# CHAPTER 3: WORKS AND CONTRACT MANAGEMENT

## 3.1 Injudicious decisions leading to avoidable/ unproductive expenditure

### *3.1.1 North Eastern: Railway — Sanction of a financially unviable project resulting in unproductive expenditure*

Expenditure of Rs.95.31 crore on a project, which was financially unviable, ab initio, remained unproductive

The work of gauge conversion of Mankapur – Katra – Faizabad (37 kms.) was approved in 1992-93 Railway budget for execution even though Rate of Return (ROR) was negative for Phase I of the project comprising of gauge conversion of Mankapur – Katra (30 kms.) and was only 0.3 per cent for Phase II – construction of Katra – Faizabad new line. Construction of a new line connecting Katra with Faizabad, including provision of a bridge over the river Ghaghra, was justified by the Railways on the consideration that linking of Ayodhya will provide a short and direct link to stations on Central, South Central, Southern and other adjoining Railways; also that the pilgrim traffic to and from Ayodhya would be better served. The Phase II project was proposed even though Katra and Faizabad were already rail heads and there was good road connectivity between the two rail heads.

The Phase I gauge conversion project was completed and opened to Broad Gauge (BG) traffic on 21 December 1992. Phase II of the project i.e., construction of Katra to Faizabad line, was frozen in September 1993 due to acute constraint of resources and lower priority. However, the Railway Administration proposed (September 1993) acquisition of land for the project on the ground that the area near the proposed alignment between Katra and Ayodhya was fast developing and the land may not be available at a later date due to construction of buildings and other structures.

The part detailed estimate amounting to Rs.3.95 crore for land acquisition submitted by the Railway Administration in February 1995 was sanctioned by the Railway Board in April 1995. Subsequently, in February 2001, the detailed estimate for the new line between Katra–Faizabad was sanctioned for Rs.80.72 crore though no reasons for reviewing the project were available on record.

The work of construction of new line between Katra – Faizabad (Ayodhya) was completed in June 2003 at a cost of Rs.95.31 crore and the line opened for goods train services since July 2003.

Audit scrutiny of the records revealed that no movement of goods train has taken place on the section Katra - Faizabad since the inception of the project. The number of passengers travelling on the section during April 2004 to March 2005 was 74 per cent lower than estimated. The objective of providing a short and direct link to stations on the adjoining Railways, as included in the justification, was not achieved (August 2005) as no train had been introduced on this line since July 2003, when the line was made operative.

When the matter was taken up (April 2005), the Railway Administration stated (May 2005) that the project had been sanctioned on the basis of socio-economic considerations in addition to operational needs as it would provide a better and alternative connection of North Eastern Railway system with Central, Southern and South Central Railways. Therefore, even though the project had ROR of only 0.3 per cent, the expenditure was justified as it was spent for uplifting the general well being of people served and for better connectivity.

These arguments are not acceptable because neither goods nor passenger trains have been introduced on this section after opening of the project in July 2003 for linking North Eastern Railway to other neighbouring Zones, as contemplated. In fact, the number passengers is 74 per cent lower than estimated, belying the argument that better connectivity has been established.

Thus, an expenditure of Rs.95.31 crore was incurred on a project, which was financially unviable ab initio, and has proved to be unproductive ever since it was made operational.

The matter was taken up with the Railway Board in October 2005. Their reply has not been received so far (December 2005).

### *3.1.2 Northern Railway: Injudicious sanction of an unremunerative project*

Construction of a new line project costing Rs.23.75 crore with a rate of return of 3.71 per cent resulted in unnecessary liability of dividend to general revenues and recurring loss on maintaining a Rail Bus Service

A preliminary engineering-cum-traffic survey found (1981) a new broad gauge (BG) rail link between Beas and Goindwal Sahib to be financially unviable as the rate of return (ROR) of the project was worked out to be 3.86 per cent, well below the ROR of 10 per cent for acceptance of such projects. In 1987, after a lapse of six years, the Railway Board directed the re-appraisal of the project report at the request of the Punjab State Government, who had recommended taking up the project on the basis of the nucleus industrial complex at Goindwal Sahib and the changed agricultural, industrial and socio-economic activities. It was also indicated by the then Home Minister that the project was of high priority for development of the region, specially with a number of industries having already come up in the Goindwal area. A Thermal Power Plant which had been planned at Goindwal Sahib by Punjab State Electricity Board, Patiala during Eighth Five Year Plan period had been taken into account for working out additional traffic for the project section and thus, ROR of 10.74 per cent was worked out for justifying the project. The Planning Commission advised (October 1988) reassessment of the viability of the project, after excluding the projected Power Plant traffic since the ROR of 10.74 per cent was mainly based on the setting up of the Thermal Power Plant, which had neither been approved nor included in the Eighth Five Year Plan. Later, based on the information about additional industries proposed to be set up/ under consideration, furnished (November 1988) by the Managing Director, Goindwal Industrial and Investment Corporation of Punjab Limited to the Prime Minister's office, the Railway Administration re-assessed

(January 1989) the ROR for the project at 3.71 per cent on the estimated cost of Rs.21.13 crore. The Planning Commission was requested to consider the execution of the work as a deposit work. The Planning Commission, however, directed the Railway Board to make budget provisions for the project during 1989-90, as decided by the then Prime Minister.

The project, sanctioned by the Board finally in the Works Programme of 1989-90 at an anticipated cost of Rs.21.13 crore, was again pruned down in October 1992 to Rs.16.60 crore, for construction of this line to 'Scratch Line' standard, using released second hand permanent way material without any signalling and introduction of train services with 'one engine only' system. The estimate was further revised and the Railway Board sanctioned the revised estimate for Rs.21.85 crore in April 1996.

The project was opened for passenger traffic on 18 December 1997 at an expenditure of Rs.23.75 crore and a Rail Bus service was introduced in the section.

Audit scrutiny of the records pertaining to the traffic revealed (January 2005) that even after seven years since the opening of the rail line for traffic, there was hardly any development in the area, which could fetch any goods traffic. On the contrary, the Railway Administration was incurring loss at an average rate of Rs.0.05 crore per annum on the operation of the Rail Bus service.

- Decision of the Railway Board to sanction and fund a project with an ROR of 3.71 per cent, as against the prescribed limit of 10 per cent was financially unjustified ab initio. Since the project was being taken up due to insistence of the Punjab Government, Railway should have explored the option of the State Government funding the project. Reasons for not doing so were not on records made available to Audit.
- Since the projected ROR of 3.71 per cent and the anticipated gross traffic earnings of Rs.4.21 crore per annum had never materialised in the seven years since the opening of the line for passenger traffic, the liability of the payment of general revenues and the loss on account of operation of the Rail Bus service, now rests with the Railway Administration. The Railway Administration has already paid Rs.11.64 crore towards dividend to general revenues on this project and incurred a loss of Rs.0.35 crore on the operation of the Rail Bus service.

The matter was taken up with the Railway Administration and Railway Board in February 2005 and October 2005 respectively. Their reply has not been received so far (December 2005).

### *3.1.3 South Western: Railway — Injudicious sanction of work leading to blocking up of funds*

Approval of non-viable new line project between Kottur – Harihar resulted in blocking up of Rs.12.56 crore

The Railway Board sanctioned (1995-96) a new line project between Kottur and Harihar via Harpanahalli (65.6 kms.) at a cost of Rs.124.13 crore primarily justified on the basis of (i) need for a shorter route between Hospet

and Mangalore for movement of iron ore, (ii) establishment of industries like sponge iron plants and a steel plant at Hospet and (iii) benefits to one of the most under developed areas of Karnataka. The cost of the new line was to be shared between the Railways and the Government of Karnataka in a ratio of 1:2. The work was scheduled to be completed by March 2005.

The Railway Board had approved the project even though the Rate of Return (ROR) of the project (4.06 per cent) at the time of inclusion in the Pink Book (1995-96) was far below the criterion of 10 per cent laid down for financial viability of projects. The ROR of 4.06 per cent was worked out taking into account cross traffic of iron ore. However, it was seen in audit that traffic for iron ore was not possible on this section because the Railways had provided for sleeper density of M+4 on this section instead of the required M+7. Moreover, the feeder section just prior to this section i.e. Gunda Road – Kottur section was itself unsuitable for iron ore movement as it was laid with released 75R rails and CST9 sleepers. A material modification proposed for track upgradation and subsequently a complete track renewal proposal for Gunda Road - Kottur section had been rejected by the Railway Board in August 2004 and February 2005 respectively. From the sleeper density specified for Kottur-Harihar project and the rejection of upgradation of Gunda Road-Kottur feeder line it is clear that Railways do not actually expect the iron ore traffic to materialise. The ROR, which even initially was less than the established criterion, was subsequently brought down, first to 1.92 per cent in 1998 and then to (-) 4.493 per cent in 2001. During the second appraisal report prepared in April 2001, the Railway authorities themselves excluded the goods cross traffic assessed in the earlier report on stated grounds of "recession in steel industry, availability of other alternative routes and general decline in piecemeal traffic".

