CHAPTER 3: WORKS AND CONTRACT MANAGEMENT

3.1 Injudicious decisions leading to wasteful/ unproductive expenditure

3.1.1 South Western: Wasteful expenditure due to non-Railway adherence to statutory requirements

Railway's failure in not adhering to the statutory requirement stipulated for obtaining forest land for a project and commencing the work resulted in wasteful expenditure of Rs.68.92 crore

Section 4.4 of the Forest (conservation) Act, 1980 stipulates that if a construction project requires utilisation of forest as well as non-forest land, work should not be started even on the non-forest land till the receipt of approval of Central Government for the release of the forest land.

Railway Board sanctioned (1997-98) a new broad gauge railway line between Hubli and Ankola (167 Kms) at the anticipated cost of Rs.997.58 crore. A part detailed estimate of Rs.103.73 crore for civil engineering works in a portion of line between Hubli and Mishrikoti (47.75Kms) was sanctioned in January 1999. Execution of this work required construction over forest land in the Western Ghat region. Railway Administration made protracted correspondence with the Ministry of Environment and Forest (MOEF) from 1998 for transfer of forest land. However Railway's request was not accepted by MOEF on the grounds that the project would cause large scale forest degradation and irreversible effect on the fragile eco system. In the meantime Railway had commenced work on non-forest land and Rs.49.53 crore were spent on the project till June 2004. Central Empowered Committee (CEC) constituted by the Hon. Supreme Court for looking into the environmental aspects ordered (September 2006) the Railway to stop the construction work even in the non-forest land. Despite the uncertain fate of the project in view of CEC's orders of June 2004, the Railway incurred a further expenditure of Rs.19.39 crore on works after July 2004.

Thus, Railway's failure in not adhering to the statutory requirement stipulated for obtaining the forest land before commencement of the work and continuance of the work beyond June 2004 resulted in wasteful expenditure of Rs.68.92 crore.

On the matter being taken up in Audit (April 2007), Railway stated (September 2007) that expenditure incurred was not infructuous as the works executed could be useful once the work on the project was resumed. The reply is not acceptable. MOEF had not accorded their clearance as yet. The CEC also stopped all works related to the project. Moreover, the works already completed are open to the climatic vagaries of the Western Ghats which is prone to heavy monsoon rains and may not sustain for long.

The matter was brought to the notice of Railway Board in September 2007; their reply has not been received (December 2007).

3.1.2 South Central: Under-utilisation of investment on Railway provision of Fiber Reinforced Polyurethane Modular toilets in coaches

Railway Board's injudicious decision to provide improved Fiber Reinforced Polyurethane (FRP) modular toilets in coaches in place of conventional toilets resulted in under-utilisation of the investment made (Rs.61.95 crore) due to defects in design and specification

With an objective to provide toilets which were more convenient, aesthetic and user friendly, Railway Board engaged Technology Information Forecasting & Assessment Council to initiate a project in association with Research, Design and Standard Organisation (RDSO), Integral Coach Factory (ICF), Rail Coach Factory (RCF), Indian Institute of Technology at Mumbai and M/S Hindustan Fiber Glass Works (HFGW), Vadodara as industrial partners. It was decided that provision of FRP modular toilets in the coaches would fulfill the desired objective. RDSO approved (June 2002) the design and specification for these toilets.

Subsequently, ICF and RCF fitted FRP modular toilets, supplied by HFGW and some other manufacturers, in 780 and 538 coaches respectively at a cost of Rs.0.05 crore (approximately) for four units per coach.

FRP modular toilets were fraught with problems right from the beginning and defects were noticed in design and manufacturing. Permanent fixing of window glasses and concealed water pipelines posed problems of replacement in case of damage. Provision of outlet pipe to wash basin with smaller diameter and sharp bends resulted in choking. Exhaust fans, other electrical fittings, looking glass and brass fittings were fitted in such a way that they were prone to theft. There were also manufacturing defects such as use of poor quality material and inferior moulding technology. Fittings used by different manufacturers were not alike and not compatible with the fittings of each other. The warranty clause of the supply orders was enforceable only by the ICF and RCF, and as such the user Railway failed to get the replacement/repair of defective parts.

ICF intimated (January 2005) the Railway Board and the RDSO that the specification for modular toilets was tentative and non-comprehensive. Drawings and specifications were revised to overcome the problems. Resin Transfer Moulding method used earlier was replaced with Compression Moulding Technology to improve structural rigidity but it was too late to arrest the damage.

Thus the use of defective and unreliable design in the provision of FRP Modular toilets besides non-achievement of the objectives of introducing these toilets has resulted in wasteful investment of Rs.61.95 crore.

On the matter being taken up by Audit (April 2007), the Railway stated (August 2007) that such policy decisions are dealt with by the Railway Board.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.1.3 Northern Railway: Unproductive investment/ avoidable expenditure due to Railway's indecision

Railway's indecisiveness in deciding the source of financing a work led to delay in its completion, avoidable payment of Rs.17.41 crore due to price escalation and non-utilisation of assets valuing Rs.33.54 crore

Railway Board directed (September 1994) the Northern Railway to take up the work of doubling of Moradabad-Ghaziabad (MB-GZB) line with a view to increase the line capacity and remove the bottlenecks on the section. However, due to resource constraints, it was decided to do the work in phases. Accordingly, in the first phase doubling between GZB and Hapur section was completed in December 2000. The work of doubling between Amroha (AMRO) and Kankather (KHE) section (31 Kms.) was sanctioned in 2000-01 at an estimated cost of Rs.48 crore (Detailed Estimate of Rs.56.98 crore) as the second phase.

While the work was in progress, the Railway Board directed (March 2002) Northern Railway Construction Organisation (NRCO) to take up this entire project under Build, Own, Transfer (BOT) Scheme. NRCO agreed (July 2002) to take up the left over works under BOT scheme. However, in September 2003 NRCO requested Board to delete the work from BOT scheme on the ground that the access charges payable under BOT scheme for similar stretch of 37 km. (Sultanpur-Bandhuakalan) were found financially unviable. Railway Board, however, did not agree to the proposal (February 2004).

NRCO finalised (May 2006) the BOT contract and recommended to the Railway Board to accept the lowest offer at total access charges of Rs.114.48 crore. However, the Railway Board decided (July 2006) to execute the remaining works (supply of ballast, track linking, S&T works etc.) through Railways' own resources. As of March 2007, NRCO had awarded three contracts valuing Rs.9.15 crore while the tenders for supply of ballast (Zone-I) and earthwork and other misc. works valuing Rs.6.32 crore (approx) were under finalisation. As per assessment of audit the amount required to complete the left over works would be Rs.42.21 crore compared to the estimated cost of Rs.29.10 crore (Civil works only).

Scrutiny of the records revealed that till August 2004, NRCO had completed all the works (except blanketing of about 2 kms which was completed in March 2006 at a cost of Rs.0.72 crore) and incurred an expenditure of Rs.33.54 crore. As no work on the project was done during April 2004 to March 2007, the assets created at a cost of Rs.33.54 crore have been lying idle for the last 31 months.

On the matter being taken up (January 2007) in Audit, Railway Administration stated (July 2007) that the financial health of the Railway in the year 2002-03 compelled it to go for Public-Private-Participation by entering into BOT tender. This decision was, however, reversed on improvement of the financial health of the Railways. They further contended that even if the work was continued to be financed through budgetary resources between March 2002 and May 2006, the allocation of funds would have been very meager. Railway's contention is not acceptable because the work was in progress when

the decision to transfer the work under BOT was taken without identifying the willing parties as well as considering the payment of access charges that would be payable. Railway's reply regarding financial crunch is only an afterthought. The fact remains that the indecisiveness of the Railway besides burdening them with increased cost of Rs.17.41 crore on account of price escalation also allowed the idling of assets worth Rs.33.54 crore.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.1.4 Northern Railway: Unfruitful expenditure on construction of an auditorium

Railway's decision for construction of an auditorium of higher capacity with state-of-the-art facilities without conducting any cost benefit analysis and without Board's final approval resulted in avoidable expenditure of Rs.5.50 crore

Rules provide that expenditure to be incurred on new assets should be financially justified and sanctioned before it is actually incurred.

Railway Board sanctioned (1997-98) the work of construction of an Auditorium of capacity for 100 persons, for holding meetings/seminars etc. by Railways Officers and its public sectors undertakings at National Rail Museum Chanakya Puri, New Delhi at an anticipated cost of Rs.0.45 crore. Detailed estimate of the work for Rs.1.37 crore was sanctioned in June 2000. Construction Organisation awarded (February 2001) a contract for Rs.0.84 crore without the approval of the New Delhi Municipal Committee (NDMC) which was received in July 2001 causing delay in commencement of the work.

When the work was in progress Railway Board directed (July and November 2001) Construction Organisation to submit revised proposal to increase the capacity to over 250 persons with state-of-the-art facilities. Railway submitted (December 2001) the revised estimate of Rs.5.91 crore for Board's approval and commenced the work without waiting for Board's formal approval to the revised estimate. The increase in the work was justified on the grounds that the Auditorium would be made viable for commercial use by various Diplomatic Missions at Chanakyapuri and that the Indian Railways Catering and Tourism Corporation had extensive plan to manage and market the Auditorium.

Though the Finance Department had observed that the capacity of Auditorium had been increased without proper justification and cost benefit analysis, Railway Board was left with no option but to sanction the revised estimate (July 2002) at a cost of Rs.5.06 crore as the work worth Rs.1.71 crore was already completed by then. The auditorium was inaugurated on 17 June, 2003 though the NDMC power supply and other statutory clearances were yet to be obtained. Licencing Authority objection about the safety led to reduction in the seating capacity of the auditorium to 194. The auditorium was put to commercial use from February 2004 after completion of residual works. Audit observed that the Auditorium completed at a total cost of Rs.5.50 crore was used only for 64 days up to December 2006.

Thus, decision to construct the auditorium at a cost of Rs.5.50 crore was not prudent. Had Railway Administration acted judiciously, the expenditure could have been avoided.

On the matter being taken up (November 2005 and January 2007), Railway stated (July 2007) that there was a need for construction of auditorium with increased capacity in Delhi area for holding Seminars and Conferences. Its commercial utilisation was not the main motive. Railways contention is not acceptable because decision to construct auditorium, with increased capacity, without ensuring its commercial utilisation was imprudent as the chances of yielding adequate return on this investment are very bleak. Moreover, a number of auditoriums are already available in Delhi and could have been used for holding seminars/ conferences.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.1.5 West Central: Wasteful expenditure on Complete Railway Track Renewal work

Injudicious decision of the Railway Administration to carry out Complete Track Renewal over a section which had to be abandoned due to submergence in water resulted in wasteful expenditure of Rs.4.97 crore

As per general guidelines contained in the Indian Railway Track Manual, track renewal works should not be planned merely on the basis that the existing track is below the prescribed standard. Rather such works should be planned with an objective of deriving maximum benefits and long term planning in mind.

Audit scrutiny of records revealed that Central Railway had proposed the Complete Track Renewal (CTR) of 16.10 Kms. between Bir (at km 602.90) and Harsud (at km 620.00) stations of Itarsi -Bhusaval section in the year 1998-99. This work was included in the Final Works Programme of the Central Railway for the year 1998-99 at the total cost of Rs.9.89 crore. The work was awarded to a contractor in March 1999 and completed in June 2003 at total cost of Rs.10.28 crore. It was also seen in Audit that within ten months after completion of CTR, a contract for dismantling of this track at a cost of Rs.0.39 crore was awarded in April 2004 as the track faced the prospect of submergence in the water of Indira Sagar Project on Narmada River. The entire track was dismantled by July 2004. In this connection the following audit comments arise:

• Narmada Valley Development Authority (NVDA) in a meeting held with the officers of Central Railway in February 1997 had indicated that the existing railway track between Talvadiya and Khirkiya stations was likely to be submerged any time after June 2000 and had stressed upon completion of diversion line before June 2000. Thus, Central Railway was fully aware that the existing line would be rendered useless as and when the construction of diversion line was completed. They, however, proposed the CTR work in total disregard of the laid down guidelines for carrying out such works as no benefits were expected to be derived from the CTR.

- The CTR work which was originally slated for completion by February 2000 had not progressed well due to non availability of material, Railway Administration instead of reviewing the necessity for possible stoppage of the work went ahead by granting extension from February 2000 to June 2003. Ultimately the track was dismantled within ten months of completion of CTR work rendering the entire expenditure of Rs.10.28 crore unproductive.
- Though the CTR work was completed in June 2003 and the line was dismantled in 2004, the completion Report of the work has not been drawn so far.

When the matter was taken up with Railway Administration in April 2007 they stated that the rails in the track were laid in 1964-65 and had carried the maximum prescribed load. The CTR work was sanctioned to ensure the safety of trains and passengers as the same had become overdue for renewal. They also stated that when the CTR work was carried out the diverted line was under construction and the condition of existing track was deteriorating fast and was not safe for use over long period.

The reply is not acceptable because when the CTR work was proposed, the construction of diverted line was almost 55 per cent complete. NDVA had made it clear that the existing line would be submerged under water any time after June 2000. In view of these developments the decision to carry out the CTR work was in total disregard to the provisions of the codes and manuals. As regards safety aspect, the position could have been improved through regular or casual maintenance.

Thus, injudicious decision of the Railway Administration to carry out Complete Track Renewal over a section that had to be abandoned due to submergence in water resulted in wasteful expenditure of Rs.4.97 crore.

When the matter was brought to the notice of Railway Board in September 2007, they added that the track was in such a state that it was difficult to improve the same by regular maintenance. The reply is not acceptable because the newly laid track was dismantled immediately after completion as such CTR was not in the interest of Railway.

3.1.6 South Central: Idling of investment due to poor Railway quality of work

Railway's poor quality work in construction of a road overbridge resulted in idling of investment of Rs.4.31 crore

The construction work of a Road Overbridge (ROB) was undertaken in lieu of an existing level crossing near Palakollu situated between Bhimavaram and Narsapur stations on cost sharing basis with the State Government of Andhra Pradesh. The work, except some minor approach road works undertaken by the State Government, was completed in January 2001 at a cost of Rs.1.19 crore. Railway deposited (March 2002) Rs.3.12 crore towards their share of the cost of approaches. However, State Government pointed out (January 2003 & August 2004) certain defects in railway works requiring improvement of

soil around the Railway track. Railway inspected (August 2005 and July 2006) the structure and found the cracks. The technical consultant appointed by the Railway observed that there was significant movement of substructure. ROB constructed as back as in January 2001 could not be commissioned (March 2007) due to Railway's failure in taking up rehabilitation works despite engaging external technical consultants.

Thus, poor quality of work in the construction of ROB coupled with inordinate delay in taking up the rehabilitation works resulted in idling of investment of Rs.4.31 crore since last six years.

On this being pointed out (March 2007), Railway stated (June 2007) that the damage to the structure of the ROB at Palakollu was not as a result of Railway's defective working but due to the foundation soils and earth pressure arising from embankment filling. Soil under the ROB location was having very low bearing capacity and high pore water pressure. Structure and wing walls settled and cracks developed due to induced pressure of the soil. Railway's argument is not acceptable as they were well aware of the soil structure before undertaking the construction work of ROB. Railway's acceptance that there was distress to the bridge structure and wing walls also proves that the work executed by the Railway was defective and of poor quality.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.1.7 North Eastern: Wasteful expenditure on construction of Railway washing pit and sick lines

Railway incurred wasteful expenditure of Rs.3.44 crore on construction of washing pit and sick lines lying unremunerative

Railway Board's instructions (December 1984) provide that the proposal for sanction of a work on 'out of turn basis' should fulfill the prescribed conditions and should necessarily be urgent and unavoidable in nature. Such work should initially be included in Preliminary Works Programme.

