



REPORT

OF THE

**COMPTROLLER AND AUDITOR GENERAL
OF INDIA**

FOR

THE YEAR 1977-78

UNION GOVERNMENT (RAILWAYS)

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1.	10	12	Grants	Grant
2.	11	15	(original Rs. 38.41 crores supplementary + Rs. 7.92 crores)	(original Rs. 38.41 crores +supplementary Rs. 7.92 crores)
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REPORT
OF THE
COMPTROLLER AND AUDITOR GENERAL
OF INDIA

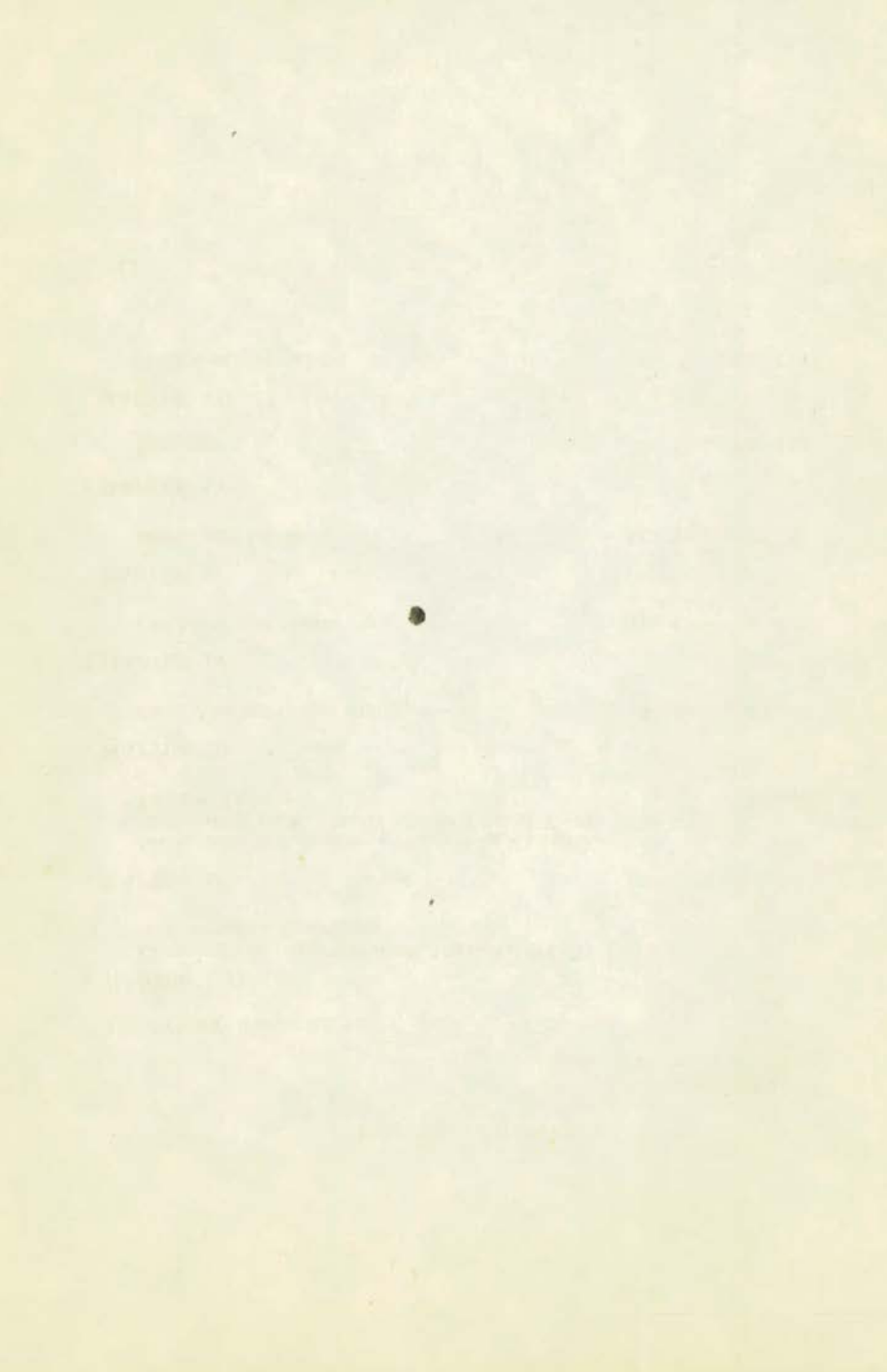
FOR

THE YEAR 1977-78

UNION GOVERNMENT (RAILWAYS)

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PREFATORY REMARKS

This Report relates mainly to matters arising from the Appropriation Accounts of Indian Government Railways for 1977-78 together with other points arising from audit of the financial transactions of the Railways.

2. The cases mentioned in this Report are among those which came to notice in the course of test audit during the year 1977-78 as well as those which had come to notice in earlier years but could not be dealt with in previous Reports; matters relating to the period subsequent to 1977-78 have also been included, wherever considered necessary.

3. The points brought out in this Report are not intended to convey or to be understood as conveying any general reflection on financial administration by the Ministry of Railways.

CHAPTER I

COMMENTS ON APPROPRIATION ACCOUNTS 1977-78 AND CONNECTED DOCUMENTS

1. Financial Results

1.1 The table below compares revenue receipts, expenditure and surplus and loan from General Revenues to the Railways for the year 1977-78 with the actuals for the previous year and the budget anticipations for the year 1977-78 :

(Rs. in crores)

	Actuals 1976-77	Budget 1977-78	Revised Estimates 1977-78	Actuals 1977-78	Variation with re- ference to Budget
1. Revenue Receipts	2045.69	2119.81	2141.80	2133.83	+14.02
2. Revenue Expenditure	1749.40	1861.99	1825.41	1781.04	-80.95
3. Net Revenue (1-2)	296.29	257.82	316.39	352.79	+94.97
4. Dividend paid to General Revenues	209.05	225.32	227.07	226.56	+1.24
5. Revenue Surplus	87.24	32.50	89.32	126.23	+93.73
6. Loan from General Revenues	146.94	169.87	67.44	67.44	-102.43

1.2 The surplus was appropriated/proposed to be appropriated to Revenue Reserve Fund and Development Fund as under :

(Rs. in crores)

	Surplus	Appropriation to	
		Revenue Reserve Fund	Development Fund
Actuals for 1976-77	87.24	61.39	25.85
Budget Estimate for 1977-78	32.50	5.84	26.66
Revised Estimate for 1977-78	89.32	55.14	34.18
Actuals for 1977-78	126.23	91.62	34.61

1.3 It had been anticipated in the Budget Estimates for 1977-78 that taking into account an appropriation of Rs. 5.84 crores to Revenue Reserve Fund from the surplus, a loan of Rs. 169.87 crores would be required from General Revenues in order to meet the liabilities of Revenue Reserve Fund towards payment of loans taken in earlier years for payment of dividend and interest due thereon. Later on, at the Revised Estimates stage, the amount of loans to be taken from General Revenues was reduced to Rs. 67.44 crores, taking into account the increased appropriation of Rs. 55.14 crores to this fund from the surplus. The actual appropriation to this fund from the surplus increased further and amounted to Rs. 91.62 crores.

Revenue Reserve Fund

1.4 The opening balance and the closing balance of the Revenue Reserve Fund were Rs. 52.07 crores and Rs. 37.79 crores respectively. At the end of the year the fund owed Rs. 216.14 crores to the General Revenues on account of loans taken in the past for payment of dividend, interest on outstanding loans and repayment of loans. (The Railways started taking loan from General Revenues for meeting dividend obligation from 1969-70 when the balances in the Revenue Reserve Fund got exhausted due to continuous withdrawals for meeting deficits in the years 1966-67, 1967-68 and 1968-69). The details of the loans taken, payments made on account of loan instalments and interest charges etc., were as under :

(Rs. in crores)

Year	Loan obtained	Instalment paid	Interest paid	Loan outstanding
1973-74	99.72	..	..	99.72
1974-75	183.07	33.24	5.48	249.55
1975-76	152.21	94.26	14.64	307.50
1976-77	146.94	145.00	19.05	309.44
1977-78	67.44	160.74	19.81	216.14

Development Fund

1.5 The opening balance and the closing balance of the Development Fund for the year 1977-78 were Rs. 14 lakhs and Rs. 24.13 lakhs respectively.

1.6 The details of the loans taken and the interest paid were as under :

Period	(Rs. in crores)			
	Loan obtained	Instalment paid	Interest paid	Loan outstanding
Upto 1971-72	86.65	..	8.53	86.65
1972-73	15.72	..	3.71	*85.65
1973-74	22.65	..	4.69	108.30
1974-75	21.90	..	5.99	130.20
1975-76	22.34	..	7.33	152.54
1976-77	..	..	8.24	152.54
1977-78	..	..	8.39	152.54

*Includes amount of Rs. 16.72 crores adjusted on pro forma basis out of the reliefs granted in payment of dividend as per recommendation of Railway Convention Committee, 1971.

1.7 At the end of the year, the fund owed Rs. 152.54 crores to General Revenues on account of loans taken in the past from 1967-68 onwards for financing works of development nature. No repayment of loans to General Revenues has been made since 1967-68.

Total indebtedness of Railways

1.8 Even though the year 1977-78 closed with a surplus of Rs. 126.23 crores, the total undischarged liability at the end of the year in respect of loans obtained from General Revenues due to deficits in the past was Rs. 368.68 crores.

Deferred Dividend

1.9 The deferred dividend on the new lines (*i.e.*, dividend accrued but not payable during construction period and the subsequent five years moratorium period, as also the dividend that had become payable for the years following the moratorium period but could not be paid as the net income of the new lines

was not sufficient to meet this liability) outstanding at the end of 1977-78, was Rs. 67.80 crores of which Rs. 37.87 crores were for new lines which had already completed the moratorium period.

Abatement of dividend

1.10 During the year 1977-78 the Railways claimed exemption in payment of dividend to the extent of Rs. 3.47 crores (on capital outlay of 133 unremunerative branch lines : Rs. 63.11 crores), even though the capital outlay in respect of unremunerative branch lines is still to be assessed precisely in accordance with the recommendations of the Uneconomic Branch Lines Committee, 1969. The Railways had also informed the Railway Convention Committee, 1973 that pending such assessment, the amount of Rs. 42.21 crores assessed as capital outlay on 77 unremunerative branch lines in 1969 would be adopted for purposes of computation of amount exempt from dividend liability. The abatement of dividend, claimed on this additional outlay of Rs. 20.90 crores (Rs. 63.11 crores—Rs. 42.21 crores) amounted to Rs. 1.15 crores (*vide* also paragraphs 1.8, 1.9 and 1.10 of the Reports of the Comptroller and Auditor General of India for the years 1974-75, 1975-76 and 1976-77—Union Government (Railways) respectively, for similar abatement of dividend claimed in those years).

Plan expenditure

1.11 The total outlay (net, *i.e.*, after deduction of credits or recoveries) on works met from various sources during the year 1977-78 was as under :

Particulars	(Rs. in crores)		
	Budget	Actuals	Variation
Capital	294.95	264.06	—30.89
Depreciation Reserve Fund	145.85	117.64	—28.21
Development Fund	19.00	26.22	+7.22
Metropolitan Transport Projects	10.00	10.13	+0.13
Accident Compensation, Safety and Passenger Amenities Fund	4.00	3.40	—0.60
Open Line Works (Revenue)	9.00	7.64	—1.36
TOTAL :	482.80	429.09	—53.71

1.12 There were savings under all the heads except Development Fund and Metropolitan Transport Projects.

1.13 The savings under capital occurred mainly due to substantial clearance under inventories (Suspense). Against an outlay of Rs. 6.69 crores anticipated in the budget, actual outlay was Rs. (—) 18.35 crores. Similarly, in the previous year 1976-77 too, against an outlay of Rs. 11.00 crores anticipated in the budget, actual outlay was Rs. (—) 68.79 crores. The savings were stated to be mainly due to better inventory control—drawing upon the existing stores acquired in earlier years and avoiding fresh build up of inventories—as a result of implementation of the recommendations of the Committee on Inventory Management.

2. Revenue Receipts

The table below compares revenue receipts for the year 1977-78 with the actuals for the previous year and the budget anticipations for the year 1977-78 :

Particulars	(Rs. in crores)			
	Actuals 1976-77	Budget 1977-78	Actuals 1977-78	Variation with reference to Budget
Passenger earnings				
Upper Class	56.42	57.63	59.67	+2.04
Lower Class	512.87	549.37	561.98	+12.61
Total	569.29	607.00	621.65	+14.65
Other coaching Earnings	86.88	91.31	90.11	—1.20
Goods earnings	1325.91	1382.94	1348.45	—34.49
Sundry earnings	53.29	53.99	58.72	+4.73
Suspense	0.74	(—)25.00	4.49	+29.49
Gross Traffic receipts	2036.11	2110.24	2123.42	+13.18
Miscellaneous receipts	9.58	9.57	10.41	+0.84
Total Revenue Receipts	2045.69	2119.81	2133.83	+14.02

There had been perceptible fall in goods traffic in the year 1977-78. The goods traffic actually carried during 1977-78 was 210.8 million tonnes as against 220 million tonnes as per

budget anticipations and 1.8 million tonnes less than the level of the previous year. The decrease in the originating traffic was mainly attributable to the following :

(In million tonnes)

Commodity	Budget Estimate	Actuals	Variation
Iron Ore for export	13.00	10.64	-2.36
Raw material to Steel Plants	24.50	22.17	-2.33
Finished products from Steel Plants	10.00	9.00	-1.00
Coal	70.50	69.16	-1.34
Other Goods	48.50	45.51	-2.99

3. Revenue Expenditure

The table below compares the revenue expenditure during 1977-78 with the actuals for the previous year and the budget anticipations for the year 1977-78 .

(Rs. in crores)

	Actuals 1976-77	Budget 1977-78	Actuals 1977-78	Variation from Budget
1. Ordinary Working Expenses	1548.96	1648.74	1570.58	-78.16
2. Appropriation to Funds	178.38	188.58	189.36	+0.78
(i) Depreciation Reserve Fund				
(ii) Pension Fund				
(iii) Accident Compensation, Safety and Passenger Amenities Fund				
3. Miscellaneous Expenditure and Payments to Worked lines etc.	13.66	15.67	13.46	-2.21
4. Open Line Works (Revenue)	8.40	9.00	7.64	-1.36
Total Revenue Expenditure	1749.40	1861.99	1781.04	-80.95

(The figures are net, i.e., after deduction of credits or recoveries).

The savings (Rs. 80.95 crores) mainly occurred under ordinary working expenses. A further analysis of ordinary working expenses (Grants Nos. 4 to 10) revealed the following :

	(Rs. in crores)				
	Budget Estimates	Revised Estimates	Actual Expenditure	Variation between Budget Estimates and Revised Estimates	Revised Estimates and Actual Expenditure
1. Grant No. 4— Administration	158.16	156.76	153.95	-1.40	-2.81
2. Grant No. 5— Repairs and maintenance	638.50	629.90	608.70	-8.60	-21.20
3. Grant No. 6— Operating Staff	329.37	324.15	316.25	-5.22	-7.90
4. Grant No. 7— Operation Fuel	320.06	302.58	299.17	-17.48	-3.41
5. Grant No. 8— Operation other than staff and fuel	93.51	88.48	87.98	-5.03	-0.50
6. Grant No. 9— Miscellaneous Expenses	52.25	52.84	49.40	+0.59	-3.44
7. Grant No. 10— Staff Welfare	56.89	56.35	55.13	-0.54	-1.22
TOTAL :	1648.74	1611.06	1570.58	-37.68	-40.48

There was a shortfall in working expenses to the extent of Rs. 37.68 crores between budget estimates and revised estimates and further saving of Rs. 40.48 crores between revised estimates and actual expenditure. Thus the total decrease in working expenses was to the tune of Rs. 78.16 crores.

The magnitude of the difference between the actuals and the budget/revised estimates shows that the estimates of expenditure were on the high side, particularly under Grant Nos. 5, 6, 7 and 9.

4. Budgetary Control

The number of demands voted for the year was 23 aggregating Rs. 3,724.05 crores. During the year seven supplementary grants were obtained for Rs. 73.45 crores.

The number of charged appropriations for the year was 12 for a total sum of Rs. 4.75 crores. During the year three supplementary appropriations for Rs. 0.22 crore were obtained.

The disbursement during the year showed a saving of Rs. 126.99 crores over the total grants and appropriations as shown below :

Particulars	(Rs. in crores)		
	Voted	Charged	Total
1. Original	3724.05	4.75	3728.80
2. Supplementary	73.45	0.22	73.67
3. Total	3797.50	4.97	3802.47
4. Total Disbursement	3672.54	2.94	3675.48
5. Saving	124.96	2.03	126.99
6. Percentage of saving to total grants/ appropriations	3.29	40.85	3.34
7. Percentage of saving to total grants/ appropriations in the previous year 1976-77	0.45	34.00	0.49

The saving in total grants/appropriations increased from 0.49 per cent in 1976-77 to 3.34 per cent in 1977-78.

5. Savings in Grants and Appropriations

A. Voted Grants

The net shortfall of Rs. 124.96 crores as mentioned in paragraph 4 is made up of shortfall under 15 grants (Rs. 166.31 crores) and excess under 6 grants (Rs. 41.35 crores).

There were no variations in two grants Nos. 11 and 11A relating to Appropriation to Depreciation Reserve Fund and Pension Fund respectively.

The works grants, namely, Grant No. 13—Open Line Works—Revenue (Rs. 2.58 crores), Grant No. 14—Construction of New Lines (Rs. 0.07 crore) and Grant No. 15—Open Line Works, Capital, Depreciation Reserve Fund and Development Fund (Rs. 81.28 crores) accounted for a saving of Rs. 83.93 crores.

A supplementary grant of Rs. 1.23 crores was obtained in March 1978 under Grant No. 13—for meeting expenditure on staff welfare works provided against special programme for staff amenity works sanctioned during the year and for speedy progress of certain other works etc. The entire amount of Rs. 1.23 crores obtained through supplementary grant remained unutilised and was not necessary.

Grant No. 15—Open Line Works—Capital, Depreciation Reserve Fund and Development Fund, accounted for the major saving of Rs. 81.28 crores which was mainly due to less production of locos and coaches (Rs. 3.02 crores+Rs. 5.03 crores) offset by more production of wagons (Rs. 4.30 crores) and more procurement of wheel sets and components parts (Rs. 5.38 crores), less progress of works (Rs. 0.97 crore), non-receipt of machinery and plant items and other material and debits thereof (Rs. 9.58 crores), less procurement of stores as a result of tight inventory control and more credits under suspense heads (Rs. 69.02 crores).

A saving of Rs. 77.76 crores occurred under Working Expenses, namely, Grant No. 4—Administration, Grant No. 5—Repairs and Maintenance, Grant No. 6—Operating Staff, Grant No. 7—Operation (Fuel), Grant No. 8—Operation other than staff and fuel, Grant No. 9—Miscellaneous Expenses and Grant No. 10—Staff Welfare. The saving was mainly due to less shed and shop repairs to rolling stock, machinery etc., (Rs. 20.94 crores), less procurement of signal and telecommunication stores and spares (Rs. 16.46 crores), non-revision of the prices of Diesel Oil (Rs. 14.77 crores), non-revision of

tariff by State Electricity Boards (Rs. 7.17 crores), observance of economy measures (Rs. 14.05 crores), non-filling of posts (Rs. 7.84 crores), and aggregate of minor variations below Rs. 5.00 crores (Rs. 16.16 crores), partly offset by increase due to more expenditure on repairs and maintenance of tracks, buildings etc., (Rs. 10.76 crores), and upward revision of dearness allowance rates with effect from 1st September 1977 (Rs. 8.87 crores).

A supplementary grant of Rs. 5.10 crores was obtained in March 1978 under Grant No. 9—Miscellaneous Expenses. This was found to be excessive to the extent of Rs. 3.96 crores.

Revenue Grants No. 1—Railway Board, Grant No. 2—Miscellaneous Expenditure, Grant No. 3—Payments to Worked Lines and Others, Grant No. 12—Dividend to General Revenues and Contribution for grants to States in lieu of Passenger Tax and Grant No. 22—Accident Compensation, Safety and Passenger Amenities Fund accounted for a total saving of Rs. 4.62 crores which was made up of variations of minor nature.

B. Savings in Appropriations

A total saving of Rs. 202.65 lakhs occurred in 12 Charged Appropriations. There were cent per cent savings under Appropriation No. 7—Working Expenses—Operation (Fuel) (Rs. 43.88 lakhs) & Appropriation No. 10—Working Expenses Staff Welfare (Rs. 1.37 lakhs). The significant savings also occurred under Appropriation No. 6—Working Expenses—Operation Staff (Rs. 43.52 lakhs), Appropriation No. 15—Open Line Works—Capital, Depreciation Reserve Fund and Development Fund (Rs. 33.57 lakhs), Appropriation No. 22—Accident Compensation, Safety and Passenger Amenities Fund (Rs. 32.49 lakhs), Appropriation No. 5—Working Expenses—Repairs and Maintenance (Rs. 12.52 lakhs), Appropriation No. 9—Working Expenses—Miscellaneous Expenses (Rs. 11.26 lakhs), Appropriation No. 8—Working Expenses—Operation other than staff

and fuel (Rs. 10.92 lakhs), Appropriation No. 14—Construction of New Lines (Rs. 10.86 lakhs). The balance of saving was under three appropriations (Rs. 2.26 lakhs).

6. Excess over grants

During the year under report excesses occurred under six grants aggregating Rs. 41.35 crores. The details of excesses during 1977-78 which require to be regularised under Article 115 of the Constitution of India are as under :

Grant	Final Grant	Actual Expenditure	Excess	Percentage
	Rs.	Rs.	Rs.	
Grant No. 16—				
Pensionary Charges—Pension Fund (Original Rs. 38.41 crores Supplementary + Rs. 7.92 crores)	46,33,14,000	50,63,14,263	+4,30,00,263	9.28

A supplementary grant of Rs. 7.92 crores was obtained in March 1978. This proved inadequate.

The excess of Rs. 4.30 crores occurred mainly due to receipt of more debits than anticipated from Civil Accounts Offices (Rs. 4.03 crores), settlement of more cases of death-cum-retirement gratuity than anticipated (Rs. 0.51 crore) partly offset by savings due to less finalisation of pension cases (Rs. 0.18 crore) and aggregate of minor variations (Rs. 0.06 crore).

Grant No. 17—

Repayment of Loans from General Revenues and interest thereon—Development Fund	8,38,96,000	8,38,96,677	+677	—
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The excess was minor and was due to calculation of interest in units of rupees.

Grant No. 18—

Revenue—Appropriation to Development Fund (Original Rs. 26.65 crores +Supplementary Rs. 7.53 crores)	34,18,38,000	34,60,64,070	+42,26,070	1.24
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The final grant includes a supplementary grant of Rs. 7.53 crores obtained in March 1978 for making an additional appropriation to the fund to meet expenditure on works financed from the fund and for discharging the interest liability on outstanding loans. This proved to be inadequate.

The excess of Rs. 0.42 crore occurred due to the surplus exceeding the anticipations and consequent more appropriation to this fund from the surplus.

Grant No. 19—

Revenue— Appropriation to Revenue Reserve Fund (Original Rs. 5.84 crores +Supplementary Rs.49.29 crores)	55,13,37,000	91,62,34,048	+36,48,97,048	66.18
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In the Budget Estimate an amount of Rs. 5.84 crores was provided for appropriation to the fund out of a total revenue surplus of Rs. 32.50 crores. A supplementary grant of Rs. 49.29 crores was obtained in March 1978 when it was proposed that Rs. 55.14 crores would be appropriated from anticipated revenue surplus of Rs. 89.32 crores. The actual revenue surplus was Rs. 126.23 crores. Consequently, appropriation to Revenue

Reserve Fund was increased to Rs. 91.62 crores, resulting in excess over the grant.