The work on construction of Kottur-Harihar line commenced in 2000-01. Till January 2005, an expenditure of Rs.17.56 crore had been incurred on the project. Out of their share of Rs.11.71 crore, the Government of Karnataka deposited only Rs.5 crore and out of this, Rs.4.57 crore were deposited back by Railways with the State Government as advance for land acquisition. Due to the poor funds flow from Government of Karnataka, four tenders valuing Rs.5.30 crore were cancelled between September 2004 to October 2004. Further, no major works costing more than Rs.20 lakh each were awarded after October 2004. Thus, only 14 per cent of the work has been completed up to January 2005 though the project was to be operational by March 2005.

When the matter was taken up (April 2005), the Railway Administration stated (May 2005) that bulk volume of material movements, particularly mineral ores by Mines and Minerals Trading Corporation/ National Mineral Development Corporation, would materialise once the line is commissioned due to the current industrial liberalisation policies of the Government,

Also the Kottur-Harihar line would be upgraded to M+7 sleeper density and they also claimed that the upgradation of track between Gunda Road-Kottur section had been proposed through material modification/ CTR.

The Railway Administration's reply is not acceptable as the complete track renewal proposed for Gunda Road – Kottur Section was rejected by the

Railway Board as recently as February 2005 which indicates that the Railways are not convinced of the materialisation of the mineral ore traffic. Moreover, in the light of Railway Board decision on the Gunda Road - Kottur section as well as the absence of mineral ore carrying capacity on that section, upgradation of the Kottur – Harihar line will not be justified and will only further increase the cost of an already unviable line.

Thus, the new line project, which was initially known to be unviable and loss making, was taken up on unjustified grounds. This has resulted in blocking up of scarce capital and resources to the extent of Rs.12.56 crore.

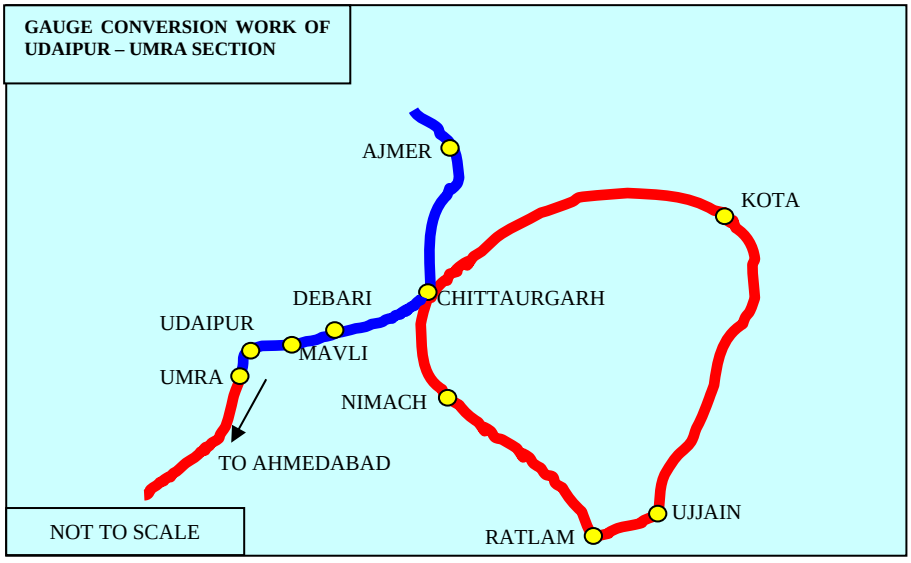
The matter was taken up with the Railway Board in September 2005. Their reply has not been received so far (December 2005).

### *3.1.4 North Western Railway: Unproductive expenditure*

Improper planning of a work through 'Material Modification', without evaluating the facilities already contemplated in the detailed estimate of a gauge conversion project, led to unproductive expenditure of Rs.5.53 crore

As per provisions of the Indian Railway Code for the Engineering Department, investment decisions should be based on adequate surveys and analysis of the existing as well as required facilities.

Gauge conversion of Ajmer - Chittaurgarh - Udaipur, a Meter Gauge (MG) section, into Broad Gauge (BG) was sanctioned in the year 1996-97. North Western Railway (NWR) proposed taking up the work Udaipur - Chittaurgarh in first phase and Chittaurgarh - Ajmer in the second phase through sub-estimates. A part detailed estimate was submitted for Rs.27.97 crore, including the work of provision of a guanteletted track between Udaipur - Umra section, though it was not a part of sanctioned work. The provision of gauntletted track was justified to facilitate loading of existing Rock Phosphate traffic from Umra in both directions i.e. in MG rakes towards Ahmedabad and in BG rakes towards Udaipur and beyond.




While vetting the part estimate, the Accounts Department had observed that the provision of guantletted track will not be utilised gainfully till a BG link is

also provided between Ajmer -Kota and Ratlam. After examining the proposal, Railway Board directed Railway Administration to process the estimate for Udaipur - Umra section through material modification (MM). The MM for Rs.21.79 crore for this work, submitted to Railway Board in September 1998, was sanctioned after updating in August 2002. The works related to provision of the gauntletted track were awarded in June 2003 and April 2004.

While these works in were in progress, Railway Board asked the Railway Administration to review the requirement of gauntletted track in view of the development of a full rake siding at Debari for handling Rock Phosphate traffic on BG system, availability of shorter route after conversion of Nimach - Ratlam section and also the reduction in maximum permissible speed of the section and maintenance problems likely to arise because of gauntletted track. Railway Administration concurred with Railway Board and proposed for doing away with the work of gauntletted track between Udaipur and Umra. The work was finally closed by Railway Board in December 2004, by which time, Railway Administration had incurred expenditure of Rs.5.53 crore (Rs.4.73 crore on account of earth work, Rs.0.72 crore on procurement of ballast and Rs.0.08 crore towards land acquisition).

Audit observed that, while planning the provision of gauntletted track between Udaipur and Umra section, the Railway Administration had failed to evaluate the facilities for handling goods traffic that were already included in the estimate of gauge conversion of Chittaurgarh - Udaipur section. This resulted in abandonment of the work of gauntletted track after incurring expenditure of Rs.5.53 crore.

On this being taken up by Audit in March 2005, the Railway Administration contended (September 2005) that Western Railway's proposal (1997) to provide gauntleted track between Udaipur–Umra was for the smooth continuation of loading of Rock Phosphate at Umra for various destinations via Udaipur and due to be transported on BG system. Subsequent to Railway Board's approval for this gauntleted track work through material modification, when the North Western Railway was asked (September 2004) by the Railway Board to reconsider this work, this Railway had recommended to drop this work subject to additional facilities of two loading sidings at Debari station being created. The Railway Administration added that timely decision through mid term review had resulted in deferring an investment of Rs.17.05 crore, without compromising the traffic requirements. They further stated that the expenditure of Rs.4.73 crore incurred on earthwork and strengthening of bridges would be used on gauge conversion of Udaipur - Ahmedabad section and the ballast procured at a cost of Rs.0.72 crore would be given to open line for use.

Railway Administration's contention is not acceptable as provision of additional facility of two loading lines at Debari station was already a part of the detailed estimate of Udaipur – Chittaurgarh gauge conversion work. The factors on account of which the material modification work of gauntleted track was proposed for dropping were well known to the Railway Administration from the very beginning and these were not the result of some subsequent

developments. Moreover, as of now there is no proposal for gauge conversion of Udaipur - Ahmedabad section and the entire expenditure will remain unproductive till the gauge conversion work is undertaken and completed. With the passage of time, maintaining this work will require additional expenditure.

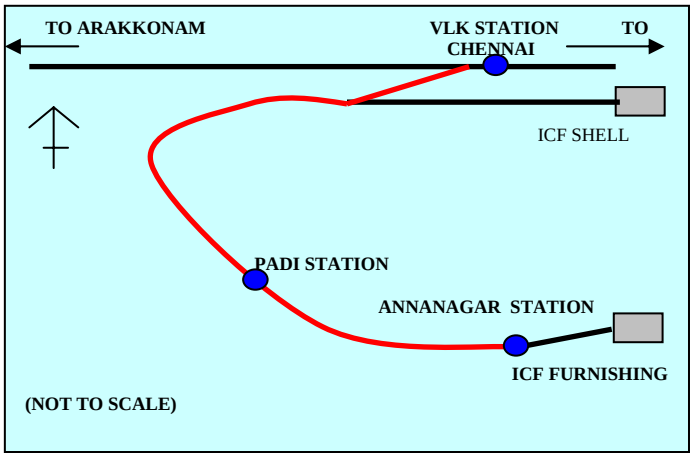
The matter was taken up with the Railway Board in September 2005. Their reply has not been received so far (December 2005).