North Eastern Railway submitted a proposal for the construction of a washing pit and sick lines at Ballia and Azamgarh stations for inclusion in Works Programme 2002-03 on out of turn basis at anticipated costs of Rs.1.52 crore and Rs.1.99 crore respectively. As per the justification, the washing pit line (280 meters) and sick line (78.5 meters) at Ballia was required for the maintenance of two rakes of passenger trains during lie-over time. In case of Azamgarh, construction of 370 meters long washing pit line and 50 meters sick line was justified for maintenance of the rake of Kaifiyat Express (Northern Railway Delhi base) alongwith some new long distance trains which were yet to be introduced ex. Azamgarh. Both the works were sanctioned in the year 2002-03.

The contract for construction of washing pit at Ballia of 280 meters length was completed (July 2004) at the cost of Rs.1.57 crore (Civil Engineering Electrical and Mechanical works upto October 2006). A joint inspection note

of Engineering Department dated 3 August 2005, revealed that the length of washing pit was 268 meters instead of 280 meters. The pit line however, could not be put to use due to defective plans and exclusion of essential ancillary works like shunting neck, etc. Thus, the total expenditure of Rs.1.57 crore including the cost of Civil, Electrical and Mechanical machinery and plant proved unfruitful.

At Azamgarh, a contract for construction of 370 meters long washing pit was awarded (December 2004) to accommodate 16 coaches at a cost of Rs.1.87 crore. The facilities being provided were, however, considered insufficient and the extension of washing pit to accommodate four more coaches was proposed (October 2006) by the Railway. The work was completed and handed over to Varanasi Division (July 2007). No new trains ex. Azamgarh since 2002-03 were introduced as per working time table and thus the creation of the facility was not justified. As such, the assets created worth Rs.1.87 crore were lying unutilised.

The matter was taken up (June 2006) with the Railway Administration. They stated (May 2007) that on availability of required facilities the washing pit at Ballia had since been made operational in February 2007 and one rake of 570/573 Passanger train was being maintained. The construction of washing pit at Azamgarh has not yet been completed. Facilities when available would be utilised by adjustment of rake links 571 UP/572 DN.

Railways contention is not acceptable. Due to non-availability of requisite ancillary facilities at Ballia, coaches marked sick are being sent to Chhapra Depot (situated 66 kms. Away) for their attention. As regard washing pit at Azamgarh, it is stated that it was not suitable to accommodate a load of 17/18 coaches of Kaifiyat Express for which it was built. Proposed construction of washing pit to accommodate 20 coaches is yet to be done.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.1.8 South Central: Idle expenditure on construction of Railway staff quarters

Staff quarters constructed at a cost of Rs.3.17 crore for a new Broad Gauge line remained unoccupied

In September 2005, Construction Organisation constructed 47 Railway quarters at a cost of Rs.3.17 crore at three locations (29 at Kakinada town, 10 at Ramachandrapuram and 8 at kotipalli) for allotment to about 200 staff of new Kakinada-Kotipalli Broad gauge (BG) line opened for traffic in November 2004. These quarters were ready for occupation in October 2005.

Review of records revealed that out of 29 quarters at Kakinada town, only one quarter was allotted and remaining. 28 quarters were handed over to open line for allotment to staff only in March 2007. 18 quarters (Ramachandrapuram-10 and Kotipalli-8) were also found lying unoccupied (March 2007). The main reason for the non-allotment of these quarters was reduction in staff strength as expected passenger and goods traffic on the new BG line had not

materialised. The sale of tickets was entrusted to the halt agents. Non-availability of the staff for occupation of the quarters resulted in idling of assets of Rs.3.17 crore for 18 months.

On this being taken up by Audit (January 2007), Railway Administration stated (June 2007) that the quarters were allotted to staff by the Open line. The fact remains that the quarters intended for staff of new line are being considered for allotment to existing staff at Kakinada and there was no prospect for allotment at the two remaining locations.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.1.9 Metro Railway: Infructuous expenditure on setting up of a hospital

Injudicious decision of Railway Administration for setting up of a separate hospital for Metro Railway employees led to infructuous expenditure of Rs.2.45 crore

Employees of Metro Railway were availing of indoor medical treatment facilities from three railway hospitals of Eastern and South Eastern Railways located at Kolkata and Howrah. A proposal, however, was made by Metro Railway in December 1999 for a separate 30 beds hospital to provide better medical facilities to the employees of Metro Railway, Kolkata.

Scrutiny of records revealed that as per extant rules, establishment of a hospital required specific prior approval of Ministry of Railways (Railway Board). Although in the Budget Speech of 2001-02, Minister of Railways had proposed to set up a separate hospital for Metro Railway, no formal sanction was accorded by the Railway Board. It was observed that a provision of Rs.3.50 crore was made for the hospital in the Pink Book for 2001-02 and 2005-06.

The hospital commenced its services from June 2005 and it was decided to outsource the ancillary services for the hospital viz. casualty service, kitchen service, nursing service, OPD and technical services etc. After running for a period of about 13 months the Indoor Service had to be suspended with effect from July 2006 as the contracts had expired and fresh tenders could not be finalised.

The assets created viz. building, medical equipment, furniture etc. procured for the Hospital remained unutilised till date (May 2007). The hospital is yet to be reopened and delay in re-opening may lead to deterioration/damage to the assets. It was observed that Director General (Railway Health Services) had expressed (May 2005) serious apprehensions regarding running of the hospital with outsourcing services. Poor response against the tender floated and the failure to finalise the tenders indicated that the present policy of running the hospital by outsourcing was not administratively viable.

Thus, the proposal for setting up of the hospital was not judicious and the total expenditure (Rs.2.45 crore) proved infructuous.

When the matter was brought to the notice of Railway Board in September 2007, they stated (November 2007) that pending posting of regular doctors/ staff, the assets were brought in use by outsourcing and further attempts have been made to run the hospital as a joint venture by contacting 8/9 multispeciality hospitals at Kolkata. Proposals for sanction of suitable manpower are in active consideration of the Railway Board. The total infrastructure will be in full use immediately on receipt of sanction of manpower from Railway Board.

The reply is not acceptable because the very purpose of setting up of the hospital exclusively for Metro Railway employees has been defeated as smooth running of the hospital could not be started even after two years from the date of completion of construction of the hospital. Even outsourced activities could also not be ensured till date.

3.1.10 South Eastern: Wasteful expenditure on Modernisation Railway of Coaching Complex at Tata

Railway Administration's poor planning resulted in wasteful contractual expenditure of Rs.1.83 crore on creation of non-productive assets at Tata

A new Coaching Complex at Tata was proposed for construction at the erstwhile Classification Yard in the year 1998-99 as the washing line at Tata was not able to place 22 coaches in existing pits. Due to funds crunch the entire work was split up into two phases. Phase-I work (sanctioned in 1998-99) included very essential infrastructure. The balance facilities comprising of important aspect of coaching maintenance such as covered shed with crane, facilities for intermediate overhauling of coaches, sick line, one additional pit, AC coach maintenance facilities etc. was to be taken up in phase-II. A detailed estimate for Phase-I work amounting to Rs.3.56 crore was sanctioned in March 2000.

Scrutiny of records revealed that the main contract out of the three civil engineering works under phase-I was awarded in July 1999, well before the sanction of the detailed estimate.

In September 2002, when the work of Phase-I was in progress, the Chief Mechanical Engineer, South Eastern Railway observed that the completion of phase-I work would serve no purpose, as maintenance would not be possible without the completion of works in Phase-II. He, therefore, requested Divisional Railway Manager Chakradhapur to revisit the plan particularly in view of the fact that space was also to be given for the proposed two new lines for collection of sick wagons. However, the plan could not be finalised at divisional level due to conflicting requirements of Mechanical and Operating departments (November 2002) and the work was put on hold in March 2003. By that time two pit lines with length of 490 and 460 meter each had already been constructed at a cost of R.1.83 crore. Subsequently, the construction of Coaching Complex was not found feasible (March-August 2003) on certain technical grounds and abandoned.

Subsequently a Committee, constituted in December 2003 for relocation of Coaching Complex, recommended (April 2004) the construction of Coaching Complex at a new site.

The matter was taken up with Railway Administration in April 2006. In their reply, the Railway Administration admitted (August 2006) the lapse of nonconducting of a detailed site survey at the time of formation of the proposal. They further added that construction of these pit lines would augument the examination of wagons more efficiently.

Railway Administration's argument regarding gainful utilisation of the abandoned infrastructure for goods examination yard in future is not acceptable because a standard goods examination yard requires only one pit of 20 meters length as against the two pit lines of the length of 490 and 460 meters provided. Therefore the two pits lines constructed for examination of coaches would remain redundant.

Thus, failure of Railway Administration to conduct survey for selection of site and non-finalisation of Yard Plan before commencement of work resulted in wasteful contractual expenditure of Rs.1.83 crore.

The matter was brought to the notice of Railway Board in September 2007; their reply has not been received (December 2007).

3.1.11 South Eastern: Injudicious decision for OHE work Railway on Tamluk – Digha section

Railway Administration's injudicious decision for the OHE work of Tamluk – Digha section led to loss of Rs.1.58 crore

Railway Board sanctioned (February 1988) an abstract estimate for construction of Tamluk-Digha (TD) BG Rail link. Subsequently (14 February 1990), the Railway Administration decided to electrify the section as all other contiguous lines were electrified. The progress of work remained dependent upon the availability of funds. In November 1999, Minister of Railway advised the Railway to ensure completion of the work by December 2000. Accordingly a detailed estimate for Rs.293.97 crore (including Over Head Electrification portion of Rs.32.22 crore) sent to Railway Board was sanctioned (April 2000). However, General Manager, (GM) South Eastern Railway considering the initial low level of traffic on the line, ordered (March 2000) to pend proposed electrification and to seek Railway Board' view. The matter thereafter remained under consideration as departments expressed different views over the viability of electrifying the section. Finally the Railway Board was informed (December 2001) for not going ahead with track electrification works.

In 2003 the Chief Electrical Engineer (Construction), however, again stressed the need to electrify the section stating that non-electrification in a completely electrified Kharagpur Division was not logical. General Manager approved (September 2003) taking up the electrification works on this section. A contract was awarded (October 2003) for supply, erection, testing and commissioning of 25KV OHE and Power Supply Installation (PSI) in one section.

Audit, however, noticed that the divisional authorities were not consulted in the matter. Railway Administration disregarded the consistent views of the Operating department (July 2000, July 2003 and January 2004) that Over Head Electrification (OHE) might not be taken up to save initial capital investment as well as recurring maintenance cost, as low forecast of traffic projected in 1998, still held good. Instead, another contract (March 2004) for similar work in another sub-section was awarded.

While the work was in progress, Divisional Railway Manager (DRM)/KGP strongly objected (November 2004) to the decision of execution of OHE work in TD section on the ground of operational constraints (line capacity of the adjoining Panskura-Tamluk section being already saturated) to run more than three pairs of trains for Digha. He stated that not only would the cost of operations increase due to creation of additional infrastructure to maintain OHE, but additional investment on this account would be a drain on the finance of Railways. He therefore, advised to immediately stop the electrification of TD section. Ultimately the electrification work on TD section was frozen (January 2005) and the two contracts were short closed (March 2006) after incurring an expenditure of Rs.1.58 crore (Rs.0.80 crore for contractual labour payment, Rs.0.15 crore for cost of materials supplied by the contractor and Rs.0.63 crore for establishment and other charges).

When the matter was taken up (January 2007) the Railway Administration stated (May 2007) that the electrification work was only frozen and not altogether dropped. The decision cannot be construed as injudicious as the electrification work can be revived at any time as per traffic demand and requisite allocation of fund.

The reply is not acceptable. There seems to be no scope to revive electrification works in the foreseeable future as COM had clearly indicated (March 2005) that the present mode of train operation i.e. 'One Train only' system would continue. Moreover continuous low level of traffic, saturated line capacity of adjoining section and increase in cost of maintenance of OHE were the prime considerations to freeze the work in this single line section working on 'one train' block system that did not merit electrification. Railway's contention regarding possibility of revival of the work is only an afterthought to counter the audit observation.

Thus, the injudicious decision to electrify the TD section without taking into account the existing line capacity, projected future growth on adjoining section and constraints of the existing train running system caused loss of Rs.1.58 crore.

The matter was brought to the notice of Railway Board in September 2007; their reply has not been received (December 2007).

3.1.12 South Eastern: Loss due to non-implementation of revised decision on signalling work

Non-observance of the changed decision by Signal and Telecommunication Department/Construction for withdrawal of Signalling system in Tamluk-Digha line led to loss of Rs.1.30 crore and blocking of capital worth Rs.1.41 crore.

The Railway Board sanctioned (April 2000) a detailed estimate for the construction of new line Tamluk-Digha (TD) Rail link. The estimate included full signaling and telecommunication works and incorporated provisions of a junction cabin at the take off point of new line and five block stations with Standard III interlocking and two/three lines on four intermediate block stations. The signaling work in Tamluk-Kanthi sub-section of the above rail link was awarded to M/s Picasona Enterprise in March 2000 i.e. prior to the sanction of the detailed estimate, violating the extant procedure.

The General Manager, South Eastern Railway, however, decided (July 2000) that there would be only one pair of trains running on the TD section. On this basis, the Signal and Telecommunication Department/Construction was asked (July-October 2000) to re-examine and finalise their plans as the same would not require any loop line and signaling system at any of the stations. However, the requirement of the signal system was not reassessed and another contract for signal work was awarded to M/s Durga Construction (August 2000) for remaining section.

Both the works were completed up to ninety per cent by December 2001. On viewing of the project, the Operating Department (Headquarters), reiterated (February 2002) their earlier decision of 'one train only system' to Chief Administrative Officer/Construction and advised for dismantling the installed signaling equipments, materials for gainful utilization at other locations.

The section Tamluk Junction Cabin-Kanthi was opened to traffic in October 2003 and the entire section up to Digha in December 2004 on 'One Train Only' system of working.

As a sequel to the withdrawal of signaling system in TD section, both the contracts were closed (February/March 2005) and the two contractors were paid (January 2007) a sum of Rs.2.96 crore comprising Rs.2.75 crore towards materials supplied and Rs.0.21 crore towards labour engaged for signaling works in TD section excluding junction cabin. The establishment and other charges were incurred to the extent of Rs.0.55 crore and Rs.0.07 crore respectively. Out of materials supplied irretrievable items of Rs.0.47 crore were found.

The matter was taken up (February 2007) with Railway Administration. They accepted (June 2007) the audit contention and stated that "forecasting errors" were made for Digha Project resulting in extra expenditure for signaling works.

Thus, the Railway Administration failure to enforce change in signal system commensurate with the changed decision to operate 'one train only system'

led to a loss of Rs.1.30 crore (proportionate contractual labour-Rs.0.21 crore, proportionate establishment charges-Rs.0.55 crore, other charges-Rs.0.07 crore and irretrievable materials-Rs.0.47 crore), as assessed in audit. Moreover, retrieved materials of Rs.1.41 crore still lying in stock are prone to depreciation, resulting in diminishing of the actual value of the stores.

The matter was brought to the notice of Railway Board in September 2007; their reply has not been received (December 2007).

3.1.13 Western Railway: Wasteful expenditure on creation of Carriage and Wagon examination facilities

Hasty and unjustified decision taken by Railway Administration to create train examination facilities alongwith non-provision of standard pathway resulted in wasteful expenditure of Rs.1.50 crore

In March 1998 a decision was taken to create Carriage and Wagon examination facilities at Viramgam. The creation of these facilities was justified on the ground that most of the goods trains originating from east of Rajkot and Viramgam - Gandhidham section will go toward Palanpur after gauge conversion of Viramgam -Mahesana section and, therefore, would be examined at Viramgam. The proposed work was approved by Railway Board and included in the Works Programme of 2000-01 at a cost of Rs.1.76 crore. The civil portion of the work i.e. construction of a covered shed along with approach road and a pathway between line No. 6 and 7 was completed in June 2001. Tools and Plants (T&P) worth Rs.0.46 crore were also procured between September 2001 and August 2004. The total cost of the work including cost of T&P items was Rs.1.73 crore.