Grant No. 20—

Revenue—

Payment towards
Amortisation of
over capitalisa-
tion, repayment
of loans from
General Revenues
and Interest
thereon—Revenue

Reserve Fund	1,80,55,28,000	1,80,55,28,059	+59	..
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The excess was minor and was due to calculation of interest in units of rupees.

Grant No. 21—

Appropriation to
Accident Com-
pensation,
Safety and
Passenger Amen-
ities Fund
(Original

Rs. 9.23 crores +

Supplementary

Rs. 0.63 crores)	9,86,11,000	10,00,61,747	14,50,747	1.47
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A supplementary grant of Rs. 0.63 crore was obtained in March 1978. This proved inadequate.

The excess of Rs. 0.15 crore was mainly due to more appropriation to the fund by North Eastern Railway due to assumption of higher figures of originating passengers.

CHAPTER II

INVESTMENTS AND CAPACITY UTILISATION OF KIRANDUL—KOTTAVALASA (K. K.) BROAD GAUGE LINE OF SOUTH EASTERN RAILWAY

7—I. *Construction of new line for carrying iron ore for Export*

7.1 A broad gauge (BG) line (length : 445 km) on South Eastern Railway was constructed (cost : Rs. 54.58 crores) during 1961—67 and opened for traffic in May 1967 (formally opened in November 1968) mainly for transport of iron ore from Bailadilla iron ore mines at Kirandul (Madhya Pradesh) to Kottavalasa (Andhra Pradesh) near Visakhapatnam Port. This line* passes through the Eastern Ghats attaining a maximum altitude of 998 metres above sea level. Thus it is said to be the highest BG railway line in the world. About 35 per cent of the track of this line has sharp curves (upto 8 degree) and 84 per cent has gradient (1 in 60 and 1 in 100). The ore traffic expected to be carried initially was 4 million tonnes per annum rising to 6 million tonnes by 1971-72.

7.2 BOX and BOI wagons (with axle load 20.32 tonnes and carrying capacity 54 to 58 tonnes) were mostly used for carrying iron ore. To increase ore movement without running more wagons on this line, the Ministry of Railways (Railway Board) designed in 1966, a wagon of higher capacity called BOY wagon with axle load 22.86 tonnes and carrying capacity 72 tonnes (30 per cent more than that of BOX/BOI wagon).

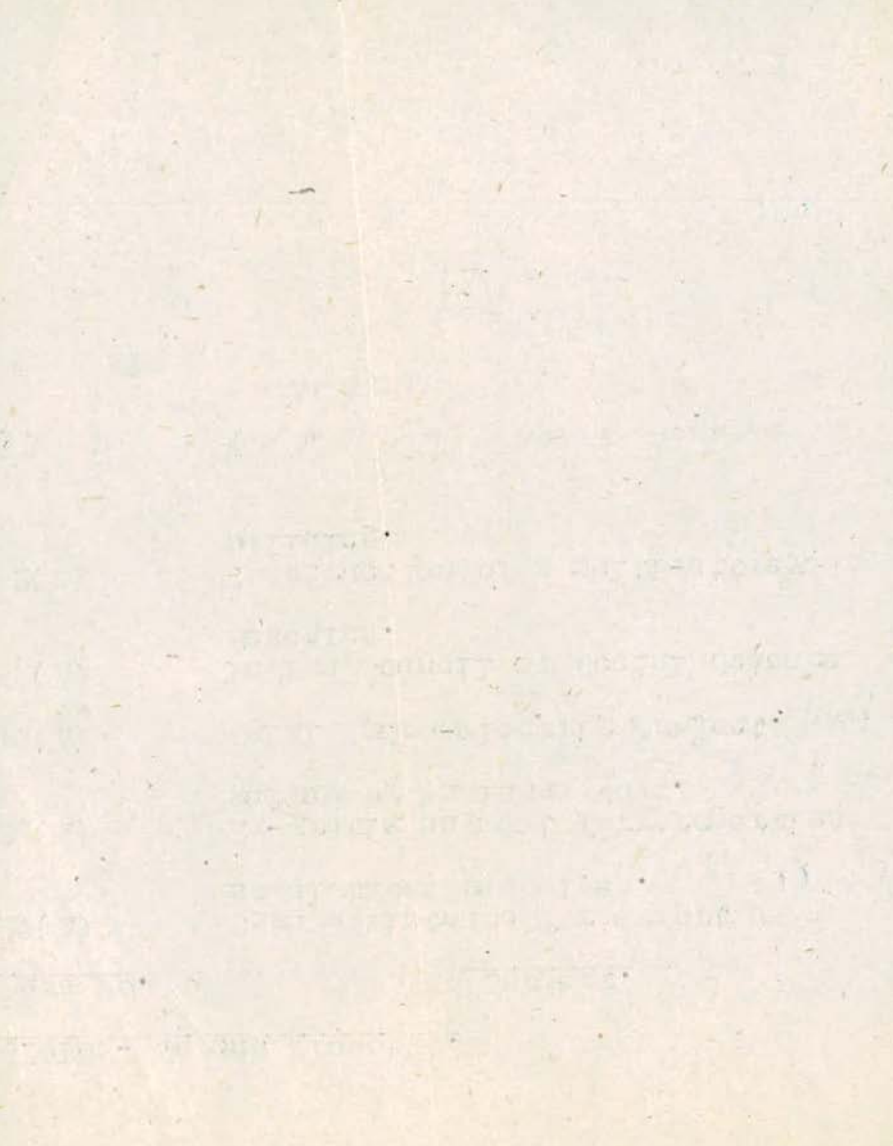
7.3 The track in the section was originally laid with 44.5 kg (90 lbs) rails for the heavy ore traffic to be transported in rakes of BOX/BOI wagons (3200 tonnes of trailing loads) hauled by diesel locos.

*A sketch map of the line and a gradient chart are placed at the facing pages.

CIVIL - Second Proposal.

Ex-gratia (in view of 27 of PIT)

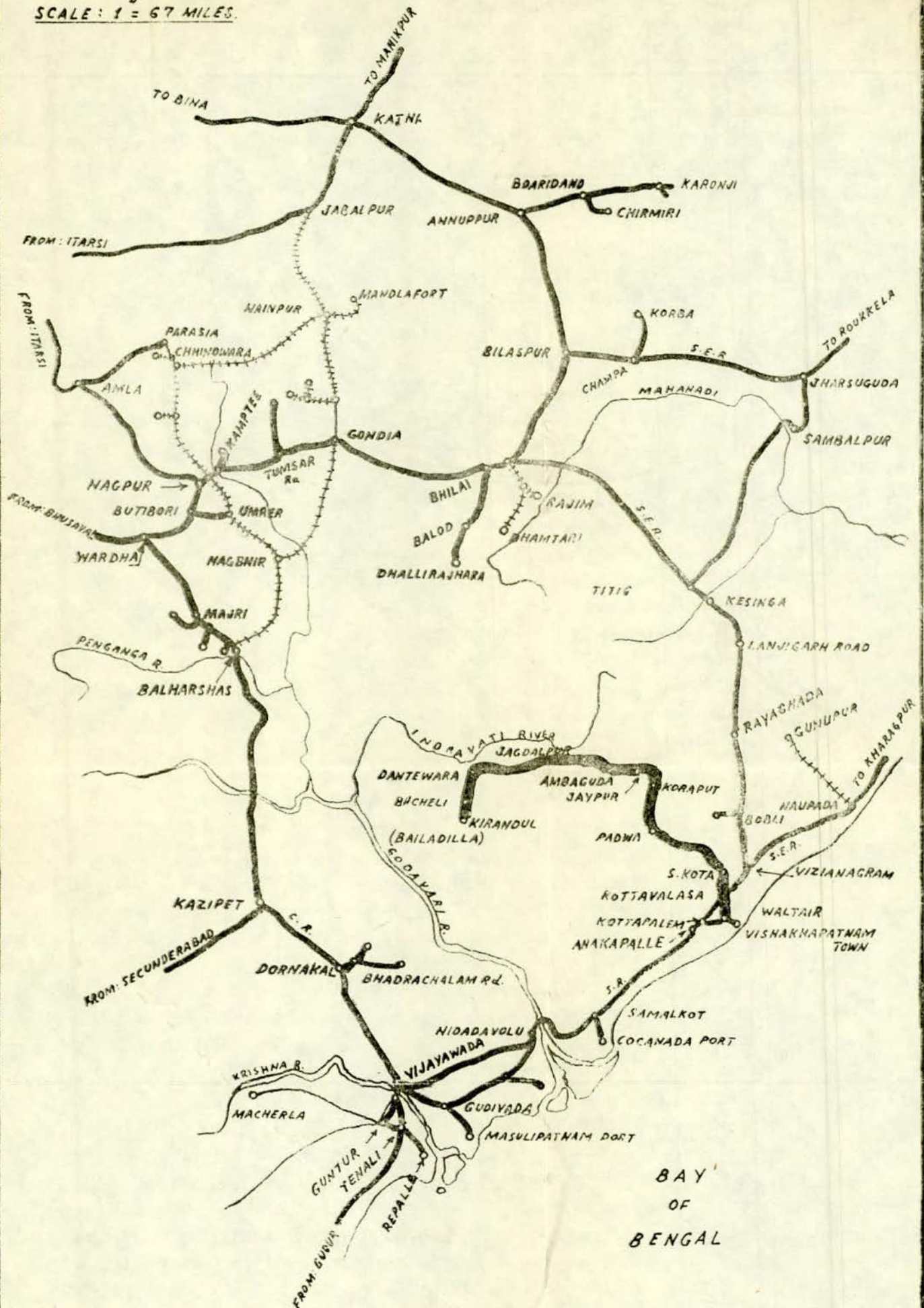
<u>Para No.</u>	<u>Subject.</u>
27(A) ✓	Cash assistance for export of steel tubes and pipes. (p. 57) - 81)
29(A) ✗	Ex-gratia payment for properties seized by Pakistan Govt. (p. 104 - 122)
40(A) ✓	Salal Hydro-electric Project. (p. 167 - 208)
57(A) ✗	Indian Council of Social Science Research.
42(B) ✗	Construction of a multi-storeyed building.
53(B) ✗	Purchase of ACSR Zebra conductors
59 (A) ✓	Indian Council Institute of Mass Communication. (p. 332 -)
48 (A) ✓	Purchase of oil hydrogenated (p. 242 - 248)



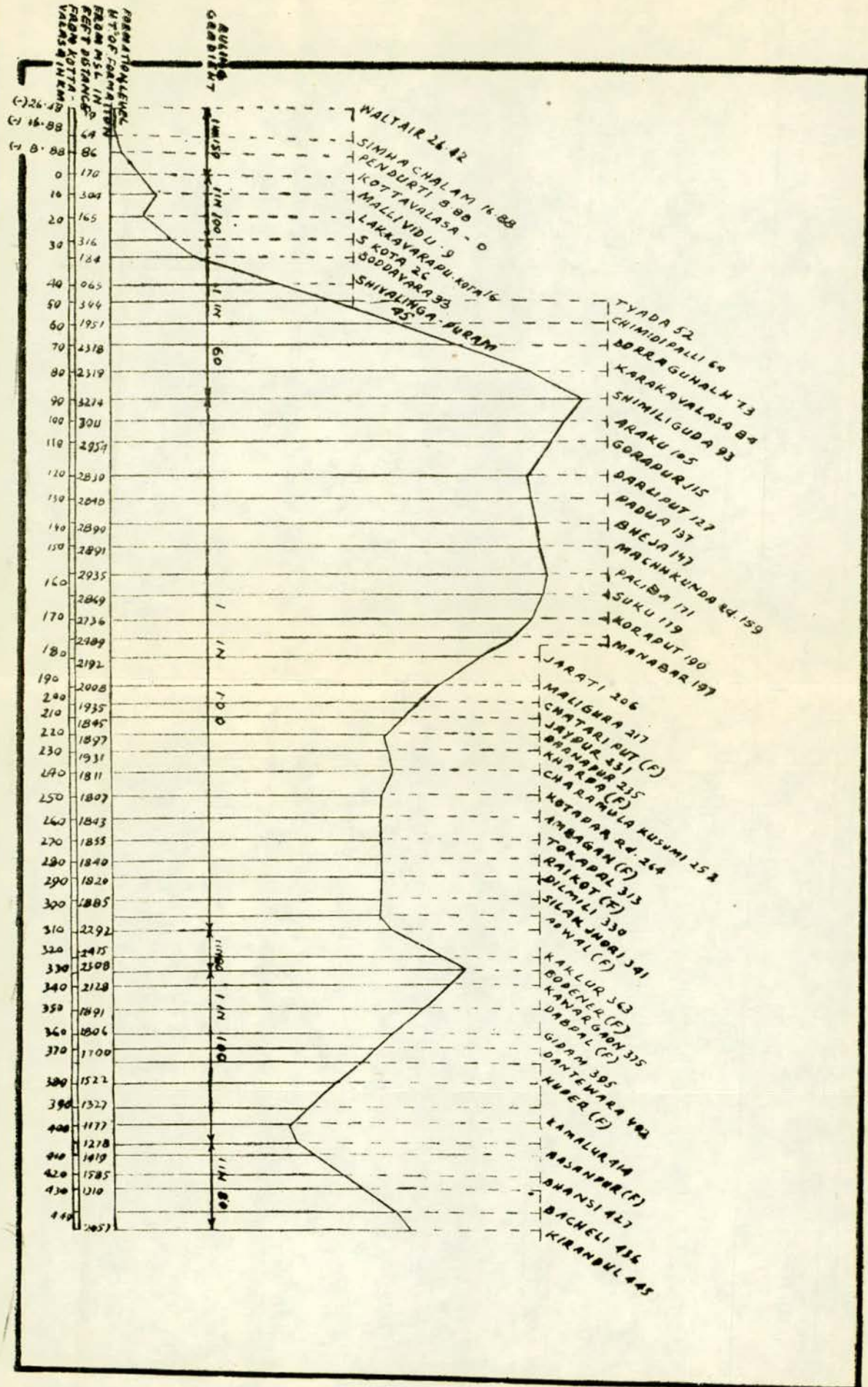
References :-

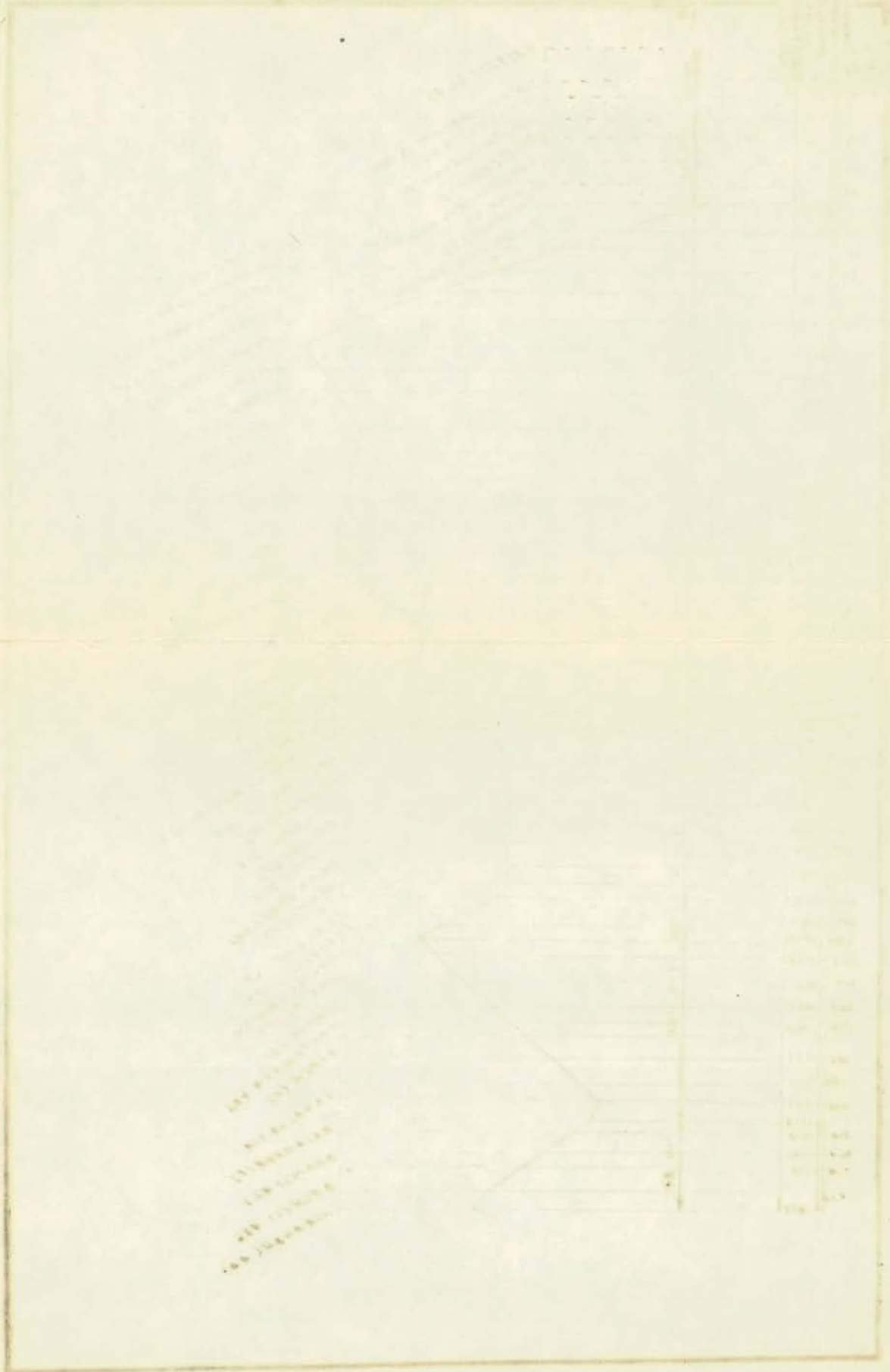
EXISTING RAILWAY LINES : B.G. M.G. N.G.

SCALE : 1" = 67 MILES.



KIRANBUL - KOTTAVALASA - WALTAIR LINE
INDEX SECTION





PROPELLER

PROPELLER

PROPELLER
 PARTS LIST
 1. HUB
 2. BLADES
 3. NUTS
 4. WASHERS
 5. SCREWS

PROPELLER
 PARTS LIST
 1. HUB
 2. BLADES
 3. NUTS
 4. WASHERS
 5. SCREWS

7.4 The actual volume of ore traffic carried in this section initially for four years had been :

	(In million tonnes)
1967-68	0.5
1968-69	1.9
1969-70	2.8
1970-71	3.3

7.5 Within three years in May 1970, the rails laid in the section, especially in the ghat sections were found to have been worn out to the maximum level in view of abnormal wear in sharp curves. The renewal of track (44 km) in the ghat section with 52 kg wear resistant rails was sanctioned in November 1971 by Ministry of Railways (Railway Board) at an estimated cost of Rs. 1.36 crores. This track renewal work was completed during 1974-75.

II. Proposal for Electrification

7.6 South Eastern Railway proposed (May 1968) electrification of this section and Kottavalasa—Waltair. The electrification was justified *vis-a-vis* diesel traction on grounds of economy in operating expenses and saving in capital investment in rolling stock. Briefly, electrification was preferred on the following considerations :

- availability of cheap hydro electric power from nearby regions in Andhra Pradesh, Madhya Pradesh and Orissa States ;
- saving one loco if electric locos were used instead of diesel locos at the existing level of traffic ;
- regenerative braking of electric loco was superior to dynamic braking of diesel loco and would reduce considerably electricity consumption. This would also enable better control of the heavy ore trains going down the ghat section.

7.7 The Electrification Scheme was expected to result in an annual saving in the recurring expenditure of Rs. 2.65 crores per annum at 6 million tonnes level of ore movement.

7.8 A project estimate for Rs. 18.61 crores (excluding cost of colour light signalling equipment) was submitted by the Railway Administration in October 1969. This also envisaged raising the capability of this section from 6 million tonnes to 10 million tonnes ore traffic at a later stage by

- (i) deploying 48 BOY wagons (4400 tonne trailing load);
- (ii) heavier locos of 6 axle WAG-5 and WAG-6 type, yet to be developed by Research Designs and Standards Organisation (RDSO); and
- (iii) providing 4 additional sub-stations.

7.9 The Ministry of Railways (Railway Board) sanctioned the Electrification Scheme of Kirandul—Waltair section in December 1970 at an estimated cost of Rs. 19.05 crores. The return on this capital investment was expected to be 15.29 per cent. The location and number of substations (10 numbers) and the overhead electric equipment (OHE) were so designed as to cater for an overall throughput of 6 million tonnes of iron ore initially. In particular the contact wire of OHE was to be 107 sq. mm.

7.10 The project was commenced in March 1971 and was targeted for completion within 4 years (*i.e.* March 1975).

7.11 The Railway Administration had gone ahead during 1970-71 and 1971-72 with the execution of electrification scheme. The actual expenditure incurred on this project mainly on establishment and stores procured to end of 1971-72 was about Rs. 1.88 crores out of the sanctioned estimated cost of Rs. 19.05 crores.

III. Traffic projections assessed during 1970-71

7.12 Since 1968, the Ministry of Railways (Railway Board) had been exploring the possibility of increasing the line capacity by running heavier ore trains with BOY wagons to cater for the following traffic needs :

- in April 1970, Minerals and Metals Trading Corporation (MMTC) concluded a 10 year contract with

a consortium of Japanese Steel Mills for export of 61.26 million tonnes of iron ore from Bailadilla mines between 1971-72 and 1979-80. In April 1971, MMTC intimated the Railway Administration that the yearwise despatches of iron ore for export against the contract would go upto 8.16 million tonnes during 1975-76 to 1979-80.

- Visakhapatnam Steel Plant was expected (according to the Railway Administration's report in October 1970) to go into production in 1978-79 requiring 3.39 million tonnes of iron ore to be hauled over this section.
- the total (both for export and internal requirements) movement of iron ore on the line were estimated at about 12 million tonnes per annum by 1978-79.
- in addition to this movement (of 12 million tonnes of ore per annum) this line would have to be opened for passenger, parcel and general goods traffic in the very near future in view of the freight potential and public pressure for passenger traffic.

7.13 In this background and with the perspective of iron ore movement in this section going upto 14 to 15 million tonnes, the Ministry of Railways (Railway Board) had planned in December 1971 increase in the capacity of this section by running heavier train loads of 7,200 tonnes with 80 BOY wagons (as against 48 BOY wagons which would enable movement of 10 million tonnes of iron ore) as a cheaper alternative to partial doubling or construction of a new line.

IV. Survey to optimise the capacity of the Section

7.14 The Railway Administration was, therefore, directed (March/July 1972) by the Ministry of Railways (Railway Board) to carry out a survey and make recommendations for optimising

capacity of this section keeping in view the above expected movement of 12 million tonnes of iron ore and other traffic needs. The terms of the survey included, *inter alia*, feasibility of running trains with 7,200 tonnes trailing loads as against 4,400 tonnes trailing loads already planned with BOY wagons, modifications necessary to OHE and sub-station installations which cannot be carried out at a subsequent date in the Electrification Scheme, strengthening of track and bridges for operation of trains with BOY rakes of 7,200 tonnes trailing loads, number and type of electric/diesel locos that would be required.

7.15 Instructions were, therefore, issued on 14th December 1972 to the Railway Administration that no further commitments were to be made in the execution of Electrification Scheme and as soon as decision is taken to implement the Optimisation Scheme for running trains with trailing loads of 7,200 tonnes, the Electrification Scheme can be progressed without any delay.