### *3.1.5 Southern Railway: Unfruitful expenditure in strengthening Integral Coach Factory siding line*

Unfruitful expenditure of Rs.5.51 crore was incurred for introducing Electric Multiple Unit services on a section with very poor patronage

A non-electrified Broad Gauge (BG) single line alignment (3.40 kms.) of a siding, situated between Villivakkam (VLK) station and Integral Coach Factory (ICF) Furnishing Division in Chennai, was being used exclusively by ICF for transporting coach shells from their Shell Division to the Furnishing Division and furnished shells/ rakes to VLK station.

The Hon'ble Minister of State for Railways in December 2002 announced the introduction of BG Electric Multiple Unit (EMU) services between VLK and Annanagar, a major residential complex in Chennai, using the ICF siding single line alignment.




The work was taken up on 'out of turn' basis on the instructions of the Railway Board and on the ground of requests from various agencies. No traffic survey for judging the financial viability of the project was, however, conducted. Earlier Techno Economic Feasibility Studies conducted in 1984, 1988 and 1992 by various agencies had not found the option of using the ICF line to be viable. It was contended in the Techno Economic Survey Report of Metropolitan Transport Project (Railway) Madras (1992) that the existing line would neither meet the needs of the commuters nor would it permit future extension. Despite this, the work was proposed in the Works Programme 2003-04 by the General Manager, Southern Railway and was taken up for execution from April 2003.

The existing track was strengthened/ upgraded by using/ providing superior track materials, automatic signalling and overhead electrification by incurring

Rs.5.51 crore, after re-appropriating Rs.5 crore from another work, having safety implications. The line was commissioned for traffic in October 2003.

Audit scrutiny of station earnings, however, showed very poor patronage of the EMU services as the earnings realised from the sale of daily tickets/ monthly season tickets, between October 2003 and December 2004, were only Rs.2.31 lakh.

Strengthening of the ICF siding line alignment, without any traffic survey, was carried out exclusively for running BG EMU services in VLK – Annanagar section. The hindrance to ICF functioning, as pointed out by General Manager/ ICF as early as in 1984, was ignored and funds were re-appropriated from a work having safety implications. Non-availability of specific written demands for the service with the Railway Administration and very poor patronage of this section clearly indicate that expenditure of Rs.5.51 crore was incurred without adequate justification.

When the matter was taken up (March 2005), the Railway Administration contended (August 2005) that services were provided in view of a continuous demand which was entertained by MOSR and that patronage would improve with the commencement of some more EMU services after receipt of new coaches.

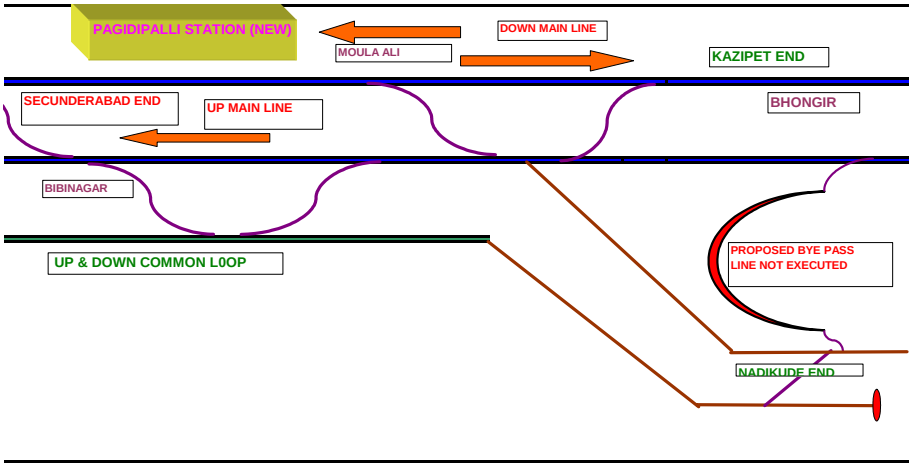
These arguments are not acceptable in Audit as no specific demands for providing train services in the section could be made available. Railway Administration have also not provided any data/ traffic survey to substantiate the projection of better patronage in future.

The matter was taken up with the Railway Board in September 2005. Their reply has not been received so far (December 2005).

### *3.1.6 South Central Railway: Infructuous expenditure due to defective planning*

Construction of common loop line at a cost of Rs.3.90 crore on the crest of a gradient could not meet the objectives for which it was constructed

Pagidipalli is a special class double line (Up and Down main lines) station located four kilometers away from Bibinagar on Secunderbad – Kazipet trunk route of South Central Railway. The Broad Gauge (BG) line towards Nadikudi – Guntur takes off at Pagidipalli on Up main line. Previously, one crossover from Down line to Up line existed at the station. However, in the absence of a common loop line at Pagidipalli, passage of trains on the main line was affected during diversion of Nadikudi bound trains from Secunderabad. Since entry to Bibinagar – Nadikudi line was available only from Secunderabad end, goods trains coming from Kazipet end meant for Nadikudi, could not be diverted at Pagidipalli for want of a line and these trains were hauled up to Moula-Ali for engine reversal.




Keeping in view the operational necessity and to overcome the passage problems for successive trains on the main line affecting the section as well as branch line, it was proposed to provide a common loop line at Pagidipalli along with a bye pass line for accommodating the goods trains from Kazipet end to Nadikudi branch line at an estimated cost of Rs.4.92 crore.

The work was included in the Final Works Programme (New Works) for the year 1996-97 and the Railway Board approved the proposal at the revised cost of Rs.4.37 crore. Earlier (August 1996), when the Secunderabad Division was asked to construct the common loop line, the Divisional Railway Manager (DRM) had not considered it advisable on technical grounds. Both the Up and Down main lines had steep gradients of 1 in 100 for most of the length was the main constraint. Due to these constraints, the take off point was estimated 1.5 kilometer away from the old station building. In view of these restrictions, the Railway Administration sought (January 1997) administrative clearance of the Railway Board for laying the common loop and provision of block station. The Railway Board accorded (January 1997) administrative approval, subject to some conditions including a clause for inserting in the station 'working rules' that no train would be stabled on the main line.

Though General Manager sanctioned (July 1997) the detailed estimate for the work at a total cost of Rs.5.43 crore, the work for construction of common loop line was only taken up (September 1997) on priority basis. While the work was nearing completion, the then DRM sent (June 1998) a revised proposal that the crossover and the overhead equipment (OHE) on the common loop will not be of any significant benefit as the distance between Pagidipalli and Bibinagar was hardly five kilometers and regulation of trains on common loop line so as to give preference to a following Up train would also not be beneficial. In fact, in his view, such procedure was to consume more time due to speed restrictions on the turnouts. However, Operating Department of the Zonal Railway advised him (July 1998) to execute the work as per originally approved plan. The loop line, constructed at a cost of Rs.3.90 crore, was opened (September 1998) to traffic. However, the work relating to the bye-pass line had not been taken up (September 2005).

A review by Audit revealed that the construction of common loop line has not brought out the desired advantage because a considerable length of track was on 1 in 100 gradient, endangering the safety of stabling or stopping of trains on main line. Clear path of Up main line is necessary for despatch and reception of trains from Nadikudi branch line. Prior to the provision of common loop line, when the Up main line was free, the trains to and from Nadikudi branch line could be handled on the existing cross overs. Continued detention of trains at home signals even after the provision of common loop line indicates the unfruitfulness of this common loop constructed by ignoring the advice of two DRMs. Since no tangible benefit has been extended, investment of Rs.3.90 crore may be viewed as infructuous. Secondly, as per justification, construction of common loopline was justified not independently but with the construction of a bye pass line. However, the construction of bye pass line had not so far been taken up (October 2005). Non-provision of bye pass line has resulted in avoidable expenditure of Rs.2.18 crore towards extra haulage of goods trains between Pagidipalli and Moula Ali both sides during the period 2001-02 to 2003-04.

On the matter being taken up (March 2005) by Audit, Zonal Railway Administration replied (June 2005) that the construction of common loop line was a conscious decision in the interest of safety. Due to uncompensated 1 in 100 gradient, there was a restriction of granting line clear to Bhongir for Up trains whenever an Up train was waiting at the station as a result of which the trains were getting detained abnormally and there was a cascading effect on Up trains. But, due to provision of common loop line, the detention to trains had been reduced considerably. Moreover, only one common loop was prioritised instead of two single loops on either direction, which is a practice on double line sections and at junction points.

Zonal Railway Administration's contention is not acceptable. The objective of fluidity and safe operation of trains has not actually been achieved and detention of main line trains have not been eliminated. Secondly, the precautionary measure of not granting line clear to the adjacent block station of Bhongir has, in fact, been incorporated in the station 'working rules' after the provision of common loop line. This very measure, coupled with the other 'station working rules', has not afforded any fluidity in the main line path and, therefore, the argument regarding reduction in the detention of trains is not tenable. Also, even after the provision of common loop lines, trains would have to be detained at home signals to ensure safety of train on Up main line, in which case detention is inevitable. During discussion on the matter in August 2005, Zonal Railway Administration accepted that the branch line traffic cannot be diverted to the common loop when a train knocks at Pagidipalli station on both Up and Down main lines.