Audit scrutiny of records of the Sr. Divisional Mechanical Engineer (Sr.DME), Ahmedabad revealed that the facilities of Carriage and Wagon examination were not utilised and were lying idle since their creation. In reply to Audit queries, the Sr.DME stated (September 2006) that the facilities could not be put to use because of change in the pattern of train examination. It was also stated that the pathway between lines nominated for intensive examination was inadequate as it was only 0.80 meter wide as against the required width of 1.72 meters. He added that some of the T&P items have been transferred to other depots for utilisation. The reply indicates that the facilities were not put to use firstly because these were not constructed as per required standards and secondly there was no requirement to create such facilities at Viramgam. Scrutiny revealed that T&P item valuing Rs.0.23 crore only were transferred to other units.

Thus, hasty and unjustified decisions taken by Railway Administration to create train examination facilities without any requirement coupled with non-provision of standard pathway resulted in wasteful expenditure of Rs.1.50 crore.

The matter was brought to the notice of Railway Board in September 2007; their reply has not been received (December 2007).

3.1.14 Northeast Frontier: Infructuous expenditure on track Railway renewal of MG section sanctioned for dismantlement

Failure of the Railway Administration to complete the transshipment facility work at Rangia in time led to an infructuous expenditure of Rs.0.50 crore incurred on avoidable execution of track renewal work in New Bongaigaon - Rangia (RNY) MG section sanctioned for dismantlement

The New Jalpaiguri (NJP) – Siliguri (SGUJ) – Alipurduar (APDJ) – New Bongaigaon (NBQ) Metre Gauge (MG) section (280.35 kms.) was sanctioned (April 1999) for gauge conversion by Railway Board and the work was completed in February 2006. After the gauge conversion up to NBQ, the remaining MG line [NBQ-RNY (109 kms.)] got truncated. The Railway, however, decided not to convert the MG section (NBQ-RNY) during the next 20 years and instead proposed (2000 to 2003) track renewal works in various stretches which were sanctioned by the Railway Board. Accordingly, 12 contracts were executed between November 2001 and March 2004 at a cost of Rs.3.31 crore and the works were completed in September 2005.

Consequent upon the on-going gauge conversion of NJP-SGUJ-APDJ-NBQ section and impending snapping of MG rail link, the Railway Administration's proposal for dismantlement of MG track from NBQ-RNY was sanctioned by the Railway Board in February 2003. As dismantling of MG track was to render the existing transshipment point at NBQ useless the Railway Administration proposed (June 2002) to shift the transshipment point to RNY on 'out-of-turn' basis. The proposal was sanctioned by Railway Board in November 2002 and the contract of the work was awarded in January 2003 with stipulated date of completion as July 2003. The work was, however, completed (September 2004) after a delay of fourteen months as Railway was not able to hand over clear site as well as plans and drawings of the work in time. Non completion of the work resulted in continuance of the track renewal works on a section which was proposed for dismantling. Thus the expenditure of Rs.0.50 crore incurred on TSR proved futile.

When the matter was taken up (March 2007), Railway Administration stated (June 2007) that though the creation of transshipment point at RNY was sanctioned on 'out-of-turn' basis, yet the completion was mainly delayed due to the law and order situation in that area. It was also stated that due to the delay in terminating passenger services in the NBQ-RNY MG section, as well as delay in commencement of dismantling work, the expenditure of Rs.0.50 crore was incurred on the renewal of sleepers, as the same was absolutely necessary for the safety of passengers.

These arguments are not tenable because delay in creation of transshipment point at RNY was on account of Railway's failure to hand over clear site to the contractor, modification of the drawings and defective planning. Moreover, though the work of dismantling the track was sanctioned in February 2003, the work was actually started in September 2005 immediately after completion of the track renewal works.

Thus, incurrence of an expenditure of Rs.0.50 crore towards execution of track renewal works from August 2003 to September 2005 in the NBQ-RNY MG section, already sanctioned for dismantlement proved infructous.

The matter was brought to the notice of Railway Board in September 2007; their reply has not been received (December 2007).

3.2 Defective planning/ delay in completion of works

3.2.1 North Central and: Avoidable expenditure due to non-Northern Railway completion of ancillary work and poor assessment of quantity

Railway's failure in obtaining cheaper power from National Thermal Power Corporation (NTPC) due to delay in completion of works resulted in avoidable loss of Rs.31.47 crore on two Railways

North Central Railway

(i) Railway Board sanctioned (1994-95) a work at a cost of Rs.59.21 crore between Panki-Sahibabad (SBB) section of Northern Railway for obtaining direct power supply from NTPC to save energy bill for the traction supply. A detailed estimate was sanctioned in March 1998 at a cost of Rs.55.36 crore. The estimate was subsequently revised to Rs.63.64 crore due to change in scope of work.

A contract for construction of traction sub station (TSS) at Panki at a cost of Rs.3.13 crore was awarded (September 2000) with date of completion as May 2001. Review of records revealed that the work of TSS was completed in November 2004 after a delay of about three and half years. However, the sub station could not be commissioned immediately as the work of construction of transmission line awarded to another contractor was completed only in June 2005. Commissioning was further delayed on account of delay in applying/receiving sanction of Electrical Inspector till January 2007. The TSS was finally commissioned in January 2007.

The Railway Administration suffered a loss of Rs.7.20 crore on account of payment of electricity bills at higher rate to UPSEB during the period July 2005 to December 2006 due to delayed commissioning of the TSS at Panki.

(ii) Another contract for the construction of transmission line between Panki/TSS and Sarsaul (Krishna Nagar) was awarded (January 2003) at a cost of Rs.3.57 crore to be completed by November 2003. The work was delayed due to incorrect assessment of scope of work resulting in an increase of 37 per cent of original contact value to Rs.4.89 crore. This contract was terminated at risk and cost of the contractor in May 2006. Though the contract for balance work was awarded in December 2006 at a cost of Rs.1.42 crore to be completed by March 2007 it was still in progress. Meanwhile, there was a loss of Rs.0.32 crore due to theft on the segment of work executed by the earlier contractor.

Abnormal delay in executing the transmission line work has resulted in incurrence of avoidable expenditure of Rs.18.90 crore on payment of energy

bill at higher rates from July 2005 to March 2007. In addition they also suffered loss of Rs.0.32 crore due to theft of material.

The matter was taken up with Railway Administration in May 2007. They stated (August 2007) that a number of factors had contributed to the delay in final commissioning of Panki/TSS. The site conditions changed due to crossing of existing and new extra high voltage transmission lines by 132 KV Panki-Sarsaul traction line at various locations, new villages coming up and other natural reasons. This has resulted in change in original alignment of traction line and other small changes in the scope of work, which was very much unavoidable, and resulted in variation of quantities. The arguments of Railway Administration are not acceptable because they were fully aware of the existing lines at the time of survey before awarding of the contract and failed to commission Panki/TSS after completion of transmission line in June 2005.

Northern Railway

Rules envisage that the tenders for executing the works should be invited and finalised only after the availability of a clear site and finalisation of designs and plans for the works.

Railway Board sanctioned (May 2002) the work of modification in OHE system and Traction Sub Station (TSS) at Sahibabad (SBB) at an estimated cost of Rs.5.49 crore for availing traction supply from NTPC in Delhi area at cheaper rates. The work was divided into two portions for execution purpose. The Construction Organisation of the Zonal Railway awarded (May 2003) the contract for the first work to a contractor at a cost of Rs.1.99 crore (later revised to Rs.2.87 crore) while the contract for the second work was awarded (May 2003) to another contractor at a cost of Rs.2.08 crore (later revised to Rs.2.43 crore). These works were to be completed by 6 November 2003.

As per the original action plan, the first work provided for running of two feeders on single mast having foundation on slope/embankment. The work was stopped as construction of masts on the slope/embankment was disputed by the Divisional Authorities. As the Construction Organisation decided to run independent feeder on independent masts on the cess on either side of the track, there was increase in quantity of steel as well as in volume of foundation work. The work was finally completed in July 2005. Further, the completion of the second work also got abnormally delayed for 20 months on account of non-provision of clear site, cubicle rooms and power blocks etc. by Railway and the same was completed in July 2005.

Delay in completion of the works of modification to OHE and TSS resulted in incurrence of avoidable expenditure of Rs.5.05 crore as the Railway had to obtain the supply of electricity from BSES Rajdhani Power Limited, Delhi during December 2003 to July 2005 at higher rates.

When the matter was taken up (February 2007), Railway Administration stated (June 2007) that the delay in completion of the work was due to unavoidable and unforeseen reasons. Railway's contention is not acceptable because had the Construction Organisation consulted the concerned Divisional

Authorities about the location of the feeder line and avoided the delay in providing the clear site, cubicle rooms and power blocks to the contractor, the abnormal delay of 20 months in obtaining the traction supply from NTPC could have been avoided.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.2.2 South Central: Blocking up of capital on an Railway incomplete work

Railway's decision to bring a largely complete work within the scope of National Rail Vikas Yojana (NRVY) resulted in blocking up of capital (Rs.36.20 crore) and incurrence of unsanctioned/uncommitted expenditure (Rs.11.68 crore)

Renigunta (RU)-Gooty (GY) section (280 Kms.) forms an important part of Chennai-Mumbai Broad Gauge (BG) Trunk Route. Doubling of track in five sub-sections of this entire stretch had already been completed in patches during years1972-2006. Railway had sanctioned doubling work in Pullampet-Bhakrapet (PMT-BHKT) sub-section in May 2002. Completion of this work would have provided a continuous double track in Renigunta-Kadapa section (121 Kms.) leaving only two patches of single line (107.39 Kms.).

Government of India announced the NRVY on 15 August 2002 and launched it in December 2002 as a non-budgetary initiative for creation and augmentation of rail infrastructure including strengthening of golden quadrilaterals and its diagonals with loan from Asian Development Bank (ADB). Doubling work in the entire section RU-GY was also included under NRVY by the Railway. By that time a sum of Rs.29.68 crore had already been incurred on the work and Railway continued to incur expenditure (Rs.41.36 crore) on the work up to 2006-07. A major portion of the earthwork and bridgework has been completed since then and only ballast collection and track laying are remaining. After the inclusion of this work in NRVY, it was decided that the balance work would be got executed through the Rail Vikas Nigam Limited (RVNL). RVNL could award the work only in July 2006. The actual execution of work was yet to start (February 2007).

Railway's decision to bring an almost complete work within the scope of NRVY and further reluctance in not getting the balance work executed through RVNL at the earliest resulted in blocking up of capital to the extent of Rs.36.20 crore besides incurring unsanctioned/ uncommitted expenditure of Rs.11.68 crore on the work.

On the matter being taken up by Audit (May 2007), Railway stated (August 2007) that investment had not been blocked as the works were going on under RVNL supervision and section was targeted for completion by December 2007. Railway's contention is not acceptable in view of the fact that had the doubling work between PMT and BHKT executed by the Zonal Railway itself, the project could have been completed and commissioned by May 2006.

The matter was brought to the notice of Railway Board in September 2007; their reply has not been received (December 2007).

3.2.3 Western Railway: Avoidable expenditure due to defective planning and delay in commencement/completion of a work

Delay in commencement of a work after six years of its sanction and further delay in completion has resulted in avoidable expenditure of Rs.14.76 crore on account of haulage of trains for an additional run of four kilometers and increase in cost due to price escalation

Gauge conversion of Meter Gauge (MG) line between Rewari -Khodiyar linking Ahmedabad station of Western Railway via Sabarmati commenced in 1992-93 was completed in March 1997. Since the Broad Gauge (BG) section between Khodiyar and Sabarmati via Chandlodiya was longer by four kilometers as compared to direct MG route from Khodiyar to Sabarmati and was over saturated, gauge conversion of Khodiyar - Sabarmati section was proposed in December 1998. The work was sanctioned by Railway Board in June 2000 as a Material Modification to Phulera - Ahmedabad Gauge Conversion project at a total cost of 17.31 crore. The sanctioned estimate contained provisions for using existing 90 R rails and CST-9 sleepers. However, the estimate was revised with provision for new rails and PRC sleepers at a total cost of Rs.25.71 crore (May 2002).

Audit scrutiny of records of Ahmedabad Division revealed that the gauge conversion work was stopped in October 2001 as the yard plans required modifications due to curtailment of certain facilities. As per original plan, a new line was to be constructed between Sabarmati station and Sabarmati 'D' cabin. However, after four years Railway Administration sent (November 2005) second revised material modification in which conversion of existing MG line was envisaged and the estimate was revised to Rs.27.13 crore. Railway Board advised (July 2006) the Railway to go ahead with the work and include the changes in the completion/revised estimate. The work was finally taken up in July 2006 and was still incomplete (September 2007). In this connection the following Audit observations are made:

- The work was sanctioned in June 2000 with the objective of decongesting the Khodiyar Chandlodiya section and also to achieve saving of four to six minutes in the running time of trains. However, Railway Administration took five years to decide the exact plans of the work and as a result the work could only commence six years after it was sanctioned. The work was still in progress and the stated objective of saving in running time of trains as well as decongesting the existing route remained unachieved even after seven years.
- A comparison of original estimated cost with the revised estimated cost revealed that delay in commencement resulted in increase of Rs.4.83 crore in expenditure on account of price escalation of various items of work.

• Due to non-completion of the work, Railway is incurring avoidable expenditure on extra haulage of the trains. An avoidable expenditure of Rs.9.93 crore has already been incurred during the year 2002-03 to 2006-07.

Thus, commencement of a work after six years of its sanction and delay in completion resulted in avoidable expenditure of Rs.14.76 crore on account of haulage of trains for additional run of four kilometers and cost escalation. Besides the stated objective of decongesting the route and saving time in running of trains could not be achieved.

The matter was taken up with the Railway Administration and Railway Board in March 2007 and October 2007 respectively; their reply has not been received (December 2007).

3.2.4 Central Railway: Defective planning and execution of work led to idling of investment and loss due to detention to loaded wagons

Failure of Railway Administration to adhere to the Railway Board's directive coupled with defective planning led to incurrence of idle investment of Rs.8.87 crore and resulted in loss of earning potential of Rs.2.08 crore on account of detention to wagons for want of locomotives

While prioritizing the Gauge Conversion work of Miraj -Latur section, the Railway Board had instructed the Railway that except for land acquisition no other commitments be entered into for Kuruduwadi -Latur and Miraj - Pandharpur sections which were to be undertaken as Phase III and Phase IV projects.

Audit scrutiny of records revealed that the work on Kurduwadi -Pandharpur (Phase I) and Latur -Latur Road (Phase II) were completed in March 2001 and March 2004 respectively. The work in Kurduwadi - Latur (Phase III) and Pandharpur -Miraj (Phase IV) sections also commenced in March 1996 and May 2003. Audit observed the following deficiencies in planning and execution which resulted in idling of investment and loss of earning potential of loaded wagons due to the detention:

- While the section between Kurduwadi-Pandharpur section was converted in Broad Gauge (BG), the section beyond Pandharpur is still Narrow Gauge. Due to non-availability of direct BG link from Kurduwadi to Miraj, Railway has lost cement traffic after June 2001. The traffic was restored via Pune from February 2006 after a gap of four and half years.
- The section between Latur and Latur Road was opened to traffic in March 2004. However, it has no access to the newly constructed BG line from Kurduwadi side because of non-completion of the gauge conversion of Kurduwadi -Latur section (Phase III). The Central Railway depends on South Central Railway to arrange locomotives for movement of its traffic from Latur. Further, the traffic on Latur Latur Road Section is being permitted only during the day time. As a result the wagons loaded at Latur are detained for a long time. Audit scrutiny of records for the period from January 2004 to January 2007 revealed that a

total of 6192 wagons loaded during day time suffered detention ranging from four hours to 172 hours resulting in loss of earning potential of Rs.1.90 crore.

