Phase II of the Mass Rapid Transit System (MRTS) from Luz to Velacheri was planned with an elevated track structure (7.848 kms.) up to Taramani, followed by surface alignment (3.318 kms.) for the stretch beyond Taramani and up to Velacheri. Initial soil investigation carried out indicated presence of soft marine clay sub-soil. Ground improvement works comprising sand piling and sand blanketing were recommended by the Soil Investigation Agency and work awarded in July 1999. As undue delay was apprehended by the State Government in the acquisition of private land involved in the original alignment, the surface alignment was shifted (August 1999) by 30 to 60 metres southwards and the work commenced.

Soil improvement measures such as drilling of sand piles and sand blanketing were carried out between August 1999 and April 2002 in the revised alignment. But there were repeated occurrences of sinkages during execution of the earthwork in the stretch between km. 18.060 and 18.400, during July 2001 to September 2003. Advice of the RDSO and Indian Institute of Technology, Chennai was sought for. On the basis of their recommendations (January 2004/ February 2004), the Railway Administration sent a proposal (April 2004) to the Railway Board for construction of elevated structure

(km.18.000 and km.18.850), at an estimated cost of Rs.15.46 crore in place of surface alignment.

In this connection, the following observations are made:

- The Railway Administration did not take cognizance of the RDSO guidelines to avoid swampy areas or to consult RDSO, before deciding upon the methodology to be adopted. Even if avoiding of these areas was not possible due to land acquisition problems, Railway should have considered elevated track structure keeping in view the soil conditions.
- The Railway Administration failed to conduct any fresh soil investigation in the revised alignment, in spite of the fact that the soil investigation on the original alignment had revealed soft marine clay sub-soil, which suggested soil exploration in closely spaced intervals as per para 3.4.3 (c) of RDSO guidelines.
- Having taken up the option of surface alignment after carrying out ground improvement works and earthwork in the stretch between km. 18.000 and 18.850, the RDSO guidelines regarding 'Construction of New Formation over Soft Compressible Sub-soil' were not fully observed. This resulted in expenditure incurred on ground improvement works amounting to Rs.2.88 crore proving to be infructuous.

When the matter was taken up (May 2004), the Railway Administration contended (in their reply in June 2004 and during a meeting held on 30 July 2004) that:

- Except for a stretch of 420 m., decision to go in for earthen embankment with ground improvement work has proved effective and hence initial judgement to go in for embankment for the full length cannot be faulted.
- Shifting of alignment by 30 - 60 m. within the same area did not necessitate making fresh exploratory bores. Bores taken along the shifted alignment also indicated presence of soft marine clay sub-soil.
- In the affected portion, earthwork commenced during March 2001 was carried out in stages and the final level was brought out in August 2003, the work spreading over a period of two and half years. However, there was sinkage during September 2003, after the formation was completed and track linking was in progress. By the time RDSO's specification for stage construction was received in July 2003, finishing layer of the earthwork was in progress.

These contentions are not tenable. Due to soft soil conditions, land chosen should have been avoided or elevated track structure provided in the first instance itself. Having started the work, the Railway Administration ignored the RDSO's guidelines which, if observed, would have enabled them to take remedial action, when the early signs of sinkages were noticed. Failure to do so resulted in infructuous expenditure of Rs.2.88 crore on the ground improvement works and earthwork.

The matter was brought to the notice of the Railway Board in August 2004 and their reply has not been received (December 2004).

3.3.11 Central Railway: Poor contract management

Improper assessment of contractor's capabilities and poor contract management resulted in re-awarding contracts on risk and cost, the recovery of which (Rs.2.53 crore) is a remote possibility

As per rules, if a contractor fails to do whole or part of the work awarded to him and the contract is terminated, the Railway has the right to get the balance work done at the risk and cost of the defaulting contractor.