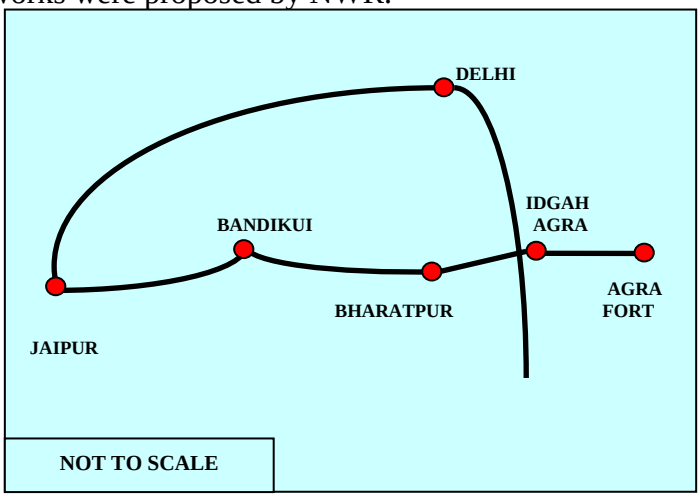
The matter was taken up with the Railway Board in October 2005. Their reply has not been received so far (December 2005).

### *3.1.7 North Western: Railway — Unproductive expenditure on provision of extra sleepers*

Provision of extra sleepers during gauge conversion of Agra Fort - Bandikui section, without any concrete proposal for upgrading other sections forming parts of Golden Triangle, has resulted in unproductive expenditure of Rs.3.84 crore

The conversion of Meter Gauge (MG) line of Agra Fort - Bandikui section into Broad Gauge (BG) was included in the Works Programme of 1995-96. The detailed estimate of the work amounting to Rs.161.03 crore sanctioned in December 1998 contained provisions for sleeper density of 1,540 per km in main line and 1,310 per km in loop lines, as per requirements of 'D' category routes. The work of gauge conversion was planned for completion in two phases. In the first phase the section between Bandikui and Bharatpur was taken up and targetted for completion by March 2004. The work in the second phase was to follow.

While the work in Phase I was in progress, Railway Board directed (November 2003) North Western Railway (NWR) to work out details of upgradation of Agra Fort - Bandikui section for a speed potential of 160 kmph as this would form part of Golden Triangle between Delhi - Agra - Jaipur - Delhi. Since the linking of Bharatpur - Bandikui was being taken up, Railway Board asked NWR to provide sleeper density of 1660 per km and also complete other works for the purpose, which could be done alongwith the gauge conversion. NWR submitted a material modification estimate amounting to Rs.3.84 crore to Railway Board only for increasing the sleeper density and no other work required for upgradation of the route to speed potential of 16 kmph was planned. After examining the MM estimate, Railway Board decided in May 2004 that the increased cost on account of provision of extra sleepers may be covered in the revised estimate/ completion estimate. NWR was also informed that if it was decided to go in for higher speed on Agra - Jaipur - Delhi section, then a separate estimate covering expenditure incurred on extra sleepers and cost of signal and telecommunication and other allied works required may be submitted for consideration of the Railway Board. However, as there was no proposal for upgrading the Agra - Jaipur- Delhi section for a speed potential of 160 kmph, no other works were proposed by NWR.



The work of Bandikui - Bharatpur and Bharatpur - Idgah sections was completed by providing 1,660 sleepers per km on main line and 1,540 sleepers per km on loop lines by incurring additional expenditure of Rs.3.84 crore and the sections were opened for traffic in May 2004 and May 2005 respectively.

- Audit observed that though Railway Board had asked NWR to plan the Agra Fort -Bandikui section for a speed potential of 160 kmph, NWR proposed only for provision of extra sleepers at a cost of Rs.3.84 crore. Other works required for upgrading the section to 160 kmph were neither proposed nor contemplated for which reasons were not on record.
- While considering the MM estimate for sanction, Railway Board was aware that there was no proposal for upgrading the sections forming parts of Golden Triangle, yet they directed the NWR to provide extra sleepers. The entire expenditure of Rs.3.84 crore on provision of extra sleepers will remain unproductive and is likely to prove infructuous as there is no proposal as yet to upgrade the remaining section, viz. Jaipur – Bandikni - Delhi, as well as to carry out the requisite works on Agra Fort - Bandikui section to make it suitable for speed potential of 160 kmph.

When the matter was brought to the notice of Railway Administration (April 2005) they stated in July 2005 that it was much easier and economical to lay the sleepers to 1,660/km density at the time of laying the BG track in the closed section. Increasing the sleeper density is not possible in the running track, as entire track has to be re-laid. It had also been contended that laying the sleeper to 1,660/km density is not only the requirement for high speed but also for likely increase in line capacity. By taking the decision to carry out this work as a part of gauge conversion and providing the sleepers with 1,660/km density Railway has saved huge expenditure. The likely expenditure in laying new track would be around Rs.11.58 crore.

The reply of the Railway Administration is not acceptable as the contention that laying of sleepers to 1,660/km density during gauge conversion is economical has to be seen in the light of the fact that as and when the upgrading work is taken up, the Railway will need to carry out all the other works related to upgrading, except provision of additional sleepers. The work of provision of additional sleepers is only about 26 per cent of the upgradation work and doing it in advance has not given substantial advantage to the Railway Administration. The Railway Administration has also stated that laying sleepers with 1,660/km density was justified from line capacity angle. The contention cannot be accepted as at the time of mooting the proposal for gauge conversion, the section was planned to be made as category 'D' route after detailed survey of future requirements. Extra sleepers were provided only to upgrade the section to speed potential of 160 kmph in the Golden Triangle for running high speed trains. There is no proposal for upgrading the other sections forming the Golden Triangle and except for provisions of sleepers, other works required have not been done in this section. The entire expenditure incurred on provision of extra sleepers is likely to remain

unproductive. With the passage of time, even the sleepers laid now will require replacement.

The matter was taken up with the Railway Board in October 2005. Their reply has not been received so far (December 2005).

### *3.1.8 Central Railway Infructuous expenditure on abandoned works*

Railway Administration's failure to assess the future requirements has resulted in infructuous expenditure of Rs.2.74 crore on works, which were abandoned later

As per provisions in the Indian Railway Code for the Engineering Department, project development should begin with of assessment of future requirements. Pre-investment decision investigations may relate to long term planning and to decide priorities. Proper evaluation of the existing facilities should be done before sanctioning of the works by undertaking feasibility studies/techno economic surveys.

Audit scrutiny of records of Construction Organisation of Central Railway revealed that three electrical/ signaling and telecom works sanctioned during the years 1992-93 to 1995-96 were abandoned after incurring expenditure of Rs.3.54 crore.

- Provision of 22 KV Duplicate Feeder on Diva - Thakurli section was included in the Works Programme of 1993-94 on grounds of additional requirement on Thane - Kalyan section. Detailed estimate of the work for Rs.1.05 crore was sanctioned by Chief Electrical Engineer/ Construction (CEE/C) in September 1993. The work was awarded to two contractors in October 1994 and March 1995. While award of contracts for this work was in process, the Central Railway was also considering conversion of the entire Direct Current (DC) section of Mumbai Division to Alternating Current (AC) traction. The works of 22 KV Duplicate Feeder were suspended in December 1997 on the ground that these works were infringing some other works relating to doubling of Diva - Vasai section and re-modelling of Diva Yard. By this time, an expenditure of Rs.0.79 crore had already been incurred. When the matter was taken up (April 2005), the Railway Administration stated (September 2005) the work from Dombivli to Thakurli (2 kms) was completed and commissioned. The work from Diva to Dombivli was also commenced but stopped as the alignment of track of Diva - Panvel and Panvel - Jasai double lines were coming on the same route. It was also stated that with the commissioning of 22 KV feeder from Kalwa to Diva, the requirement of 22 KV feeder between Diva and Dombivli was reviewed and work stopped. In the meantime the entire section was provided with Alternate Current (AC). From the reply, it is evident that Railway Administration had not assessed their requirement properly giving due consideration to other ongoing/ sanctioned works. As a result, the work of provision of 22 KV feeder between Diva to Thakurli was abandoned after incurring avoidable expenditure of Rs.0.79 crore.