- Despite Railway Board's orders, works commenced for construction of minor and major bridges in Phase IV in May and August 2003 i.e. much before the completion of work in Phase II (March 2004). Two of the works were stopped after incurring an expenditure of Rs.6.00 crore and one work was closed even before its commencement due to delay in approval of designs and drawings.
- Two contracts were awarded for earthwork and bridges in December 2004. The works were, however, stopped by the contractors as the sites were not available because dismantling of the existing NG track was not allowed due to continuance of train services on the sections. An expenditure of Rs.1.27 crore was incurred on these works.

The expenditure of Rs.7.27 crore incurred as payment to contractors and Rs.1.60 crore on establishment and other miscellaneous items will remain idle till completion of the entire phase IV which is targeted for completion by December 2008.

When the matter was taken up with Railway Administration in March 2007, they stated (June 2007) that the works of long lead items like earthwork and bridges in Phase IV were taken up as public representatives had requested to complete the entire project early. It was also added that termination/arbitration in contracts are known facts in any project execution and not specific to Phase IV works. The reply is not convincing because the works in Phase IV were undertaken in May 2003. Moreover, Maharashtra Government had requested (December 2004) for early completion of work in Phase III and then take up the work in Phase IV. Railway's remarks that termination/arbitrations is common to execution of projects points toward their poor planning and management of contracts which led to termination and arbitration. In this case also, works of construction of bridges were terminated because of delay in the approval of designs and drawings. Moreover, earthwork contractors had clearly stated that they could not progress the work because of non-dismantling of the existing NG track.

Thus, the failure of Railway Administration to adhere to the Railway Board's directive coupled with defective planning led to incurrence of idle investment of Rs.8.87 crore and resulted in loss of earning potential of Rs.2.08 crore.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.2.5 North Central: Unproductive investment due to Railway defective planning

Delay in commissioning of RRI due to defective planning led to unproductive investment of Rs.6.36 crore

The work of replacement of worn out lever frames, signal gears, old cabin building by Route Relay Interlocking (RRI) was sanctioned in 1998-99 at an

estimated cost of Rs.9.49 crore at Agra Cantt (AGC) station of North Central Railway (erstwhile Central Railway). A contract for outdoor and indoor signaling works was awarded to a contractor at a cost of Rs.2.03 crore which was to be completed by December 2001.

During the execution of work, the Railway Board communicated (April 2001) the recommendations of the Railway Safety Review Committee (RSRC) which provided for the up-gradation of all stations on Broad Gauge main and trunk routes to standard-III interlocking. To comply with these recommendations, the Railway Administration identified (July 2001) Agra Cantt. for upgrading the signaling system from standard-I interlocking to standard-III interlocking. A second contract was awarded (February 2002) to another contractor for executing the work of 'supply, installation, testing and commissioning of outdoor equipment, locking alteration' etc. at a cost of Rs.0.42 crore which was to be completed by June 2002. requirement of the entire work of RRI at AGC had not been covered even after award of above contract, another contract for left over items was awarded (January 2003) to the same contractor at a cost of Rs.0.14 crore with date of completion as March 2003. The value of first contract was also enhanced to Rs.2.45 crore on the grounds that some items of works were required to be executed in excess of the scheduled quantity.

The Railway Administration prepared (February 2003) a revised estimate incorporating the provisions of increased Clear Standing Room (CSR), isolation of main lines to raise the standard of interlocking to standard-III etc.

The progress of the above works was very poor right from the beginning. The Railway Administration had to extend the period of completion on four to five occasions as plans could not be provided. While the physical progress of the first work up to June 2004 and of the second work up to January 2005 was 65 and 50 respectively, no work was done against the third contract.

The work of construction of RRI Building at Agra Cantt, which was awarded in January 2000 at a cost of Rs.0.34 crore, had been completed in 2001. Till March 2005 an expenditure of Rs.10.26 crore had been incurred on the RRI of AGC and out of this, investment of Rs.6.36 crore had been lying unproductive since April 2005 as neither the works had progressed nor any funds provided by Railway Board. In the Budget of 2006-07, the Railway Board sanctioned two projects viz. yard remodeling of AGC and connectivity of AGC with Bayana and Bandikui. However, the work remained still incomplete till April 2007, when the Railway Administration decided to execute the RRI at AGC as per existing layout keeping the necessary provisions for future modifications. The earlier contract was short closed.

Thus, defective planning and lackadaisical approach in deciding the final scope of work led to delay in commissioning of RRI at AGC and resulted in unproductive investment of Rs.6.36 crore.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.2.6 North Central: Blockage of capital due to delay Railway in dismantling the siding

Failure of the Railway Administration to take back the released material from the Defence Authorities and dismantle the balance portion of the siding resulted in blockage of capital of Rs.4.99 crore.

As per the extant orders all retrievable material used in the construction of a siding is the property of Railway. The Central Ordnance Depot (COD), siding Kanpur of Allhabad Division had become unsafe for Railways operations and as the Defence Authorities were not ready to accept the proposal for its renewal, the Railway Administration decided (July 2000) to close the same.

Defence Authorities intimated (September 2001) the Railway Administration that they did not require the track of the siding inside the COD due to modernisation plan and requested (October 2001) Railway to remove the track from the site. It was also requested to keep the balance track (three Kms.) out of total 21.411 track Km. of the siding as operational for loading/unloading purposes. Accordingly, a proposal to dismantle the proposed portion of the track was approved in September 2003.

In the meantime, Defence Authorities had dismantled 6.904 Km. length of track of the siding to facilitate their construction activities. The Railway Administration requested (June 2004) the Defence Authorities to handover the material released from the dismantling of the track. The retrieved material, however, could not be taken back despite protracted correspondence due to the differences over the manner of stacking of the released material, till March 2007. The balance track of length 11.507 Kms. of the siding was also lying un-dismantled as on March 2007.

Thus, failure of the Railway Administration to take back the released material from the Defence Authorities and dismantle the balance portion of the siding resulted in blockage of capital of Rs.4.99 crore.

When the matter was taken up with Railway Administration in May 2007, they contended (August 2007) that work of loading of material by Railway Authorities from COD store will commence from 15 September 2007 after joint verification by the COD and Railway Authorities. This loading work is expected to be started from 15 September 2007 onward.

The fact, however, remains that the materials released from already dismantled track and materials to be released from the track yet to be dismantled, were not received by the Railway Administration till August 2007.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.2.7 East Coast: Delay in execution of bridge rehabilitation Railway work

Delay in execution of bridge rehabilitation work led to a loss of Rs.2.81 crore on account of continuance of permanent speed restriction

The work of replacement of existing corroded steel trough of Bridge No.1383 Up was awarded in January 2003 to be completed by September 2003 with a

view to rehabilitate the distressed bridge and to avoid speed restriction. In terms of Clause 24 of the Special Conditions of Contract, time being the essence of contract, all the works were required to be completed in all respects within eight months.

Audit scrutiny revealed that the contractor did not take up the work immediately due to delay in handing over of final drawing by Railway Administration for trial blocks. The work could start only in November 2003 i.e. after two months of the proposed date of completion of the work. Chief Engineer, Bhubaneswar advised till date (September 2004) to close the contract without financial repercussion on either side due to slow progress of work, and to float fresh tender for the balance work in view of deteriorating condition of the distressed bridge. However, despite three extensions up to May 2005, the contractor could complete only four spans out of seven and informed the Railways about his inability to go ahead with the work due to steep rise in prices of steel. The contract was finally closed on (June 2005) with forfeiture of full security deposit of Rs.3 lakhs.

It was observed that due to non-completion of the work, the speed restriction imposed in1996 had to be continued till (September 2007). An assessment made in audit revealed that the continuance of speed restriction has caused Railway a loss of Rs.2.81 crore during the period from October 2003 to November 2006 towards loss of earning capacity of goods trains. Financial implications of speed restriction on coaching trains could not be assessed.

Thus, the failure of Railway to provide right drawing based on the site conditions resulted in delay in commencement and completion of work of a distressed bridge which is indicative of poor contract management and resulted in a loss of Rs.2.81 crore.

When the matter was taken up with Railway Administration in May 2007 they accepted (September 2007) that there was delay in finalisation of drawing. The delay in conducting the trial was not intentional but due to lack of experience in execution of such type of work. The permanent speed restriction was not an avoidable one due to unconventional nature of work and thus loss calculated by Audit is only having a notional value.

The reply is not acceptable Railway Board has repeatedly emphasized the fact that Railway Administration should be ready with complete drawing/plan before awarding of a contract. In the instant case, the drawings were handed over to the contractor only after expiry of the original contractual period. Railway administration failed to take steps to repair the distressed bridge within a reasonable period involving safety aspect which resulted in continuance of permanent speed restriction with consequential loss of revenue.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.2.8 Southern: Unfruitful expenditure due to delay in Railway completion of a Railway Electrification work

Delay in completion of railway electrification work of a section resulted in movement of goods traffic through a longer route and extra operational expenditure of Rs.3.76 crore

Railway Board desired (1996) to electrify Katpadi-Pakala-Tirupathi section along with the Gauge Conversion work on the non-electrified section between Arakkonam-Jolarpettai and Arakkonam-Renigunta. The Railway however, took up only the Gauge Conversion work and completed the same in August 2003. Thereafter, Construction Organisation Authorities justified (May 2004) the railway electrification of this section as it necessitated change in traction resulting in heavy detention to rolling stock. Railway Board had also viewed seriously (October 2004) the delay in taking up the electrification.

Accordingly, Central Organisation for Railway Electrification (CORE), Allahabad awarded (December 2004) a contract for the work at a cost of Rs.18.57 crore. The work was to be executed on turnkey basis and to be completed by March 2006.

A review of records connected with the finalisation of tender by the CORE in December 2004 revealed that although the contractor was a regular source for railway electrification works, CORE accepted the offer without evaluating his latest performance, and competence to execute an urgent work on turnkey basis.

During execution of work, following delays/failures on the part of Railway Administration as well as the contractor were observed by Audit:

- Though the Letter of Acceptance (LA) was issued on 29 December 2004, the contractor signed the agreement on 21 February 2005.
- Contractor took over the site of work (24 April 2005) after four months from the issue of LA.
- Depot demanded by the contractor was handed over by the end of April 2005 and the work commenced after a delay of five months.
- Railway Administration as well as contractor accepted that as of September 2005 the performance of the work was poor.
- Contractor had not procured/arranged the material required for the work even by November 2005 and requested Railway for the departmental supply of copper conductors in view of sharp increase in their market prices. Railway Administration did not agree because procurement of all the items required for the work was within the scope of work being executed on turnkey basis. A seven days notice was issued (17 March 2006) to the contractor stating that the balance work would be got executed at his Risk and Cost. Railway, however, took four months to terminate (19 July 2006) the contract from the initial date of completion i.e. 28 March 2006. The contractor, however, filed a case in Allahabad High Court challenging the termination. Risk contract was awarded in

October 2006 at a cost of Rs.30.84 crore involving risk and cost amounting to Rs.14.93 crore.

Thus, the acceptance of the offer of a contractor who was not competent to execute a work on urgent/ turnkey basis resulted in unfruitful expenditure of Rs.29.93 crore. Moreover, Railways failure to terminate the contract within the currency of the contract would render the recovery of risk and cost amount of Rs.14.93 crore difficult.

It was also noticed that due to delay in the electrification goods traffic was moved through a longer route via Melpakkam resulting in avoidable extra expenditure of Rs.3.76 crore on account of extra haulage during the year 2006-07 alone.

The matter was taken up with the Railway Administration in March 2007 who stated (October 2007) that efforts for recovering 'Risk and Cost' would be made. Hon'ble High Court has also directed in their order (May 2007) to withheld the amount to the extent demanded. Expenditure incurred so far on the electrification can not be treated as unfruitful as in every project, investment is made in a phased manner whereas returns do not start accruing immediately. The change in traction was inevitable. Railways reply is not acceptable as they failed to take timely action to terminate the contract although Administration was very well aware of the contractor's failure. Hon'ble High Court has directed to refer the matter to the Arbitration. As the contract was terminated after the expiry of the currency of the contract, chances of recovery of 'Risk and Cost' would be remote. Further, the work was awarded on turnkey basis to avoid all delays either on Railway's or contractor's account. Due to non-completion of work, the expenditure incurred remained unfruitful. Moreover, the changes of traction became inevitable as electrification work could not be completed. This reflects Railways' failure to appointing an appropriate agency for correcting the work and supervising the work of the contractor.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.2.9 Southern Railway: Unfruitful /avoidable expenditure due to non- completion of Road Over Bridges/ Road Under Bridges (ROBs/RUBs)

Due to lack of coordination between Railway and State Government, 12 ROBs/RUBs could not be constructed within the stipulated period resulting in unfruitful expenditure (Rs.2.78 crore) and avoidable expenditure (Rs.1.13 crore) towards salary to the Gatemen kept at Level crossings

Gauge conversion of Metre Gauge suburban section between Chennai Beach (MSB)-Tambaram(TBM)-Chengalpattu (CGL) was included in the Rail budget for 1998-99. Ministry of Railways and the Government of Tamilnadu were to share the cost of work in equal ratio. Both were also required to equally share the cost of conversion of level crossings into ROBs/RUBs. Railway Administration, with an idea to complete the construction of

ROBs/RUBs along with the Gauge conversion, proposed to bring this work as a part of the gauge conversion work. After receiving the acceptance of the State Government, Railway sent (1998) a proposal to the Railway Board for inclusion of 12 level crossings in the estimates of the gauge conversion work. Accordingly necessary changes were made (November 1998) in the project report. Overall work was to be completed within five years.

It was noticed that though Railway had completed the gauge conversion work and opened the section to traffic in November 2004, only one RUB was completed and commissioned till March 2007. Although Railway had also constructed the bridge portion in respect of three ROBs/RUBs, the work of approaches has not been completed by the State Government. Noncompletion of approach work by the State Government has resulted in the unfruitful expenditure of Rs.2.78 crore on construction of bridge portion by the Railway.

Out of remaining eight ROBs/RUBs, while the work was in progress in three ROBs/RUBs, there was nil progress in both bridge/approach portions in respect of another three ROBs/RUBs and in one case, the progress was negligible. There was lack of coordination among various agencies of the State Government and the Railways. Negligible/nil progress was attributed to delay in tendering, presence of pipeline across the alignment of bridges, failure to acquire the land that belonged to defence department, non-approval of GAD etc.

Thus, non completion of the ROBs/RUBs resulted in continued operation of eight level crossings in the section from November 2004 to March 2007 and incurrence of avoidable expenditure of Rs.1.13 crore towards the salary of the gatemen.

On this being taken up by Audit (March 2007), Railway stated (June 2007) that completion period of five years was for the Gauge conversion project and not for ROB/RUB works. It was not possible for Railway to start works on ROB/RUB at a time. Railway planned the works as per priority given by the State Government keeping in view the proper diversion of the traffic arrangements. Wherever possible, Railway completed the bridge works but the State department could not complete approach works simultaneously. Railway's reply is not acceptable in view of the fact that as per the project report recast in the year1998, ROBs/RUBs were made the integral part of the overall project and all 12 ROBs/RUBs works were also due for completion within five years. There was lack of coordination between the Railway and the State Government.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.2.10 Central Railway: Unproductive expenditure on construction of a subway at Kurla, Mumbai

Non completion of the work besides non-fulfillment of the objectives of constructing a subway has resulted in unproductive investment of Rs.2.65 crore

Railway Board advised (November 2002) Railway that the work of provision of a sub-way at Kurla be included as a Material Modification to the existing ongoing work of construction of fifth and sixth line. Accordingly a proposal was sent in December 2002 to construct a subway of 6.5 meter by 2.5 meter at a cost of 7.90 crore. Railway Board communicated their approval in January 2003. The justification for construction of this subway was on safety consideration for the pedestrians who were crossing railway tracks because the existing Foot Over Bridge at Kurla was inadequate to cater to their requirement during peak hours. The Municipal Corporation of Mumbai, however, did not accept the size of subway and asked Railway to revise the size of the subway to 7.6 meter X 2.5 meter.