7.16 The optimisation survey report was received from Railway Administration during later half of December 1972. The recommendation in this survey had indicated changes in the Electrification Scheme already sanctioned and being implemented.

V. Results of Optimisation survey and further progress in Electrification after 1973-74

7.17 The optimisation survey submitted (December 1972) by the Railway Administration recommended that the line capacity of this section could be increased in six stages up to about 20 million tonnes of iron ore traffic. The various measures recommended were provision of tokenless block working, additional crossing stations, running of heavier trains (7,200 tonnes) etc. Stage-I of the Optimisation Scheme was approved in June—September 1973 by Ministry of Railways (Railway Board) for implementation to increase the throughput of the section to about 12 million tonnes. For this purpose the

following works were sanctioned by the Ministry of Railways (Railway Board) :

Description of work	Date of sanction	Estimated cost
		(Rs. in crores)
(a) Provision of additional 3 crossing stations and tokenless block instrument at 7 sections	June 1973	0.35
(b) Additional Electrification Scheme : increase in the number of substations from 14 to 18 and increase in the size of contact wire from 107 sq. mm to 150 sq. mm.	October 1973	1.24

7.18 In addition, track renewal and track strengthening by way of relaying with 60/52 kg wear resistant rails (in sections other than 44 km referred to earlier) and increasing sleeper density and ballast cushioning was approved for execution in the works programme during the years 1973-74 to 1978-79 at a cost of Rs. 12.71 crores. Procurement of 1,700 BOY wagons at a cost of Rs. 16.80 crores was also sanctioned by the Ministry of Railways (Railway Board) during 1971—74 (ordered in November 1971—April 1972 : 1,300 and ordered in September 1973 : 400).

7.19 Consequent upon the change in the scope of Electrification Scheme, (originally sanctioned in December 1970 and modified in June—October 1973) the target date for completion of this project (March 1975) was revised to March 1976. In June 1974, Railway Administration submitted revised estimates of the modified Electrification Scheme to the Ministry of Railways (Railway Board) at a cost of Rs. 33.59 crores. The increase in estimates, *inter alia*, was due to escalation from 1969 price level (Rs. 9.66 crores) and change in scope of work (Rs. 4.59 crores) taking into account the material modification of Rs. 1.24 crores sanctioned in October 1973 for optimisation. The revised estimate (for Electrification-cum-Optimisation Schemes) was sanctioned by the Ministry of Railways (Railway Board) in January 1978, *i.e.*, after a lapse of three and half years.

The target date of completion was again postponed owing to non-availability of adequate funds, matching materials etc. to complete the work.

7.20 The estimates, as assessed by Railway Administration in November 1978, will further have to be revised to Rs. 41.22 crores and the Electrification and Optimisation Schemes were expected to be completed by 1980-81.

7.21 The Budget allotment and actuals from 1970-71 have been indicated below :

(Rs. in crores)

Year	Budget Allotment	Actual
1970-71	0.50	0.04
1971-72	2.64	1.84
1972-73	3.85	2.72
1973-74	4.19	2.46
1974-75	3.12	3.20
1975-76	4.86	4.53
1976-77	4.71	4.79
1977-78	5.00	5.37
1978-79	6.96	1.70

(Upto December 1978)

7.22 Some of the salient points noticed by Audit during a review of the implementation of these schemes are mentioned below :

(a) *Delay in the execution of works contracts*

The entire section was divided into two groups for the purpose of execution of Electrification Scheme :

- (i) Waltair to Koraput —217 km
- (ii) Koraput to Kirandul —255 km

The supply of contact wire for OHE was the responsibility of Railway Administration. Ministry

of Railways (Railway Board) entered into agreement for fabrication, *inter alia*, of contact wire of 107 sq. mm for the Electrification Scheme during June 1972 with delivery "commencing within 8 weeks from the receipt of raw materials (copper) and drum lengths" from Railway Administration.

The Railway Administration invited tenders in February/June 1972 for erection of OHE and supply and erection of equipment for sub-stations, independently of the proposal for the Optimisation Scheme (survey ordered in March 1972, completed in December 1972 and sanctioned in June—October 1973).

The contracts for the supply and erection of OHE (with material such as contact wire, insulators etc. to be supplied free by the Railways), for the two groups were concluded in October—November 1973 by the Railway Administration with firms 'A' and 'B' at a cost of Rs. 2.46 crores and Rs. 2.01 crores respectively stipulating that the works should be completed within 30 months from the date of contracts *i.e.*, April 1976 and May 1976 and the contractors should be compensated for any delay beyond 6 months from the stipulated date of completion which was attributable to the Railway Administration. These contracts also took into account the use of 150 sq. mm contact wire.

Consequently, the fabrication contract for supply of contact wire had to be modified for fabrication of 150 sq. mm contact wire as per the Optimisation Scheme instead of 107 sq. mm as originally envisaged in the Electrification Scheme. This amendment to fabrication contract was issued in June 1975 instead of in October/November 1973.

The supply of contact wire was not, however, linked up with the erection contracts concluded in October/November 1973 with firms 'A' and 'B'. Consequently, the erection contract could not be completed within the stipulated period. According to the Railway Administration the delay was due to (a) Railway's inability to supply matching material (contact wire) and other fittings which had to be supplied free to the contractor by the Railway Administration, (b) failure to provide the required facilities and services (adequate number of work trains) and (c) due to reduction in the allocation of funds for the project from time to time.

Since the delay was beyond 36 months from the date of the contract, the Railway Administration negotiated (December 1977) for a lump sum payment of compensation of Rs. 26 lakhs and Rs. 14 lakhs to firms 'A' and 'B' respectively to make good the expenses on account of their maintenance of establishment and continued payment of insurance. The validity of the contracts was also extended upto June 1980 and December 1978 respectively. The Ministry of Railways (Railway Board) approved this settlement in March 1978. The Railway Administration has so far (February 1979) paid Rs. 30.25 lakhs (Rs. 16.25 lakhs to firm 'A' and Rs. 14.00 lakhs to firm 'B') and the balance is to be paid in instalments.

(b) *Sub-stations*

The Electrification Scheme envisaged 14 sub-stations for which tenders were invited in June 1972. However, while awarding the contracts, the number of sub-stations were increased from 14 to 18 as per Optimisation Scheme and the contracts (value : Rs. 72.41 lakhs) were awarded in two groups of 9 sub-stations each in July 1974 and October 1975 to firms 'B' & 'A' respectively.

(c) *Laying of Telecommunication cable*

In March 1972, the Ministry of Railways (Railway Board) invited global tenders for procurement of telecommunication cables for the **Electrification Scheme** and concluded in November 1972 a contract with a French firm for import of 155 km of telecommunication cables at a cost of Rs. 38.09 lakhs. The cables were received by the Railway Administration during June—October 1974. These cables, however, were not laid till January 1977 as it was considered in June 1973 that the system design originally decided upon in December 1970 was required to be modified on account of higher overhead electric current required by the loco hauling the heavy iron ore trains (7,200 tonnes) on this section (as per the Optimisation Scheme sanctioned in June—October 1973). But the precise modification to be made in the system design of the cable could not be decided in spite of taking advice from a foreign firm. The Ministry of Railways (Railway Board) in December 1976 decided that, in the absence of proper advice from foreign consultants and in view of the cables and equipment having already been received by the Railway Administration, they should go ahead with the laying of the cables and erection of equipment on the basis of experience so far available with them. Accordingly, the cables were laid by the Railway Administration for 155 km during January 1977 to May 1978. For the remaining portion of about 295 km of the section, no cables have so far been procured (December 1978).

Ministry of Railways (Railway Board) stated (March 1979) that the implications of the Optimisation Scheme sanctioned in June—October 1973 on the telecommunication cable were not

known before the placement of the order in November 1972 and that the study of the foreign firm regarding the system design of the cable did not offer any cut and dry solution and hence their report had to be supplemented through further investigations and tests by RDSO. The Ministry added that the cable design has now been developed by changing casing sheaths for the cable and provision of repeater stations and cable huts to reduce the induction effects of higher traction currents under Optimisation Scheme. Action was under way to procure the cable for the remaining portion of this section.

(d) *Compensation payable to State Electricity Board due to delay in Railway work*

The Railway Administration approached the Madhya Pradesh Electricity Board (MPEB) in November 1971 for supply of power and indicated in October 1973 (by this time the optimisation scheme had been sanctioned) the seven points (4 points by March and 3 points by December 1976) at which the power supply would be required to energise the section between Jagdalpur—Kirandul. On the strength of the above request from Railway Administration, the MPEB initiated (September 1973) action to meet the Railway's requirements by March 1976. In April 1975 the Railway Administration requested the MPEB for rescheduling their construction programme to suit Railway's revised target of June 1978 (for all 7 points) due to delay in the execution of Railway Electrification Works viz. erection of OHE including the contact wire and establishment of sub-stations. The MPEB had claimed compensation for the investment of Rs. 2 crores (later revised to Rs. 1.49 crores) made till March 1976 for the needs

of Railways. In October 1977 the Railway Administration agreed to compensate the MPEB to the tune of Rs. 24.77 lakhs for the period up to June 1978 when the Railway Administration expected to energise part of the section. This amount (worked out at 10.5 per cent per annum for 19 months on Rs. 1.49 crores mentioned above) was not actually paid but was capitalised on which the annual minimum guaranteed charges at 18 per cent per annum on the capital invested is payable from the date of energisation. As a result there would be an increase of Rs. 4.46 lakhs in the minimum guarantee charges payable every year over and above the amount of such charges fixed earlier. However, this revised date of June 1978 also was not adhered to. Hence further increase in the annual minimum guarantee charges may become payable due to postponement of date of energisation beyond June 1978. The present target date for energisation is April 1979.

The Ministry of Railways (Railway Board) stated in March 1979 that the incidence of any extra expenditure to the Railway would arise only if the minimum guaranteed energy is not drawn.

It is, however, not known whether the Optimisation Scheme sanctioned in October 1973 would necessitate changes in the work undertaken by the MPEB resulting in extra expenditure and/or delay in energising the line.

(e) *Delay in availability of Electric Locos*

The Electrification Project Report of October 1969 envisaged WAG-1 type of electric locos, which was in the regular line of manufacture at the Chittaranjan Locomotive Works (CLW) for haulage of 40 BOX wagon loads (3,200 tonnes). However, it became known during 1971-72 that ore

traffic in this section would be carried by BOY wagons with air brakes, (orders placed in November 1971 and April 1972). None of the existing locos was suitable to operate with air braked wagons at that point of time. In April 1972 it was decided that ten of the electric locos (five each of WAG-1 and WAM-4 types) should be suitably modified by RDSO to haul the air braked BOY wagons. The development of the locos was subsequently held in abeyance due to the decision (December 1973) of Ministry of Railways (Railway Board) that requirements of this section could be met by import of 36 AC locos from Czechoslovakia for which suitable provision had been made in the bilateral agreement in December 1973. Subsequently the Ministry of Railways (Railway Board) decided in December 1975, not to import any locos from abroad in view of high cost of loco and financial constraints. The modifications to WAM-4 locos were, therefore, again taken up (January 1976) by the CLW. Four out of five modified locos costing Rs. 50.80 lakhs each were delivered to the South Eastern Railway by end of December 1978. With these locos, a part of the line is expected to be energised by April 1979.

VI. Track relaying and Track strengthening works

7.23 Mention was made in para 12 of the Report of the Comptroller & Auditor General of India—Union Government (Railways) 1973-74 about heavy wear on rails due to the impact of iron ore traffic in BOX/BOI wagons noticed within 3 years of opening of this section. As a result, the existing 44.5 kg (90 lbs) section rails in the ghat sections were relaid during 1972—74 prematurely (after carrying 30 gross million tonnes against the norm of 250 gross million tonnes) with heavier 52 kg wear resistant rails for a length of 44 km at a cost of Rs. 1.62 crores. In view of the impending introduction of

BOY wagons (ordered in November 1971 and April 1972) RDSO carried out a study in 1972, regarding the effects of running BOY wagons (22.86 tonnes axle load) on rail track. Since the BOY wagons were not available at that time, the study was conducted with BOBS/BOBX (of the same axle load as BOY) wagons in Barajamda-Asansol section of South Eastern Railway. The study recommended that the minimum track structure for operation of BOY wagons was 52 kg rails with higher (N+6) sleeper density.

7.24 The study was not carried out in the KK Line with sharp curves and steep gradients and it was also confined only to assess the maximum permissible speed of these wagons upto 75 kmph.

7.25 Since rail wear would be even more on account of heavier axle loads of BOY wagon, (as revealed by RDSO study report) the Ministry of Railways (Railway Board) approved for execution in the works programme for the years 1973-74 to 1978-79, track renewal works for 230 km with wear resistant 52/60 kg rails, increased ballast cushioning and higher sleeper density in the section at a cost of Rs. 12.71 crores. These relaying works for 145 km have been completed (March 1978).

7.26 The BOY wagons were introduced from August 1974 in this section and by November 1976 about 1,100 wagons out of 1,700 ordered were running along with BOX/BOI wagons. The Railway Administration reported to the Ministry of Railways (Railway Board) in March 1978 the following problems encountered due to operation of BOY wagons :

- (i) abnormal wear on the gauge face of the outer rail on curves;
- (ii) gradual widening of gauge on curves necessitating frequent regauging and consequent reduction in life of the sleepers;
- (iii) development of longitudinal cracks on 44.5 kg rails;
- (iv) derailments resulting from heavy flange forces.

7.27 To counter these problems it suggested complete track renewal with rails of better wear resistant properties in this section. In the meantime to minimise the wear of rails, as well as of wheel flanges, intensive lubrication had been resorted to, employing a total of over 370 mechanical lubricators, supplemented by manual application of grease at a cost of Rs. 10 lakhs during September 1974—March 1978 (as against Rs. 4.45 lakhs during April 1969—August 1974). The Railway Administration, therefore, suggested (March 1978) that it would be unwise to add to the existing fleet of BOY wagons. Consequently outstanding orders for 600 BOY wagons were cancelled in April 1978.

VII. Procurement of BOY wagons

7.28 For moving 8 million tonnes of ore, the requirements of BOY wagons were assessed at 1,700 wagons which were ordered during 1971—74 at total cost of Rs. 16.80 crores as follows :

	No.	Value
		(Rs. in crores)
1. Bogies for BOY wagons (2 per wagon) :		
Firm C (Type I)	100	0.18
	1400	2.38
Firm D (Type I)	1600	2.72
Firm F (Type II)	100	0.17
2. Wagon Body :		
Firm E	1100	3.29
Firm F	600	1.68
3. Value of free supply items		6.38
	TOTAL :	16.80

7.29 All the 1,100 wagons ordered on firm 'E' were received and placed on line during August 1974—November 1976. (No BOY wagons were received from firm 'F' till then). These wagons showed abnormal wheel flange wear on front wheels. The problem was sought (March 1974—August 1978) to be

met by various measures (besides lubrication of wheel flanges) costing Rs. 31.03 lakhs as follows :

— Repairs/Retyring of wheels	Rs. 29.24 lakhs
— Modification to axle box	Rs. 1.12 lakhs
— Modification to bogies	Rs. 0.55 lakh
— Tyre turning	Rs. 0.12 lakh

7.30 As a result of the above measures, the percentage of average ineffective BOY wagons was brought down from 11.6 in 1976 to 6.8 in 1977 and to 9.2 in 1978, as against the prescribed percentage of 4. However, there were large number of failures of indigenous roller bearings fitted on the wheels of these wagons during 1976-77. In July 1977 the Board decided to import 3,000 bearings for replacing the indigenous bearings. The order for these bearings has since been placed (January 1979) at a cost of Rs. 44.52 lakhs (foreign exchange : Rs. 23.91 lakhs).

7.31 After investigation, it was decided in 1977 that, to avoid premature failure of bearings, the indigenous cylindrical bearings should be replaced by imported tapered bearings.

7.32 With the available 1,100 BOY wagons, traffic offering of 5.2 million tonnes of iron ore per annum was fully met in 1976-77 as against 8 million tonnes anticipated. Besides, 1,100 BOY wagons, the Railway had a fleet of 550 BOX and 230 BOI type wagons also for carrying the ore traffic in this section. Considering the trend of iron ore offered for movement and the operational and maintenance problems faced by the South Eastern Railway with the existing fleet of 1,100 BOY wagons, in April 1978, the Ministry of Railways (Railway Board) as already mentioned earlier cancelled the order for 600 BOY wagons. Consequent to the cancellation of the order, 1,900 wheel sets and 958 bogies (value : Rs. 1.15 crores) and 600 air brake sets (value : Rs. 35 lakhs) became surplus.

7.33 The Ministry of Railways (Railway Board) stated (March 1979) that the wheel sets have since been diverted for

use in BOBS and BFKK wagons under construction. The bogies were also being utilised for BOBS wagons and out of 600 air brake sets, 50 had already been consumed.

VIII. Loading and Terminal facilities at Bachel

7.34 While planning the construction of KK Line for ore traffic, Kirandul was chosen (1963) as terminal as this was the centre for all the known Bailadilla iron ore deposits No. 14, 11, 10 and 5, though for deposit No. 5, the nearest loading point could be more conveniently sited near the adjacent station Bachel. The terminal facilities at Kirandul was completed in 1967 and could handle 6 million tonnes of iron ore per annum. In August 1967 the National Mineral Development Corporation (NMDC) intimated their plan to exploit Deposit No. 5 near Bachel and requested the Railway Administration to develop suitable rail facilities. In April 1971, NMDC anticipated ore traffic from Bachel to rise from 5 million to 15 million tonnes per annum between 1972-73 and 1977-78 in following phases :

	Phase Period	Traffic offered (Million tonnes per annum)
I	1972-73 to 1974-75	5
II	1975-76 to 1976-77	10
III	1977-78	15

7.35 In September 1971, NMDC revised downward the traffic expectation from Bachel to 1 million tonne in 1974-75 and to 4 million tonnes in 1976-77 and deferred expansion of Phase II and onwards to suit the commissioning of the Vizag Steel Plant.

7.36 The terminal yard facilities at Bachel for traffic requirements in 1976-77 viz., 4 million tonnes were estimated to cost about Rs. 421 lakhs. As traffic earning of the yard at Bachel for deposit No. 5 would break even only when the despatches

from Bachelu reach 8 million tonnes of ore per annum, NMDC agreed in July 1972 to pay annually Rs. 34 lakhs (@ 10 per cent of the extra cost of Rs. 340 lakhs) till the traffic reaches 8 million tonnes level to compensate the Railways for the additional capital investment.

7.37 The work was included in the Works Programme of Railways for 1972-73. This estimate was further revised to Rs. 747.05 lakhs for Railway Capital Works.

7.38 The terminal facilities at Bachelu were to be constructed in stages as follows :

- Stage 1A—to handle 1.5 million tonnes
- Stage 1B—to handle 3 million tonnes
- Final Stage—to handle 4 million tonnes

The construction of stage 1A of the work to handle 1.5 million tonnes of iron ore per annum was commenced in April 1973 and was completed in April 1975 and the yard was handed over to NMDC in April 1975. But loading of iron ore on a regular basis commenced actually in 1976-77. The expenditure incurred upto March 1978 is Rs. 3.04 crores. The compensation payable by NMDC, as agreed to in July 1972, upto March 1978 works out to Rs. 1.01 crores. The amount is yet to be paid by NMDC (March 1979).

7.39 It may be pointed out that after the loading of iron ore from Bachelu had commenced, the average monthly loading from Kirandul had come down as follows :

Year	Kirandul & Bachelu	
	(In lakhs)	(tonnes)
1975-76	4.12	0.34
1976-77	4.16	0.42
1977-78	3.85	1.43
1978-79 (up to October 1978)	2.97	1.75

7.40 Considering the trend of loading of ore both at Kirandul and Bachel, there is remote possibility of loading 8 million tonnes of ore at Bachel. On the other hand the quantum of ore traffic from the existing terminal at Kirandul had declined resulting in under utilisation of terminal facilities at Kirandul and at Bachel.

IX. Traffic materialisation and utilisation of the line capacity and Rolling Stock

7.41 As per the contract concluded in 1971 by MMTC 61.26 million tonnes of iron ore was to be exported during the period from 1971-72 to 1979-80. The ore traffic materialised fell below the quantum envisaged under the export contract concluded by MMTC :

Year	Envisaged (As per contract)	Progra- Materialised	
		mmed	
		(In million tonnes)	
1971-72	4.92	..	3.70
1972-73	5.23	4.9	3.89
1973-74	5.23	5.00	4.02
1974-75	7.53	5.00	3.91
1975-76	8.06	6.00	4.96
1976-77	8.06	6.00	5.18
1977-78	8.16	6.00	6.28

7.42 The utilisation of the line capacity from time to time since 1973-74 is given below :

Year	Line capacity		Utilisation		Total	Non-revenue earning-Departmental	Total	Percentage of utilisation of practical capacity	
	Theoretical	Practical (80%)	Revenue earning Ore traffic	Other traffic				Revenue earning	Non-revenue earning
1973-74	13	10.4	5.0	..	5.0	5	10.0	48	48
1974-75	15	12.0	4.9	..	4.9	5	9.9	41	42
1975-76	15	12.0	5.2	..	5.2	5	10.2	43	42
1976-77	15	12.0	4.5	1	5.5	5	10.5	38	50
1977-78	15	12.0	5.1	1	6.1	5	11.1	46	47

7.43 It may be noticed that while the practical capacity of this section increased from 10.4 trains each way in 1973-74 to 12 trains in 1974-75, the actual utilisation for the ore traffic remained at about 5 trains till 1977-78. One passenger train was introduced from September 1976. The utilisation of the capacity of the section for revenue earning traffic varied 38—48 per cent since 1973-74. Thus, the increased capacity created over the years from 1973-74 was not used for movement of iron ore.

7.44 The procurement of BOY wagons was made on the assumption of turnround of 4.6 days per rake which, in actual operation, turned out to be on the high side. The Railway Administration was able to achieve an average turnround of 4 days during 1976—78. Based on this turnround, the existing fleet of 1,100 BOY, 550 BOX and 230 BOI wagons were found (January 1977) by the Railway Administration to be more than adequate to carry the present level of 6 million tonnes of iron ore traffic. The Railway Administration assessed that with the present holding it can carry ore traffic upto 8 million tonnes. This would mean that about 25 per cent of the holdings or about 525 BOX wagons (value : Rs. 8.14 crores) could be termed as surplus. Special features (air brake operation, higher axle load etc.) in these surplus wagons (BOY, BOX and BOI) come in the way of diverting them to other sections/Railways.

7.45 The Ministry of Railways (Railway Board) stated (March 1979) that no surplus stock of wagons were kept lying idle and even BOY wagons were diverted for carrying other commodities like cement, slag and bamboos without in any way jeopardising movement of iron ore for export.

X. Conclusion

7.46 It will be seen from the above that the construction of the Kirandul—Kottavalasa broad gauge line had passed through the following phases :

- construction of a broad gauge track and other facilities with diesel traction for haulage of a maximum

of 6 million tonnes of iron ore during 1961 to 1967 by deploying BOX/BOI wagons. The rails were of 44.5 kg intended to carry a trailing load of 3,200 tonnes.

- electrification of this line : Electric traction was considered to result in substantial economy of Rs. 2.65 crores per annum in working expenses for movement of 6 million tonnes of iron ore. It would also increase the trailing load capacity to 4,400 tonnes for movement of 10 million tonnes of iron ore by deploying 48 BOY wagons, heavier locos and provision of 4 additional sub-stations. The electrification works were commenced in 1971 and were due to be completed in 1975.
- optimisation of the capacity of this line for carrying 12 to 15 million tonnes of traffic by using BOY wagons carrying trailing load of 7,200 tonnes was considered in 1972. Electrification Scheme was not progressed until modifications consequent to optimisation were decided upon. Stage I of Optimisation Scheme was cleared in June—September 1973 and work sanctioned in June—October 1973.