- In another case, Central Railway proposed for replacement of existing Analogue Microwave system over Bhusaval - Nagpur section by digital radio relay system as in their view, expressed while proposing the estimates (April 1997), Optical Fibre Cable (OFC) could not be used since it would be restricted to the division whereas the digital microwave system was for all the Railways. While vetting the estimate, the FA&CAO had observed that replacement of existing system after completion of 18 years, as against the prescribed life of 25 years, was premature. He had also suggested exploring the possibility of hiring a line from Department of Telecommunication (DOT) in view of heavy capital investment involved. The Railway Board approved (August 1997) the detailed estimate of Rs.14.99 crore under the Build, Operate Lease and Transfer (BOLT) Scheme. The Railway Board approved (April 1999) revised estimate for the work under their own funding. Subsequently, the work was pended (September 1999) by the Railway Board along with some other works relating to provision of OFC and the work was not revived thereafter. However, by this time, the Railway Administration had already incurred an expenditure of Rs.1.15 crore on construction of buildings (Rs.0.32 crore), procurement of stores (Rs.0.53 crore) and wages and miscellaneous work expenditure (Rs.0.30 crore). Audit took up the matter in December 2004/ April 2005. In their reply, the Railway Administration admitted (September 2005) that the work of provision of digital radio relay system was deleted as per policy decision of the Railway Board and OFC was subsequently sanctioned on BSL – NGP section. The Railway Administration also claimed that since OFC works taken up under BOLT were frozen as the BOLT scheme did not succeed. Sanction of the detailed estimate of digital radio relay system works was justified at that moment of time in the year 1999. They further stated that material worth Rs.0.45 crore had been issued to other Divisions. The reply is not acceptable. The sanction of the Railway Board given in April 1999 was only a revision of the estimate approved in August 1997. The Railway Board decided to go in for digital microwave radio technology even though they were aware of the advantages of OFC and, in January 1996, the Railway Board had specifically advised all Zonal Railways in favour of using OFC systems wherever copper cable was due for replacement. Provision of radio relay system at a high cost, despite financial advice to the contrary, was thus not in the interest of the Railways. It has also been noticed in audit that out of total amount of Rs.0.45 crore stated to have been adjusted, only Rs.0.21 crore pertain to the cost of material. The balance amount of Rs.0.24 crore is the cost of establishment, which has erroneously been booked against other works. Thus, Railway Administration has incurred infructuous/ unproductive expenditure of Rs.0.94 crore.

- Similarly Central Railway proposed the provision of Intermediate Block Signalling (IBS) in both directions over Warora - Majri and Nagri - Chikni Road sections in order to augment the line capacity of Wardha - Balharshah section. The work was justified on the ground that the section was saturated to the level of 115.4 per cent and carrying out additional line

capacity works was inescapable. The work was included in the Works Programme (WP) of 1992-93 at a total cost of Rs.1.35 crore. The work of provision of IBS in Warora - Majri section was completed and commissioned in December 1997. While the work of provision of IBS in Nagri - Chikni Road section was in progress, Central Railway sent another proposal for carrying out IBS works at four more locations and the same were included in the WP of 1999-2000. The detailed estimates for Rs.3.77 crore for these works was sanctioned by Chief Administrative Officer (Construction) in July 1999. While these works were in progress, Divisional Railway Manager observed (July 2000) that the level of traffic did not justify the provision of IBS in four block sections and recommended for stopping the works, including the work of Nagri - Chikni section. In view of this, the works were dropped by Central Railway in September 2000. By the time of closure of these works, besides incurring an expenditure of Rs.1.30 crore on provision of IBS in Warora - Majri and Nagri - Chikni Road sections, Rs.0.29 crore had also been spent on the provision of IBS at four locations sanctioned in 1999. Railway Administration in their reply (September 2005) stated that IBS works were sanctioned initially to increase the line capacity. However, due to drop in demand of food grain traffic, the actual utilisation of the line capacity dropped and the works were stopped after reviewing the position. It has also been stated that the IBS provided at Warora - Majri section was commissioned and being utilised. The expenditure incurred on Nagri - Chikni Road and four other sections works out to Rs.0.73 crore out of which material worth Rs.0.31 crore is lying in Material at Site Account of the work. The reply indicates that with the drop in utilisation of line capacity the expenditure incurred on provision of IBS has become infructuous. Moreover, the chances of utilisation of the material worth Rs.0.31 crore are remote as the same is lying idle for the last four to five years.

These instances point to Railway Administration's failure to assess future requirements properly while taking up projects, which led to infructuous expenditure of Rs.2.74 crore.

The matter was taken up with the Railway Board in October 2005. Their reply has not been received so far (December 2005).

### *3.1.9 Integral Coach: Factory — Extra expenditure due to provision of stainless steel paneling in Electric Multiple Unit coaches*

Provision of stainless steel canvas for the ceiling and stainless steel sheet honeycomb for side and end walls in Electric Multiple Unit coaches without permission of the Railway Board resulted in extra expenditure of Rs.2.70 crore

Powers delegated to General Managers specifically provide for Railway Board's prior approval for the introduction of new designs and for effecting

changes, alterations or modifications in the design, layout or equipment of the existing rolling stock.

Integral Coach Factory (ICF) manufactured Broad Gauge Air conditioned Electric Multiple Unit (EMU) coaches for Multi Modal Transport System (MMTS) of the twin cities of Hyderabad - Secunderabad. As South Central Railway and Andhra Pradesh Government were to share the cost of EMU coaches, some expensive modifications/improvements were carried out in those EMU coaches at the specific requirement of the State Government. ICF Administration simultaneously sought (December 2002) Railway Board's permission for incorporating similar modifications/improvements in EMU coaches to be built in future. Railway Board responded (July 2003), after consultation with RDSO, that out of the improvements/modifications carried out in EMU coaches built for MMTS, relevant modification could be adopted in future. However, Research Designs and Standards Organisation (RDSO) objected (August 2003) to certain modifications/ improvements, which had not been recommended by them. Stainless steel paneling inside the coach i.e. in the side and roof panel was one of the modifications disallowed by RDSO. Subsequently, Railway Board also reversed (August 2003) their earlier order of July 2003 and restored the use of sunmica in the side and roof panel.

A review in audit revealed that even before approval of Railway Board conveyed in July 2003, ICF had already manufactured 18 coaches with stainless steel canvas for ceiling and honeycomb for side and end walls. The manufacture continued despite Railway Board's order of August 2003 rejecting the use of steel. 86 EMU Coaches were manufactured by 2004-05 on the ground of Southern Railway Administration's request for standardisation of the entire fleet of EMUs on Southern Railway on MMTS pattern. Incorrect utilisation of stainless steel by the ICF Administration in contravention of Railway Board's orders and RDSO recommendations resulted in avoidable expenditure of Rs.2.70 crore on 86 EMU coaches manufactured during September 2003 to March 2005. ICF has decided to switch back to conventional panels of sunmica for production during 2005-06.

Audit took up the matter with the ICF Administration in May 2005 and with Railway Board in October 2005, who contended in August 2005 and December 2005 respectively that Railway Board approval was not needed for such modification as per items No. 55 of powers of General Managers. Similarly RDSO approval was also not required as no change was made to the basic structures. Since ICF had procured the stainless steel meant for panelling, the same was utilised in EMU trains meant for Southern Railway to prevent the deterioration of materials and to minimise the inventory.

Railway Administration contention is not acceptable as Railway Board approval was required under item No. 55 and 56 of powers of General Managers as alteration was being made to authorised rolling stock. Moreover, clear directives of Railway Board were available from August 2003 stipulating that any modification to coaches having financial implication of Rs.10,000 and above in case of AC coaches and Rs.2,500 in case of TL coaches required the approval of Railway Board. ICF Administration ignored the Railway Board's

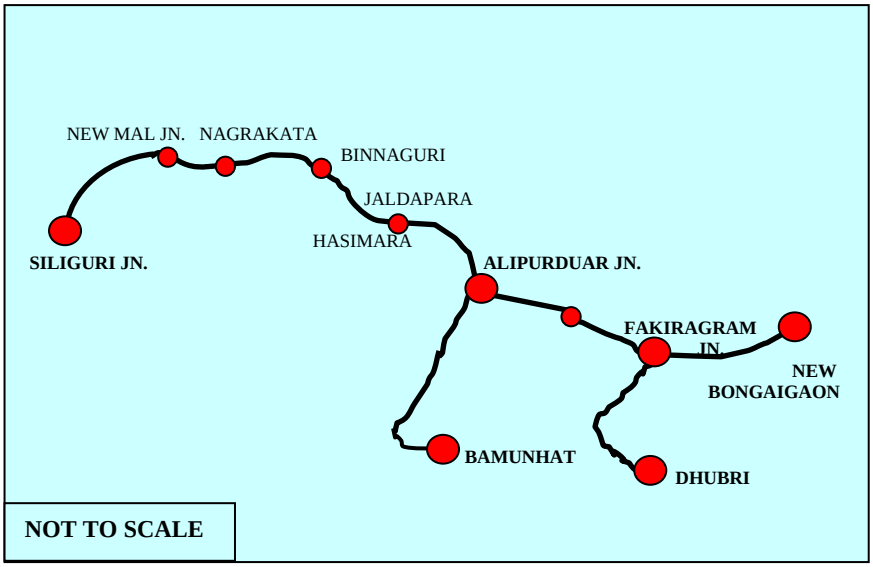
orders just to utilise the already procured steel and incurred avoidable extra expenditure of Rs.2.70 crore in carrying out modifications not authorized by Railway Board.