Audit scrutiny of records of Construction Organization of Central Railway revealed that the work of construction of a subway of 7.6 meter by 2.5 meter was awarded to a contractor in August 2003 at a total cost of Rs.3.45 crore. Simultaneously the change in size of subway was communicated to Railway Board. Though the work was to be completed by November 2004, the completion period was extended up to May 2006 on various grounds such as non-availability of traffic block, water logging due to heavy rains and delay in issue of drawings. The work, however, could not progress after May 2006 as the drawings related with linking the subway to roads were not approved by Municipal Authorities. The work was stopped after incurring an expenditure of Rs.2.65 crore and its completion would depend on approval of the drawings.

When the matter was taken up with the Railway Administration in May 2007, they admitted (August 2007) that the approach box and steps on east and west side could not be constructed as the Municipal Corporation has not done the work of additions/alterations required in the roads as also the diversion of underground services like sewer line, drainage line and cables. The reply indicates that the work had not been planned with proper coordination with Municipal Authorities. As a result the work of construction had been stalled for more than one year and there was no response from the Municipal Authorities for completing the above mentioned works.

Non-completion of the work besides non-fulfillment of the objectives of constructing a subway has resulted in unproductive investment of Rs.2.65 crore.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.3 Deficiencies in contract management

3.3.1 East Central: Awarding of contract at higher rates Railway on single tender

Improper decision to award contract for construction of Road Over Bridges (ROB) to M/s Konkan Railway Corporation Ltd. (KRCL) on 'Turn Key' basis at higher rates led to extra liability/expenditure of Rs.24.86 crore

Rules provide that Railway Administration should obtain the best value possible for the money spent and the tender system should be given a very careful and serious consideration in all cases as one of the most effective methods of securing competitive rates. It further provides that exceptions can be made on practical consideration in order to avoid delay and works of comparatively smaller value.

Railway Board awarded (April 2003) the work of construction of seven ROBs to M/s KRCL on 'Turn Key' basis at an estimated cost of Rs.74.52 crore. The payment was to be made on actual basis plus amount not exceeding five per cent (i.e. Rs.3.72 crore) of estimated cost. Management fees at 10 was also permitted. Railway Administration was however, directed by the Railway Board to sanction detailed estimate of the work as per extant rules and procedure.

Audit scrutiny revealed that as per estimate of the Railway the cost was only Rs.53.38 crore. Construction Organization had not observed the instructions of Railway Board regarding scrutinizing the detailed estimate for correctness of quantity as well as reasonableness of rates. Further the observations made by Accounts for reducing the rates were also not considered. The rates quoted by M/s KRCL were higher in 8 major items involving increase of 116 to 826 and the difference in estimated cost between Railway estimates and M/s KRCL for the completion of one ROB was Rs.2.80 crore. The rates quoted in other items were also higher than the market rates.

The contract condition provided that all seven ROBs were to be completed within 12 months (excluding monsoon) from the date of making the land/site available for taking up the work. However, till August 2007, the work of only three ROBs was completed and in remaining six ROBs the progress ranged between 65 and 85. The delay was attributed to delay in acquisition of land in 3 cases. In other two cases local problems affecting progress of works were reported. Thus the basic objective of economy plus timely completion could not be achieved. Had these contracts been finalised on the basis of competitive bids the extra cost of Rs.24.86 crore (including Rs.3.72 crore anticipated price increase) as well as delay in completion of the works could have been avoided.

When the matter was taken up with the Railway Administration in February 2007, they stated (May 2007) that the decision of awarding the work of seven ROBs was taken to ensure timely completion of works of extremely technical nature at the minimum possible cost. Audit has taken the difference of Rs.24.86 crore as additional expenditure between sanctioned Abstract cost of Rs.53.28 crore for the subject ROBs and awarded value of Rs.74.52 crore

based on M/s. KRCL detailed estimate and failed to take into account the effects of inflation, especially in the cost of cement and steel and detailed requirements as per approved GAD. The reply is not acceptable. The Railway Administration failed to achieve their main goal to get timely completion of ROBs. It needs to be appreciated that Railway's own rules do not provide for much variation between the Abstract Estimates and Detailed Estimates.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.3.2 South Central: Improper contract management resulting Railway in time and cost over run

Railway Administration has suffered a loss of Rs.8.55 crore besides substantial time over run due to improper contract management

The primary responsibility of the Railway Administration with regard to the award of contracts is to obtain the best value for the money spent. Tender system is an effective system for securing the most competitive rates. As time is the essence of any contract, for the early commencement of the work after award of contract, tenders should be finalised within the validity period of the tenders and drawings/specifications made available at the tendering stage itself.

Audit of works contracts entered into by the Construction Organisation (each with money value of more than Rs.1 crore) revealed following irregularities involving time/cost over run-

- (a) Railway opened tender (October 2003) for construction of superstructure of a bridge across river Krishna on Wadi-Guntakal section and awarded the work (June 2004) after a delay of about eight months. The contractor could not commence the work as per schedule and due to slow progress of work (known to Railway in October 2004) the contract was terminated in June 2005. Fresh contract was not finalised within the stipulated period of six months, as a result recovery of risk and cost charges of Rs.4.54 crore could not be enforced on the defaulting contractor. Besides, delay in completion of work has resulted in imposition of speed restriction causing loss of Rs.2.88 crore. Railway Administration's contention (August 2007) that loss due to imposition of speed restriction was only a notional one is not acceptable as speed restriction always results in higher expenditure on fuel.
- (b) A contractor who had tendered for the work of rebuilding of a bridge across river Cheyyar had gone to court because his tender was rejected on account of eligibility criteria. This resulted in delay of almost one year in award of contract and consequently extra expenditure of Rs.1.64 crore on account of price escalation. Railway's contention (August 2007) that there was no ambiguity in the eligibility criteria is not acceptable as the delay of one year occurred because of ambiguity in the eligibility criteria put forth in the tender documents.

- (c) In the bridge work across River Hagari on Hospet-Guntakal section, the contract was awarded after the expiry of validity period of tender. As a result, the contractor claimed increase in rates on account of hike in steel prices. Railway did not entertain his claim and the case was decided by Arbitrator who upheld the contractor's claim. Railway had to pay Rs.1.13 crore (steel cost Rs.0.79 crore and prolongation of work Rs.0.34 crore) to the contractor. Thus, delay in finalisation resulted in avoidable loss of Rs.0.34 crore.
- (d) In Gudur-Renigunta Doubling project, contractor engaged to supply and stacking of ballast on 1 March 2001 failed to commence the work. Despite this, an agreement was signed in November 2001. As the progress of work was slow the contract was terminated on 24 December 2001. Fresh contract at the risk and cost of defaulting contract was awarded but Railway could not recover the amount of Rs.0.09 crore. The defaulting contractor challenged the termination. The Arbitrator declared the termination invalid and ordered Railway to pay compensation of Rs.0.38. In similar other work also a compensation of Rs.0.41 crore was awarded by the Arbitrator. Thus, Railway's failure in ensuring the receipt of Letter of Acceptance (LA) by the contractors and in not following the set procedure at the time of termination of these contracts has resulted in a loss of Rs.0.79 crore. Railway stated (August 2007) that once the contractor had signed the agreement, non-receipt of acceptance letter was no more relevant. Railway's argument is not acceptable in view of the fact that Railway terminated the contract without considering the time provided to contractor. In fact, the Arbitrator also termed the Railway's action as illegal on this account.

Thus, due to improper contract management, the Railway Administration suffered a loss of Rs.8.55 crore besides substantial delay in completion of the projects.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.3.3 Southern Railway: Avoidable expenditure due to inefficient contract management

Railway's inefficiency in proper assessment of earthwork involved in hard rock soil and mismanagement during execution of other works resulted in avoidable extra expenditure of Rs.2.62 crore

A review of records connected with the execution of three major works revealed following instances of inefficient contract management-

(1) In connection with automatic block signaling works in Arakkonam-Katpadi-Jolarpettai section, Railway took up the construction work of third line in Arakkonam-Katapadi-Jolarpettai section for which Overhead Electrification (OHE) work was planned on completion along with the Track and Signalling works. Accordingly, Railway awarded a contract for OHE work to a contractor in January 2004 with completion period of six months. Although permanent way plans etc. were provided to the contractor in

February 2004, neither the work was started nor the material procured by the contractor on the plea that the civil works were not progressing. Railway countered it by saying that construction of foundations by the contractor on the segment where the embankment was ready was possible. However, contractor did not commence the work even after grant of four months extension and the contract was terminated in December 2004. Since Railway could not get the rider agreement for the extension signed by the contractor, contract could not be terminated (December 2004) at the Risk and Cost of this defaulting contractor. Contract for the work was awarded again to another contractor at an additional cost of Rs.0.72 crore.

Railway stated (August 2007) that as the work was targeted for completion and there was no rider agreement, a new tender was floated. However, this expenditure was inevitable because OHE works were to be executed in stages. Railway's contention is not acceptable as execution of the rider agreement would have enabled the termination of the contract within its currency at the risk and cost of the defaulting contractor. There should have been a proper coordination of earthwork and OHE work.

(2) Two contracts for construction of Road Over Bridges (ROBs) in lieu of two Level Crossings (LCs) (Nos.50 and No.64) near Tiruvalam and Gudiyatham in Arakkonam-Jolarpettai section were awarded (January 2005) for construction of pre-stressed concrete superstructure with contractor's own men, material including providing supporting arrangements involving staging(s), temporary girder(s) etc.

However, after completing the substructure work, the contractor requested Railway for supplying staging material which was available at different locations. Railway advised the contractor to transport the material to the site of works at their own cost as per special conditions of the contract. The contractor, however, disputed the issue by demanding payment. As the contractor failed to proceed with the super structure work, contracts were terminated (December 2005) at his risk and cost.

While awarding contracts for left over works in year 2006, Railway adopted a new methodology for launching the girders by using the cranes instead of temporary staging arrangements in ROB work in lieu of LC No. 50. As such, contract could not be awarded under risk and cost terms. Inclusion of unnecessary items of works in the contract schedule and changing the methodology at the re-tender stage resulted in additional expenditure of Rs.0.54 crore.

Railway stated (August 2007) that four items incorporated in the schedule of initial contract were meant for transportation of Railway material if ordered by the Railway in connection with the safety of track to provide additional staging arrangements. The contractor misinterpreted it and did not proceed with the work further and hence, the contract was terminated. Railway's reply is not acceptable as it was not specified in the tender schedule of the original contract that four items under reference would be applicable for additional staging arrangements only. This ambiguity resulted in the dispute.

In Gauge conversion work in Guindy-Tambaram section, track work **(3)** and Overhead Electrification (OHE) work were to be executed simultaneously. But, when the tender floated in September 2003 for the OHE work was being finalised, lowest tenderer whose offer had already been recommended for acceptance (January 2004) by the tender committee, informed Railway (February 2004) about the steep increase in the prices of copper etc. and requested either for a price escalation for copper or supply of copper conductor on loan basis returnable when copper prices stabilised. Railway opined (February 2004) that price variation clause was not incorporated in contract, where completion period was less than six months and any issue of material on loan at this stage would tantamount to operation of a post tender condition. However, during tender proceedings, provisions of Clause No. 1.2.21 were not at all discussed which allow sharing the material by the purchaser to the contractor if such materials were available in the stock of the purchaser. The tender was discharged (February 2004).

Lowest offer received against the fresh tender floated (February 2004) was again from the earlier firm. This tender also incorporated Clause No. 1.2.21. But, this clause was operated this time and material made available to the contractor. However, discharging first tender and not considering the provisions of the relevant Clause resulted in extra avoidable expenditure of Rs.1.36 crore.

Railway stated (August 2007) that non-operation of the incorporated clause at the first occasion cannot be compared with the operation of this clause at the second occasion. Railway's argument is not acceptable as circumstances prevailing on both the occasions were the same.

Railway's inefficiency/mismanagement have resulted in extra avoidable expenditure of Rs.2.62 crore.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.3.4 Southern Railway: Avoidable extra expenditure due to termination of two linked contracts

Award of a contract without examining credentials of a contractor by the Railway resulted in delayed completion and foreclosure of linked contracts. Overall activity also involved avoidable expenditure of Rs.4.01 crore

The construction of the third line between Attipattu–Korukkupet an important section of Southern Railway was sanctioned in 1999-2000 on grounds of additional freight traffic from Ennore Port and also in view of increasing suburban passenger traffic. The work included shifting and laying of a water pipeline along the alignment.

Para 1215 of Indian Railway Code for Engineering Department prescribes that no work or supply should ordinarily be entrusted to a contractor whose capability or financial status has not been investigated beforehand and found satisfactory. These instructions have been reiterated time and again by Railway Board in August 1994, May 2001 and November 2003.

The work of supply and laying of new 300 mm CI pipe water mains between Korukkupet and Tiruvottiyur was awarded (January 2004) to M/s. S. R. Govardhandas Agencies, Chennai being the lowest tenderer without verifying the genuineness of the credentials viz. experience certificates furnished by the tenderer. The work was to be completed within a period of four months. As the contractor did not commence laying the pipes till September 2004 and the pipes supplied were also not of the required standard, the contract was rescinded (October 2004) at the Risk and Cost of the contractor. While processing the risk and cost tender, in which the defaulting contractor also participated, it was observed that the experience certificate furnished by him was not genuine. The contract was finally awarded to another agency which completed the work by end of September 2005 i.e., a year after the original scheduled date after incurring an additional expenditure of Rs.1.18 Crore.

As a consequence, the earthwork along the alignment was delayed. Another contract for design, supply, erection, testing and commissioning of traction Over Head Equipment etc. on Korukkupet- Ennore section was awarded to a firm in January 2004 with date of completion as 1.7.2004 although the earth work in the stretch between VOC Nagar- Korukkupet was not completed. As a result, track pegging plans for the open route as well as track plans for the four major station yards were either given in piecemeal or were delayed. The OHE contractor sought for the foreclosure of the contract on grounds of increased procurement cost due to this piecemeal supply of plans. The contract was accordingly foreclosed and re-awarded to another agency at an extra cost of Rs.2.83 Crore by the Railway without liability on either side.

Thus, due to the failure of the Tender Committee as well as the Construction wing of the Southern Railway to follow the codal provisions and verify the credentials in the first instance itself has besides delay in completion of the third line also resulted in avoidable extra expenditure of Rs.4.01 Crore.

On the matter being pointed out (April 2007) by Audit, Railway stated (July 2007) that there was no violation of any codal provisions /instructions issued by the Railway Board as the work was awarded on the credentials enclosed along with the tender documents by the lowest tenderer.

The matter was brought to the notice of Railway Board in August 2007 who stated (November 2007) that Railway Board had banned the business dealings with the defaulting agency. Further, Tender Committee had scrutinize the technical and financial capability of the executing agency at the time of award of the contract. Railway contention is not acceptable as the offer of the lowest tenderer was accepted on the basis of forged experience certificate provided by M/s L&T, the genuineness of which was not verified at the initial stage.

3.3.5 North Western: Extra expenditure due to inefficient contract management

Railway's failure in finalising/ providing the drawings and site clear of all encumbrances before the commencement of works resulted in an avoidable expenditure of Rs.3.72 crore

As per Railway Board orders (August 1980), contracts for works should not be awarded unless soil tests and site investigations are complete, all plans,

drawings are approved by the competent Authority and there is no obstacle in handing over the site to the contractor.

Railway Administration awarded (September 1999 and September 2000) two contracts (value Rs.0.13 crore and 0.08 core) for the preparation of drawings of bridges to be constructed in Ajmer- Chittaurgarh Gauge conversion project with completion periods of three and four months respectively. However, there were abnormal delays in the finalisation of drawings due to frequent changes/modifications by the Chief Engineer (Construction) in plans/longitudinal sections. As a result, the contractors could complete the drawing work assigned to them as late as in January 2005 and March 2005 respectively i.e. after abnormal delay of more than four years in each case.