Audit scrutiny of records of offices of the Dy. CEs (Construction) at Panvel and Solapur revealed that contracts relating to nine works awarded between October 1996 and March 2001 were terminated during February 1997 to February 2003 as either the progress of work was not satisfactory or contractors had not commenced works. Fresh contracts for getting the balance work done were awarded during May 1997 to August 2003 and notices for recovery of risk and cost charges were served on defaulting contractors. Six of the defaulting contractors referred the cases for arbitration. In one case, pre-arbitration meetings had taken place and there was no response in the remaining two. As against total amount of Rs.2.97 crore worked out for recovery, the Railway Administration could withhold only Rs.0.43 crore from pending bills, leaving a balance of Rs.2.53 crore.

A further review of these cases revealed that -

- In three cases, contractors had not even commenced work. Two contracts pertaining to supply and stacking of stone ballast were awarded, in April 1999, to the same contractor, who was already having two contracts valuing Rs.4.47 crore which were due for completion in May 1999. At the time of award of new contracts, physical progress of existing works was 0.19 per cent and 16.83 per cent only; yet the TCs found the progress satisfactory. The third contract was for earthwork in embankment, cutting and bridge approaches. Work was awarded to a contractor who was totally new to the Railway working and his past experience was only that of undertaking a work of filling for Ispat Industries Limited. Still, TC found him suitable for awarding contract.
- In other cases, the contractors have refuted the claims on the ground of delay by the Railway to hand over clear site for work, change of plans and obstruction by presence of gas pipe lines at the site of work which were not removed by the Railway.

These cases clearly indicate improper assessment of contractors' capabilities for executing works and poor contract management by the Railway Administration, resulting in long drawn procedures of awarding and cancelling contracts, calling of fresh tenders on risk and cost, delay in completion of works and unnecessary arbitration/ legal proceedings. Most important fall out of these cases is the remote possibility of recovering risk and cost amount of Rs.2.53 crore as the contractors have gone for arbitration/ legal proceedings.

When the matter was taken up with the Railway Administration (April 2004) and Railway Board (September 2004) they stated in July and December 2004 respectively that all possible steps for recovery of risk and cost charges have

been taken and that action for recovery through civil suit filed in the court has already been initiated in one case. Similar action will be taken in other cases also after all other means are exhausted. It has also been contended that contractor's capabilities for carrying out the works were properly assessed and they were found financial solvent and capable of carrying out the works. Failure in a few cases can not be ruled out even after considering the credentials thoroughly.

The reply is not tenable. As explained above, the award of a contract to a contractor ignoring the poor physical progress of works awarded to him earlier and award of a contract to contractor who had never done the type of work being awarded to him are clear cases of improper assessment. Moreover, Railway is silent on the issue of poor contract management which led to contractors refuting the claims of the Railways in three other cases.

3.3.12 Central Railway: Non-completion of preliminary works before awarding of contracts

Failure to observe the Railway Board's directives for conducting soil test, site investigation, approval of proper plans, drawings and estimate before awarding of contract resulted in avoidable payment of Rs.2.03 crore

Normally no work should be awarded to contractor before the site is ready for handing over and estimate, plans and drawings have been sanctioned by the competent authorities.

Audit scrutiny of the cases of arbitration awards against Dadar and Pune offices of the Construction Organisation revealed that all 30 cases finalised during 1998-99 to 2003-04, were decided against the Railways. In 28 cases, the Railway had either not made the site of work available to the contractors or there was delay in approval of plans and drawings. In some cases, the design required changes due to improper site investigation. All these factors led to contractors claiming compensation for idling of their staff and machinery. Disputes were settled by arbitrators and ultimately the Railway ended up making avoidable payment of Rs.2.03 crore, inclusive of Rs.0.97 crore on account of interest for delay in payments.