### *3.1.10 Northeast Frontier Railway: Infructuous expenditure on track renewal works*

Lack of coordination among the Open Line and Construction Organisations of Railway resulted in infructuous expenditure of Rs.1.29 crore on execution of avoidable complete track renewal/ through sleeper renewal works

According to Para 101 of Indian Railway Code for the Engineering Department, maintenance and renewal of civil engineering assets of the Railways is the responsibility of the Open Line Organisation of the Civil Engineering Department and construction activities of the Railways are carried out by Construction Organisation. Para 111 stipulates that Construction Organisation should maintain liaison with Open Line Organisation and ensure proper coordination for execution of works as per laid down procedures.

Conversion of Siliguri - Alipurduar - New Bongaigaon section, including two branch lines viz. Alipurduar - Bamunhat and Fakiragram –Dhubri, from Meter Gauge to Broad Gauge was included by Railway Board in the works programme of the year 1997-98 and detailed estimate for Rs.123.88 crore was also sanctioned in April 1999. The Construction Organisation thereafter commenced the work by calling for tenders for various works of gauge conversion in December 2001. The works were awarded in April 2002 by the Construction Organisation.




While the Construction Organisation of the Northeast Frontier Railway (NFR), was taking the necessary action for gauge conversion of the Alipurduar - Bamunhat section, the Open Line Organisation of NFR also sent a proposal to Railway Board in April 2000 for carrying out Complete Track Renewal (CTR)/ Through Sleeper Renewal (TSR) of Alipurduar - Bamunhat section, on safety considerations, stating clearly that there was no programme for gauge

conversion of this section. Railway Board included CTR/TSR on Alipurduar-Bamunhat section in three parts in the Works Programmes of the year 2000-01, 2001-02 and 2003-04 respectively, at a total cost of Rs.15.25 crore. The tenders for CTR/TSR works were invited in May and June 2002 and Open Line Organisation awarded the contracts in September and October 2002.

Within three months after the award of contracts by Open Line Organisation, the section between Alipurduar and Bamunhat was closed for traffic from 21 December 2002 as the gauge conversion work was progressing. However, the Open Line Organisation continued the works of CTR/TSR till September 2003 and incurred an expenditure of Rs.1.29 crore even though the duplication was pointed out by Audit in May 2003 itself.

Thus, though the gauge conversion work of Siliguri - Alipurduar - New Bongaigaon, including Alipurduar -Bamunhat section, had already been sanctioned by Railway Board in 1999, the Open Line Organisation of NFR got CTR/TSR works sanctioned on the ground that there was no programme for gauge conversion for this section. This indicated lack of coordination between Construction Organisation and Open Line Organisation of NFR. Though both the works were approved by the Railway Board, the duplication was not detected by them either.

Open Line Organisation also failed to re-examine the necessity of carrying out CTR/TSR or take any action to stop the CTR/TSR works despite the traffic having been stopped in December 2002 for carrying out the gauge conversion work and the duplication being pointed out by audit . In reply to Audit, Railway Administration claimed (May 2005) that the works were continued with a view that traffic may resume at any time.

Out of the total expenditure of Rs.1.29 crore incurred on these works, Rs.0.77 crore pertained to procurement and spreading of ballast and Rs.0.52 crore on CTR/TSR works. On guage conversion of MG track into BG, the whole expenditure of Rs.0.52 crore on CTR/TSR works, viz laying of rails and sleepers, besides the irretrievable portion out of the expenditure of Rs.0.77 crore spent on procurement and spreading of ballast will be rendered infructuous.

When the matter was brought to the notice of the Railway Administration (March 2005), they stated in May 2005 that CTR/ TSR works in Alipurduar – Bamunhat section were sanctioned on safety considerations as no track renewal work was done on this very old track which had further deteriorated due to floods in 1993. It was also stated that the scope of CTR/ TSR works was reviewed in September 2003 and all works were closed. The reply is not accepted. In fact, in view of gauge conversion works, CTR/ TSR works were not required at all. Moreover, the Railway Administration took nine months to review the scope of works after the section was closed in December 2002. Also, the Railway Administration's argument that the CTR/ TSR works were taken up due to floods is not convincing because the floods occurred in 1993, while the CTR/ TSR was proposed six years later and while justifying the proposal, no mention was made of this factor.

The matter was taken up with the Railway Board in October 2005. Their reply has not been received so far (December 2005).

## 3.2 Poor Contract/ Project Management

### *3.2.1 North Central Railway: Idle investment due to inefficient project management*

Failure of Railway Administration to ensure availability of plans, drawings and clear site for works resulted in short closures/ termination of the contracts leading to abnormal delay in completion of the project and consequent escalation in cost by Rs.17.57 crore. Besides idling of investment of Rs.54.61 crore, Railway was deprived of the benefit of annual savings of Rs.8.73 crore

In order to overcome major constraints in freight operations due to cross movements of passenger trains to and from Kanpur Central, Northern Railway sent a proposal to Railway Board during 1993-94 for construction of an additional third line between Kanpur and Juhi Yard along with two additional lines between Juhi and Panki and provision of a fly over for Mail/ Express trains over existing North and South lines. This proposal was sent, however, without conducting necessary traffic survey and feasibility study. The proposal was curtailed by the Railway Board (September 1994) and only the works relating to provision of third line between Kanpur - Panki and fly-over were included in the Final Works Programme (FWP) 1995-96 at an anticipated cost of Rs.21.46 crore. No target date for completion of this work was fixed. Later on, Railway Board directed (24 May 1996) Northern Railway to submit the estimate for the third line and a material modification for the fourth line. The detailed estimate for the third line between Kanpur - Panki and a material modification for the construction of fourth line between Juhi - Panki was sanctioned by Railway Board in April 1997 at a cost of Rs.23.94 crore and Rs.10.09 crore respectively.

The Civil Engineering work was divided into seven zones viz. Zone I, II, IIIA, IIIB, IV, V and VI and contracts for various works in these zones were awarded from July 1997 to October 2001. The works in these contracts were to be completed within periods ranging from six months to 18 months.

Audit scrutiny of the performance of works on these contracts revealed that due to non-provision of clear sites for works, non-finalisation of drawing of the works and frequent changes in the plans etc., the contractors were unable to complete the works even during the extended periods ranging from two months to 55 months. As a result, contracts of Zones I and III B were short closed in April 2005 and January 2004 respectively and contracts of Zones II and III A were terminated in March 2002 and September 2004 respectively. The contracts for balance works in Zone III B, II, III A and I were awarded in November 2004, February 2005, March 2005 and April 2005 respectively. The scope of work of Zone V was changed (October 2001) for provision of a via-duct in place of an RCC retaining wall between chainage 8600 M to 8850 M. The work of construction of viaduct awarded in July 2002 with completion period of 18 months, had not been completed so far (October 2005). Thus, only the work of Zone VI was completed till date.

As there were largescale changes in the plans and drawings resulting in increase in quantities of the works, abstract estimate of the work was revised

from Rs.31.55 crore to Rs.63.36 crore and sanctioned by Railway Board in June 2002. The increase of Rs.31.81 crore over the original estimate was attributed to escalation in cost of labour and material (Rs.17.57 crore), increase in quantities of existing items (Rs.8.43 crore) and introduction of new items (Rs.5.81 crore).

As a result of non-completion of civil engineering works, the contracts relating to electrical and Signal and Telecommunications were also closed without completion of those works. As these works have to be awarded afresh, this will result in further delay in commissioning of the lines.

Thus, planning and sanctioning of a work without conducting traffic survey and feasibility studies, coupled with non-preparation of drawings of important works and non-provision of clear sites before award of contracts resulted in escalation in cost by Rs.17.57 crore besides delay in completion of the project. This deprived the Railway the benefit of annual savings of Rs.8.73 crore on account of increase in line capacity, saving in running time of goods trains and operational efficiency. The entire investment of Rs.54.61 crore will remain unproductive till the project is commissioned.

When the matter was brought to the notice of the Railway Administration in January 2005, they admitted (July 2005) that no formal traffic survey was conducted but stated that the project was sanctioned on the basis of inputs received from various units. It was also admitted that contracts were closed/ terminated due to poor progress by contractors. However, the work had now been geared up and would be completed at the earliest and hence investment made so far will be put to use.

Railway Administration's contention that contracts were terminated/ closed on account of poor progress of works is not correct. In fact, the contracts were terminated/ closed because plans and drawings of various works were finalised much later than the original date of completion of contracts and there were huge changes in scope as well as quantities of works. Had proper traffic survey been conducted before sanctioning the work, there would have been hardly any need to change the scope of work after its commencement.

The matter was taken up with the Railway Board in October 2005. Their reply has not been received so far (December 2005).

### *3.2.2 Southern Railway: Improper execution of reconstruction work of a distressed bridge*

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| Delays in award of contracts and improper co-ordination resulted in continued use of a distressed bridge at the cost of safety, apart from an extra expenditure of Rs.0.93 crore per annum and idling of assets costing Rs.7.13 crore |

Railway bridges are essential links to ensure safe transportation. Cast iron screw pile bridges with cracks fall under the classification of distressed bridges. Continued utilisation of such distressed bridges for transportation is a safety hazard, as was evidenced by the accident on a distressed bridge (Bridge No.924) across Kadalundi river between Parpanangadi and Kadalundi station in Shoranur – Calicut section in June 2001.