7.47 The following aspects of this Project deserve consideration :

- (a) the capacity Optimisation Scheme was undertaken ignoring the fact that there was no firm projection for the commissioning of the Vizag Steel Plant and that the NMDC was not undertaking the construction of the necessary facilities at Bachel for ore loading for the Vizag Steel Plant, which was known to Railway Administration as early as September 1971.
- (b) the decision to implement stage I of the Optimisation Scheme (June—October 1973) necessitated the following changes in the Electrification Scheme already sanctioned in December 1970 :

- (i) increase in the size of the contact wire from 107 sq. mm to 150 sq. mm and consequential delay in the procurement and installation of OHE ;
- (ii) re-designing of the telecommunication cable, increase in the size of the casing of the cable and provision of repeater station and cable huts to reduce the induction effects of higher traction currents ;
- (iii) increase in the number of the electric sub-station from 14 to 18.

These factors delayed its execution resulting in non-realisation of the savings in operational expenses at the rate of Rs. 2.65 crores per annum (at 6 million tonnes of iron ore traffic) as originally envisaged.

- (c) the delay in implementing the Electrification Scheme as modified by Optimisation Scheme also resulted in avoidable expenditure by way of payment of compensation due to delay to Railway account in erection work by contractors. This has also led to Railway Administration having to accept liability for payment of higher minimum guarantee charges to MPEB.
- (d) the BOY wagons were inducted without proper trials to assess the technical and operational implications of heavier wagons and heavier trailing loads.
 - (i) The deployment of BOY wagons necessitated the upgrading and strengthening of the track at an expenditure of Rs. 12.71 crores during 1973-74 to 1978-79.
 - (ii) There was increased maintenance expenditure of Rs. 10 lakhs (1974—78) on lubrication of track alone with a view to minimising the wear and tear

of the rails and of wheel flanges caused by BOY wagons with heavier axle loads.

(e) under-utilisation of the haulage capacity and other assets :

- (i) Due to the failure of the traffic to materialise as projected, the utilisation of the capacity of the line was less than 50 per cent during 1973-74 to 1977-78.
- (ii) Because of under-utilisation of the capacity 525 BOX wagons of the value of Rs. 8.14 crores were surplus.
- (iii) Again as a result of the decrease in the requirement of BOY wagons and the consequent cancellation of the order for 600 such wagons, wheel sets and air brake sets of the value of Rs. 1.50 crores required for manufacture of these BOY wagons became surplus in April 1978.
- (iv) Investment of over Rs. 3 crores on the terminal yard facilities at Bacheli by April 1975 for handling 1.5 million tonnes iron ore could be utilised only from 1977-78 and that also at the expense of utilisation of the terminal yard facilities at Kirandul.

7.48 The Ministry of Railways (Railway Board) stated (March 1979) that the optimisation survey was carried out in 1972 for possible expansion of the capacity on this line in the context of persistent demand and projections for rail capacity from different departments ; but no investment was made for optimising the capacity beyond 8 million tonnes throughput of iron ore. Certain line capacity works were only sanctioned (June 1973) for the movement of 8 million tonnes of iron ore for which there was an international export commitment. The procurement of 1,700 BOY wagons was also for movement of 8 million tonnes and later (April 1978) orders for 600 wagons were cancelled

when the ore traffic did not pick up to that level and was seen to persist only at about 6 million tonnes.

7.49 The Ministry further stated that the optimisation investments in higher capacity telecom cables, thicker contact wire (150 sq. mm) and increased number of sub-stations (18) was a "conscious decision so that in the eventuality of longer trains having to be run for carrying 12 million tonnes of iron ore traffic, the infrastructure would not be rendered infructuous only for want of marginal increase of Rs. 1.24 crores in investment at the initial stage itself and the dislocation to traffic at that time for modifications would be minimal". On this consideration "the execution of the Railway Electrification Scheme of 1970 was frozen due to the Optimisation Scheme; but in the opinion of the Railway Board, this had not resulted in any direct loss".

7.50 There was, however, a failure on the part of the Ministry of Railways (Railway Board) in assessing the implications of the Optimisation Scheme. The Optimisation Scheme of October 1973 necessitated the modifications of the Electrification Scheme and delayed its execution, resulting in avoidable expenditure in the form of compensation etc. to third parties and in loss of the savings expected to arise on the completion of the Electrification Scheme.

7.51 It would also appear that the Optimisation Scheme was sanctioned without obtaining any firm projections about the iron ore to be moved for the Vizag Steel Plant and disregarding the communication from the NMDC of September 1971, revising downwards the estimates of the iron ore to be moved for that steel plant from the Bachel terminal.

7.52 As regards the economy instructions and inadequacy of funds for implementing the scheme the line capacity works were exempt and essential and productive works were entitled to priority in budget allotment.

CHAPTER III

PLANT, MACHINERY AND ROLLING STOCK

8. Manufacture of narrow gauge diesel rail cars

Based on the study by the Efficiency Bureau Directorate of the Ministry of Railways (Railway Board) in 1969 on the economics and profitability of introducing diesel rail cars *vis-a-vis* steam/diesel hauled trains on narrow gauge (NG) sections and the recommendations of the Un-economic Branch Lines Committee, 1969 the Ministry of Railways (Railway Board), in September 1970, decided that diesel rail car service should be introduced on such NG sections where it was economically justified. The Ministry of Railways (Railway Board) directed the Zonal Railways to work out the economics of diesel rail car *vis-a-vis* steam traction keeping in view the limitations of seating accommodation, haulage capacity, speed, etc., and the estimated traffic and earnings likely to result on the introduction of diesel traction.

Pursuant to this directive, the Southern Railway conducted (January 1971) a study of comparative economics of diesel rail cars *vis-a-vis* steam traction in Bangalore-Bangarapet NG section of Mysore Division. The study revealed *inter alia* that :

- (i) the distance between Bangalore City and Bangarapet was 69.96 km *via* BG as against 164.6 km *via* the NG and this factor had a decisive effect on traffic offering for movement *via* NG, especially since the several points served by the NG were accessible to BG by road, thus cutting short the distance ;
- (ii) the normal load of 9 trains (up and down) presently run on this section was between 3 to 4 bogies with an average seating capacity of 48 persons in each

bogie and generally the passenger occupation in these trains was poor ;

- (iii) introduction of diesel rail cars for passenger services would result in savings of about Rs. 4.87 lakhs per annum on operation, repairs and maintenance of rolling stock compared to the existing steam operations.

Based on this study report Southern Railway proposed (December 1971) to the Ministry of Railways (Railway Board) for diesel traction for passenger service only and also sought approval for manufacture of 6 diesel rail car units (each consisting of a power car and 4 trailers) at an estimated cost of Rs. 25.32 lakhs for this purpose. The Ministry of Railways (Railway Board), in January 1972 accorded sanction for the manufacture of 6 diesel rail car units for Bangalore-Bangarapet Section. Accordingly, the Southern Railway undertook the manufacture in Golden Rock Workshop, which was later (December 1972) transferred to Mysore workshop. The manufacture of the diesel rail car units actually commenced in April 1973.

In the meantime the passenger traffic on Bangalore-Bangarapet NG section was declining and registered a sharp fall during 1972-73, total passenger km (in thousands) being 13,380 against the corresponding figures of 19,938 in 1970-71 and 20,162 in 1971-72. In the wake of the coal crisis, the Southern Railway cancelled all the passenger trains on this section with effect from 21st December 1973. By this time the passenger traffic further declined to 8,999 passenger km (in thousands) during April—December 1973. Without taking into account the above developments, the Southern Railway Administration submitted in July 1975 to the Ministry of Railways (Railway Board) a revised estimate for Rs. 44.32 lakhs for manufacture of the diesel rail cars for induction on this NG section.

In August 1975 the Railway Administration advised the Ministry of Railways (Railway Board) that all the passenger trains on this NG section had been cancelled permanently and

would be removed from the Time Table effective from 1st November 1975, due to poor passenger traffic. At about the same time (August 1975) the Southern Railway informed the Ministry of Railways (Railway Board) that it would not be requiring the diesel rail cars under manufacture and they might, therefore, be allotted to other Railways. By this time, the Southern Railway had not turned out even a single unit and had incurred an expenditure of about Rs. 14.73 lakhs (*i.e.*, about 33 per cent of the revised estimated cost) towards manufacture of the diesel rail cars. This included Rs. 12.38 lakhs for stores issued to the work but not actually consumed in the manufacture of the rail cars. Although no decision regarding the introduction of rail car service on the other Railways in the light of Ministry of Railways' (Railway Board) decision of September 1970 had been taken and the manner of utilisation of the rail cars under manufacture on other Railways was still to be decided, the Ministry of Railways (Railway Board) sanctioned in October 1975 the revised estimate for Rs. 44.32 lakhs.

Since then the question of allotment and utilisation of these diesel rail cars had been under correspondence/discussion by the Ministry of Railways (Railway Board) for more than 3 years with the Western and Eastern Railways which expressed reluctance to accept the rail cars on technical and operational grounds.

The Western Railway pointed out in September 1976 that introduction of diesel rail car service on the NG sections of Bombay, Baroda and Ratlam Divisions would require turning and maintenance facilities at certain locations and also running separate trains for goods traffic hitherto cleared by mixed trains. The Ministry of Railways (Railway Board) decided in September 1977 that three diesel rail cars should be put to use on one of the Western Railway un-economic NG branch lines, in consonance with the assurance given to the Un-economic Branch Lines Committee. Thereupon, Western Railway advised in November 1977 that the feasibility of utilising the diesel rail cars on its system was still under consideration and it was not possible to take over them from Southern Railway at that stage.

The Eastern Railway also stated (April and August/September 1976) that the diesel rail cars under manufacture in Mysore workshop could not be used on its Ahmedpur—Katwa and Burdwan—Katwa NG sections in replacement of the existing services because of limited seating accommodation and non-availability of vendors' compartment and that induction of these cars in Sealdah Division would require execution of various works costing about Rs. 8.4 lakhs which would take about two and a half years. On the suggestion of Ministry of Railways (Railway Board) in July 1977, the Eastern Railway reluctantly agreed (November 1977) to use the diesel rail car for operating one round trip each on Burdwan—Katwa and Ahmedpur—Katwa sections, as there was "no other choice".

Meanwhile during October 1976—September 1978 four units of diesel rail cars had been completed. The total expenditure so far incurred on the manufacture of the rail cars is Rs. 40.73 lakhs (October 1978) as against the estimated cost of Rs. 44.32 lakhs. Out of the three units allotted to the Eastern Railway, two units had been commissioned in February 1979 and the third unit (despatched to that Railway in January 1979) is yet to be commissioned. The fourth unit was undergoing trials in the workshop and the remaining two units are still under manufacture (March 1979).

In this connection the following aspects deserve to be considered :

- (1) The manufacture of the rail cars was proceeded with even though the steep fall in the passenger km in 1972-73 and 1973-74 justified a review of the rail car service on this section.
- (2) Again, passenger train services were suspended on this section in December 1973 and permanently cancelled in August 1975 but the revised estimate for the manufacture of rail cars was sanctioned in October 1975 by the Ministry of Railways (Railway Board) without ascertaining or deciding the precise

section of the various Railways on which these would be utilised. Since then the Ministry of Railways (Railway Board) had been exploring ways and means for utilising the rail cars under manufacture and it was in September—November 1977 that it was finally decided to use them on the Western and Eastern Railways. The Ministry of Railways (Railway Board) stated (March 1979) that :

- (i) the commissioning of the diesel rail cars on Eastern Railway was delayed due to flood damage ;
- (ii) the remaining three units allotted to Western Railway would be despatched on completion of trials after manufacture ; and
- (iii) in any case the 24 trailers (seating capacity 30—42 each) and six power units (seating capacity 28 each) could be utilised as coaches replacing a large number of overaged NG stock of the Railway ; in that event only the six engines of the power units (cost : Rs. 8.10 lakhs) would at best be unutilised.

9. Northeast Frontier Railway—Import of a lathe machine

The supply of a defective double headed axle journal turning and burnishing lathe machine of Polish make (Rafamet) supplied by firm 'A' of Bombay and delayed commissioning thereof were commented upon in the Report of the Comptroller and Auditor General of India for the year 1976-77—Union Government (Railways).

A multi-purpose wheel lathe machine with grinding attachment of the same Polish make (Rafamet) imported and supplied by firm 'A' in June 1976 at a cost of Rs. 8.58 lakhs including freight, insurance and agent's commission charges for installation at the Railway Workshop at Dibrugarh is still lying idle without

being commissioned due to various defects and deficiencies in it. The facts of the case are as follows :

Against an indent placed by Railway Administration in July 1970 for a heavy duty loco wheel lathe for Dibrugarh Workshop, the Director General, Supplies and Disposals (DGS&D), invited tenders in December 1970. Out of the three offers received, the offer of firm 'A' of Bombay for an imported lathe machine (Rs. 8.58 lakhs) was the lowest. The wheel lathe machine with grinding attachment offered by this firm was considered technically suitable. The Railway Board approved of the Railway Administration's proposal for purchase of this multi-purpose wheel lathe machine and foreign exchange of Rs. 7.43 lakhs was released for the purpose. Accordingly, DGS&D finalized a contract on 19th October 1972 with firm 'A' for the supply of the Rafamet (Polish) multi-purpose wheel lathe machine, as per the required drawings, to be supplied f.o.b. European port of shipment by 15th December 1973.

As per the contract the machine was to perform the following operations :

- (a) tyre turning on loco coupled wheels;
- (b) journal polishing on loco coupled wheels ;
- (c) tyre turning of carriage and wagon wheels; and
- (d) grinding and burnishing of journals of both loco and carriage and wagon wheels.

The contract provided that the Principals would commission the machine and give free demonstration of the machine to demonstrate the maximum working capacity at the consignee's place after its erection at site and guarantee the satisfactory performance of the machine from any manufacturing defect for a period of 12 months from the date of satisfactory commissioning of the machine. Full f.o.b. cost of Rs. 7.52 lakhs was to be paid against documents of despatch to the supplier's Principals in Poland in non-convertible Indian rupees under Indo-Polish Trade Plan.

The date of delivery of the machine was extended in stages from 15th December 1973 to 31st January 1976 subject to the recovery of liquidated damages for the period from 31st May 1974 to 31st January 1976. The lathe machine supplied by the Polish firm was inspected in December 1975 by the Railway Adviser to the High Commissioner for India, London and was accepted on manufacturer's guarantee. The lathe machine was shipped from Poland on 31st January 1976, and the machine arrived at the Dibrugarh Workshop in June 1976. Although foundation drawing and electrical circuit diagrams had been received by the Railway Administration in October/November 1975, and the Chief Workshop Engineer had specifically desired that the foundation should be ready before the onset of monsoon, the foundation work of the machine was completed in December 1976, and the machine was installed in February 1977. An amount of Rs. 8.38 lakhs towards the cost of the machine and other incidental charges was paid in March/June 1976.

The Polish engineers reported at Dibrugarh Workshop on 18th March 1977 for commissioning the machine. After checking the machine for twelve days the engineers declared that the machine could not be commissioned, as the two thyristor units supplied with the machine, were defective. Three Polish engineers again arrived at Dibrugarh Workshop on 8th June 1977 and brought with them two numbers of new thyristor units. The engineers worked on the machine during 8th June 1977—7th July 1977; but the machine could not be commissioned successfully due to breakage of components during commissioning of the machine.

On 4th November 1977, a discussion between the representative of firm 'A' and the Chief Workshop Engineer of the Administration took place to examine (1) the feasibility of commissioning the machine using the attachment supplied with the machine and (2) what additional attachment/modification was required to be carried out on the machine for its utilisation for all the operations for which it was procured. The representative of the firm 'A' pointed out that the machine had been

supplied with reference to the basic design data given in the drawings supplied by Railways but 'the drawings did not indicate the dimensions (i) on mating radius on the inside journals at the liner face and (ii) the radii on the journal collar and journal shoulder on the outside journal wheel sets'. He added that the design had been re-examined by their Principals in Poland with the help of the additional drawings supplied by Railway Administration and the machine would require further modification/ additional special toolings and attachment to cater for the complete range of work. The Administration stated that the drawings, which were supplied with the tender notification gave sufficient data as normally understood and considered essential for the design of the lathe and if these were deficient in certain respects, it was for the firm to ask for specific clarification.

At the instance of the Ministry of Railways (Railway Board), DGS&D requested (January 1978) the firm to put the machine into service, failing which action would be taken, as per the terms of the contract. In January 1978, it became known that, in addition to the quantity of tools and toolings already supplied, it would be necessary to go in for a few more items. The firm informed the Railway Administration on 2nd March 1978, that they would first get the machine commissioned for tyre turning. The firm's engineer arrived at Dibrugarh Workshop in June 1978, and worked for about a month to commission the machine for tyre turning work only but without success.

The following points require consideration in this case :

- (i) The date of delivery of this machine which was originally 15th December 1973 was extended on a number of occasions till 31st January 1976. No liquidated damages for the delay in delivery have been recovered from the firm.
- (ii) The machine was received at the Dibrugarh Workshop in June 1976. The foundation work therefor was completed by the Engineering Department only in December 1976 resulting in its

delayed installation in February 1977. It is not clear why the Engineering Department could not complete the foundation work even though the necessary drawings had been received from firm 'A' in October/November 1975 itself.

- (iii) During the commissioning trials by the Polish engineer in June/July 1977 it was clearly established that the machine was defective. Certain damages also occurred during commissioning and the machine was not capable of performing the jobs for which it was intended. The Railway Adviser to the Indian High Commission in London had inspected the machine in December 1975 and certified that the machine was in conformity with the requirements of Railways and was accepted on the firm's guarantee. The circumstances in which these defects in the machine which were noticed subsequently, could not be detected during this inspection by the Railway Adviser require to be elucidated.
- (iv) The machine was required to perform multiple operations like :
 - (a) tyre turning on loco coupled wheels;
 - (b) journal polishing on loco coupled wheels;
 - (c) tyre turning of carriage and wagon wheels; and
 - (d) grinding and burnishing of journals of both loco and carriage and wagon wheels.

Attempts to commission the machine in June 1978 for tyre turning only were also not successful. Thus, the purpose for which the machine was procured had not been fulfilled.

- (v) The Works Manager, Dibrugarh Workshop had stated in November 1972 that lot of difficulty was being experienced in turning out loco wheels for the

shops as well as the divisions in the absence of this machine. Consequently grinding and burnishing of loco axles were stated to have been done by manual labour using emery paper.

Ministry of Railways (Railway Board) stated (March 1979) that the machine for tyre turning work had since been commissioned and every effort was being made to commission the machine for other types of jobs in association with the Polish supplier. The Ministry of Railways also added that the Railway Adviser cleared the machine on the basis of the manufacturer's guarantee and he could not have conducted all the tests required for detecting the defects subsequently found.

10. North Eastern Railway—Non-commissioning of a bogie hearth furnace

An order was placed by the Railway Administration in December 1970 through the Director General, Supplies and Disposals (DGS&D), on a firm of Bombay for supply of a bogie hearth normalising furnace with certain spares to the Railway Workshop at Gorakhpur at a cost of Rs. 1.53 lakhs (inclusive of sales tax). The furnace was required in the workshop for handling additional load as well as for certain types of heat treatment like process annealing, stress annealing and tempering of dropstamping dies for which jobs the existing bogie hearth furnaces were considered unsuitable. The furnace was received in 1972.

After procuring certain damaged/deficient components and parts (value Rs. 40,537) during the years 1974-75, the furnace was erected for trials in August 1976. The furnace could not, however, be commissioned on account of the following defects and shortcomings, among others :

- (i) burners not aligned due to faulty brackets supplied by the firm ;
- (ii) electrical pressure safety switch did not work automatically ;

- (iii) the air distributor in the right hand burner not working ;
- (iv) the regulator of the damper in the chimney for the final control of flues could not be operated ;
- (v) the lift of the solenoid valves in the air line not sufficient to permit the flow of air through the same; and
- (vi) uniform temperature not obtained throughout the charge.

The firm was addressed (September 1976) to rectify the defects and make good the shortcomings. Some of the defects had been rectified by the Administration at a cost of Rs. eight thousand. So far, the expenditure incurred on procurement of the furnace (95 per cent value of the contract only; the balance of 5 per cent yet to be released), parts, freight and rectification has amounted to about Rs. 2 lakhs.

The Railway Administration stated (January 1979) that the delays in procurement for replacement of the damaged/deficient parts of the furnace, conducting of trials and final commissioning of the furnace were attributable to the non-cooperative attitude of the firm.

The following points deserve consideration in this case :

- (i) The furnace was subjected to trial tests after 4 years of its procurement, leading to defects and shortcomings being detected ; and
- (ii) It was not clear as to how and to what extent the Administration has been undertaking all this time the special types of heat treatment for which the existing bogie hearth furnaces in the workshop were considered to be technically unsuitable and procurement of this furnace was considered necessary.

The Ministry of Railways (Railway Board) stated (March 1979) that the special types of heat treatment for which the

bogie hearth normalising furnace was considered necessary, had been undertaken in the absence of this furnace, through very special and careful monitoring by deputing better skilled staff to watch and manually regulate the temperature etc., on the existing furnaces.

It was further stated that the furnace had been commissioned on 23rd December 1978. However, it was noticed by Audit that the furnace was in operation only for 20 days against 55 working days during the period from 23rd December 1978 to 28th February 1979, and was 'under rectification' on the remaining 35 days. The furnace has been out of order since 1st March 1979.

CHAPTER IV

PURCHASES AND STORES

11. Procurement of broad gauge rail crossings

Rail crossings used in railway tracks on wooden layout are of two types : (a) crossings cast from high manganese steel and (b) crossings fabricated from medium manganese rails.

The life of the cast manganese steel crossings is longer than that of the fabricated medium manganese steel crossings.

The Ministry of Railways (Railway Board) had informed the Public Accounts Committee in 1971 that the life of cast manganese steel crossings was twice that of the fabricated steel crossings. The Research, Designs and Standards Organisation (RDSO) in 1972 had informed the Zonal Railways that the average life of cast manganese steel crossings was expected to be about four times that of the fabricated crossings. Besides, cast manganese steel crossings help in reducing the maintenance costs, as bolts and loose components are not used for their installation in the railway track. These bolts and loose components, used in fabricated crossings are liable to wear or get loosened under traffic.

The Ministry of Railways (Railway Board) in March 1978 estimated the cost of cast manganese steel crossings between Rs. 6,182 to Rs. 8,556 and that of the fabricated crossings between Rs. 5,758 to Rs. 6,998. However, in view of longer life of the cast manganese steel crossings as compared to fabricated crossings namely, twice or four times as the case may be and its relative advantages in reducing the maintenance costs,

the use of such manganese steel crossings would be substantially more economical.

A steel foundry was set up at Chittaranjan Locomotive Works (CLW) in 1961 with an investment of Rs. 5.97 crores and with a capacity for ten thousand tonnes of steel castings per annum. This included a capacity to manufacture one thousand tonnes of cast manganese crossings which would be equivalent to about two thousand crossings a year weighing about half a tonne each.

In December 1967 the CLW Foundry was required to produce 350 tonnes of broad gauge manganese steel crossings (of standard sizes 1 in $8\frac{1}{2}$ and 1 in 12 suitable for wooden layout) against the installed capacity of one thousand tonnes. However, it produced only 99 tonnes in 1967-68 and 198 tonnes in 1968-69. From 1972-73 onwards the Ministry of Railways (Railway Board) refixed the capacity of the CLW Foundry at 800 numbers or 400 tonnes of cast manganese steel crossings. In this connection, 11th Report of the Public Accounts Committee 1971-72 of the Fifth Lok Sabha and the Ministry of Railways' (Railway Board) communication to the Public Accounts Committee of June 1973 refer.