When the matter was taken up with the Railway Administration (April 2004) and Railway Board (September 2004), they stated in July and December 2004 respectively that while in few cases the plans got delayed and land was not available, the works were awarded only after the site was available to a reasonable extent. It has also been contended that if Railways were to wait for hundred per cent availability of site, plan/ drawings etc., they would have ended up paying Rs.1.25 crore more on account of cost escalation as against the amount of Rs.0.52 crore paid as award in eight cases studied by them.

The reply is not tenable because the details of eight cases stated to have been studied by them has not been provided. Moreover, the contention of the Board that they can not wait for hundred per cent site clearance and approval of plans is contrary to their earlier directives and likely to encourage Railways to award more contracts without sites being ready and consequent disputes causing more delay in the completion of works.

3.3.13 North Eastern Railway: Avoidable extra expenditure on purchase of stone ballast

Purchase of ballast at higher rates resulted in extra expenditure of Rs.0.95 crore
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For meeting requirement of stone ballast for Bareilly-Kasganj-Fatehgarh-Rawatpur sections, the DRM, Izatnagar invited (December 1999) open tenders for supply of 50,000 cum. stone ballast at Mathura Junction station. Tenders were opened in January 2000. The TC met from time to time but could not finalise the tenders. Finance Member of the TC was of the view that procurement cost of ballast from Mathura Junction at Rs.369 per cum. was abnormally high as compared to Rs.245 per cum. obtained in June 2000 from Lalkuan, a regular source of stone ballast. The competent authority accepted the tender at a higher rate (September 2000) on the ground that there was capacity constraint at Lalkuan and that there was necessity to develop a new source of supply at Mathura. Accordingly, an order was placed (September 2000) at the rate of Rs.369 per cum. for supply of 50,000 cum. ballast and 50,326 cum. of ballast was procured.

Again, in September 2001, the DRM, Izatnagar floated tenders for supply of 30,000 cum. ballast at Mathura, which was opened in October 2001. The TC met on various dates. Two members of TC gave dissenting notes recording that the procurement should be made from Lalkuan where the rates were much lower and the source was also established. The competent authority, however, accepted (July 2002) the negotiated rate of Rs.332 per cum. from Mathura, recording that Lalkuan could not meet the full requirement, there was acute shortage of ballast and rates offered were less than what had been paid by Central Railway. The contractor supplied 30,011 cum. of ballast by May 2003.

A review of records by Audit revealed that justification provided by the accepting authority for ignoring the view of Finance Member of the TC in the first case and overruling the majority view of the TC in the second case was not supported by facts. Thus, acceptance of higher rates for procurement of ballast from Mathura resulted in excess expenditure of Rs.0.95 crore.

When the matter was brought to the notice of Railway Administration (April 2004) and Railway Board (September 2004) they contended in July and December 2004 that:

- The comparison of rates of one quarry with those of other quarries hundred kilometres away has no relevance as the lead for taking ballast from Mathura to Kasganj and Kanpur was less than the lead involved from Lalkuan to these places.
- The output capacity of Lalkuan and Tanakpur quarries was limited and it was not possible to procure all ballast from these quarries and, therefore, decision was taken to develop a new source.
- Shortage of stacking space and loading capacity of the siding at Lalkuan were the other constraints due to which the decision to procure ballast from Mathura was taken.

The arguments are not tenable because:

- Even after taking the lead into consideration, the Lalkuan was to be preferred instead of Mathura. In fact the calculations made by tender committee in their Minutes of meetings held in December 2001 and January and February 2002 revealed that despite the higher lead the rates from Lalkuan to Kasganj and Lalkuan to Kanpur were much cheaper than the rates from Mathura to Kasganj and Mathura to Kanpur.
- The contention that output capacity of Lalkuan was limited has not been supported with facts. Moreover, the ballast from Mathura was already being procured by Central Railway and thus the plea that there was need to develop a new source does not hold good.
- The contention of shortage of stacking space and loading capacity at Lalkuan is also not supported by facts. Audit scrutiny of records have revealed that 120 rakes were loaded during the year 2000-01 from Lalkuan MG siding. Moreover, as per information made available by Station staff Lalkuan MG siding has the capacity to handle one full rake daily.