In the mean time, Railway awarded (December 2002, September 2003 and June 2004) three contracts (T/5, T/11R and T/22) valuing Rs.3.26 crore, Rs.2.51 crore and Rs.5.12 crore respectively for earthwork and construction of minor/major bridges. Although these works were to be completed within 12, 11 and 11 months respectively, Railway neither provided the requisite drawings nor clear site for works at the time of award of contracts. The drawings were made available after a period of seven months. In the meantime, the prices of cement and steel increased. As Railway did not agree for any increase in the rates the contractors did not complete the works and the contracts were terminated in January 2006 and March 2006. Contracts were re-awarded (June 2006 and October 2006) at the risk and cost of the defaulting contractors wherein risk and cost amount involved was Rs.3.16 crore after deducting their dues (Rs.0.24 crore). Also Railway got executed subsequently some items of left over work against contract T/11R through a separate contract (T/78) as non-risk items at higher rates resulting in an irrecoverable extra expenditure of Rs.0.56 crore.

The contractors protested against termination and lodged their counter claims. While in one case (T/22), matter has been referred (September2006) by the Railway to arbitration in another case (T/11R), contractor has got stay order (June 2006) against the recovery of the risk and cost amount. As such the chances of recovery of risk and cost amount (Rs.3.16 crore) are bleak.

On this being pointed out by Audit (May 2007), Railway Administration stated (October 2007) that all drawings could not be made available to the contractors in time due to acute shortage of staff in concerned offices and the main reason for the failure of the contract was un-workability of the rates due to steep hike in the prices of cement and steel. Railways contention is not acceptable as the drawings in all cases were a pre-requisite and should have been finalised prior to the award of contracts and made available to the contractors along with the award of work. Structures infringing a bridge should also have been removed before the commencement of works on those sites.

Railway's failure in finalising and providing the drawings prior to the award of contracts and also in making available to the contractors the clear site before the commencement of works resulted in termination of contracts. Reawarding of contracts resulted in avoidable expenditure of Rs.3.72 crore.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.3.6 Northeast Frontier: Loss due to inefficient management of Railway contracts

Failure of the Railway Administration to avail advantage of cheaper rate for procurement of additional quantity of boulders by invoking the 25 per cent variation clause of the agreement resulted in avoidable extra expenditure of Rs.3.12 crore

Clause 42 [2 (i)] of the General conditions of contract and Standard Special conditions of contract the quantity of a supply order can be increased or decreased by 25 per cent at the agreed rates.

As per final report for the construction of rail cum road bridge across river Brahmaputra at Bogibil near Dibrugarh, Ms. Rail India Technical Economic Services (RITES) recommended (July 2000) procurement of 7,00.000 cum of man size stone boulders weighing 40 to 70 kg for stone pitching on the front slopes of guide bund. Accordingly, Railway Administration awarded four contracts between September 2002 and December 2002 for supply of 3,00,000 cum of boulders at the rate ranging between Rs.1090 and Rs.1134. Meanwhile, in November 2002, tenders were invited for the remaining quantity of 4,00,000 cum of boulders. The rates received in the tender were, however, much higher ranging between Rs.1974 and Rs.2180 per cum. Therefore, the Tender Committee recommended (July 2003) negotiation with the contractors to explore the possibility of reduction in rates and simultaneously for increasing the quantity by 25 per cent of the contracts executed earlier to take advantage of lower rates.

Scrutiny of records, however, revealed that the Railway Administration executed six more contracts in November 2004 for supply of 4,00,000 cum of boulders at a much higher price of Rs.1529.24 per cum ignoring altogether the Tender Committee's recommendation to enhance 25 per cent of quantity in earlier contracts to take advantage of the lower rates of the existing contracts.

Thus, failure of the Railway Administration to avail advantage of cheaper rate for procurement of additional quantity of boulders by invoking the 25 per cent variation clause of the agreement resulted in avoidable extra expenditure of Rs.3.12 crore.

When the matter was brought to the notice of Railway Administration in May 2007; they stated (September 2007) that increase in quantity by 25 per cent in respect of first set of contracts could not be affected as disputes arose regarding the size of boulders and due to this dispute the contractors went for arbitration. These arguments are not acceptable because M/s. RITES in their report of July 2000 had clearly recommended for boulders weighing 40-70 kg only, no dimensional limitation was mentioned. During currency of the first set of contracts, the Tender Committee in their meeting (July 2003) in connection with the finalisation of the Special Limited Tender for the second set of contracts, had clearly recommended to the Railway Administration to obtain additional 25 per cent of the contractual quantity to keep the benefit of

lower rates through the first set of contracts. The recommendations of Tender Committee were not accepted and therefore, the benefit of lower rates on additional quantity was foregone. This clearly indicates that the management of the contract was conducted in a very inefficient manner and the Railway Administration was never serious in asking the contractors to supply additional quantity of boulders to take advantage of the available cheaper rate.

The matter was brought to the notice of Railway Board in August 2007; their reply has not been received (December 2007).

3.3.7 South Central: Extra expenditure due to avoidable Railway discharge of two tenders

Railway discharged two tenders after rejection of lowest offers and did not award the contracts to the remaining eligible tenderer which resulted in extra expenditure of Rs.3.04 crore

As per Railway Board's guidelines, a contractor becomes eligible for the award of contract on fulfilling eligibility criteria laid down in the tenders. However, a note has also been appended to the condition which further stipulates that after obtaining the financial concurrence, the General Manager may modify the eligibility criteria in case of urgent project works/works of specialized nature.

Audit scrutiny of records of Hyderabad Division revealed tenders for through renewal of bridge timbers with galvanized channel sleepers on bridge Nos.398 and 406A (Tender No.212) and No.442 (Tender No.213) on Secunderabad-Dronachalam section were invited (November 2002). The estimated cost of works included in these tenders, based mainly on the previously accepted/prevailing rates, were Rs.1.46 crore and Rs1.28 crore respectively. Railway laid down the eligibility criteria in both tenders in financial and performance terms to ensure that the tenderer were technically and financially capable to execute the work.

Railway received (December 2002) two offers against each tender from two contractors wherein the lowest offers in both cases were from M/s Balaji Fasteners, Hyderabad at 3.36 per cent below the tender rate. Tender Committee (TC) opined that the lowest tenderer did not satisfy the eligibility criteria specified in the tender. During negotiations, the second lowest tenderer, who had quoted at 3.6 per cent above the tender rate and had become the lowest eligible tenderer as per TC's opinion, reduced the offered rate by only 0.2 per cent. Railway discharged the tender (December 2003) saying that the reduction in rate offered during negotiation was negligible. Tenders for the same works were called in February 2004 and again in July 2004. While the rates received (from the same parties) against the tender of February 2004 were 31 to 42 higher than the tendered rates, the rates received against the tender of July 2004 were higher by 102. After negotiations, in the first instance, the tenderer instead of reduction increased the rates. In the second instance (against the tender of July 2004) though the reduction was merely by one, Railway accepted the offer and awarded the contract to M/s Balaji Fasteners at a value of Rs.2.94 crore and Rs.2.58 crore respectively.

In this connection, following observations are made:

- Since both works belonged to the category of project works and were
 urgent in view of the safety involved, Railway should have followed the
 spirit of Railway Board's instructions and, modified the eligibility criteria
 at the time of inviting the tenders and awarded the contract to the lowest
 tenderer at the first instance itself.
- Railway could have also considered other aspects in respect of the lowest tenderer like very poor response to the tender (only two offers), satisfactory simultaneous execution of four different works valuing Rs.1.10 crore of similar nature on other divisions and outstanding performance of the contractor at Vijayawada division and awarded the contract against first tender.
- Railway took a considerable period of one year for discharging the first tenders especially when the negotiated rates of the second lowest tenderer were close to the tender rates. No reason for such inordinate delay was available on record.
- Eligibility criteria were main cause for the rejection of the lowest offer and discharge of the first tender. However, final contracts were awarded at more than double the rates to the same contractor who had not been found eligible for the orders only one year back.

Avoidable rejection of the genuine offers of the lowest tenderer by the Railway by making eligibility criteria an issue, delay of more than one year in discharging the tenders and finally awarding the contracts at rates more than double to the tenderer whose offers were rejected initially resulted in avoidable expenditure of Rs.3.04 crore.

When the matter was taken up with the Railway Administration (April 2007), they stated (August 2007) that fulfillment of eligibility criteria by tenderers was necessary and any deviation from this after opening of tenders would have been arbitrary and vitiated the tender. Hence, the offers of tenderers who had not meet the eligibility criteria, were not evaluated. The reply is not tenable because ultimately the work was awarded to the contractor whose offer was rejected in the first instance on account of non-fulfillment of eligibility criteria. This could have been done earlier after holding negotiations.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.3.8 Central and North: Non-recovery of risk and cost charges from Central Railways defaulting contractors

Railway Administration's delay in taking timely action for recovery of risk and cost charges has resulted in non-recovery of Rs.2.67 crore on two Railways

As per codal provisions authorities responsible for execution of a work should enforce the contract conditions strictly and ensure that nothing is done to nullify or vitiate a contract. In terms of clause 62 of the General Conditions of

contracts, if the contractor fails to execute the work in time or does not adhere to the instructions of the concerned authorities with regard to execution of the work, the Railways reserve the right to terminate the said contract and execute the balance work in part or as a whole at the risk and cost of the defaulting contractor. Further as per instructions issued by Railway Board in July 1988, risk purchase action should be completed within six months and where it was not possible to do so, a provisional claim for risk and cost charges be lodged with the defaulting contractor within six months.

Central Railway

Audit scrutiny of records of Nagpur and Bhusaval Divisions of Central Railway revealed that out of five contracts awarded between July 2000 and February 2004, three contractors had not even commenced the works and their contracts were, therefore, terminated between February 2001 and January 2005. Although two contractors had commenced the work, the work done by one was not found satisfactory and the progress of work of the other was very slow due to which their contracts were also terminated in March 2003 and November 2004. While the risk cost contracts in respect of three works were finalised within stipulated period of six months, in two cases Railway had taken 12 and 13 months. It was also observed that no claim for recovery of risk and cost charges was made from three contractors. Reasons for doing so were also not available in record. The amount recoverable in these three cases works out to Rs.0.46 crore. In the remaining two cases, the notices for recovery of risk and cost charges of Rs.0.56 crore were issued after a delay of ten and 50 months.

When the matter was taken up with Railway Board (September 2007), they stated (December 2007) that delay in finalisation of risk and cost contracts in two cases was due to completion of administrative formalities and that risk and cost notices to two contractors were issued in April 2007. It was also added that in order to overcome the difficulties faced in recovery of risk and cost charges, clause 62 of the General Conditions of Contract has been amended and instead of enforcing the recovery of risk and cost charges, contractor's performance guarantee bond, would be en-cashed to compensate for the extra expenditure. The reply is not acceptable because non issue/delay in issue of risk cost notices may jeopardize the Railways claims. Moreover, the contractors would be furnishing performance guarantee only for five per cent amount of the total value of the contract. Audit observed that this measure was not sufficient as in all the cases commented upon in the paragraph, the amount of risk and cost charges is much more than the five per cent value of the contract.

Thus the failure of the Railway Administration in taking timely action for recovery of risk and cost charges has resulted in non-recovery of Rs.1.02 crore from five contractors.

North Central Railway

Jhansi division of erstwhile Central Railway awarded (January 2003) a contract for renewal of Bridge timber with galvanized steel channel sleepers

on various girder bridges on for Rs.3.59 crore. The work was scheduled to be completed by January 2004.

A review of records in Audit revealed that due to nil/slow progress of work, the contract was rescinded at the risk and cost of the defaulting contractor on 27 August 2004. To execute the above work, the risk and cost tender was opened on 29 November 2004. However, the tender was discharged (August 2005) due to receipt of high rates. The risk and cost tenders were again invited in September 2005 and the contract was awarded at the cost of Rs.5.24 crore in January 2006 to be completed by January 2007.

An inordinate delay on the part of Railway in awarding the risk and cost contract after 16 month to a new contractor has deprived the Railway of the recovery to the extent of Rs.1.65 crore from the defaulting contractor.

When the matter was taken up with Railway (April 2007), they stated (August 2007) that action had already been taken for recovery of the risk and cost amount of Rs.1.65 crore from the defaulting contractors. The fact, however, remained the amount is yet to be recovered even one and half year of awarding of risk and cost contract.

The matter was brought to the notice of Railway Board in September 2007; their reply has not been received (December 2007).

3.3.9 North Eastern Railway: Undue benefit to contractor

Erroneous payment of Rs.0.99 crore for blanketing material procured from a source with a shorter lead

In term of Para 4.3.4.2 of 'Guideline for Earthwork in Railway Projects', selection of blanket material is to be done after proper survey of the area close to the project to ensure availability of material of specified quality and in sufficient quantity, so that the time and cost of transportation could be minimised.

For completing the patch doubling work between Jarwal Road – Burhawal stations (15.70 kms), Railway Administration decided (August 2002) to procure stone dust from the nearest available source at Jhansi (376 kms.) at an approximate rate of Rs.751 per cum (including cost of transportation). The work was split into two sections (Jarwal Road to Ghaghraghat and Chaukaghat to Burhwal). Tenders were invited in August 2002 for procurement of 65,000 cum of material. Subsequently, the quantity of blanketing material was reduced from 65,000 cum to 39,000 cum and two contracts were executed in December 2003 and January 2004 for 38100 cum of blanketing materials (14000 cum + 24100 cum) at Rs.749 per cum with a contractor who had bid for both the tenders.

Scrutiny of records revealed that despite specific directions for supply of quarry dust from Jhansi (376 kms. from the work site), the contractor supplied 35,079.998 cum of blanketing material between January and August 2004 from Hamirpur and other adjacent sources (212 kms. from work site) at Rs.749 per cum. This has resulted in over payment of Rs.0.99 crore to the contractor.

On the matter being taken up with Railway Administration in June 2005, they stated (October 2006) that earlier survey had indicated availability of stone dust at Jhansi but subsequently at the time of execution it was found that sufficient quantity of material was not available. Hence the blanketing materials were supplied from other suitable sources. The rate paid for obtaining blanketing material from the river bed at Nautanwa and Hamirpur in other contracts were Rs.764 and Rs.749 per cum and in the current contract, Rs.749 per cum was paid to the contractor.

These arguments are not acceptable. The tender was called on the basis of assessed rate of blanketing material specifically from Jhansi. The original rate analysis done by the Railway Administration was Rs.751 per cum from Jhansi with lead of 376 kms. and based on this, tenders were invited, but since the materials were actually supplied from Hamirpur and other adjacent areas, having much less lead, the payment at the rates as for supply from Jhansi was not justified. This resulted in overpayment of Rs.0.99 crore.

The matter was brought to the notice of Railway Administration and Railway Board in May 2007 and October 2007 respectively; their reply has not been received (December 2007).

3.3.10 North Eastern: Railway

Loss of revenue due to delay in awarding a contract and non-execution of work

Railway Administration suffered loss of Rs.0.74 crore due to delayed decision in awarding a contract and non-execution of the work by contractor

The station working Rule (May 2003) provides for 400 metres of shunting neck for proper shunting of Meter Gauge (MG) trains so as to avoid shunting of rakes by locos in parts for placement/release of empty rakes at/from washing pit.

A newly constructed washing pit of 225 metres length opened (June 2003) for service at Aishbagh station of Lucknow Division was to be extended upto 400 meters for smooth shunting of rakes. Railway Administration awarded (June 2004) a contract for the work "Extension of shunting neck at Aishbagh station" at a cost of Rs.0.04 crore with completion period of two months. However, the contractor did not execute the work and the contract was terminated in September 2006.

As a result of non-extension of the shunting neck, the placement/release of MG rakes of 5307 UP/5308 DN express trains were being done in parts resulting in avoidable shunting of one hour per day. The loss on account of additional shunting hours works out to Rs.0.74 crore for the period June 2003 to March 2007 and would continue until the shunting neck was extended up to 400 metres.

Thus the delay of one year in awarding the contract and thereafter non-execution of work by the appointed contractors resulted in recurring loss of revenues on account of part placement/release of MG rakes.