Bridge No.823 built in 1930 between Pallipuram and Perashannur stations in the Shoranur – Kuttipuram section was on steel screw/ cylindrical piles. Considering safety aspects and anticipated heavy traffic, reconstruction of this distressed bridge was sanctioned in 2000-01, with date of completion as 31 March 2004. After an accident on a similar bridge (Bridge No.924) in June 2001, a speed restriction of 20/ 15 kmph was also imposed on this bridge as a follow up to the recommendation of the Chairman Railway Safety (CRS) as a precautionary step.

The replacement for this distressed bridge was a new combined bridge for the proposed double line and the existing line. This was on a new alignment the two ends of which were at a distance of 60 metres and 15 metres from the existing bridge. Open tender floated in July 2001 for bridge construction (excluding superstructure) was not finalised within the validity period. As the lowest tenderer did not agree to extend the validity period of his offer, the tender was discharged (December 2001) quoting relevant instructions issued in this regard by CVC.

Thereafter, a special limited tender for construction of the new bridge (sub-structure and super-structure) was floated in January 2002 for which contract was awarded in August 2002 at a cost of Rs.8.54 crore. Extensions of time were granted up to 15 April 2004 by which time all major works, except the protective works, were completed. The protective works had been delayed, as the earthwork on the approaches was not completed. Payment of Rs.7.13 crore was made to the contractor up to February 2005 as per twenty third on-account bill.

For execution of earthwork, separate tenders were invited only in October 2002, even though the work of construction of bridge was handed over to Construction Organisation in July 2000 itself and the tenders for the bridge work had been floated as early as in July 2001. This delay was a result of the initial delay in placing the requisitions before State Government (September 2001 and October 2002) for land acquisition. The contract for earthwork could be awarded only in May 2003. The contract was then terminated in May 2004 due to poor progress of the work. This resulted in award of a risk and cost contract in November 2004 for carrying out the balance work. The progress of work as of February 2005 was only 34 per cent. Ministry has now informed (December 2005) that bridge had since been commissioned

Even though the bridge work was finally commissioned by December 2005, delay in execution of matching approach works and delay in finalisation of tenders, etc. had resulted in continued operation of traffic on the unsafe bridge for one and a half years. This led to avoidable loss of Rs.1.40 crore due to imposition of speed restriction. Another Rs.0.46 crore were spent on account of discharging of open tender due to delay in finalisation of tender within the validity period.

Moreover, due to improper co-ordination and delays in construction and commissioning of the alternative bridge, important passenger trains continued to be run on a distressed and over-aged bridge over an extra 18 months, which was a safety hazard.

The matter was taken up with the Railway Administration in November 2004/ March 2005 and with Railway Board in September 2005 who contended (May 2005 and December 2005) that time taken in construction was essential as it was a time consuming process involving land acquisition, availability of approach roads, Court cases etc., which were beyond the control of the Railway Administration and that the bridge construction was taken up in a systematic manner.

The contention of the Railway Administration is not acceptable. Processing of the open tender for bridge work should have been completed within the validity period but the Railway Administration failed to adhere to the time schedule. Moreover, the bridge, constructed on grounds of urgency and safety, could not be commissioned due to Railway Administration's failure to synchronise the execution of earth work with the bridge work.

### *3.2.3 South Central Railway: Inadequate contract management*

Railway Administration's failure to identity the sources of suitable soil and moorum etc. required for the work before awarding contracts and accepting higher rates in two contracts resulted in poor contract management leading to accumulation of risk and cost charges of Rs.3.67 crore

As per guidelines issued by Research, Designs and Standards Organisation for earthwork in connection with conversion projects, sources of availability of borrow soils and blanket material like moorum, coarse sand and quarry grit etc. in the region should be identified and sample of the soil tested for assessing its suitability by blending and lab compaction tests. These requirements are to be completed before award of contracts. Rules also provide that when an agency fails to execute the work, Railway Administration may terminate the contract and get the work completed at the risk and cost of the defaulting contractor. As per directives of the Railway Board (September 1990) the recovery of risk and cost charges from the defaulting contractor should be restricted to amounts due to him in the final bills plus security deposits of other contracts being executed by him and no recovery should be made from the running bills in respect of any other works in progress.

In August 1986, Railway Board approved survey for restoration of Kakinada and Kotipalli line (dismantled in 1940) and sanctioned (August 2001) the detailed estimate for restoration at a cost of Rs.66.80 crore. Railway Administration awarded (November 2001 – March 2002) fourteen contracts to seven contractors for earthwork in formation, construction of minor bridges and execution of other miscellaneous works. The works in all these contracts were to be completed within six months from the date of issue of acceptance letters. Reasonableness of the rates quoted by contractors was done through a rate analysis and accordingly the rates finalised for Schedule 'A' items (mainly earth work and minor bridge items) were either at par or up to 39 percent above the scheduled rates.

Audit scrutiny of the contracts revealed that works, which were originally scheduled for completion between May 2002 and September 2002 were not

completed even after grant of extensions ranging from five months to 25 months. Two contracts for which extensions were granted up to January and February 2003 were terminated in May 2003 citing 'slow progress' as the reason. The risk and cost tenders finalised in August 2003 received lowest rates of 169 and 100 per cent above the scheduled rates. After negotiation, these rates were brought down to 102 and 97 per cent above the scheduled rates and the negotiated rates were justified as reasonable by the Tender Committee on the grounds that the locations from where the suitable earth and moorum can be obtained were far away from the work sites and there was urgency for completion of the works. Railway Administration accepted these rates and awarded the contracts in September 2003. Consequently, the remaining six other contractors who were doing the works at the existing lower rates also slowed down their progress, which compelled the Railway Administration to terminate their contracts. Railway Administration terminated the remaining contracts between September 2003 and November 2003 and awarded the balance works at higher rates, ranging from 45 per cent to 86 per cent above scheduled rates for Schedule 'A' items. It was also noticed that two risk and cost contracts, where the rates were comparatively lower, were again terminated and later granted at 112 per cent and 113 per cent above the Schedule 'A' rates. As a result of this, an amount of Rs.4.07 crore became due for recovery on account of risk and cost charges from the defaulting contractors. Out of Rs.4.07 crore, Railway Administration was able to recover only Rs.0.18 crore upto January 2005. Another Rs.0.22 crore were available for adjustment leaving a balance Rs.3.67 crore.

- It was observed in Audit that the reasons, such as non-availability of suitable earth and moorum near the sites of works, given for acceptance of higher rates in the risk and cost tenders were clear indication that Railway Administration had not assessed the availability of suitable soil before award of contracts, as prescribed by RDSO.
- Acceptance of very high rates in two risk and cost works, at a time when other contractors in the adjoining sections were working satisfactorily, led to slowing down of the works by them. Consequently Railway Administration had to terminate their contracts as well and award the risk and cost tenders at much higher rates.
- As a result of instructions for not recovering the risk and cost amount from the running bills of the defaulting contractors for executing other works, Railway Administration was not able to recover the amounts though some of the defaulting contractors were still working with the Railway.

Thus, Railway Administration's failure to assess properly the sources of availability of suitable soil and moorum etc. required for the work before awarding of contracts and subsequently accepting higher rates in two contracts is indicative of poor contract management leading to accumulation of risk and cost charges Rs.3.67 crore.

The matter was taken up with the Railway Administration and Railway Board in May 2005 and September 2005 respectively. Their reply has not been received so far (December 2005).

### *3.2.4 West Central: Railway — Non-recovery of risk and cost amount from a defaulting contractor*

Failure of the Railway Administration to initiate prompt action against a defaulting contractor resulted in non-recovery of risk and cost amount of Rs.2.13 crore

General Conditions of contract stipulate that if a contract is awarded on risk and cost basis to a fresh contractor, the defaulting contractor should pay, within the stipulated period, the risk and cost amount to the Railway. The Railway Administration should finalise the risk and cost tenders within six months and provisional claim for recovery of risk cost amount should be lodged immediately.

In April 1989, a contract for 'supply of 5 lakh cum of 50 mm. gauge stone ballast (machine crushed) directly loaded into all types of Broad Gauge wagons at Chaumahla station on Kota Division' (now in West Central Railway) was awarded to M/s Harihar Quarry Pvt. Ltd., Vadodara. The date of completion of the contract was kept as 26 March 1994. However, as the contractor demanded extension, on grounds not attributable to him, the date of completion was extended to 15 August 1996. The contractor could not supply the contracted ballast within the stipulated period and hence the contract was terminated in August 1996 at the risk and cost of the contractor. As on the date of termination the contractor had supplied only 2,91,326.28 cum of ballast (58.27 per cent of the ballast), a contract for balance quantity of 2,08,673.72 cum of ballast was awarded (February 1998) to another firm at the risk and cost of defaulting contractor. The fresh contractor supplied 2,34,443.16 cum ballast and the work was closed on 14 March 2002.