3.3.14 Northeast Frontier: Excess expenditure in moving Railway PSC sleepers by road

Injudicious decision of Railway Administration to transport sleepers by road instead of rail resulted in excess expenditure of Rs.0.86 crore
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Work of construction of new MG line between Kumarghat (KUGT) and Agartala (AGTL) (108.5 kms.) was sanctioned in 1996-97. As the Railway Administration considered that soon after the conversion of Lumding (LMG) – Badarpur (BPB) – Silchar (SCL) section (198 kms.) into BG under the unigauge policy, KUGT - AGTL section will also be converted, construction of entire section from KUGT to AGTL was planned with BG standard, using dual gauge (BG + MG) PSC sleepers. The work was started in August 1997. Since the State Government of Tripura was pressurising for early commissioning of the project, the Railway Administration planned (December 2001) to commission the stretch between KUGT – Manu (21 kms.), falling in KUGT-AGTL section by March 2003. The Railway Board accorded sanction (December 2001) to the proposal with MG services using BG sleepers.

In connection with this project (KUGT-Manu), a contract was executed (October 2002) for manufacture and supply of 36,900 dual gauge PSC sleepers including cost of their transportation [at the rate of Rs.498 per sleeper from the factory at Jagiroad (JID) to the nominated locations between KUGT and Manu]. Only 26,325 PSC sleepers were supplied by road till March 2004.

Audit scrutiny revealed that despite the existence of a Railway network up to KUGT, these sleepers were transported by road. Analysis of cost of transportation by rail and road revealed that the cost of transportation of a sleeper by rail at public tariff rate from JID to KUGT (428 kms.) and also from KUGT to nominated locations by road including cost of loading/unloading at KUGT was Rs.172.47 as against Rs.498 by road from JID to

Manu. This resulted in avoidable expenditure of Rs.0.86 crore in respect of sleepers supplied till March 2004.

The matter was brought to the notice of the Railway Administration and the Railway Board in April 2004 and September 2004 respectively and their reply has not been received (December 2004).

3.3.15 Northern Railway: Non-recovery of risk and cost charges

Failure to take timely action against a defaulting contractor resulted in non-recovery of Rs.0.81 crore even after lapse of a period of over three years
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Central Organisation of Railway Electrification (CORE), Allahabad awarded (June 1993) a contract to a firm for carrying out certain works and supply of materials for eight stations on Bokaro Steel City – Hatia section. This work was to be executed under the control of Project Manager (PM)/ Railway Electrification (RE), Ranchi and completed by the contractor within a period of 11 months of the award of contract.

The contractor could not complete the work within the stipulated period (May 1994). CORE, Allahabad extended the period five times; the last extension was granted upto 31 March 1997. But, in view of very poor progress of work, the contract was terminated (February 1997) and balance work awarded to another firm in January 1998 at the risk and cost of the defaulting contractor. The work was completed in December 2000.

In July 2003, PM/RE/Ranchi requested GM, CORE, Allahabad to recover Rs.0.81 crore from defaulting contractor on account of risk and cost, cost of material not returned, liquidated damages etc who in turn directed (November 2003) for suitable action to realise this amount from the defaulting contractor. PM/RE/Ranchi advised (December 2003) that nothing payable to defaulting contractor was pending with them and requested for recovery of the amount from the contractor's bills for works done in other Railway projects. CORE, Allahabad, however, asked (January 2004) them to advise the contractor to deposit the risk and cost amount.

When the matter was taken up (March 2004), the CORE Administration (in their reply and during the discussion) stated (June 2004) that recovery notice was issued to the contractor on 15 April 2004. Other Railways have since been advised to withhold bills, if any, pending with them.