When the matter was taken up with the local Railway authorities in November 2006, they stated (January 2007) that the work of extension of washing pit will be taken up in the last phase of gauge conversion works of Gonda-Bahraich and Lucknow-Sitapur sections. The reply is not acceptable. The work of shunting neck extension was contemplated in local works programme of 2003-04 and was to be completed by August 2004 as per contract awarded in June 2004.

The matter was brought to the notice of Railway Administration and Railway Board in May 2007 and September 2007 respectively; their reply has not been received (December 2007).

3.3.11 South Eastern Railway: Poor Contract Management

Railway Administration's faulty contract management as well as injudicious rejection of valid initial offer led to an avoidable extra financial liability of Rs.0.77 crore for execution of the work at higher rates

In order to reduce the shunting activity in the existing constrained layout of Santragachi (SRC) yard having sick lines, Intermediate Overhauling (IOH) shed and wheel turning facilities located at different places and to handle the increased train services, it became imperative to set up an intergrated sick line-cum-IOH shed at SRC. A detailed estimate was sanctioned (July 2001) to complete the above work in three years. An open tender was invited (September 2002) after a gap of one year. The Tender Committee (TC) during deliberations (February 2003) considered offer of M/s Turnkey Engineers (Rs.2.44 crore) as valid and recommended for negotiation to explore the possibility of achieving reduction in rates. Since the rates after negotiation were still high, the TC recommended (May 2003) discharging the tender. However, the tender accepting authority observed (May 2003) that the higher rates did not appear to be substantially out of proportion considering substantial increase in the prices of diesel and steel. It was decided to hold another round of negotiations.

As the rates of some of the schedules remained high even after the second negotiation, TC recommended discharge of the tender. The recommendations were accepted by the authorities (May 2003).

Meanwhile the relevant drawings for IOH shed were prepared afresh with requirement of materials over and above that included in the sanctioned estimate. The second open tender with enhanced quantity and new eligibility criteria was opened in August 2003. The TC, after by passing three lowest offers including that of M/s Turnkey Engineers (the only valid tenderer on the earlier occasion) for not satisfying the eligibility criteria, considered the fourth lowest offer (Rs.3.92 crore) of another contractor (M/s Sibani) as valid and recommended (October 2003) for negotiation. The negotiated offer of Rs.3.89 crore was found as reasonable, workable and economical and a contract was awarded (October 2003) to M/s Sibani with higher rates in Schedules A, B, D, F, G and H than that of the earlier valid offer of the first tenderer (M/s Turnkey Engineers). The work was stipulated to be completed within a period of one year.

Thus, the Railway Administration discharged injudiciously the valid offer of M/s. Turnkey on the ground of high rates without taking into consideration the substantial increase in market prices of steel and other materials and subsequently considered the higher rates of M/s Sibani as reasonable and economical for acceptance. This resulted in additional financial liability of Rs.0.38 crore to the exchequer.

Further scrutiny of records revealed that M/s Sibani claimed (November 2004) enhancement of rates for increase in prices of steel and did not complete the work. The work valuing only for Rs.1.20 crore was executed. The Railway Administration finally terminated the contract (July 2005) at risk and cost of the defaulting contractor and withheld security deposit (SD) of Rs.0.13 crore lying with them. After one year, the Railway Administration awarded (June 2006) the balance work to another contractor at Rs.3.52 crore with enhanced quantity in Schedule A, despite Railway Board's instructions of January 1996 that the quantities of the left over work should be indentical with that of the original tender. The Railway Administration's acceptance of still higher rates in the third tender for balance work was necessitated due to the hike in prices of fuel and rising trend of market prices with the passage of time. This resulted in further extra expenditure of Rs.0.39 crore for the balance work (except Schedule A). Since the Railway Administration had changed the quantum of work in Schedule A, the risk and cost clause may not be enforceable as per Railway Board's order (January 1996) and the SD of Rs.0.13 crore lying with the Railway may have to be refunded.

As the work has not yet been completed even after seven years, expected benefit did not accrue in the interim period and the project became costlier due to time over-run caused by Railway Administration's delay in finalizing the contract at different stages.

Thus, Railway Administration's faulty contract management coupled with injudicious decision of discharging the first valid offer burdened the exchequer with an avoidable financial liability of Rs.0.77crore (Rs.0.38 crore + Rs.0.39 crore) for execution of the work at higher rates.

The matter was brought to the notice of Railway Administration in May 2007; their reply has not been received (December 2007).

3.4 Deficiencies in execution

3.4.1 Northeast Frontier: Avoidable expenditure due to utilisation Railway of ballast beyond permissible limits

Railway's failure in utilisation of ballast as per permissible limits of requirement during gauge conversion works resulted in extra expenditure of Rs.25.48 crore

Indian Railway Permanent Way Manual (Rule 263) provides that ballast quantity required for a ballast cushion of 250 mm and 200 mm for a kilometer of Broad Gauge (BG) single line long welded track on PSC sleepers will be 1954 cum for main line (straight track) and 1428.5 cum on an average for loop line respectively.

The New Jalpaiguri (NJP) – Siliguri Junction (SGUJ) – Samuktala (SMTA) – New Bongaigaon (NBQ) section of Northeast Frontier Railway was dealing with 11 pairs of passenger trains. In April 1999, Railway Board sanctioned detailed estimate of gauge conversion of the NJP-SMTA-NBQ (280.35 kms.) and all the phases were completed and opened for traffic between December 2003 and May 2006. The detailed estimate of Rs.123.88 crore had also included the estimated cost of other two branch line sections viz., Alipurduar – Bamanhat and Fakiragram - Dhubri. As per codal provision, 8.18 lakh cum of ballast was required to be spread in the converted stretch of 369.559 kms.(main line – 280.35 kms. and loop line – 89.209 kms.) after allowing an extra eight per cent for shrinkage.

The Construction Organisation, however, procured 9.29 lakh cum of ballast through various contracts executed between September 2001 and May 2004 besides 1.96 lakh cum of ballast retrieved from existing MG track as against the total requirement of 8.18 lakh cum. As per records, 11.25 lakh cum were shown as spread on the track, even though only 8.18 lakh cum was needed to be spread.

Thus, an excess expenditure of Rs.25.48 crore was incurred by way of excess utilisation of 3.07 lakh cum of ballast.

The matter was brought to the notice of Railway Administration and Railway Board in April 2007 and August 2007 respectively; their reply has not been received (December 2007).

3.4.2 South Central: Avoidable expenditure on publication of Railway Tender Notices

Non-adherence of Railway Board's directives for not publishing the terms and conditions of tenders in the Tender Notices advertised in the Newspapers resulted in extra avoidable expenditure of Rs.19.19 crore

Instructions are that in the Tender Notices in addition to nomenclature or description of work, only routine information like time and place wherefrom the contract documents/blank tender forms can be seen or obtained and time and place wherefrom tenders are to be submitted and opened should be published. Railway Board has directed (August 1991) that in view of increased advertising cost, Railways should make all out efforts for maximum economy in this regard. Before sending the material for publication, Public Relation Department, must edit properly the classified and tender advertisements received from various Executive departments. Railway Board pointed out (May 2000) that detailed terms and conditions of tenders were being exhibited/published in the advertised material.

A test-check in Audit of press clippings of Tender Notices along with paid vouchers in support of payment made in respect of 408 advertisements out of 1548 advertisements published by the Railway during the year 2006-07 revealed that contrary to the Railway Board's instructions, terms and conditions of tenders were still being incorporated in the advertised text. Audit observed that due to publication of unwarranted text in the advertisements, on an average, 56 of the expenditure incurred on advertisement was avoidable.

On this basis, out of total expenditure of Rs.34.20 crore incurred on advertisements during the years 2004-05 to 2006-07, expenditure to the extent of Rs.19.19 crore was extra and avoidable.

On the matter being taken up (April 2007) with Railway, they stated (June 2007) that only gist of terms and conditions of Tender Notice to the extent necessary was published in the Newspapers and there was no infructuous expenditure. The reply is not acceptable. Railway Board's orders are very clear that terms and conditions of the tenders should form part of tender documents only and there are no guidelines allowing the publication of the gist of terms and conditions in the text of the advertisements.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.4.3 Northern Railway: Extra expenditure due to inadequate surveys

Failure to conduct adequate surveys for identifying suitable sources of blanketing material led to awarding fresh contracts at higher rates resulting in extra expenditure of Rs.6.82 crore on account of price escalation.

As per guidelines issued by Research Designs and Standards Organisation (RDSO), the areas near the projects should be surveyed properly to identify suitable sources of cheap naturally available blanket material, before awarding of contracts.

Based on surveys and laboratory tests conducted (November/December 2003) to identify sources of availability of riverbed material for blanketing, Northern Railway Construction Organisation (NRCO) concluded that suitable blanket material was available in almost all the riverbeds/khuds located between Madhopur Punjab (MDPB) and Jammu Tawi (JAT) stations.

NRCO awarded (July/August 2004) three contracts at a cost of Rs.17.85 crore to a single contractor to be completed between January and July 2005 for supply and laying blanketing in formation in embankment including mechanical compaction, construction of minor bridges etc. between MDPB-Budhi (BUHY), Budhi-Ghagwal (GHGL) and Vijaypur Jammu-Jammu Tawi (VJPJ-JAT), in connection with the doubling of Jalandhar-Pathankot-Jammu Tawi section. The reasonableness of the rates was decided on the basis of the rates of naturally available blanketing material at the time of award of the contracts. As per the contract agreements, the blanketing material was to be obtained from the specified Khuds/riverbeds (surveyed by NRCO during November/December 2003) or any other sources (implying natural sources other than those specified) approved by the Railway.

The contractor submitted (July 2004) two sets of samples of blanketing material for testing and also indicated (January 2005) the non-availability of blanketing material. Contractor proposed (February 2005) to do the above works with crusher dust at the rate of Rs.380.16 per cum which was not accepted. NRCO ordered fresh surveys, which indicated (March 2005) non-availability of required blanketing material. The contractor could not execute

the works and NRCO terminated (May to June 2005) all the three contracts at the risk and cost of the contactor. NRCO invited (July 2005) fresh tenders for executing the above works on identical terms and conditions as that of the earlier contracts. Tender Committee while considering offers justified the reasonableness of the rates on the basis that the contractors would use crushed material for blanketing. NRCO awarded (September 2005 to January 2006) the risk and cost contracts to three different contractors at a cost of Rs.29.54 crore as against the originally accepted cost of Rs.17.85 crore.

Audit noticed that the availability of 2,23,000 cum blanketing material was assessed (November/December 2003) on the basis of in adequate number of samples. The shortfall in collection/testing of samples noticed was to the extent of 89. It was further noticed that availability of 35000 cum blanketing material was reported without obtaining any sample and conducting the required tests. Had NRCO conducted adequate number of surveys and correctly estimated availability of natural blanketing material in November/December 2003 itself, it could have awarded contracts for using crushed or blended blanketing material and avoided extra expenditure of Rs.6.82 crore on account of price escalation for the period February 2004 to July 2005.

When the matter was taken up (March 2007) with the NRCO, they contended (September 2007) that the contracts were terminated at the contractor's risk and cost on the grounds of nil/poor progress of the works because the contract agreements did not mention any preference for source of natural blanketing material and as such the contractor could supply the blanketing material from any other approved sources. NRCO also contended that risk and cost amount would be recovered from the defaulting contractor. NRCO's reply is not acceptable because the completion of works by the contractor was not possible due to non availability of the natural blanketing material either in the specified khuds/river beds or any other natural source. Besides, the rates mentioned in the earlier contract agreements were only for the cheaper natural blanketing material. Further, as blanketing material to be used as per earlier and subsequent contract agreement was different, the termination of contracts on the basis of contractor's poor progress was not in order.

Thus, NRCO's failure to conduct proper and adequate surveys for identifying the suitable sources of blanketing material led to awarding the fresh contracts at higher rates resulting in extra avoidable expenditure of Rs.6.82 crore.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.4.4 South Central: Avoidable extra expenditure due to Railway outsourcing of work of rail welding

Outsourcing for a work for which in-house facilities were available led to avoidable expenditure of Rs.3.25 crore

Welding of joints for Through Rail Renewal (TRR) works on South Central Railway are undertaken by Flash Butt Welding Plant (FBWP) at Moula-Ali. FBWP has two plants for this purpose viz. ESAB make plant installed in the

year 1987 (installed capacity 48000 joints per annum) and a Mobile Plant (MP) procured during the year 1993. This MP has been stationary since 1997 and its annual production capacity as per the actual production achieved in the year 2002-03 was 8173 joints. Thus, the installed annual capacity of the FBWP was 56173 joints per year against which the effective yearly production, after taking into account the actual production by the ESAB during the year 2004-05 as 39971 joints, was 48144 joints.

In view of the rail renewal targets set for this Railway, Zonal Administration assessed the requirement for welding as 51000 joints during the year 2004-05. However, against the effective annual production of 48144 joints, Railway estimated the production capacity as 38000 joints only and awarded (May 2005) a contract .for outsourcing the work of 60000 joints for five years at the rate of Rs.1500.50 per joint against Rs.792 per joint actually incurred by them. Railway justified outsourcing of the work of weld joints by underestimating the actual production capacity of the FBWP on the plea that the weld failures in FBWP were abnormally high and that the plant had outlived its life. The justification was not based on appropriate facts and figures. Outsourcing the work which should have been managed in-house resulted in avoidable expenditure of Rs.3.25 crore.

The matter was brought to the notice of Railway Board in September 2007 who stated that outsourcing was an economical, reliable and safer option in view of actual manufacturing capacity of plant and production on out lived machines. This contention is not acceptable as cost per weld adopted by audit was complied by workshop accounts authorities and there was no evidences showing that there was any decline in production due to machines which had out lived their lives.

3.4.5 North Eastern: Avoidable extra expenditure on Railway construction of a bridge

Railway Administration suffered a loss of Rs.1.81 crore due to modification in design and non-adherence to contractual conditions

As per provisions in paragraph 1219 of Indian Railway Code for the Engineering Department, design and plan of the bridge should be finalised and soil investigation done prior to tendering and award of contract.

Railway Administration accepted (January 2003) a tender for rebuilding of bridge No.268 (9x18.30m) between Kasganj-Mathura (KSJ-MTJ) section on river Kalinadi at an approximate cost of Rs.3.36 crore. The work was to be completed within 18 months. This bridge was to be constructed as per identical tentative dimensions of Bridge No, 143 at Km.109/10-11 rebuilt on the same river pending completion of soil investigations.

However, during execution of work the drawing of the bridge was modified (February 2003). As per modified drawing the outer diameter of wells and thickness of steining wall was increased from 5.5 m to 6 m and 1.2 m to 1.4 m respectively. The proposed changes were made because clayey soil strata in three stretches was noticed in bore log data obtained during soil investigations (February 2003). The bridge No. 143, whose pattern was adopted, contained

composite girder while bridge No. 268 was proposed with PSC girder and difference in loads of girders necessitated increase in thickness/diameter of Item 11 of schedule of contract agreement provided for sinking of well. Thus, additional expenditure of Rs.0.79 crore was incurred on account of increased work.

When the matter was taken up (July2005) with Railway, they stated (July 2007) that Item no. 11 of schedule of contract agreement provided for "Sinking of well including all cost of working steam, diesel hoist dredger or pulsometer etc. and all other charges including bailing out water complete" and the unit of rate was per metre depth of sinking per Sqm of base area. The additional expenditure incurred on sinking of well was only Rs.7.59 lakhs as per actual required work done. Railway's contention is not acceptable because they had indicated additional cost required for increase in depth only and had not added the extra cost required for concreting, fabrication and fillet welding costing etc. Moreover, there was no provision of work of retaining wall in the contract agreement. The diversion plan issued in April 2003 included a provision of 755 metres long retaining wall due to paucity of land on MTJ side. This work of 540 metres (out of 755 metres proposed) was carried out without exploring possibility to acquire the land of said stretch for spread of embankment and was done later for acquiring 2.3672 hectares of land for bridge No. 268 and for other bridges No. 254, 272, 272A rebuilt in the area. Due to Railways reluctance in undertaking timely efforts to acquire 0.60 hectares of land close to the Railway land near river on MTJ side, expenditure of Rs.1.02 crore incurred on the construction of retaining wall of 540 metres could not be avoided. Railway Administration stated that land acquisition was a long time consuming process and there was no hope for an early land acquisition at this location. The contention of Railway is not acceptable as they should have finalised all the ancillary works like approval of permanent diversion plan, acquisition of land etc. before awarding the contact.