The Railway Administration worked out Rs.2.13 crore as risk and cost amount and issued notice June 2005 to the defaulting contractor to deposit this amount within 15 days. There was thus undue delay of about three years in preferring the risk and cost amount.

When the matter was taken up (April 2005), the Railway Administration stated in June 2005 that the action for recovery could not be taken as the final bill of the risk and cost contractor could not be prepared for want of clearance of site of work by him. The contractor cleared the site on 7 December 2004 and the final bill was recorded on 7 December 2004.

These arguments are not acceptable because provisional claim for recovery of risk cost amount, as required under the rules, was not lodged by Railway Administration immediately. Even after completion of the work in March 2002, the Railway Administration took two years and nine months to prepare the final bill and another six months to prefer the claim. The chances of recovery of risk cost amount of Rs.2.13 crore are remote as the notice served by Railway Administration in June 2005 has been received back undelivered.

The matter was taken up with the Railway Board in October 2005. Their reply has not been received so far (December 2005).

### *3.2.5 Eastern Railway: Loss due to mismanagement of contracts*

Railway Administration's failure to manage the contracts properly led to avoidable payment of Rs.1.09 crore in three cases

Clauses 64 (1) (i) and 64 (3) (a) (i) of General Conditions of Contract-1969 stipulate that in the event of any dispute or difference between the parties and in case the contractor demands in writing that the dispute or difference be referred to arbitration, Railway Administration will appoint Arbitrator/ Arbitrators within sixty days from the day when the demand for arbitration has been received. Eastern Railway Administration awarded three contracts to (1) M/S Venus Engineering in October 1990, (2) M/S M.K. Mukherjee in June 1995 and (3) M/S Eastern Star Turn key Engineers in March 1997.

Review of records revealed that in respect of the first contract, the work was completed in September 1991 and the necessary completion certificate issued. In the second and third contracts, the work remained incomplete within the agreed periods and the contracts were terminated in July 1996 and August 1997 respectively. It was further noticed that due to some dispute on non-return of some excess cement, rod and gunny bags worth Rs.3.68 lakh by the first contractor, the Railway Administration withheld the final bill amounting to Rs.1.84 lakh. The final bill of Rs.0.95 lakh was withheld in respect of the second contractor on account of dispute over contractor's dues. Similarly, the final bill in respect of the third contractor, in which recovery of Rs.2.62 lakh was involved, was also withheld due to excess payment made. All the three contractors pleaded for arbitration in January 1996, September 1996 and November 1997 respectively.

However, in contravention of above clauses, Railway Administration appointed (December 1996) joint arbitrators for settlement of the dispute in the first contract much beyond the time permitted for such appointment. In the second and third contracts, Railway Administration failed to appoint any arbitrator at all. The joint arbitrators appointed in the first contract failed to initiate proceedings, despite repeated reminders. Consequently, all the three contractors went to the Court in April 1999, July 1998 and July 1998 respectively.

It was further noticed that sole Arbitrators were appointed by the Court in all the three cases and they passed awards of Rs.8.89 lakh, Rs.10.43 lakh and Rs.28.67 lakh respectively, along with interest payable till final and full settlement of the claim. The Railway Administration failed to challenge the award in due time in the first contract. Subsequently, the Railway advocate deputed to move an application before the Court for recalling the award failed to appear in the Court and an ex-parte award was passed by the Court (August 2002) directing Reserve Bank of India (RBI) to pay a sum of Rs.57.83 lakh to the contractor.

The Railway Administration sought to challenge the award in respect of the second contract in the Calcutta High Court but the same was dismissed

(January 2002) due to non-appearance of Railway counsel at the time of hearing and the Court dictated an order (September 2002) on RBI for payment of Rs.21.36 lakh to the contractor. In the case of the third contract also the Court passed a decree (December 2001) directing RBI to pay sum of Rs.30.33 lakh to the contractor.

In the three cases RBI apprised Railway Administration of Court decrees in August 2002, September 2002 and January 2002 respectively and urged Railway Administration to obtain stay orders from the Court within the stipulated seven days. However, for the first contract, an appeal was filed by Railway in October 2002, challenging Court's decree after the stipulated period of seven days was over. The Hon'ble Court after hearing both sides dismissed the case in August 2003. In the cases of second and third contracts, no effort was made to bring stay orders against the decrees. As a consequence the Railway Administration had to pay a sum of Rs.57.83 lakh, Rs.21.36 lakh and Rs.30.33 lakh respectively to the contractors.

Thus, Railway Administration's failure to initiate Arbitration proceedings for settlement of the disputes within the stipulated period and negligence in conducting cases by the Advocates deputed on behalf of the Railway in the Court, led to avoidable payment of Rs.1.09 crore.

The matter was taken up with the Railway Board in October 2005. Their reply has not been received so far (December 2005).

## 3.3 Others

### *3.3.1 East Central Railway: Loss due to illegal tapping of electric energy*

Delay in supply of materials by the Railways delayed the work of laying underground cables in colonies, which resulted in continuous illegal tapping of energy by outsiders, causing loss of Rs.3.74 crore to the Railways

Railway Administration purchases electric energy from Uttar Pradesh Power Corporation Limited (UPPCL) and Bihar State Electricity Board (BSEB) for distribution in their colonies at Mughalsarai Division (MGS). Sealed meters are attached at all the receiving sub-stations, where joint meter reading is taken and bills preferred accordingly. The Railway colonies at MGS are scattered in different areas adjoining the boundaries of the colonies. Illegal tapping of electricity by outsiders was observed during site survey by Field Supervisors as well as during various drives, undertaken by Railways with the help of Law and Order authorities.

In order to plug the power thefts, the Railway Administration decided to take up (Works Programme 2000-01) the work of underground cabling in lieu of overhead traction, at an estimated cost of Rs.52.80 lakh. Expected date of completion of the works was between 31 March 2005 and 31 August 2005 for the various colonies. However, due to delay in procurement of rate contract items, which were to be supplied by the Railways, only upto 60 per cent of the work could be completed as of September 2005. It was observed that due to

this delay, the Railways had been sustaining a recurring loss on account of unauthorised tapping of electricity by outsiders. Out of 19,31,93,479 units purchased by the Railway Administration during the period April 2001 to February 2005, it was estimated that approximately five per cent of the electricity (96,59,674 units) valuing Rs.3.74 crore was illegally tapped by outsiders.

When the matter was taken up (March 2001), Railway Administration stated (January 2005) that colony-wise replacement of overhead Low Tension line by underground cable was in progress at different colonies. It was also stated that 25 per cent of the work had been completed (January 2005) and the rest would be completed by 2005-06.

The contention of the Railway Administration cannot be accepted as the work, which was started in September 2003, has been completed only up to 60 per cent as of September 2005 (25 months after it had been started). The Railway Administration has not been able to avail the benefit of the investment as illegal tapping by the outsiders continues, in spite of the anti-theft drive claimed to have been undertaken by the department.

The matter was taken up with the Railway Board in October 2005. Their reply has not been received so far (December 2005).

### *3.3.2 Eastern Railway: Mismanagement in regulating consumption of electricity*

Non-repair/ delayed repair of Capacitor Banks at Belur and Belmuri feeding posts resulted in non-achievement of savings of Rs.1.05 crore during the year 2003-04

Capacitor banks at Belur and Belmuri feeding posts were commissioned in May 1994 and March 1999 respectively and yielded savings of Rs.6.50 lakh per month at Belur and Rs.2.30 lakh per month at Belmuri during the financial year 2002-03 towards payment of demand charges by reducing maximum demand. However, the capacitor banks at Belur and Belmuri went out of order in November 2002 and September 2002 respectively. The capacitor bank at Belur was finally repaired in May 2005 after a lapse of about 29 months whereas the capacitor bank at Belmuri could be repaired only in August 2004 after a gap of 22 months.

As per report sent by Railway Administration to Railway Board in July 2004 on the performance of capacitor banks, a comparative analysis of average saving per month between the year 2002-03 and 2003-04 revealed that savings to the tune of Rs.1.05 crore during the year 2003-04 could not be achieved due to non-functioning of these two capacitor banks.

When the matter was taken up with Railway Administration in May 2005, they attributed (July 2005) the delay in repairing the capacitor banks to the to non-availability of funds in the revenue head in the year 2002-03 and the fact that further processing for tendering and procurement took a lot of time in finalising the Purchase Order/ Letter of Acceptance, which is a procedural delay.

The reply is not acceptable because Railway Administration had surrendered an amount of Rs.3.15 crore in the revenue head in the year 2002-03. Moreover, delays of 29 and 22 months in processing repairs to an essential equipment, especially where such delay was causing huge leakage of Railway revenue, cannot be considered reasonable.

The matter was taken up with the Railway Board in October 2005. Their reply has not been received so far (December 2005).