The reply is not tenable. The new contractor had completed the work in December 2000. The matter regarding recovery of risk and cost from the defaulting contractor remained unattended and was tossed between CORE, Allahabad and PM/RE/Ranchi for about three years. The contractor was advised for depositing the risk and cost amount only in April 2004, after 40 months of completion of work by the new contractor. The chances of recovery of risk and cost amount from the defaulting contractor is remote at this stage.

The matter was brought to the notice of Railway Board in October 2004. Railway Board, besides reiterating the reply of Railway Administration, also explained (November 2004) the reasons for delay in taking action for

recovery. The reasons furnished are delay in final measurement of works, time taken for vetting and staff being busy in commissioning of other projects. The reply is not tenable because Administration took almost six years to ask the contractor for making payment.

3.3.16 Northern Railway: *Wasteful expenditure in connection with weak formation of track*

Failure to rehabilitate weak formation as advised by RDSO resulted in a wasteful expenditure of Rs.0.76 crore and the problem remaining unsolved
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Four different portions of track over a total distance of 7 km. on Delhi-Ambala section have problem of weak formation since 1989. The Railway Administration requested (June 1991) RDSO to provide a permanent solution to this problem. In September 1992, RDSO recommended for provision of a 60 cm. thick blanket of granular material. Some work was, therefore, carried out but the problem of weak formation continued. Later, the number of locations of weak formation increased. In July 1998, the matter was again referred to RDSO who recommended (October 1999) providing a 70 cm. thick blanket of specified materials using aluminium alloy girders.

The Railway Administration floated (July and August 2000), tenders for supply of 5 sets of aluminium alloy girders and for work of permanent treatment of the weak formations. However, these were discharged (December 2000) due to non-availability of funds and revision in the tender schedules. Later, a supply contract for Rs.0.76 crore was awarded in July 2001 to a firm, who completed the supply in August 2002.

The Railway Administration had also floated (April 2001) another tender for execution of work for permanent treatment of the weak formations. The TC, however, recommended (September 2003) discharge of this tender on grounds that the Senior Divisional Operating Manager had refused (May 2002) to provide traffic blocks of 3.25 hours daily and Principal CE had advised (July 2003) using a ballast cleaning machine or laying sub-ballast and blanketing materials after obtaining mega traffic block.

Thus, the Railway Administration failed to rehabilitate weak formation as advised by RDSO even after procurement of aluminium alloy girders worth Rs.0.76 crore rendering the expenditure as unproductive and the problem remained unsolved even after lapse of a period of over 14 years.

When the matter being taken up (March 2004). with Railway Administration stated (August 2004) that the problem being peculiar and section being very busy, no readymade foolproof solution is available for the permanent treatment for weak formation.

The reply is not tenable. RDSO had suggested (October 1999) a method for permanent treatment of these weak formations. The Railway Administration failed to adopt this method even after procurement of materials worth Rs.0.76 crore. Besides, continuing operations on track with weak formation tantamounts to compromising with safety norms.

The matter was brought to the notice of the Railway Board in September 2004 and their reply has not been received (December 2004).

3.3.17 Northeast Frontier Railway: Injudicious acceptance of tender

Injudicious acceptance of higher rate for ballast procurement resulted in excess expenditure of Rs.0.71 crore

For recoupment of ballast on running main lines, an open tender was floated (August 1999) for manufacture and supply of 50,000 cum of 50 mm. size machine crushed ballast at Chaprakata (CPQ) Depot (Alipurduar Division).

Out of two parties who responded, only one tenderer was found eligible, who quoted exceptionally high rate of Rs.1174 per cum. for supply of ballast against estimated rate of Rs.696 per cum. Since rate quoted was on higher side (74.03 per cent), the TC conducted negotiation (28 February 2000) and finally negotiated rates of Rs.799.50 per cum. (for supply) were accepted (March 2000). Adverse law and order situation and fear of extortion in the area were recorded as the reasons for acceptance of high rate. The TC further recorded that the rate should not be used for future comparison.