Further, heat treatment capacity of the CLW Foundry was augmented for heat treatment of the manganese steel crossings during 1967—1975 at an investment of Rs. 8.22 lakhs. [Para 19 of the Comptroller and Auditor General's Report for the year 1975-76—Union Government (Railways) refers]. The CLW Foundry has been so far the only source in the country for the supply of cast manganese crossings to the Zonal Railways.

The annual requirements of the crossings of all the Zonal Railways is assessed by the Ministry of Railways (Railway Board) and split between (a) cast steel manganese crossings to be procured from the CLW Foundry and (b) fabricated crossings to be :

- (i) manufactured in the railway workshops, and
 (ii) procured from trade.

Zonal Railways take procurement action accordingly. The following table shows the number of BG fabricated crossings/manganese steel crossings allotted by the Ministry of Railways (Railway Board), actually procured from the CLW/Railway Workshops/Trade by the Zonal Railways during the six years 1972-73 to 1977-78 :

Year	Fabricated crossings procured from Rail- way Workshop/trade		Cast manganese steel crossings		
	Allotment by Railway Board	Actual Procure- ment	Allotment by Railway Board	Actual procure- ment by Zonal Railways	Production by CLW Foundry
1972-73	1,993	1,884	1,394	401	434
1973-74	2,094	1,412	411	96	126
1974-75	1,290	1,317	91	123	90
1975-76	565	927	84	112	226
1976-77	867	177	Not available	69	188
1977-78	1,066	392	350	69	12

It will be seen from the above table that the procurement of manganese steel crossings from the CLW Foundry by the Zonal Railways as well as production thereof in the Foundry had been coming down and had never reached the full capacity of 800 crossings per year reported to have been built up as far back as 1972-73. On the other hand, the Zonal Railways had been procuring every year substantial number of fabricated crossings from the trade/Railway Workshops.

The extra expenditure incurred during 1972-73 to 1977-78 on the procurement of fabricated crossings as against cast manganese steel crossings, works out to more than Rs. 2.04 crores (at 1978 price level) if the life of the cast manganese steel

crossings is taken to be twice that of the fabricated crossings. The extra expenditure involved would be twice this figure, if the life of the cast manganese steel crossings is taken as four times that of the fabricated crossings as per the assessment of life by RDSO. The additional expenditure incurred on the maintenance of fabricated crossings as compared to the cast manganese steel crossing cannot be assessed but is likely to be substantial.

The following points merit consideration in this case :

- (i) the allotment of fabricated crossings for procurement from trade and workshops was made by the Ministry of Railways (Railway Board) every year without taking advantage of the full capacity of the CLW Foundry for cast manganese steel crossings ;
- (ii) the number of cast manganese steel crossings procured by the Zonal Railways from the CLW Foundry have substantially been less than the allotment made by the Ministry of Railways (Railway Board); and
- (iii) considering the advantages in initial cost and in maintenance of cast manganese steel crossings, it was desirable for the Ministry of Railways (Railway Board) to have ensured the procurement of the maximum number of cast manganese steel crossings from CLW as against fabricated crossings from trade and Railway Workshops.

The Ministry of Railways (Railway Board) stated (November 1978 and March 1979) that :

- (1) the orders for cast manganese steel crossings had been placed on the Foundry to ensure sufficient work-load commensurate with the actual performance of supply ;

- (2) there had been a decline in the production capacity due to labour problems, strikes and power break-downs in 1973-74 and 1974-75;
- (3) from 1975-76 to 1977-78 the capacity for production of cast manganese steel crossings was diverted to the production of higher priority items, namely, Co Co bogies and other intricate castings required for the manufacture of diesel and electric locomotives. But the CLW was producing castings from the Foundry to its installed capacity of 10,000 tonnes; and
- (4) as the Railways were finding it difficult to provide necessary funds to cover the demands already placed on the CLW Foundry, the CLW Foundry on 1st October 1977 cancelled the quantity outstanding against previous orders for 668 cast manganese steel crossings.

It may, however, be mentioned that while making allotment of cast manganese steel crossings on CLW in the various years, the decline in the production capacity either due to labour trouble or power break-down or diversion of the capacity to the manufacture of higher priority items, was not taken into account. It was also inappropriate for the CLW to have cancelled the outstanding orders for supply of cast manganese steel crossings on 1st October 1977 on its own inasmuch as, it was not ensured that the funds available for procurement of cast manganese steel crossings were utilised in the best possible manner, namely for procurement of the maximum number of cast manganese steel crossings as against fabricated crossings.

12. Use of lead seals for sealing of covered wagons

Generally wax seals are used to seal covered wagons except those containing explosives, gases, inflammable liquids etc. The One-Man Expert Committee on Compensation Claims observed in April 1970 that these seals are not a safeguard

against theft but an indication of theft. The Committee desired the Railways to consider the relative merits of wax (lac) seals and lead seals.

While considering the observations of the Expert Committee, the Ministry of Railways (Railway Board) concluded in 1970 that in most cases wax (lac) seals became defective not because of tampering but on account of the seals not being sufficiently secure to withstand the jolts and jerks of normal movement and the effects of wind and weather. It held the view that lead sealing "is a very secure method of sealing and should meet the Railways' purpose". It was considered that "advantage to be secured by the use of lead seals was so obvious as to make it unnecessary to postpone the adoption of this measure pending comparison of the extra cost involved and the likely saving".

Accordingly, in September 1971, the Ministry of Railways (Railway Board) communicated to all the Zonal Railways, its decision that wax (lac) seals should be substituted by lead seals for booking wagons with all types of commodities. The Zonal Railways were required to procure and supply lead seals to the stations immediately and also issue suitable instructions to the staff.

The specifications for the equipment required for lead sealing, viz., lead tablets, sealing wire, sealing plier and card label were standardised in consultation with the Research, Designs and Standards Organisation (RDSO) and these were circulated to all the Railways, at the same time. The Railways were also asked to submit reports on the action taken by them after a period of three months.

However, the first report in this regard was sent to the Ministry of Railways (Railway Board) by Western Railway in January 1975. This report disclosed that the lead seals were not as effective as wax seals and also did not serve the purpose

against prevention of claims and from being tampered with for the following reasons :

- (i) the lead tablets could not withstand the punching and sometimes broke into pieces ;
- (ii) the impressions were not generally clear ;
- (iii) the seals could be manipulated; the wires could be taken out from the tablet and inserted back in position without any sign of interference by a nail or a small pointed instrument ; and
- (iv) lead seals were easily subject to tampering and interference without detection en route. It would also be difficult to localise the point at which mischief was committed.

In January 1975 the Ministry of Railways (Railway Board) called for detailed reports from the other Railways on the usefulness of lead seals *vis-a-vis* wax (lac) seals. The Ministry of Railways (Railway Board) informed the Zonal Railways in July 1975 that 'the reports received from them (except Eastern, Northeast Frontier and South Central Railways) about the efficiency of lead seals indicated that these seals are not foolproof against tampering and are susceptible to manipulation and are harmful'. The Ministry of Railways (Railway Board) further instructed that, pending final decision in the matter, the use of lead seals should not be extended so that the possibility of claims arising on this account is reduced. In the meantime, the covered wagons were to be provided with lac/lead seals (to the extent the lead seals were available).

Despite the Ministry of Railways' (Railway Board) instructions not to extend the use of lead seals, on two Railways lead seals were procured even after July 1975. Considerable quantities thereof are lying unused. The details are furnished below :

South Central Railway

The South Central Railway Administration placed an indent in February 1975 on the Director General, Supplies and Disposals (DGS&D) for supply of 11,530 kg of lead tablets at an estimated cost of about Rs. 1.04 lakhs. For want of some technical particulars from the Railway Administration, DGS&D returned the indent in August 1975. While furnishing the required details in September 1975, the Administration requested DGS&D to reinstate its indent for immediate coverage as the lead tablets were said to be very badly required for sealing of wagons. Tender for supply of 11,530 kg of tablets was thereafter accepted by DGS&D in November 1975 and orders placed in the same **month. Lead tablets weighing about 11,515 kg costing about Rs. 1.29 lakhs** were received by the Railway between December 1975 and June 1976. These are yet to be utilised (December 1978).

The South Central Railway Administration explained in August 1978 that the Ministry of Railways' (Railway Board) letter of July 1975 was received in the Claims Branch and was transmitted to the Stores Branch only in November 1975.

Western Railway

The Railway Administration placed an indent on the DGS&D in July 1975 for purchase of sealing wire. The DGS&D entered into a contract with a Calcutta firm for supply of wire in November 1975 and supplies were received between May and August 1976 involving an expenditure of Rs. 77,388. Again, in May 1976 the Administration placed an order on a Bombay firm for supply of 29,31,100 numbers of lead tablets out of which 11,90,000 numbers costing Rs. 67,078 were received in December 1976 and the balance quantity was cancelled. Sealing wire and lead tablets costing Rs. 1.12 lakhs out of material procured (value : Rs. 1.44 lakhs) are still lying un-utilised (October 1978).

Southern Railway

On the Southern Railway, the Railway Administration succeeded in cancelling the balance quantity of an order on the DGS&D, of 28,10,065 numbers of lead tablets valued at about Rs. 1.18 lakhs in December 1976 after the matter had been taken up by Audit in August 1976.

In order to overcome the defects of lead seals, the RDSO have since designed a new Metal Tape Seal. The advantage of this seal, besides easy operation, is stated to be that it cannot be tampered with unless it is deliberately cut. Preliminary trials with these seals on New Delhi—Howrah section are reported to have proved satisfactory. The Ministry of Railways (Railway Board) proposed in February 1977 to conduct further trials for six months between 24 pairs of stations on seven Railways from a date to be notified later on. This, however, has not been done so far (March 1979) for want of sufficient number of seals for which orders are stated to have been placed on the firms.

The following points require consideration :

- (1) The changeover from wax (lac) seals to lead seals in 1971 does not appear to have been introduced after due investigation and field trials.
- (2) The Ministry of Railways (Railway Board) had in September 1971, called for reports from various Railways regarding implementation of its orders for introduction of lead sealing of wagons, after a period of three months. This was not further pursued. The reports were obtained in 1975, *i.e.*, nearly four years later and based on these reports, the scheme of lead sealing of wagons was suspended in July 1975.

As a result, the scheme of lead sealing of wagons was implemented on Railways for nearly four years without any operational or financial advantage.

- (3) the circumstances in which the South Central Railway and the Western Railway procured lead tablets and sealing wire even after the receipt of Railway Board's instructions not to extend the use of lead seals, requires investigation.

The Ministry of Railways (Railway Board) stated (March 1979) that lead seals are still to be used on wagons containing explosives and inflammable material etc., and that the existing stock of lead seals on the Railways will be utilized.

13. Northern Railway—Purchase of limpet asbestos sheets

In pursuance of the recommendations of Accident Enquiry Committee, the Research, Designs and Standards Organisation (RDSO) issued a directive to the Railway in August 1968 that, as a measure for fire prevention, the ceilings of coaches fitted with hard board should be replaced by limpet asbestos sheets when the coaches pass through workshops for periodical overhaul. In September 1971 the RDSO furnished to the Railway Administration the following specifications of ceiling material to be used in various types of passenger coaches :

“Ceiling specification shall be of 2 mm thick limpet asbestos sheet or 1.5 mm thick rigid PVC sheet to B.S. specification No. 3757 Part-I 1964 Type A1. The ceiling material shall be fire and vermin proof.”

The specification permitted the use of either limpet asbestos or PVC sheet, whichever was available.

Limpet Asbestos sheets are proprietary manufacture of a firm of Bombay.

The Carriage and Wagon Workshops, Jagadhri, where the work of modification of coaches was undertaken, placed a requisition on the Controller of Stores in January 1974 for supply

of 1,200 limpet asbestos sheets in thickness of 2 mm. However, the requisitions placed by the same workshop in June and July 1974 for supply of 1,000 and 2,000 numbers respectively of limpet asbestos sheets indicated thickness of 3 mm.

Against the two requisitions of June and July 1974 the Controller of Stores placed two purchase orders on the firm of Bombay for supplying 1,000 and 800 numbers of limpet asbestos sheets to Deputy Chief Mechanical Engineer, Jagadhri Workshop measuring approximately 3,048 mm × 1,524 mm thickness of 3 mm in October 1974 and March 1975 respectively at the rate of Rs. 245 per sheet. Against another requisition of December 1974 placed by Deputy Chief Mechanical Engineer, Alambagh Workshop, an order for supplying 1,180 limpet asbestos sheets of the same description to Deputy Chief Mechanical Engineer, Alambagh was placed in March 1975 at the rate of Rs. 245 per sheet. The 1,800 sheets of 3 mm thickness were received at Jagadhri Workshop during March 1975 and June 1976 and were used for replacement of ceiling of coaching stock during March 1975 to March 1977. The 1,180 sheets were received at Alambagh on 26th March 1976, out of which 1,150 were utilised at Alambagh during the period March 1977 to May 1978 and 30 sheets were transferred to Jagadhri Workshop on 27th March 1977.

Against the requisition of January 1974, the Controller of Stores placed an order on the same firm in December 1974 for supply of 1,200 limpet asbestos sheets measuring approximately 3,048 mm × 1,524 mm in approximate thickness of 2 mm at the rate of Rs. 163 per sheet. These were received in October 1975 and consumed during 1975—77 for replacement of ceiling of coaches.

It may be mentioned that the Integral Coach Factory, Perumbur has been using limpet asbestos sheets in thickness of 2 mm for coach ceiling since 1962.

The procurement of limpet asbestos sheets of 3 mm thickness instead of the specified thickness of 2 mm has resulted in avoidable extra expenditure of about Rs. 2.44 lakhs.

The circumstances in which the Railway Workshop indented for limpet asbestos sheet with 3 mm thickness contrary to the specification prescribed by the RDSO viz., 2 mm thickness were not clarified by the Railway Administration.

The Ministry of Railways (Railway Board) stated (March 1979) that limpet asbestos sheet with 3 mm thickness cannot be used for curved surfaces but can be used for straight faces; and that its life is two or three times the life of 2 mm thick sheet. The Ministry further added that procurement of limpet asbestos sheets of 3 mm thickness was presumably due to a clerical error.

14. Northeast Frontier Railway—Purchase of substandard material

In March 1974, the Railway Administration placed an order on a firm of Calcutta for supply of 5 tonnes of ingots phosphor bronze (class I) at the rate of Rs. 28.92 per kg and 9 tonnes of ingots gun metal (class II) at the rate of Rs. 24.94 per kg (both conforming to IS specification : 1458), to the Assistant Controller of Stores, Dibrugarh. The material was to be inspected by the Director of Inspection of Director General of Supplies and Disposals (DGS&D) and 90 per cent advance payment was to be made on proof of inspection and despatch. The supplies of 5 tonnes of phosphor bronze and 9 tonnes of gun metal were originally stipulated to be completed by 30th September 1974 and 30th November 1975 respectively. The time for delivery was subsequently extended upto 30th June 1976 in both the cases.

The firm supplied the materials, duly inspected by the Director of Inspection (DGS&D), and payments were made as under :

Material	Quantity supplied	Date of supply	Date of receipt by the consignee	Amount of 90 per cent payment made to the firm Rs.	Month of payment
Ingots phosphor bronze	1505 kg	5-12-74	22-1-75	33,117.30 (after deducting security of Rs. 7,230)	December 1974
	2510.5 kg	22-5-75	2-7-75	No payment made	—
	*254 kg	15-1-76	6-2-76	No payment made	—
Ingots gun metal	9011 kg	18-7-75	4-8-75	1,98,068.33	July 1975

*The quantity of 254 kg was received in replacement of 245 kg out of 1505 kg received in the first lot and 9 kg out of the second lot of 2510.5 kg.

Out of the first lot of 1,505 kg of phosphor bronze supplied by the firm in December 1974, a quantity of 1,260 kg was drawn by the Works Manager, Dibrugarh Workshop on 21st February 1975 and consumed during February-March 1975. A sample from the remaining 245 kg was subjected to tests in the Workshop Laboratory in April 1975. The tests revealed that the material did not conform to any grade and could be classified as bronze scrap containing harmful impurities. A rejection advice was issued to the firm in May 1975 *i.e.*, after about 4 months of receipt of the material, and a copy thereof was endorsed to the Director of Inspection.

The remaining 2 lots of phosphor bronze and one lot of gun metal were also rejected on 21st July 1975, 21st July 1976 and 20th August 1975 respectively, after the laboratory tests in the Railway Workshop had revealed that the materials supplied did not conform to the standard specifications. The Director of Inspection was also informed of the rejections in the case of the first of the two lots of phosphor bronze and the lot of gun

metal on 25th September 1975 and 25th October 1975 respectively.

The rejection advice in case of 254 kg of phosphor bronze was issued after about 5 months of receipt of the material, but the Director of Inspection was not informed of it.

In May 1976 the Administration advised the other Zonal Railways to stop payment against pending bills of the firm.

When the substandard nature of supplies of phosphor bronze was pointed out to the firm through rejection advices, the firm requested the Administration in June 1976 to accept the supplies after discount to make up the deficiency in the chemical composition of the supplied material. The Railway Administration, however, did not agree to the proposal.

After protracted correspondence, the firm agreed in March 1977 to remove the rejected material after refunding the payment received against the rejected supplies and they requested the Administration for furnishing a statement of account, showing the net amount payable. The firm also reminded the Administration for this in May 1977. It was decided (30th June 1977) that the firm be permitted to remove the rejected stock of 3,009.5 kg of phosphor bronze and 9,011 kg of gun metal ingots from the Dibrugarh Stores Depot at their own risk and cost after refunding Rs. 2,03,074 the amount received by the firm for stores supplied. It was also decided that in case the firm failed to refund the amount and remove the rejected material within 14 days from the date of receipt of the notice, the rejected material would be sold by auction, and if the money realised through auction did not fully compensate the loss, legal action against the firm was to be taken to recover the balance amount. A demand notice asking for refund of Rs. 2,03,074 was sent to the firm on 30th August 1977.

The firm had earlier informed the Railway Administration on 3rd August 1977 that in view of their stringent financial conditions they were offering revised terms of payment *i.e.*, in instalments

of Rs. 30 thousand against which rejected material of equivalent value would be taken back by them. The firm reiterated the same in their communication dated 23rd September 1977. In December 1977 the Administration furnished to the firm a statement showing the amount payable by the firm, and also intimated to them that their revised terms of refund were unacceptable.

On receipt of this communication, the firm, on 26th December 1977, disputed the legality and propriety of the Railway's claim, specially Railway's unilateral action in freezing their dues from other Railways. However, for an amicable settlement of the dispute, the firm stated that they were prepared to furnish a security bond for the allegedly substandard materials which were not acceptable to the Administration.

The firm has so far (January 1979) neither taken back the rejected material nor has refunded the amount. The Railway Administration stated in March 1978 that the case was being processed for arbitration as per legal advice and a final notice was served on the firm on 2nd March 1978 asking them to refund the money.

The following lapses would need consideration in this case :

- (1) Purchase of substandard material due to failure, if any, in the inspection conducted by the Director of Inspection (DGS&D) before accepting supplies of the material.
- (2) Failure to issue rejection advices to the firm in respect of 245 kg and 254 kg of the rejected phosphor bronze ingots within the prescribed period of 45 days of their receipt by the consignee.
- (3) Consumption of 1,260 kg out of a total supply of 1,505 kg of phosphor bronze ingots; this material was subsequently found to be substandard though the price paid was as for standard material. The amount

paid for the substandard material consumed works out to Rs. 37,532 inclusive of Sales Tax.

The Ministry of Railways (Railway Board) stated (March 1979) that the Director of Inspection (DGS&D) had requested the Controller of Stores, Northeast Frontier Railway in February 1979 to arrange for a joint inspection of the rejected stores. The Director (Vigilance) of the DGS&D's office is also examining the matter.

15. North Eastern Railway—Procurement of SGCI bearing shells

According to the Ministry of Railways' (Railway Board) instructions of 1971 bronze bearings on axle boxes of wagons and coaches are to be replaced by spheroidal graphite cast iron (SGCI) bearings with a view to reduce consumption of non-ferrous metals. The bearings could be procured from trade either in fully machined condition, or in proof machined condition to be subsequently machined by the Railway Workshops. The Ministry of Railways (Railway Board), in July 1972 further intimated that, in order to expedite the change over (which was considered very urgent to prevent thefts and save foreign exchange), it had no objection if the Railways obtained fully machined shells from trade and that a firm of Thana (Maharashtra) had developed capacity which could supply upto 7,000 numbers of fully machined white metallised shells per month.

The North Eastern Railway, in order to meet its requirements for fully machined SGCI bearing shells, placed two indents in January 1972 on the Director General, Supplies and Disposals (DGS&D) for supply of 15,000 numbers (7,500 proof machined and 7,500 fully machined) and 5,000 numbers (2,500 proof machined and 2,500 fully machined) of SGCI bearing shells of different sizes. The considerations on which the Administration decided to procure half the quantity of the requirements of SGCI shells in fully machined condition and the remaining half in proof machined condition are not on record. Even when the Stores Department was informed in November 1972 by the Mechanical Department that sufficient capacity had been generated

in the country to manufacture and supply SGCI bearings 'duly finished and in ready for use condition', no modifications of the indents were made.

The DGS&D entered into two running contracts—one with a firm of Madras and the other with a firm of Howrah—in February 1973 for supply of SGCI bearing shells, covering the requirements of three railways. Under these contracts, the North Eastern Railway was to be supplied 15,000 shells by the firm of Madras, and 5,000 shells by the firm of Howrah, 50 per cent of the quantities being in fully machined condition and the balance 50 per cent in proof machined condition. The contracted rates for the proof machined shells were higher by Rs. 5 to Rs. 7 each than those for the fully machined shells.

As per specifications, the proof machined bearing shells were required to have further machining allowance of above 3 mm all over. Consequently, the proof machined shells in order to be fully machined, required further machining to that extent involving additional labour and risk of damage during machining. Despite this and the fact that the rates offered by the firms for fully machined shells were lower than those for proof machined shells, DGS&D neither contracted for all the bearing shells required by the Railway Administration in fully machined condition, nor referred the matter back to the latter to obtain their specific instructions.

The firm of Madras supplied 7,496 numbers of proof machined shells during March 1975—April 1975 and the firm of Howrah supplied 2,500 numbers of proof machined shells during July 1974—January 1977.

The extra expenditure incurred on the proof machined shells on account of their higher cost amounted to Rs. 65 thousand. A further expenditure of about Rs. 1.05 lakhs was incurred on fully machining these shells in the Railway's workshop.

It may be added that another Railway Administration (North-east Frontier Railway) had placed an indent on DGS&D in April

1972 for supply of 3,600 numbers of SGCI bearing shells (Metre Gauge) and 800 numbers of SGCI bearing shells (Broad Gauge) 'fully machined or semi-finished'. In September 1972 the General Manager of Northeast Frontier Railway advised DGS&D that only 'fully machined SGCI bearing shells' were required. Accordingly, DGS&D incorporated the revised requirements of the Northeast Frontier Railway for fully machined bearing shells in the same running contracts executed in February 1973. The firm of Madras supplied fully machined 2,800 bearing shells (MG) and 640 bearing shells (BG) during October 1973 to January 1975 and the firm of Howrah supplied fully machined 800 bearing shells (MG) during November 1975 to February 1976.