Thus, failure of Railway Administration to finalise the design, approval of permanent diversion plan and acquisition of land resulted in avoidable extra expenditure of Rs.1.81 crore.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).

3.4.6 Northeast Frontier: Loss due to non-observance of Railway provision for deduction of shrinkage allowance for blanketing work

Failure of the Railway Administration to effect prescribed deduction for shrinkage from the gross quantity of blanketing work resulted in overpayment to contractors to the tune of Rs.1.42 crore

In the construction of new lines or conversion from Metre Gauge (MG) to Broad Gauge (BG), the earthwork in embankment must be provided with blanket layer of adequate thickness to ensure track formation with adequate bearing capacity and to safeguard against swelling, shrinking etc. Normally, a

shrinkage allowance of five per cent is provided where the compaction is carried out by mechanical means.

Construction Organisation of Northeast Frontier Railway executed 24 contracts between May 2002 and July 2005 for earthwork to form embankment etc. in three different projects Viz. Harishchandrapur – Kumarganj & Eklakhi – Kumarganj (Patch Doubling), Barsoi – Radhikapur (Gauge Conversion) and Eklakhi – Balurghat (New Lines).

The work was to be executed in conformity with the tender/ contract documents such as 'General and Standard Special Conditions' of contract, 1998 and 'Standard Specifications' of Northeast Frontier Railway. However, if there was any conflict between the 'Additional Special Conditions and Special Specifications' on the one hand and the 'General and Standard Special Conditions' of contract, 1998 and 'Standard Specifications' of Northeast Frontier Railway on the other hand, the former was to prevail as spelt out in the contract documents.

Scrutiny of records revealed that as per 'Special Specifications' attached to the contract, the coarse grained soil* / blanketing materials shall be compacted to get a minimum density index of 70 per cent and the payment for earthwork with mechanical compaction was to be made on the basis of net quantity after deduction of shrinkage allowance of five per cent from the gross quantity. Even though the coarse grained soil and blanketing materials are similar in nature consisting of sand, gravel, gravel sand mixture etc. and the same degree of compaction of minimum density index of 70 per cent [IS:2720 (Part XIV) 1983] was prescribed in the 'Special Specifications' and 'Schedule of Items', yet, the provision for deduction in quantity on account of shrinkage for blanketing materials was not made in the 'Contract documents'. Further, bills passed till March 2007 revealed that although the blanket layer on the top of widened/ new formation etc. was compacted to the minimum density index of 70 per cent in accordance with the provisions of Special Specifications & Standard Non-scheduled Items etc. of Northeast Frontier Railway, the payment was made on gross quantity without effecting any deduction for shrinkage. This had resulted in undue benefit to the contractor towards overpayment of Rs.1.42 crore.

When the matter regarding irregularity in the mode of payment was taken up (September 2005), Railway Administration stated (December 2005) that the blanketing materials, after compaction to 70 per cent relative density, would not shrink further and thus, no overpayment was involved.

The argument is not tenable because as per tender/ contract document, the coarse grained soil/ blanketing materials was to be compacted to get a minimum density index of 70 per cent and accordingly, the payment after

^{*} As per Special Specification of blanketing, blanketing materials shall be sand, gravel, quarry dust, non-cohesive materials, moorum etc. Again, sand, gravel and gravel sand mixture have been equated with coarse grained soil – as per RDSO's Guidelines for earthwork in Railway Projects, May 1987.

mechanical compaction shall be made on the basis of net quantity after deduction of shrinkage (5 per cent for mechanical compaction).

Thus, failure of the Railway Administration to observe the provision of contract documents resulted in overpayment to contractors to the tune of Rs.1.42 crore.

The matter was brought to the notice of Railway Board in September 2007; their reply has not been received (December 2007).

3.4.7 North Eastern: Damage to sleepers due to improper de-Railway stressing of tracks

Improper de-stressing of Long Welded Rails (LWR) tracks led to damage of 10,000 PSC sleepers resulting in loss of Rs.1.28 crore

De-stressing of track of LWR/ Continuous Welded Rails (CWR) is undertaken with or without use of rail tensor to secure stress free condition in the LWR/CWR tracks at the desired/specified rail temperature.

During the year 2003 to 2005, the work of de-stressing of LWR track in Gorakhpur – Bhatni and Bhatni – Chhapra sections were undertaken departmentally by permanent way staff. Scrutiny of records revealed that in course of the de-stressing work, 5800 PSC sleepers in Gorakhpur – Bhatni and 4200 PSC sleepers in Bhatni – Chhapra section were damaged due to seizer of Elastic Rail Clips (ERCs) which resulted in loss of Rs.1.28 crore. As per procedure laid down for carrying out de-stressing work, possibility of damages to PSC sleepers is not contemplated unless mis-handled in the course of destressing of tracks. Also, in order to make ERCs free from dust and corrosion, the Keyman of the section should carry out in a systematic manner greasing of ERCs and eye of inserts at the rate of 20 sleepers per day.

Similar works of de-stressing were also carried out in Gorakhpur Cantt – Chhapra Kachehary section on contract in April 2006 and ARJ – ALY section, during 2002 and 2004, but no case of damages of PSC sleepers were noticed. Thus, due care was not taken in releasing sleepers fastening in the course of de-stressing operation of Gorakhpur-Bhatni and Bhatni-Chhapra sections by departmental labour.

Test check of records also revealed that as per yardstick 2900 kgs. of lubricant grease graphite is required yearly for Siwan-Chhapra, a section of 58 kms., but only 302 kgs. in 2004 and 269 kgs. in 2005 was used. As such, codal provisions were not properly observed in lubrication of ERCs and eye inserts of sleepers which resulted in seizer due to rust.

Thus, non-observance of codal provisions and improper handling of PSC sleepers fastening in the course of de-stressing operation of LWR track by departmental labours caused damages to 10,000 sleepers resulting in loss to the tune of Rs.1.28 crore.

The matter was brought to the notice of Railway Administration and Railway Board in February 2007 and October 2007 respectively; their reply has not been received (December 2007).

3.4.8 East Central: Non-execution of blanketing work as per Railway Board directives

Change of specification of blanketing work against express directives of Railway Board led to extra expenditure of Rs.0.96 crore

Though the construction of a new B.G. line from Daniawan to Biharsharief was found financially un-remunerative with continuous loss throughout its life, the detailed estimate of the same was sanctioned by the Railway Board in February, 2002 at Rs.104.79 crore on the ground of development of economically backward area.

Scrutiny of records revealed that while sanctioning the estimate, Railway Board had reduced the depth of blanketing from 100 cm to 45 cm and thus the quantity of blanketing material was reduced from 338675 cum to 135470 cum. The reduction of 203205 cum blanketing material brought down the estimated cost by Rs.6.03 crore. It was however, noticed that in the tender for earthwork and blanketing for this line invited in January 2002 for 13 km length from Biharsarief end the provision of blanketing material for 100 cm depth was made. Entire length (Daniawan-Biharsharif) of 38.00 km. was divided into 5 sub sections and four more tenders for earthwork and blanketing keeping depth as 100 cm were invited during August 2002. The Railway Administration awarded the contract with 184050 cum blanketing to the contractors at different rates.

Out of total 338675 cum blanketing materials, 58538 cum blanketing had been done so far in 13 km length by the contractors till December, 2006 entailing an extra expenditure of Rs.0.96 cores. In the meantime Railway Board issued instructions (July 2006) specifying track standards for light traffic routes. According to these orders, blanketing depth in low traffic routes was to be kept as 30 cm irrespective of the type of soil in the embankment. Based on these instructions, a decision has now been taken to restrict the depth of blanketing to 30 cm in 25 km length where blanketing had not been taken up so as to avoid further extra expenditure.

Thus Railway Administration's injudicious decision to go ahead with its original plan of blanketing with 100 cm depth despite Railway Board's clear directive to reduce it to 45 cm resulted in an extra expenditure of Rs.0.96 crore.

The matter was taken up with the Railway Administration and Railway Board in May 2007 and October 2007 respectively; their reply has not been received (December 2007).

3.4.9 South Eastern: Avoidable expenditure on construction of Railway Railway quarters surplus to requirements

Railway Administration's injudicious decision for construction of Railway Quarters despite availability of vacant quarters led to an avoidable expenditure of Rs.0.57 crore besides loss of rent of Rs.0.03 crore.

The Engineering Department of Railways is responsible for maintaining an up-to-date list of residential quarters including the position of occupancy and vacant quarters so as to enable them to judge the necessity for construction of

more quarters and avoid wasteful expenditure in construction of Railway quarters surplus to requirement. The list should also be furnished to Personnel and Accounts Departments each year.

Audit scrutiny of records of Adra Division of South Eastern Railway revealed that though 117 Railway quarters were vacant as on January 1998, construction of 32 quarters in replacement of over aged and dilapidated quarters was proposed (January 1999) and the work was included in the Pink Book for Works Programme of 1998-99. The detailed estimate of Rs.0.74 crore was sanctioned in November 1999. It was observed that the Accounts Department vetted the estimate without actually knowing about the vacant quarters. 32 quarters were constructed and completed in April 2003 after incurring an expenditure of Rs.0.57 crore. Records revealed that to show the full occupancy of 32 newly constructed quarters, allotment of two quarters was irregularly made in favour of one Railway employee. Further out of 32 old dilapidated quarters, only 12 were dismantled/abandoned, and the balance of 20 were still under occupation of Railway employees. The continuous occupation of these old quarters (including their re-allotments in 10 cases during April 2000 to June 2005) diluted the justification for declaring them as dilapidated and thus uninhabitable. The most significant point to be noted was that the quantum of vacant old habitable quarters remained more or less constant right from January 1998 (117) to November 2005 (118), and again increased to 139 in January 2007. The work was thus not required to be undertaken.

Thus, Engineering Department's disregard of codal provisions as well as directives of CE/SER in respect of inadequacy certificate and failure to consult their own records and lack of coordinated efforts of Engineering, Personnel and Accounts Departments resulted in avoidable expenditure of Rs.0.57 crore. Besides, there was a loss of rent of at least Rs.0.03 crore for the period from January 1998 to January 2007, as assessed in audit. This loss will continue to increase unless remedial action is taken.

The matter was taken up with the Railway Administration and Railway Board in March 2007 and October 2007 respectively; their reply has not been received (December 2007).

3.5 Others

3.5.1 Southern Railway: Non-inclusion of cost of imposition of speed restriction to a deposit work

Not charging the cost of speed restrictions imposed during the construction of a deposit work resulted in undue financial benefit to the party worth Rs.6.22 crore

As per provisions in Indian Railway Code for Engineering Department, before undertaking construction of any over/under bridge, the cost of which is entirely or partially borne by the Road Authority, an agreement with the Road Authority should be executed which should inter-alia spell out their liability to bear initial, recurring/maintenance and other costs.

Railway undertook on deposit terms the construction work of additional three-lane bridge to the existing Road over Bridge (ROB) No.339A on National Highway 45 at Thozhupedu between Acharapakkam and Karasangal stations on behalf of National Highway Authority of India (NHAI). In the agreement entered into between Railway and the NHAI, the latter accepted to bear any additional liability due to any increase in cost over the estimated cost. In order to ensure the safe running of trains during the execution of the work, speed restrictions had to be imposed for 656 days between April 2004 and April 2006. However, Railway Administration neither brought this issue to the notice of NHAI for increasing the agreed estimated cost nor themselves charged the additional cost to the extent of Rs.6.22 crore (based on results of the special studies undertaken by Traffic Costing Cell of South Central Railway) to the deposit work in accordance with the prevailing condition in the agreement.

When the matter was taken up (April 2007) with Railway Administration, they stated (June 2007) that imposition of speed restrictions were connected with Railways own working and charging of its cost to the Deposit work was not justified. Railway's contention is not acceptable in view of the fact that the speed restrictions were solely imposed due to this deposit work and thus, increase of Rs.6.22 crore in the estimated cost of work was to be recovered from the party for whom the work was being done as decided by Railway Board in response to Action Taken Note on Para No.3.2.2 of Railway Audit Report No.9 of 1998, highlighting a similar incidence where they had decided to pass on the extra cost to the agency for which the work was executed on deposit terms.

Thus, Railways inaction in not charging the cost of speed restriction as per the agreement resulted in undue financial liability of Rs.6.22 crore on the Railways.

The matter was brought to the notice of Railway Board in September 2007; their reply has not been received (December 2007).

3.5.2 Central, North Western, : Loss due to poor Southern, South Central, maintenance of Jatropha Western and West Central Curcas plants Railways

Plantation of Jatropha Curcas without ascertaining the feasibility of its requirements for bio-diesel coupled with poor maintenance has resulted in wasteful expenditure of Rs.4.17 crore

Bio-Diesel is a plant based, renewable, eco-friendly and cost effective fuel. Although this fuel can be produced from a large variety of plant based oil seeds, Jatropha Curcas was found ideally suited to the agro-climatic and socioeconomic condition in India. Indian Government had accorded top most priority to the plantation of this tree in tenth Five Year Plan. In view of this, Railway Board signed (February 2003) a Memorandum of Understanding with the Indian Oil Company (IOC) whereby Railway had agreed to provide 500 hectare of land to IOC at a nominal lease charge of Re.1 per annum for a

period of 15 years. In turn IOC was to do the plantation and set up facilities for production of Bio-Diesel as soon as the plants started giving yield. These plants were expected to give yield after a period of three years. The fuel so produced was to be supplied to Railways at the price to be decided mutually. In the meantime, Railway Board also directed all the Zonal Railways in January 2003 to take up the work of plantation of Jatropha Curcas on Railway land as much as possible.

Audit scrutiny of records of Central, North Western, Southern, South Central, Western and West Central Railways revealed that they had taken up the plantation from 2002-03 and planted a total of 0.73 crore Jatropha Curcas plants up to 2006-07. Since Railways had not kept any records of the expenditure incurred, Audit had assessed the expenditure of Rs.14.78 crore on the basis of cost of plantation of Rs.20 per plant obtained by Central Railway. It was, however, observed by Audit that approximately 0.22 crore plants (30) had died within short period as a result the expenditure of Rs.4.35 crore had proved a waste. It was also observed that records of the yield were not maintained and the meager quantity of seeds collected by some of the Railways was stated to have been used for growing saplings for future plantation instead of Bio-diesel production.

Scrutiny of records of Western Railway revealed that though Railway identified 1326 hectare land for handing over to IOC, they had taken possession of only 188.49 hectares. Out of this plantation was done only on 70 hectare and 1,25,000 plants were planted during 2003 to 2005. There was no progress afterwards and the remaining land was lying idle with the IOC. Though as per estimation plants were expected to yield 1000 kgs of seed in the third year, there was no indication in the records whether the plants had started producing seeds or not.

Audit observed that the efforts of the Railways as well as of IOC towards contributing to the national project were not up to the mark as the plants on which Railway had already incurred an unproductive expenditure of Rs.4.35 crore have died.

When the matter was brought to the notice of Central Railway in March 2007 they agreed (June 2007) about premature death of plants and attributed the reasons to inadequate infrastructure and lack of manpower due to which due care could not be taken. The reply is not acceptable because the plantation work was commenced without ascertaining the feasibility of the project and resulted into wasteful expenditure of Rs.4.35 crore.

The matter was brought to the notice of Railway Board in October 2007; their reply has not been received (December 2007).