Audit scrutiny of similar tender/ contract finalised in the adjacent section (Bijni–Patiladaha section about 10-13 kms. from CPQ Depot) having similar law and order situation, revealed that the Railway Administration had accepted (July 1999) much lower rate of Rs.530 per cum. Thus, the rate recommended by the TC was injudicious and resulted in extra financial liability of Rs.0.87 crore for supply of 32,406.512 cum. of 50 mm. machine crushed ballast at CPQ depot upto March 2004.

When the matter was brought to the notice of Railway Administration (May 2004) and Railway Board (September 2004) they stated in July and December 2004 that:

- The existing contract was for supply of machine crushed stone ballast whereas the contract with which the Audit compared the rates was for hand broken ballast. The rates for machine crushed ballast were always higher and not comparable with hand broken ballast.
- Transportation cost form major component of the cost of ballast and due to increase in diesel prices in September 1999, there was increase in the cost of ballast also.
- Kidnapping of Railway's officials in the month of September 1999 might have kept away the other prospective tenderers from sending their quotation thereby leaving no scope for obtaining much favourable rates even by retendering.

These arguments are not tenable:

- The Tender Committee in one of the cases had admitted that the difference in the cost of machine crushed and hand broken is Rs.50 per cum. However, the difference between the accepted rates of the contract in

question and the one entered at a nearby location was of Rs.269.50 per cum.

- As per tender committee, the transportation cost works out to approximately 30 per cent of total cost. Taking the increase of diesel prices which took place in September 1999, the last accepted rates would have gone up by Rs.16 making the last accepted rates of hand broken ballast as Rs.546 per cum. Adding the difference of Rs.50 for machine crushed ballast the reasonable rates would have been Rs.596 as against the accepted rates of Rs.799.50 per cum.
- The fact that kidnapping of Railway officials might have prevented the prospective tenderers from quoting their rates is not relevant and cannot be accepted as valid ground for not going for retendering.

3.3.18 Northeast Frontier: Injudicious restoration of Railway abandoned MG line

Injudicious decision to restore abandoned MG line led to infructuous expenditure of Rs.0.61 crore

A detailed estimate was sent to the Railway Board for GC of Lumding to Dibrugarh including branch and loop lines. The Railway Board sanctioned (October 1993) straight conversion of Lumding –Tinsukia - Dibrugarh section with only two branch lines viz. Tinsukia (TSK) - Lekhapani (LKPE) and Makum-Dangri. The GC of the branch line from TSK to LKPE was taken up upto Tirap (TPWF) only and completed by March 1997 and since then the section from TPWF-LKPE was lying abandoned. In February 2001, the GM decided to restore the TPWF-LKPE MG line. The contract agreements were, therefore, executed and the work was completed in March 2002 at a total expenditure of Rs.0.61 crore. No train services have been run on the restored line so far (October 2004).

When the matter was taken up (May 2004), the Railway Administration stated (July 2004) that work was taken up on the GM's directives and on behest of the Minister of State for Home and Industries, Assam. The Minister wanted a vintage steam safari to be run on TPWF-LKPE line during festival days, when large number of tourists including foreign tourists were expected to come.

This is not tenable. The very fact that no train has been run till date (August 2004) is a clear indication that directions to restore the line were issued without any proper assessment of traffic potential. The operational constraints and difficulties in obtaining and maintaining rolling stock required for running trains on the gauge locked MG section of 5.5 kms. were also not considered. Further, no costing of running the train was undertaken before commencing the restoration work.

Thus, decision of restoring the abandoned MG line between TPWF - LKPE without proper examination of its viability as a commercial venture or for tourism purposes led to the investment of Rs.0.61 crore as totally infructuous.

The matter was brought to the notice of the Railway Board in September 2004 and their reply has not been received (December 2004).