The following points merit consideration :

- (1) Though the requirements were for fully machined SGCI bearing shells the Stores Department chose to indent for half the requirements in proof machined condition. The basis for this decision is not on record.
- (2) Though the need for change over from bronze bearings to SGCI bearings was considered very urgent and the Stores Department was aware in November 1972 of adequate capacity being available with the trade to supply the SGCI shells, fully machined and in 'ready for use' condition, it did not take any steps to modify the indents on DGS&D to provide for only fully machined shells while another Railway Administration took action to amend their requirements.
- (3) The contracts placed by DGS&D provided for increase or decrease in the quantities on individual items as well as total quantity ordered, to the extent of 25 per cent by the purchaser during the currency of the contract. When the Railway Administration became aware in February 1973 (when the DGS&D

had placed orders) that fully machined shells were cheaper than proof machined shells, it could have addressed DGS&D suitably for increasing the ordered quantity for fully machined shells with proportionate reduction in the ordered quantity for proof machined shells. The Administration, however, did not take advantage of this contract provision. Had this been done, the extra expenditure would have been reduced.

- (4) When the indents were composite ones (covering both proof machined and fully machined shells), the DGS&D, on becoming aware that the rates for fully machined shells were lower, should have either placed the order for the full quantities in fully machined condition or referred the matter back to the indentors specifically for instructions, keeping in view that the machining of proof machined shells would involve extra expenditure and risk of damage to the shells. The action in ordering for proof machined shells at higher rates was not to the Railway's interest.

Ministry of Railways (Railway Board) stated (February 1979) that :

- (1) the Railway Administration decided to procure half of its requirements from trade keeping in view the machining capacity available in their shops; and
- (2) the option for fully machined or proof machined shells was to be exercised at the time of ordering itself.

It may be added that the option under the running contract by DGS&D was available during the currency of the contract, subject to 25 per cent of the total quantities specified in the contract. The justification given by the Railway Board for splitting up the order between their workshops and the trade viz., the machining capacity available, is not based on their records.

16. Northeast Frontier Railway—Supply of defective material

In May 1976, the Railway Administration placed an order on a firm of Calcutta for supply of 5 tonnes of 'ingot phosphor bronze class I to IS : 1458 latest' at the rate of Rs. 26.50 per kg plus Central Sales Tax at 4 per cent, to the Assistant Controller of Stores, Dibrugarh Town. The supply was to be completed by 2nd July 1976. Advance payment to the extent of 95 per cent was to be made on proof of despatch after inspection by the Assistant Director of Inspection (Metallurgical) Calcutta under Director General, Supplies and Disposals (DGS&D).

The Administration received 4,889.1 kg of the material on 13th August 1976. An advance payment of Rs. 1,22,886 was made to the firm on proof of inspection and despatch, after deducting Rs. 5,120 as liquidated damages on account of delay in supply by 33 days.

On the basis of the tests conducted in the Railway Workshop laboratory on 7th October 1976, it was found that the material did not conform to the required specifications due to presence of lead and zinc beyond permissible limits. Accordingly, rejection advice was issued to the firm by the consignee on 18th October 1976 *i.e.*, 67 days after the receipt of the material, as against the prescribed period of 45 days. A copy of the rejection advice was also endorsed to the Assistant Director of Inspection (Metallurgical) Calcutta. The consignee also requested the firm and the Inspection Officer at Calcutta to send their representatives for a joint inspection. On 6th November 1976, the Controller of Stores also wrote to the Assistant Director of Inspection drawing his attention to the consignee's rejection communication of 18th October 1976, and requested for an immediate joint inspection of the stores at site, along with the representative of the firm. In reply, the Assistant Director of Inspection stated that the percentages of lead and zinc found had not been reported in the rejection advice and requested for re-testing of the stores, samples for which were to be drawn from a sufficient number of ingots.

Accordingly, samples drawn from 10 different slabs were re-tested in the Railway Workshop laboratory. The results showed that the lead content varied between 1.90 to 4.00 per cent, against the permissible limit of 0.5 per cent, and the zinc content was between 1.50 to 2.3 per cent against the permissible limit of 0.5 per cent. The results of the second test were communicated both to the firm and the Assistant Director of Inspection on 16th June 1977. The Assistant Director of Inspection was telegraphically reminded on 29th July, 18th August and 3rd October 1977 for arranging a joint inspection of the stores. On 15th October 1977 the Deputy Director of Inspection (DGS&D) New Delhi was requested by the Administration to impress upon the firm to refund Rs. 1,22,886 already paid to it.

Meanwhile, the firm stated in August 1977 that it had no intention to contest the test results carried out in the Railway's workshop. To maintain good business relations and to avoid delay in finalisation of the case after joint inspection, the firm offered 1 per cent reduction in price, subsequently increased to 2 per cent in November 1977 for accepting the material. The Chief Workshop Engineer of the Railway Administration, however, stated that the rejected stores could not be considered for acceptance with the reduction in price as offered by the firm.

On 5th December 1977, the Deputy Director of Inspection (DGS&D) informed the Controller of Stores that the results of the chemical analysis on ten different slabs from phosphor bronze ingots carried out at the request of the Assistant Director of Inspection were scrutinised carefully but the variation in the contents, according to him, appeared to be so glaring that it could neither be accounted for by heterogeneity in composition nor analytical error and, hence, no tangible conclusion could be drawn. He, therefore, requested the Controller of Stores to confirm that samples selected for analysis as also the stores bore the mark of acceptance of Assistant Director of Inspection to enable them to proceed further in the matter of a joint inspection. However, the Controller of Stores did not give any reply, considering that it was not necessary to pursue the case further

with the Deputy Director of Inspection as the firm had expressed its willingness not to contest the test results.

On 26th December 1977 the Administration decided that as the firm as well as Assistant Director of Inspection had not contested the rejection, the firm should be asked by way of demand notice to refund the sum of Rs. 1,27,671 [being the 95 per cent payment against the rejected supply (Rs. 1,22,886) plus ground rent (Rs. 1,014) on the rejected stores plus freight charges (Rs. 1,180) and inspection charges (Rs. 2,591)] and then take back the rejected stores failing which the case would be processed for arbitration. Accordingly, a notice was served on the firm on 28th February 1978 claiming payment of the amount on or before 13th March 1978, failing which the Administration would be constrained to process the case for arbitration. The firm did not refund any amount.

In May 1978, the firm stated that the question of refund did not arise as the inspection report of the consignee was not acceptable to them. The firm, further, requested for joint inspection of the material. In September 1978, the Director of Inspection also requested the Railway Administration for a joint inspection of the material. Accordingly, joint inspection was done on 27th November 1978, by the Director of Inspection (DGS&D), the Assistant Controller of Stores, the Laboratory Superintendent of the Railway Workshop and the firm's representative. The joint report alongwith samples was sent to National Test House, Calcutta for final testing and report. The Director of Inspection (DGS&D) advised the Assistant Controller of Stores on 9th February 1979 that since the lead and zinc contents of the material, as reported by National Test House, Calcutta were within the specified limits, the Railway's complaint be withdrawn and the case closed. The matter is still (March 1979) under consideration of the Railway Administration.

The following lapses would need consideration in this case :

- (1) Failure, if any, in the inspection conducted by the Director of Inspection, (DGS&D), or the tests conducted in the Railway Workshop Laboratory ;

- (2) Failure on the part of the consignee (Assistant Controller of Stores, Dibrugarh) to issue the rejection advice within the prescribed period of 45 days of the receipt of the material ;
- (3) Failure to specify the percentages of lead and zinc in the rejection advice sent by the consignee (Assistant Controller of Stores, Dibrugarh) on 18th October 1976 ;
- (4) Failure on the part of the Controller of Stores to confirm expeditiously, to the Deputy Director of Inspection (DGS&D) that the samples selected for analysis as also the stores bore the mark of acceptance of Assistant Director of Inspection.

The Ministry of Railways (Railway Board) stated (March 1979) that the final position will be known after the Railway Administration have considered the test report of National Test House, and also after the investigation presently being conducted by the Director, Vigilance of the office of the DGS&D is completed.

17. South Central Railway—Purchase of galvanised iron wire

Based on an indent of December 1975 of the Railway Administration, the Director General, Supplies and Disposals (DGS&D) placed an order on 20th May 1976 on a firm of Patna for supply of 75 tonnes of galvanised iron wire, 3.55 mm dia, to Divisional Signal and Telecommunication Engineer (Construction), Kazipet, at the rate of Rs. 3,700 per tonne. The supply was to be f.o.r. Dighaghat station on Eastern Railway and required to be completed by 15th September 1976.

The stores were to be inspected by the Director of Inspection (DGS&D), Calcutta and 95 per cent of the value of supplies inspected was payable to the Contractor on proof of despatch after inspection and balance 5 per cent on receipt of stores by the consignee in good condition. According to special

conditions of the contract, the supplier was responsible till the entire stores contracted for, arrived in good condition at the destination. In case the entire consignment was not received within 30 days of despatch (*i.e.*, date of railway receipt), the indentor/consignee was to advise the fact to the supplier immediately.

The firm booked, after inspection, 51.002 tonnes out of 75 tonnes ordered, as 'smalls' at Dighaghat station in two lots under 6 invoices/railway receipts dated 9th and 10th September 1976. No weighment was done at the despatching station but sender's weight was accepted.

The railway receipts were received by the consignee on 20th September 1976.

As the consignments were not received, the consignee issued a telegraphic message on 25th November 1976 (*i.e.*, after the expiry of 30 days of the date of railway receipts) to Junctions *en route* and also requested the Claims Department of the Railway in December 1976 to trace the consignment. However, the supplier was not intimated. In the meantime, an amount of Rs. 1.86 lakhs being 95 per cent value of the supplies inspected and despatched was paid to the firm in October 1976 by the Controller of Accounts, Department of Supply, Calcutta.

The firm did not make further supplies thereafter under the contract and the delivery period of the contract expired on 15th September 1976. The DGS&D advised the firm on 4th December 1976, that the order for the balance quantity not delivered was cancelled at its risk and cost.

On investigation by the Commercial Department it was found that the consignments shown as booked in September 1976 were actually despatched from the booking station only on 23rd December 1976 after a delay of about 3½ months. The wagon in which the above materials were booked was mis-despatched and was traced at Moghalsarai on 15th May 1977.

It was thereafter brought to its destination at Kazipet on 6th July 1977 and opened on the same day. As shortages and substandard material were noticed, the matter was reported on 8th July 1977 to the firm and the inspecting authority in DGS&D.

A detailed survey of the contents was conducted on 15th October 1977 by the Commercial and the Signal Departments. The firm's representative was not present. The verification disclosed that :

- (i) the number of iron wire coils actually received was 515 as against 517 as per railway receipts;
- (ii) there were only 27.748 tonnes of galvanised iron wire of different sizes (as against 51.002 tonnes as per railway receipts) of which 5.748 tonnes were found to be totally unacceptable, as the material was badly rusted, twisted and of released and scrap type; and
- (iii) there was no inspection mark on any of the coils.

As no representative of the firm turned up, open delivery was resorted to on 15th October 1977. The results of verification were reported immediately to the supplier, DGS&D and paying authority for further action. On 4th November 1977 the DGS&D directed the firm to refund the sum of Rs. 1,07,307.40 representing the cost of 29.002 tonnes (short supplies : 23.254 tonnes and rejected : 5.748 tonnes) of material along with Sales Tax and freight charges and also to remove the rejected material within 15 days. The Controller of Accounts, Department of Supply, Calcutta was also directed to recover this sum from the supplier's bills.

The Controller of Accounts, Department of Supply, Calcutta advised (February 1978) that no bill, excepting one for Rs. 2,941, of the firm could be withheld and that the prospect of recovery was remote as there were no other bills.

The Administration intimated to the DGS&D on 18th May 1978 that the total amount recoverable from the firm was Rs. 1,15,225.51.

The DGS&D cancelled the balance quantity of 29.002 tonnes of the material on 25th October 1978 at the risk and expense of the firm. However, no recovery has been effected from the firm so far (March 1979). The firm is reported to be in financial difficulties and has closed its factory.

The following aspects require consideration in this case :

- (i) According to extant instructions all 'smalls' consignments should be weighed in full at the forwarding station. In this case the consignments were booked as 'smalls' at Dighaghat station, without weighing, accepting the sender's weight. The 95 per cent advance payment made to the firm was on the basis of sender's weight of consignments as indicated in the railway receipts;
- (ii) The consignments were not received by the consignee within 30 days of despatch (*i.e.*, date of railway receipts). This fact was not immediately reported to the supplier;
- (iii) The consignments were shown in the railway receipts as having been booked for despatch on 9th and 10th September 1976 but were actually despatched on 23rd December 1976;
- (iv) The circumstances in which the wagon was misdespatched;
- (v) The circumstances in which the consignments said to have been inspected before despatch, were found to be without inspection mark at the destination station.

The Ministry of Railways (Railway Board) stated (March 1979) that the lapses on the part of the commercial staff at the forwarding station on Eastern Railway have since been taken up for investigation by their Vigilance Directorate.

CHAPTER V

WORKS AND LOSSES

18. Metropolitan Transport Project (Railways) Calcutta— Construction of subway structures

In December 1972 the Metropolitan Transport Project Administration, Calcutta invited tenders for construction of subway structures between Esplanade and Maidan stations, estimated to cost about Rs. 2.5 crores, specifying four alternative departmental designs. The tenderers were asked to quote for each of these designs and also for their own alternative designs, if any. The tender conditions stipulated, *inter alia*, that the rates quoted by the tenderer and accepted by the Administration must hold good till the completion of work and no claim would be admissible on account of fluctuation in market rates, increase in taxes etc. The period of execution was stipulated as 24 months from the date of acceptance of the tender. The tenders opened on 30th May 1973 were valid upto 27th August 1973. The validity of the offers was got extended upto 25th December 1973.

On 19th October 1973 the Project Administration recommended to the Ministry of Railways (Railway Board) for acceptance of the lowest technically acceptable offer of a firm at Rs. 3.44 crores for their alternative design (diaphragm walling) based on their collaboration with a West German firm, stated to be reputed subway designer. At the instance of the Ministry of Railways (Railway Board), the validity of the tender was got further extended upto 28th February 1974. However, the firm on their own, on 25th February 1974, offered to keep the rates open upto 31st March 1974 which was reiterated by them on 11th March 1974.

After obtaining clarifications from the Project Administration between November 1973 and January 1974 on certain technical points the Ministry of Railways (Railway Board), on 23rd February 1974, recommended acceptance of the tender by the Minister of Railways (the competent authority in this case). The recommendations of the Ministry of Railways (Railway Board) remained under consideration of the Minister till 29th March 1974 when he approved the same without any modification whatsoever.

On 30th March 1974 the Ministry of Railways (Railway Board) advised telegraphically the Project Administration for acceptance of the tender with certain stipulations and desired that a letter of intent should be issued to the firm within the validity period (31st March 1974). Accordingly, a letter of intent was issued to the firm on the same day (*i.e.*, 30th March 1974) stating that it had been decided to award the contract to them subject to their furnishing collaboration agreement with the West German firm duly approved by the Government of India within one month. Further to this letter of intent, the firm were also informed on 30th March 1974 that their tender was acceptable subject to certain stipulations.

At about the same time, the firm in their letter of 30th March 1974 intimated the Project Administration that the tenders had been opened on 30th May 1973, that they had extended the validity five times and that for further extension of the validity of their offer until 30th April 1974 they would like to have a suitable increase in rates on the basis of 'All Commodity Price Index' on the date of award of the contract. This was reiterated on 9th April 1974 by the firm on receipt of the letter of intent accepting their tender by the Railways. On 10th April 1974 the firm asked for a minimum increase of ten per cent and confirmed that these increased rates would remain firm during the entire period of currency of the contract. The ten *per cent* increase in rates claimed by the firm was estimated to involve additional financial liability of about Rs. 21 lakhs.

In May 1974, on the recommendations of a Committee of the Heads of Departments of the Administration, the competent Authority accepted 10 per cent increase in the rates asked for by the firm on the following considerations :

- (a) There was no concluded contract with the firm before it had asked for the increase in rates;
- (b) There was little possibility of getting favourable rates if fresh tenders were called for from the limited number of experienced firms who could undertake this work and entrusting the work to another contractor was likely to involve more expenditure than the extra payment of Rs. 21 lakhs consequent upon the acceptance of 10 per cent increase ;
- (c) The design offered by the firm was more economical than the departmental design to the extent of Rs. 72 lakhs and this advantage would not be available if the work was to be given to any other contractor ;
- (d) It was essential to avoid any further loss of time in awarding the contract; otherwise, the rates were likely to rise further due to the trend of galloping prices; and
- (e) It was considered expedient to commence the work because the State Government was keen for early implementation of the underground railway project.

It would appear that the delay in the acceptance of tender, especially after completion of technical scrutiny, was avoidable and resulted in extra expenditure of Rs. 21 lakhs.

The Ministry of Railways (Railway Board) stated (July and December 1978) that :

- (i) the acceptance of the tender could be decided by 29th March 1974 only and it was not, therefore, possible to issue the letter of acceptance incorporating

the requisite conditions in a proper legally binding form before 31st March, *i.e.*, the validity date of the tender and that the claim of the firm for ten per cent increase in rates had to be seen in the context of the unprecedented increase in prices during 1973-74; and

- (ii) there was no avoidable delay in acceptance of the tender and in entering into a legal contract considering the fact that the contract was being awarded for the first time for a braced cut using diaphragm walls, envisaging a collaboration agreement with a foreign firm and it had to be ensured that interests of the Government were properly safeguarded.

It may be stated that in the case of import of wheel sets in 1974 as mentioned in para 11 of Comptroller and Auditor General's Report—Union Government (Railways) for 1975-76, there was delay in according approval by the competent authority (the same Minister of Railways) to the recommendations of the Ministry of Railways (Railway Board) for placement of orders on the lowest tenderer, which ultimately resulted in an additional expenditure of Rs. 1.32 crores to the exchequer.

19. North Eastern Railway—Rebuilding of Darbhanga station building

In March 1973 the Ministry of Railways (Railway Board) called for a report from the Railway Administration on the existing facilities, condition and proposed improvements of station buildings at Darbhanga and four other stations. The Administration informed the Ministry of Railways (Railway Board) in March 1973 that the station building at Darbhanga was very old and had not been provided with damp-proof course. Darbhanga being in Tarai area, the moisture had risen upto 8 feet in the walls. The Administration, therefore, considered it uneconomical to maintain the existing building and proposed that the existing building be dismantled and a new station building

constructed. The Administration, further stated that the work could be processed for inclusion in the Works Programme for 1974-75. Subsequently, the Minister of Railways desired, after having inspected the station personally, that the provision for retiring rooms and for renovation for station building at Darbhanga should be made. Thereupon, the Railway Administration submitted a proposal in April 1973 to the Ministry of Railways (Railway Board) for constructing a new station building at Darbhanga at a cost of Rs. 9.20 lakhs as an 'out of turn work' during the current year 1973-74 itself. The approval of the Ministry of Railways (Railway Board) for taking up this work as out of turn during 1973-74 at a cost of Rs. 7.91 lakhs was communicated in May 1973. The work was commenced in October 1973, though the detailed estimate for this work along with some others was submitted to the Ministry of Railways (Railway Board) in December 1975 and sanctioned by them in August 1976. The direction of the Ministry of Railways (Railway Board) to take it up as 'out of turn work' even though it was not justified on grounds of urgency as per rules, resulted in disregard of a number of formalities required to be observed normally, as brought out in the succeeding paragraphs.

The Divisional Superintendent (Engineering), Samastipur sent to Railway Administration's Headquarters for approval, on 5th June 1973, the site plan and detailed plans for the work duly approved at Divisional level. The Divisional Superintendent (Engineering), Samastipur, however, invited tenders for this work on 1st June 1973 even before the approval of the site plan and detailed plans for the works at the Divisional level. As the rates were considered high, the Tender Committee recommended negotiations. The negotiated rates of contractor 'A' who was the lowest tenderer were accepted in August 1973 and a contract agreement for about Rs. 6.53 lakhs (less 2 per cent rebate) was executed on 21st September 1973, the stipulated date for completing the work being 9th April 1974. The contract was awarded to the contractor in September 1973 without finalisation

of the site plan and the detailed plans by the Chief Engineer and the estimate by the Ministry of Railways (Railway Board) and without determination of soil conditions etc.

On 28th September 1973, the General Manager (Engineering) advised the Divisional Superintendent (Engineering), Samastipur that the design of the building was based on assumed foundation pressure of one tonne per sq. ft. (safe bearing capacity) which was to be got checked at site and if the safe bearing capacity was found to be less than one tonne per sq. ft. the design was to be altered accordingly. But no testing of foundation pressure had been done before starting the work on 1st October 1973. The work had to be stopped by the contractor under Divisional Superintendent (Engineering), Samastipur's orders of 11th October 1973 as, while working, sub-soil water level was found at 2 ft. below the ground level and the soil was found to be too poor and loose to support designed foundation pressure of one tonne per sq. ft. That the safe bearing capacity was less than one tonne per sq. ft. was also confirmed by subsequent soil tests conducted from 29th October to 31st October 1973 by Inspector of Works/Soil Mechanics with the help of the staff of Research, Designs and Standards Organisation (RDSO). It was decided by Engineer-in-Chief, in February 1974, in consultation with the RDSO to provide a grid of sand-wicking below the foundation, and this work was done from February to July 1974 departmentally at a cost of Rs. 78,600. The contractor, thereafter, resumed the work on 20th April 1974, after the stipulated date of completion of the work viz. 9th April 1974.

The contractor made a representation on 18th March 1974, *inter alia*, claiming an amount of Rs. 80 thousand mainly as compensation for expenditure on continued maintenance of staff and establishment during the period the work remained suspended on Railway's account. On 20th April 1974, the contractor requested for extension of time for completing the work, from 9th April 1974 to 31st January 1975 with the stipulation that increased rates should be paid to him because of increase in rates of materials and labour. After negotiation, a Committee

of Deputy Heads of Departments recommended on 1st October 1974 acceptance of revised enhanced rates, increasing the value of the contract from Rs. 6.53 lakhs to Rs. 8.48 lakhs with the condition that the contractor will give up his claim of Rs. 80 thousand and will complete the work by 31st October 1975. It was further agreed that the Railway would arrange supply of screened shingles to the contractor at a concessional rate of Rs. 20 per cum. There was no provision in the contract for supply of shingles. The sale rate for supply of shingles by Railway at that time was Rs. 67.50 per cum. The market rate for shingles was Rs. 87.50 per cum. This proposal was approved by the General Manager. A revised contract agreement was executed with the contractor on 3rd November 1974 for Rs. 8.48 lakhs (approximate value of the work). The work was executed at revised rates but date of completion was subsequently extended upto 30th April 1976. The station building was completed in February 1976 and was formally opened on 26th February 1976. Based on the contracted amount, the additional expenditure incurred on re-building of station building at Darbhanga amounted to Rs. 2.50 lakhs as per details given below :

(Rs. in lakhs)	
(i) Enhancement in the face value of the contract because of revision in rates (Rs. 8.48 lakhs — Rs. 6.53 lakhs less 2 per cent rebate) as compensation for stoppage of work pending decision about re-designing of foundations.	2.08
(ii) Supply of shingles at concessional rates.	0.42
TOTAL	2.50

If the market rate for shingles is taken into account, the benefit derived by the contractor would be Rs. 2.68 lakhs.

In this case the following points require consideration :

1. There was no urgency for constructing the new station building as 'out of turn work' during 1973-74.
2. The Administration had as early as March/April 1973 advised the Ministry of Railways (Railway Board)

that Darbhanga being in the Tarai area the moisture in the station building walls had risen up to 8 ft. In the circumstances it is not clear as to how the site plans and detailed plans were finalised without conducting soil tests. It is also not clear how the rudimentary but essential pre-requisite of safe bearing capacity, which was pointed out by the Headquarters office, came to be overlooked at the Divisional level.

3. The Ministry of Railways (Railway Board) had in September 1972 issued instructions that the Railways should call for tenders only after the site plans are finalised. But the work was taken up even before the site plan was approved by the Chief Engineer.
4. The Division invited tenders for the work on 1st June 1973 before it finalised the site plans etc., and sent the same to the Engineer-in-Chief on 5th June 1973.
5. The failure to conduct the soil test for safe bearing capacity delayed the work and resulted in an avoidable expenditure of over Rs. 2 lakhs.

The Ministry of Railways (Railway Board) stated in March 1979 that for ordinary single or double storey building like the Darbhanga station building, testing of the soil for determining its safe bearing capacity and for making the site plan and the detailed plan is not generally considered an essential pre-requisite, keeping in view the engineering practices. It appeared that the execution of the work 'out of turn' resulted in non-compliance with the standard engineering practices and procedure and orders of superior authorities for this construction work, resulting in avoidable expenditure.

20. **South Central Railway—Construction of an overbridge in lieu of a railway crossing**

The Government of Andhra Pradesh proposed in June 1970 to the Railway Administration for the construction of a road

overbridge at a level crossing on a State Highway in the Kazipet-Balharshah Section to eliminate frequent interruption to road traffic. The Railway Administration agreed to the proposal in November 1970 and the construction of the overbridge was included in the Works Programme for 1974-75. The total cost of the approaches and the overbridge was estimated (August 1974) at Rs. 32.05 lakhs, later (March 1976) revised to Rs. 34.51 lakhs. The work on the bridge portion costing Rs. 7.19 lakhs was to be executed by the Railway and the approaches costing Rs. 27.32 lakhs were to be constructed by the State Government. The expenditure was to be shared equally by the State Government and the Railway, except the cost for making provision for two additional lines for future requirements (Rs. 19,756) provided in the estimates and the Railway's share of expenditure amounted to Rs. 17.36 lakhs.

The required plans were mutually got approved by the Railway and the State Public Works Department (PWD) in March 1972; modified plans were later approved in May 1975. The State PWD first initiated action to undertake the work on the approaches by awarding a contract (value : Rs. 21 lakhs) in May 1974. The State PWD authorities requested (July 1974) the Railway authorities to mark the abutments on both sides of the approaches for the bridge to enable them to commence their portion of work. The Railway Administration awarded the contract for the portion of the work in March 1976 to firm 'A' for the bridge (value : Rs. 2.82 lakhs). The work was commenced on 5th April 1976 and was scheduled for completion by 29th December 1976. Shortly after commencing the work, on 17th April 1976, while marking for the overbridge on the site was being done, the Railway authorities checked the actual layout of the approach road, which was already in an advanced stage of construction by the State PWD. It was then noticed that due to an error in conversion from foot to metric units in their earlier mark out for the approaches, the rail level was indicated as 30.563 metres instead of 32.696 metres. This resulted in the approach road level being 2.133 metres below the overbridge level. The problem was discussed in a meeting held in May/October 1976

between the Railway and the State PWD authorities and it was decided that the Railway would lower the overbridge level by 1.055 metres and the State PWD would raise the level of approach road to match the level of the bridge. The Railway had to re-design the T-beams and slabs for the end spans of the bridge by increasing the T-beams from 3 to 6 numbers.

In the meantime, firm 'A' was asked (1st May 1976) to stop the work. By this time, the work on the foundation and plinth work of the overbridge had been progressed in 2 piers (2 per cent of the work). Firm 'A' was again advised to re-start the work from 3rd June 1976 and proceed with the work on piers cautiously. However, due to delay in the revision of the drawings, continuous work could not be provided to the contractor. After partly completing the piers (38 per cent of the work), firm 'A' abandoned the work on 29th December 1976 *i.e.*, the date of expiry of the contract.

Firm 'A' also claimed in December 1976 higher rates on the plea that the scope of the work originally envisaged under the contract had completely changed on account of the revision of the drawing and also claimed Rs. 60 thousand as compensation for idle labour and advances paid for men, material and machines.

The revised drawings were finally approved in January 1977. The Railway Administration held negotiations with all the three tenderers who had originally tendered for this work (including the firm 'A' which had been awarded the bridge work), for carrying out the balance of the work left. The offer of firm 'A' was the lowest. The Railway Administration agreed to have the work completed by this firm at higher rates as negotiated, and the firm agreed to waive its claims for compensation in the contract of March 1976. According to the revised estimates prepared in November 1977, the overall cost of the road overbridge (Rs. 18.60 lakhs) and approaches (Rs. 42.15 lakhs) increased to Rs. 60.75 lakhs, as against the original estimate of Rs. 34.51 lakhs and the

share of Railway had gone up from Rs. 17.36 lakhs to Rs. 28.62 lakhs.

The following points would require consideration :

- (1) As a result of the mistake in conversion into metric units, the mark out for the approaches by Railway Administration was wrongly done ; consequently the design of the bridge had to be changed at an estimated cost of Rs. 2.88 lakhs, which was avoidable.
- (2) Even after the mistake was noticed in April 1976, the delay in finalising the revised drawings till January 1977 (after the validity of the contract with firm 'A' expired in December 1976) contributed to an extra expenditure of Rs. 1.29 lakhs on account of increase in the rates negotiated with firm 'A' in May 1977.
- (3) In addition to the above, the Railway will have to bear the increased share of expenditure on the approaches being executed by State PWD.

The Ministry of Railways (Railway Board) stated (March 1979) that the mistake was detected in August 1972 by the State PWD who intimated the Railway Administration that they would be adopting the road level correctly after rectification but in actually carrying out the work, they adopted the incorrect level.

It may, however, be pointed out that the Railway repeated this mistake even when the modified plans were approved in 1975.

21. Western Railway—Change of site of Jamnagar station

The rules in the Indian Railway Code for Engineering Department provide that final location survey report for a proposed railway line should indicate the cases in which the proposed Railway works would interfere with existing military installations, the extent of such interference, opinion of local Military Authorities and how their objections, if any, can best be met.

In the Project Report for the conversion of Viramgam-Okha-Porbandar metre gauge line to broad gauge, it was indicated that the existing Jamnagar railway station, located in the heart of the town, with considerable length of alignments passing through congested localities of the town, provided no room for any further expansion of the yard. It was suggested that the diversion of alignment to the north of Jamnagar town provided an ideal site for new station, with the added advantage of passing mainly through Government open land. The Report on Engineering Survey of the Project indicated that there were no military cantonment buildings, rifle ranges, camping grounds, or communications interfering with the projected alignment.

The Conversion Project was sanctioned in December 1971. The estimated cost for the siting of the new Jamnagar station was Rs. 98.98 lakhs. The Railway Administration awarded contracts for earthwork and construction of quarters in January 1973 and the work was started in February 1973. Land admeasuring 36 hectares (approximately) was also acquired at a cost of Rs. 10.83 lakhs by the Administration in March 1973.

In December 1973, when earthwork to the extent of 40,000 cum for the proposed site of the station etc. had been completed and eighteen railway quarters were constructed up to plinth level, the Railway Administration received a communication from the Ministry of Railways (Railway Board) indicating the objections of the Ministry of Defence to the location of the railway station :

- (i) In the opinion of the Defence Authorities the proposed location of the railway station at Jamnagar was just about $1\frac{1}{2}$ km from the airfield of the Air Force and was in line with the runway and, as such, would be a prominent land mark ;
- (ii) The railway station would fall within the airfield zone and would create bird menace ; and
- (iii) The proposed location of the railway station and the flyover would be a flying and security hazard.

The Defence Authorities suggested re-location of the new railway station in such a manner that it did not interfere with the Air Force requirements.

The Railway Administration stopped further work on the station in December 1973. A meeting was held between the Railway Authorities and the Defence Authorities in January 1974 wherein, while refuting the points made by the Railways that the Defence Authorities never raised any objection regarding the siting of the station earlier, the Defence Authorities indicated that earlier correspondence with the Railways was mainly regarding acquisition of land and the issue of location of the station had not attracted their attention. The Air Force Authorities maintained that in February 1973, when they became aware about the location of station, verbal objections were made by them and they simultaneously moved the Ministry of Defence for taking up the issue with the Ministry of Railways (Railway Board).

The Administration was informed by the Ministry of Railways (Railway Board) in September 1974 that the Ministry of Defence had not agreed to the proposed location of Jamnagar station. It was also advised to select and finalise a new site for the proposed station in consultation with the Air Force Authorities.

The Ministry of Railways (Railway Board) in January 1978, accorded its approval to the re-location of Jamnagar station at another site at a revised cost of Rs. 126.49 lakhs resulting in an extra cost of Rs. 27.51 lakhs. An expenditure of Rs. 5.5 lakhs incurred on the earlier site in connection with earthwork, foundation of quarters and interest charges on cost of land acquired, has been rendered infructuous. The land to be rendered surplus out of the 36 hectares acquired in March 1973 has not been put to alternative use or disposed of so far (October 1978).

The following points require consideration :

- (i) Though the Engineering Survey Report of the Project indicated that Army, Navy and Air Force units are headquartered at Jamnagar, it stated that there were

no military cantonment buildings, rifle range, camping grounds or communications interfering with the projected alignment. The basis for this statement is not known as in actual fact the proposed location selected for construction of station building was close to the air field, in line with runway and within the circuit zone of the airfield.

- (ii) The Administration stated (July 1978) that when it was corresponding with the Air Force Authorities as early as 1972 for the acquisition of land for the project, it was incumbent on their part to register their objections in writing for the proposed location of station. It may be mentioned that in the correspondence pertaining to acquisition of land, there was failure to mention about the location of station at the proposed site and to invite the objection, if any, of Air Force Authorities thereupon.

The Ministry of Railways (Railway Board) stated (March 1979) that in 1972 itself a sketch plan had been sent to the local Air Force Authorities, with the location of the station duly indicated therein. During 1972-73 discussions were held with the Air Force Authorities about the alignment of track and location of station but they never raised any objection, and in fact they had even indicated on 1st June 1973, their requirement for siding facilities at the original location of the station.

However, according to the Air Force Authorities, the subject matter of the reference made by the Railway Administration in 1972 related to Railway's proposal for acquisition of Air Force land, and, therefore, it did not attract the attention of the local Air Force Authority to the location of the station site marked in the key plan. No land was relinquished by the Air Force in favour of the Railway. During discussion with the Executive Engineer (Construction) of the Railway on 24th February 1973 the objections of the local Air Force Authority were conveyed to him verbally, and he was also told that the objections in writing

were being conveyed to their higher authorities since on such matters decisions could not be conveyed at local level. The matter was duly reported by the local Air Force Authority to their Headquarters on 8th May 1973.

Lack of co-ordination between the Railway Administration and the local Air Force Authority resulted in infructuous expenditure of Rs. 5.5 lakhs.

22. North Eastern Railway—Extra expenditure on departmental loading of stone ballast

The Railway Administration awarded ten contracts on different dates during March 1974 to September 1974 for manufacture and supply of a total quantity of 53,150 cum of stone ballast at Varanasi City station, including loading into wagons. This was to be completed during the period ending September 1974, in respect of nine contracts and December 1974 in respect of one contract. The contract agreements, *inter alia*, stipulated a rate of Rs. 2.50 per cum for loading the stone ballast in wagons at Varanasi City inclusive of all leads and lifts. Two of the contractors did not make any supply. The period of supply in respect of the remaining contracts (excepting one) was extended to various dates upto 30th September 1975, during which a total quantity of 48,378.71 cum of stone ballast was supplied by the contractors.

Though the total number of wagons required for loading of the stone ballast supplied by the contractors was 4,713 (four wheelers), requisitions for only 1,339 wagons (four wheelers) were registered during the period from April 1974 to July 1975. The reasons for which the Construction Division made registration for a smaller number of wagons than required, were not available with the Railway Administration. Again out of the 1,339 wagons requisitioned, registrations for 244 wagons were cancelled by the Construction Division, and out of the remaining 1,095 numbers, 1,091 wagons were supplied to them. Due to failure to arrange for the required number of wagons by the Administration, a quantity of 8,756.32 cum of ballast, out of the total supply of

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48,378.71 cum could be loaded by the contractors. Of the balance quantity 10,031.32 cum was disposed of by transfer to the open line (9,511.70 cum) and by movement through ballast train and loading through chowkidars (519.62 cum). The remaining quantity of 29,591.07 cum was loaded in 3,622 wagons through departmental labour during April 1976 to September 1976 at an expenditure of about Rs. 1.57 lakhs. It is significant to note that while during the course of departmental loading of ballast the Railway Administration had made registration for 4,271 wagons in a period of six months from April to September 1976, only 1,339 wagons were registered over a period of 16 months (April 1974 to July 1975) during the currency of contracts.

Had the quantity of 29,591.07 cum of stone ballast loaded departmentally been loaded by the contractors, the amount payable to them at the contract rate of Rs. 2.50 per cum would have been Rs. 74 thousand only. Thus the loading of wagons by departmental labour entailed additional expenditure of about Rs. 83 thousand, which was avoidable. Besides, further expenditure of about Rs. 13 thousand was incurred beyond the contract period on wages of chowkidars, office establishment and travelling allowances of staff in connection with the loading of ballast departmentally.

The Administration stated (January 1979) that registrations were made after informally ascertaining whether wagons would be made available in the near future, and that no purpose would have been served by simply asking for more wagons and inflating the number of registrations. In this connection it may be pointed out that the rules do not in any way limit the number of wagons to be requisitioned for carriage of railway material.

23. Northeast Frontier Railway—Delay in the finalisation of a contract

In response to a tender notice of August 1975 for manufacture and supply of 10,000 cum of fully broken ballast 40 mm size from the private quarries at Naharkatia, Namrup and Borhat

in the Lumding Division of the Railway for the season ending September 1976, eleven tenders were received and these were opened on 10th September 1975. The Tender Committee in October 1975 recommended the award of the contract to the contractor 'A', who was the 2nd lowest tenderer (as the working report of the first lowest tenderer was stated to be unsatisfactory). The total value of the offer was Rs. 3.69 lakhs, at the rate of Rs. 36.89 per cum with validity for 90 days *i.e.*, up to 9th December 1975. The Divisional Superintendent, Lumding, did not accept the recommendation of the Tender Committee without giving any reason and ordered negotiations with all the tenderers, except the first lowest tenderer.

The Railway Administration requested the tenderers on 6th December 1975 to extend the validity for another 30 days and three contractors including the contractor 'A' extended the validity of their offers upto 6th January 1976. The Tender Committee met the three contractors including contractor 'A' on 6th January 1976. As the extended validity date had also expired, the three contractors were requested to extend the validity upto 8th February 1976. Contractor 'A' agreed to extend the validity upto 8th February 1976 with the following special condition :

“Extension of time will be granted for the period by which the finalisation of the contract is delayed and programme of supply will be made accordingly, as the working season for the riverine quarry ends on 31st March and starts from 1st October in Upper Assam”.

The contractor 'A' did not agree to any further reduction in rates and the Tender Committee on 6th January 1976 recommended the acceptance of the offer of the contractor 'A' stating that extension of time to the contractor could be considered, when it was needed. The acceptance letter was issued on 15th January 1976 in favour of the contractor 'A' with the stipulation that the supply should be completed within the target date *i.e.*, 30th September 1976 without mentioning anything about acceptance or

non-acceptance of his special condition. While executing the draft contract agreement on 16th February 1976 the contractor 'A' endorsed in the schedule attached to the contract that 'the special condition given at the negotiation would stand valid'. The contractor also, through a separate communication dated 16th February 1976 to the Administration, stated that his special condition should be included in the contract agreement. The contractor was informed by the Administration in April 1976 that his special condition was not acceptable and he was asked to withdraw it. The contractor on 13th April 1976 informed the Administration that he was not agreeable to remove the special condition.

The contractor further informed the Administration on 15th May 1976 that he was not agreeable to execute the work as the working season had already ended. Thereupon, the Administration informed the contractor on 28th May 1976 that the inclusion of his special condition was under active consideration and on 9th June 1976 the contractor was intimated that the contract agreement had been executed in his favour accepting the special condition of his offer and extending the stipulated date of completion of supply to 31st March 1977. In reply the contractor informed the Administration on 3rd August 1976, of his inability to supply the material since (i) his rate was valid upto 8th February 1976, (ii) part acceptance of his offer was communicated on 15th January 1976 completely ignoring his special condition regarding extension of time and (iii) full acceptance of his offer was communicated only on 9th June 1976.

In August 1976, the Administration invited fresh tenders for the manufacture and supply of 11,000 cum of fully broken ballast 40 mm size from the same two quarries at Namrup and Borhat for the season ending 30th September 1977. A contract was finalised on 6th December 1976 with another contractor (at a total value of Rs. 7.15 lakhs) at the rate of Rs. 65 per cum.

In January 1978, the Railway Administration referred the case to the Law Officer of the Railway inviting his opinion, among others, whether the contract was binding on the contractor 'A'

and whether he was liable to supply the ballast. The Law Officer of the Railway observed in May 1978 that there was no valid contract having a binding effect on the contractor.

The failure of the Railway Administration to take timely decision on the contractor's special condition regarding programme of supply of ballast and conclude a valid and binding contract for the supply of 10,000 cum of fully broken ballast 40 mm size for the season ending September 1976 with the contractor 'A' resulted in additional expenditure of Rs. 2.81 lakhs on procurement of ballast at the rate of Rs. 65 per cum as against the rate of Rs. 36.89 per cum quoted by contractor 'A'.

24. Northeast Frontier Railway—Water supply scheme at Digaru

In order to overcome the difficult water supply position at Kamrup Khetri in the dry months, a scheme was finalised to shift loco watering arrangement to Digaru and the same was included in the Works Programme for 1959-60. An estimate for Rs. 2.65 lakhs for this work and certain other items of work was sanctioned in December 1959.

In connection with the watering arrangement two overhead tanks were erected in May 1962. The sump well and the pump house were constructed in June 1966 at an expenditure of Rs. 23,082. Further 4,660 ft. long R.C.C. pipeline with about 776 joints from Digaru river to overhead tank No. 1 was laid in February 1966 at a cost of Rs. 35,045.

Though according to the standard specifications of the Railway and the sub-estimate of the work the pipes were to be cast iron pipes or mild steel pipes with screw and socket joints, R.C.C. pipes with collar joints were laid in this case.

The pipe line was sought to be commissioned in November 1967 but water did not reach even the first overhead tank and leaks developed in the joints of the pipe line. A number of leaky joints were repaired departmentally during the period from April to June 1972 but the pipe line could not be commissioned. During the same period 1,561 ft. of R.C.C. pipe line were replaced

with cast iron and galvanised iron pipes, leaving a balance of 3,099 ft. of R.C.C. pipe line with about 500 joints still to be replaced. The expenditure incurred for repairing the leaky joints and for replacement of the R.C.C. pipes amounted to Rs. 24,658 (labour Rs. 4,935 and material Rs. 19,723). A further test was conducted in August 1972 to pump water directly to the overhead tank, but this was not possible due to leakage in the joints of the R.C.C. pipe line. In September 1972 it was realised that it was not possible to commission the Digaru water supply unless the entire pipe line was replaced by cast iron pipes.

Thereupon, the Railway Administration conducted negotiations in 1974 with the Defence Authorities at Digaru who were having water supply arrangement of their own, for taking water from them. The Defence Authorities furnished an estimate of Rs. 98,700 in April 1975, which was accepted and sanctioned by the Railway Administration in May 1977. Since there had been an escalation in prices during the intervening period, the Defence Authorities submitted in January 1978, a revised estimate for the work amounting to Rs. 1.35 lakhs which was accepted by the Administration.

The Defence Authorities would be supplying water, utilising their own pump house and pipe line. Thus the total expenditure of Rs. 82,785 incurred by the Railway Administration on the construction of the pump house and sump well together with the expenditure on R.C.C. pipe line and its replacement by cast iron and galvanised iron pipes has been rendered infructuous.

The circumstances in which R.C.C. pipes were laid, disregarding the standard specification and the specification of the pipe line in the sub-estimate of the work, are not on record. According to the Railway Administration (March 1979), it appeared that there was a general shortage of cast iron pipes at the time R.C.C. pipes were used.

It also needs to be examined why it took 6 years for the Railway Administration to discover that the water supply scheme

could not be commissioned unless the pipe line was laid with cast iron pipes.

The Ministry of Railways (Railway Board) stated (March 1979) that the laying of R.C.C. pipes was probably done as an experimental measure. However, no evidence was produced to this effect.

CHAPTER VI

EARNINGS

25. Southern Railway—Incorrect rating of goods

Rollers, tyres, wheels and shafts are classified in the Goods Tariff, under the main head 'Iron or Steel—Division A' (wheels and shafts had been classified under 'Iron or Steel—Division B' prior to 1st November 1975).

A test check of the records of Tiruvottiyur station by Audit in August 1976 disclosed that rollers, tyres, wheels and shafts manufactured by a firm for use in sugar and cement plants and offered for booking in 'wagon loads' (Broad Gauge) were declared by the consignor as "Machinery parts not otherwise classified" (Machinery parts NOC) and charged by the station staff accordingly. This resulted in undercharges.

The table below compares the freight rates as charged with those as chargeable :—

Article	As charged			As chargeable		
	Head of classification	Class	Minimum weight (quintals)	Head of classification	Class	Minimum weight (quintals)
Rollers	Machinery Parts-NOC	75	110	Iron or Steel Division-A	87.5	224
Tyres	"	"	"	"	"	Carrying capacity of wagon
Wheels and Shafts (From 1-11-75)	"	"	"	"	"	224
Wheels and Shafts (Before 1-11-75)	"	"	"	Iron or Steel—Division—B	70	224

A review of the invoices issued by Tiruvottiyur station during the period from 1st July 1974 to 30th June 1976 disclosed undercharges of freight of Rs. 1.46 lakhs. However, these undercharges were not accepted by Southern Railway Administration who contended that the goods in question were machinery parts. On this being taken up with the Ministry of Railways (Railway Board) in August 1977, they replied in January 1978 that consequent to the classification of 'Machinery parts NOC' having been brought on par with that of 'Iron or Steel—Division A', namely class 87.5, with effect from 1st January 1978, the problem had been automatically solved and there would be no loss of revenue on this account. It was again pointed out to the Ministry of Railways (Railway Board) in August 1978 that since the minimum weight condition applicable to 'Iron or Steel—Division A' was higher than that applicable to 'Machinery Parts NOC', undercharges in freight would continue to occur if the goods in question were treated as 'Machinery parts NOC'. The Ministry of Railways (Railway Board) ultimately accepted in November 1978 that since rollers, shafts, tyres and wheels have already been classified under the main head 'Iron or Steel-Division A', these are not to be accepted for booking under the entry 'Machinery parts NOC'.

In the meantime rollers, tyres, wheels and shafts booked from Tiruvottiyur station continued to be charged as 'Machinery parts NOC'. The undercharges on this account for the period from July 1974 to September 1978 are assessed at Rs. 3.67 lakhs.

The Ministry of Railways (Railway Board) stated (April 1979) that action is being initiated to recover the undercharges.

26. Eastern Railway—Non-payment of railway dues by a tourist agent

Recognised tourist agents who have entered into agreements with the Railway Administrations are authorised to issue coupon tickets, card or paper tickets and special paper tickets to (i) genuine overseas tourists and/or (ii) residents of India in accordance with the rules and conditions laid down in this regard.

In June 1971 the Railway Administration recommended for Ministry of Railways' (Railway Board) approval, the appointment of a firm of Calcutta to act as tourist agent, even though it was considered that the firm did not possess necessary financial stability to act as a tourist agent. An enhanced amount of security deposit of Rs. 25 thousand was proposed to be recovered from the firm (as against the usual security deposit of Rs. ten thousand) to safeguard the interest of the Administration. The proposal was approved by the Ministry of Railways (Railway Board), and accordingly, the Administration appointed this firm as tourist agent for the period from 17th September 1971 to 31st December 1975 for the sale of railway tickets. As per the agreement, the firm was required to submit a fortnightly account showing the particulars of tickets issued during a fortnight and also to remit the money collected during the fortnight to the Administration within five working days after the expiry of each fortnight. For sale of special tickets in respect of reserved accommodation either by a special or by an ordinary train, the agent was required to have the charges verified in writing by the Railway Administration before selling the same. The agreement further provided that in case the tourist agent failed to make any remittances or submit the account by the due dates, or committed breach of any of the terms and conditions of the agreement, the Administration was entitled to call upon the tourist agent to stop forthwith the sale of any tickets, to terminate the agreement and seize, after making inventory, the stock of tickets lying with him. Thereupon, the entire amount that may be payable by the agent to the Government was to become payable forthwith.

The tourist agent, however, neither submitted any sales statement in time nor remitted the amounts collected to the Railway within the stipulated period. The dues for the three fortnightly periods ending December 1973, for a total amount of Rs. 68 thousand were paid by the firm in July 1974, December 1974 and July 1975. For the amounts due after December 1973 the firm tendered cheques on outstation banks to liquidate their dues to the Railway. Eight such cheques deposited by the firm

27. Western Railway—Undercharges of freight*BFU type well wagons*

According to Goods Tariff, freight charges on consignments booked in BFU type well wagons should be levied on the actual weight subject to minimum weight for charge on the carrying capacity marked on the wagons. A test check of the records of Indira Dock and Grain Depot stations of Bombay Port Trust Railway disclosed that freight charges for consignments booked in BFU type well wagons were being levied on the basis of actual weight subject to the minimum weight computed for a BFU type well wagon at $2\frac{1}{2}$ times a four-wheeled wagon. This resulted in undercharges, the marked carrying capacity of the BFU type well wagon being higher than both the actual weight and the weight computed as above. The undercharges on this account for the period June 1974 to April 1977 were assessed at Rs. 1,33,860 out of which Rs. 6,125 pertained to local traffic and Rs. 1,27,735 to foreign traffic. The Western Railway Administration (responsible for check of transactions relating to Bombay Port Trust Railway) stated (February 1979) that undercharges of Rs. 6,125 relating to local traffic had since been recovered. As regards undercharges amounting to Rs. 1,27,735 in respect of foreign traffic, undercharges of Rs. 11,497 had been recovered by foreign Railways and the balance amount of Rs. 1,16,238 was still outstanding. The Railway Administration also stated that out of the total undercharges of Rs. 1,27,735 relating to foreign traffic, undercharges of Rs. 57,521 had been detected in internal check.

It may be added that similar undercharges had been noticed at these stations earlier also, and were commented upon in para 37 of the Audit Report—Railways 1970. The Public Accounts Committee (1971-72) in their 11th Report had observed that Ministry of Railways (Railway Board) should ensure that such lapses do not recur. Accordingly, necessary instructions were issued by Ministry of Railways (Railway Board) in October 1971.

during February 1974 to February 1975 amounting to Rs. 1.23 lakhs were dishonoured. Out of these, an amount of Rs. 57 thousand could be realised subsequently. The tourist agent did not also submit proper sales statements for the period from August 1975 to March 1976. In spite of the fact that the firm was defaulting in payment of railway dues and in submitting the returns from December 1973 onwards, the Administration, on 26th December 1975, extended the agreement with the firm for a further period of one year from 1st January 1976.

The tourist agent sold special tickets without getting the charges verified from the Administration and undercharges to the extent of Rs. 57 thousand were noticed by the Accounts Department in 'internal check' during February 1972 to August 1976 in respect of special tickets issued by the firm. The check of accounts in regard to 24 other special tickets is still held up for want of particulars of tour programme etc., which have been called for from other Railways.

Ultimately, in September 1976 the Administration seized all money value books, tickets etc., from the firm. The Administration issued a demand notice to the firm on 18th July 1977 for payment of dues amounting to Rs. 1.64 lakhs. The firm had on 19th August 1977 accepted the liability for Rs. 1.05 lakhs disputing particularly the undercharges of Rs. 57 thousand. The Administration, in September 1977, adjusted the firm's security deposit of Rs. 25 thousand against the railway dues. The firm tendered a cheque for Rs. 59,113.06 in January 1978, again an outstation bank, and a demand draft for Rs. one thousand in June 1978 towards payment of outstanding dues, but the cheque was dishonoured. A sum of Rs. 1.38 lakhs is still (March 1978) outstanding against the firm.

The Ministry of Railways (Railway Board) stated (March 1979) that the outstanding amount is being disputed by the firm and the Railway Administration has decided to initiate legal action against the firm for realization of the dues.

There is no information whether any other action has been taken by the Ministry of Railways (Railway Board) against the firm.

Narrow Gauge wagons

According to an amendment to Goods Tariff, effective from 1st May 1977, a narrow gauge bogie wagon with carrying capacity of 22.4 tonnes and above should be equated to $2\frac{1}{2}$ times of a narrow gauge four-wheeled wagon for computing minimum weight for charge. A test check of the records of Virar, Vasai Road and Nallasopara stations in Bombay Division of the Railway disclosed that freight charges on consignments received at these stations from South Eastern Railway, booked in narrow gauge wagons with carrying capacity of 22.4 tonnes and above had been levied by computing the minimum weight for charge at 2 times instead of $2\frac{1}{2}$ times of a four-wheeled narrow gauge wagon. This resulted in undercharges of Rs. 36,073 for the period May 1977 to July 1977.

The Railway Administration stated (February 1979) that the entire amount of undercharges was still outstanding. Responsibility for lapses on the part of the defaulting staff on some of the stations is also yet to be fixed.

28. Western Railway—Undercharges of freight—Non-levy of infringement charges

Rules in the Goods Tariff provide that when bulky articles exceeding the maximum moving dimensions are accepted for carriage under special arrangements, a charge of Rs. 3.50 per kilometre for each wagon (a four-wheeler, six-wheeler or bogie) calculated on the total distance from the booking station to the destination station (subject to a minimum charge of Rs. 140) is leviable in addition to the freight charges. A test check of the records of Indira Dock station of Bombay Port Trust Railway in October 1977 and May 1978 for the period from October 1974 to April 1977 disclosed that these charges were either not levied or levied for one wagon only, though more than one wagon were used for carriage of the over-dimensional consignments included in an invoice. This resulted in short recovery of the charges amounting to Rs. 3,68,635 in respect of both local and foreign traffic.

The Railway Administration stated (December 1978) that the undercharges were correctly recoverable and that undercharges amounting to Rs. 2,59,530 had been detected in internal check. An amount of Rs. 28,136 pertaining to local traffic has since been recovered. The balance amount of Rs. 3,40,499 is outstanding. The Railway Administration further stated that steps had been taken by them to recover the balance undercharges of Rs. 1,683 relating to local traffic and that other Railways had been addressed for effecting recovery of undercharges amounting to Rs. 3,38,816 in respect of foreign traffic. Responsibility for the lapses is yet to be fixed by the Administration. Review of stations in six divisions of this Railway did not reveal any undercharges. A review of the other stations on remaining two divisions is stated to be under progress by the Administration (February 1979).

29. **Northeast Frontier Railway—Loss of revenue on bamboo traffic**

The minimum weight prescribed for charge for bamboo chips, cuts, splits and splints in the Railways' Goods Tariff is 90 quintals per Metre Gauge (MG) four wheeled wagon. There is regular traffic in bamboo chips etc., in 'wagon loads' from stations on Northeast Frontier Railway to the paper mills at Titagarh, Raniganj, Naihati and Dalmianagar on Eastern Railway.

Cachar is a major bamboo producing area. In 1959-60 the quality of bamboo deteriorated considerably due to flowering. In consequence, bamboos dried up/died and lost weight.

In 1960-61, there were representations from the trade that MG wagons could not be loaded to the extent of 90 quintals of bamboo chips made from bamboos after flowering, though the loadability of wagon at 240 maunds (equivalent to 90 quintals) of bamboo had been fixed since October 1948. The Railway Administration deputed a Rates Inspector to undertake test weighments of wagons loaded with bamboo chips etc. The Rates

Inspector visited two stations in March/April 1961 and weighed 20 wagons out of which 18 were with floor area of 12.5 sq. metres. (These are the types of wagons mostly in use on Northeast Frontier Railway). The test weighments showed the average weight of bamboo chips etc., per wagon as 75 quintals. Financial Adviser & Chief Accounts Officer, while considering the revision of the chargeable weight, observed that the weighment done with the flowered and dried bamboos would not hold good, when new green bamboos are available for loading. The Railway Administration notified (May 1962) that with effect from 15th June 1962, MG wagons with floor area of 11.2 sq. metres to 12.5 sq. metres, when loaded with bamboo chips etc., will be charged at the fixed weight of 74 quintals per wagon and that such wagons need not be subjected to any weighment.

According to the report of the railway inspector, bamboos take about five years to grow up and mature after flowering. In consequence, the fixed weight prescribed for charge for bamboo traffic required to be reviewed in 1965-66 with a view to restoring it to 90 quintals per MG four wheeled wagon. This review was, however, not conducted and the reduced fixed weight of 74 quintals per wagon introduced in 1962 continues to be in vogue.

In February 1976, Ministry of Railways (Railway Board) advised the Railways to conduct fresh test weighments of wagons loaded with bamboo chips etc., to see if the fixed weights called for any revision on account of change in the type or specie of bamboo booked to the paper mills. In pursuance of this directive, the Railway Administration, after conducting test weighments (August 1976) in respect of 20 wagons, proposed to the Ministry of Railways (Railway Board) in September 1976 that in view of all MG four wheeler covered wagons used for loading of bamboos being of 12.5 sq. metres floor area, the floor area basis for bamboo traffic be abolished on the MG system of the Railway and that minimum weight for charge for a four-wheeler MG wagon be fixed at 85 quintals. In reply, the

Ministry of Railways (Railway Board) stated in October 1976, that the question whether fixed weight for charge on floor area basis should continue or not, was a matter for the Railway Administration itself to decide. The Administration has not so far notified the fixed chargeable weight of 85 quintals, proposed by them in September 1976. Freight charges are still being recovered at the fixed weight of 74 quintals per MG wagon, notified in May 1962. This is resulting in short realisation of freight charges at the rate of 11 quintals per MG wagon. The loss of revenue on this account for the period January 1977 to January 1978 is assessed at Rs. 4.54 lakhs.

The Railway Administration stated in January 1979 that test weighments were proposed to be conducted to ascertain the loadability of bamboo chips but the same could not be conducted earlier due to heavy congestion in Badarpur and Lumding Yards during March to October 1978 and imposition of booking restriction *via* transshipment point owing to severe floods and breaches on Eastern Railway during September to October 1978. The Railway Administration further added that the Report on test weighments would be submitted by March 1979.

The following points require consideration :

- (i) The circumstances in which the Railway did not examine the loadability of the wagons with bamboos in 1965-66 so as to restore it to the minimum weight of 90 quintals in vogue before May 1962; and
- (ii) The reasons for non-enforcement of the minimum weight of 85 quintals found justified on the basis of test weighments in August 1976 in the interest of Railway revenues.

The Ministry of Railways (Railway Board) stated (March 1979) that though there might have been lapses on the part of the Railway Administration, it would not have been possible to

enforce the chargeable weight of 85 quintals per MG wagon in the light of the results of test weighments done in 1976 and March 1979 and as such there was no financial loss to the Railways.

30. North Eastern Railway—Incorrect stencilling of floor area on wagons

Sugar-cane in 'wagon loads' is charged by weight calculated with reference to the floor area of the wagon. The Railway Administration notified in December 1970 that the chargeable weight in respect of a Metre Gauge four-wheeled open wagon having floor area above 13.9 sq. metres but upto 14.9 sq. metres should be 140 quintals, and that in respect of a wagon having floor area above 14.9 sq. metres, the weight should be 155 quintals. (Prior to this, the chargeable weight in respect of all open wagons having floor area above 13.9 sq. metres was the same : 125 quintals).

According to the standard diagram available in the Mechanical Department of the Railway, the floor area of an open four-wheeled K.C. wagon is 161.25 sq. feet equivalent to 14.98 or 15 sq. metres, when rounded off. However, the floor area had been wrongly stencilled as 14.9 sq. metres on the body of the wagons. This wrong stencilling was noticed by the Railway Workshop, Izatnagar, in March 1975. Thereafter, the correct floor area of 15 sq. metres was marked on the wagons as and when the wagons came to the workshops for periodical overhaul. However, no instructions were issued to the concerned stations to apply the correct floor area for determining the chargeable weight. As a result, freight charges in the case of the uncorrected wagons continued to be levied on the basis of the floor area of 14.9 sq. metres instead of 15 sq. metres. Freight charges were thus recovered for 140 quintals instead of 155 quintals per wagon.

During test audit, the loss of revenue on this account has been assessed at Rs. 1.29 lakhs in respect of five stations as follows :—

Station	Period	Amount Rs.
Pilibhit	December 1970 to March 1975	62,549
—do—	April 1975 to June 1975	3,928
Hargaon, Golagokaran Nath, Tulsipur and Balrampur	April 1975 to March 1978	62,622
		1,29,099

There are 39 other stations where similar traffic was handled for the different sugar mills served by the Railway.

Even after the wrong stencilling of floor area on the wagons had been noticed in March 1975, the remedial action taken by the Administration was confined to stencilling of the correct floor area only on the wagons received in the workshops for periodical overhaul. No instructions were issued to the stations to charge freight by applying correct floor area in the case of "uncorrected wagons" which were still on the line and did not come to the workshops for periodical overhaul. Railway Administration's failure to do this resulted in undercharging of freight in respect of such wagons. A test audit of the accounts of 5 stations revealed loss of revenue amounting to Rs. 67 thousand. The total loss in respect of the other 39 stations serving the sugar factories is likely to be of a large magnitude.

The Ministry of Railways (Railway Board) stated (April 1979) that all the 3,100 open four-wheeled K.C. wagons of the Railway had passed through the workshops for periodical overhaul during the period from 15th March 1975 to 15th September 1978, and the correct floor area had since been marked on all of them. The Ministry of Railways (Railway Board) further

stated that instructions were not issued to the stations to charge freight by applying correct floor area in the case of 'uncorrected wagons' during the afore-said period, because such instructions were normally not issued to the stations as they might cause confusion.

31. Southern Railway—Undercharges of freight—Boiler components

According to the Through Rate circular issued by the Railway Administration on 4th March 1976, 'boiler components' have to be charged at Class 130 in 'smalls' and Class 115 in 'wagon loads' with effect from 25th March 1976. During the period from 25th March 1976 to 13th July 1977 consignments of 'boiler components' booked by a public sector undertaking as 'smalls' from Mobile Booking Office at Tiruchirapalli, were charged at Class 105 as for 'valves' under Iron and Steel Division 'A' with reference to the description of the consignments as given by the consignor in the forwarding notes. This mistake was corrected in July 1977 on its being pointed out by Audit. The total amount of undercharges on this account has been worked out as Rs. 1.18 lakhs.

It may be mentioned that similar consignments booked from the firm's siding at Tiruverambur (High Pressure Boiler Plant siding served by Golden Rock station) had been declared correctly as 'valves-boiler components' and charged accordingly.

The incorrect description of the goods by the undertaking had not been detected by the inspecting officials of the Commercial and the Accounts Departments of the Railway during the course of their periodical visits to Tiruchirapalli station.

The Railway Administration stated (July 1978) that action had already been initiated by the Commercial Branch to recover the undercharges from the undertaking, but no recovery has been effected so far (February 1979).

Ministry of Railways (Railway Board) stated (February 1979) that as the charges were levied in accordance with the declaration of the articles in the forwarding notes, the discrepancy coming to the notice of Accounts and Commercial Inspectors did not arise.

32. **Western Railway—Undercharges of freight—Non-application of minimum weight condition**

According to Goods Tariff the minimum weight condition as prescribed for application of wagon load scale of rates is in terms of per four-wheeled wagon.

A test check of records of Indira Dock and Victoria Dock stations of Bombay Port Trust Railway in October 1977 and May 1978 for different periods from March 1974 to February 1978 revealed that in cases where more than one wagon was booked under one invoice, chargeable weight had been computed on actual weight instead of applying the minimum weight condition per four-wheeled wagon individually. This resulted in undercharges of freight amounting to Rs. 81,182 in respect of both local and foreign traffic.

The Railway Administration stated (November 1978) that undercharges are recoverable. Out of the undercharges of Rs. 81,182, an amount of Rs. 44,755 had been detected in internal check. The Administration further stated (November 1978) that undercharges of Rs. 1,182 relating to local traffic had since been recovered and as regards undercharges relating to foreign traffic, other Railways had been addressed for effecting recoveries. Undercharges to the extent of Rs. 80 thousand are still outstanding (February 1979). Responsibility for the lapses is yet to be fixed by the Administration in the case of some of the station staff and in the case of the Accounts staff concerned.

33. **Western Railway—Undercharges of freight—Iron or steel pipes loaded in BOX wagons**

From 15th February 1976, the minimum weight condition for charging freight on the consignments of pipes and tubes irres-

pective of any length and diametre, when loaded in BOX wagons, was fixed at 450 quintals.

A test check by Audit of the records of two stations, *viz.*, Indira Dock Station of Bombay Port Trust Railway and Sabarmati (Broad Gauge) for different periods during February 1976 to March 1976 revealed that freight charges in respect of pipes booked in BOX wagons were computed on actual weight. The staff of the former station had described incorrectly BOX wagons as BKC wagons in the invoices. This resulted in short realisation of freight charges amounting to Rs. 62,720 in respect of outward local and foreign traffic. Most of the undercharges remained undetected in internal check due to incorrect description of wagons. The Railway Administration stated (October 1978) that undercharges, as pointed out by Audit are correctly due and include an amount of Rs. 12,680 already detected in internal check of invoices pertaining to foreign outward traffic. Further, an amount of Rs. 11,350 had since been recovered by Western Railway from the parties in respect of local traffic and an amount of Rs. 12,019 had been recovered by foreign Railways in respect of foreign traffic.

The total amount still to be recovered both in respect of local and foreign traffic is Rs. 39,351. Responsibility for the lapses is yet to be fixed by the Railway Administration in respect of some of the station staff and the Accounts staff concerned. A review of the other stations on seven Divisions of the Railway has revealed that no undercharges are due on such consignments. Similar review is still in progress in respect of one Division (February 1979).

CHAPTER VII

OTHER TOPICS OF INTEREST

34. Chittaranjan Locomotive Works—White metalling of liners of Traction Motors

White metal is a costly alloy (composition : Tin 85 per cent, Antimony 5 per cent, Hardner 10 per cent) used for metal lining the pinion and commutator ends of traction motors in the Chittaranjan Locomotive Works (CLW). The technical assistance for white metalling had been given by their collaborator and CLW had to evolve their own method of manufacture. This operation had been undertaken by CLW since 1971-72. The process involves broadly melting the metal, pouring the molten metal into the shell for coating the liner and machining the excess metal to provide the requisite thickness of coating. The boring arisings during the machining operation are recycled after converting them into ingots along with virgin metal.

As per the recommendation of the collaborator white metal was to be procured at the rate of 20 kg per set of liners (pinion end : 12 kg and commutator end : 8 kg) and as per the drawings provided by the collaborator the finished liner set required 10 kg (pinion end : 6 kg and commutator end : 4 kg) of the metal. Thus the gross and net requirements of white metal per set of liners worked out to 20 kg and 10 kg respectively (ratio 2:1).

A check in audit of the foundry outturn statements of CLW for the period April 1971—July 1977 revealed the following :

	Pinion end	Commutator end	Total
Production	1434 Nos	1445 Nos	
Average metal cast per liner	21.77 kg	16.61 kg	38.38 kg
Average metal per machined liner	8 kg	5 kg	13 kg

- (1) The excess metal consumed in the finished liner was 3 kg per liner set (13 kg—10 kg)—a 30 per cent increase over the collaborator's recommendation and involving more consumption of 4.31 tonnes valued at Rs. 2.88 lakhs approximately (at the rate of Rs. 66.95 per kg).
- (2) The gross and net requirements per set of liners in actual operation worked out to 38.38 kg and 13 kg respectively (in the ratio of 3 : 1 as against the recommended ratio of 2 : 1 by the collaborator). This resulted in the increased machining of the excess coated metal of 18.38 kg (38.38 kg—20 kg) per liner set involving 22.14 tonnes at extra cost of Rs. 1.42 lakhs.
- (3) The quantity of white metal available for recovery and recycling from the rejected liners (143 pinion and 64 commutator ends) and from the machined borings worked out to 40.36 tonnes from which only 30.66 tonnes could be recovered. Thus the loss in the recovery of metal amounted to approximately 24 per cent. CLW had prescribed in March 1976 the process loss from borings to ingot at 6 per cent but no handling and collection loss in the recovery of borings had been prescribed, although the Ministry of Railways (Railway Board) had issued detailed directions in 1970 and 1972 for ensuring proper collection, accountal and disposal of non-ferrous borings and for fixation of target percentage for recovery of borings. The Ministry of Railways (Railway Board) had also indicated (June 1973) that recovery in the case of white metal should not normally be less than 80 per cent.

The CLW Administration stated (September 1977 and September 1978) as follows :

- (1) The collaborator had at no stage advised the quantity of white metal to be cast on the liners, nor spelt out

the machining allowance. The collaborator had only indicated the quantity of white metal to be procured (per set of liners) and by way of quantum of metal to be retained in a finish machined component had indirectly confirmed an overall loss of 50 per cent of white metal during melting, handling and processing. The Administration also stated that the recommendation of the collaborator could only be treated as a guideline.

- (2) The weight of white metal cast in the liners and weight of metal retained in the finished liners had to be increased after physical trials to ensure sound casting and a minimum thickness of 3 mm.
- (3) As regards short recovery of borings it stated that while no permissible limits were laid down for handling losses, all efforts were made to minimise the same and to recover the borings to the maximum extent possible.

The Railway Administration could not, however, furnish (a) information as to whether the original estimate of white metal to be used per set of liners was framed on the basis of the recommendation of the collaborator or on their own experience and (b) details of physical trials stated to have been carried out to ensure sound casting and minimum thickness of the lining. At the same time the white metal was procured as per the guidelines given by the collaborator.

35. Central Railway—Acquisition of land

The Ministry of Railways (Railway Board) sanctioned in June 1963 doubling of the line between Sobhapur and Salichauka Road on an 'urgency' certificate. In December 1963, the Railway Administration decided to acquire 40.72 acres of land at the Pipariya station in Jabalpur Division for yard remodelling

which was a part of the work of doubling the line. In February 1966, the requirement of the area was scaled down to 30.88 acres. While in the project estimate it was estimated that compensation would be payable for the land acquired at the rate of Rs. one thousand per acre, in December 1966/January 1967 the Land Acquisition Officer awarded compensation at the rate of Rs. 26,136 per acre.

Out of the 30.88 acres of land acquired at a cost of Rs. 10.56 lakhs, the Railway Administration used for the remodelling of the yard and other ancillary works 16.26 acres only. In December 1967, the Railway Administration re-assessed their future requirements of land at Pipariya station to be 2.83 acres and decided to relinquish the balance 11.79 acres. The land of the value of Rs. 3.39 lakhs in excess of requirements has not been disposed of so far (November 1978). In the meantime dividend of Rs. 1.42 lakhs has been paid to General Revenues on this capital investment during the years 1971-72 to 1977-78. The unrealistic initial assessment of 40.72 acres, later reduced to 19.09 acres has resulted in the avoidable expenditure of Rs. 3.39 lakhs.

The Railway Administration stated (February 1979) that the land originally proposed to be acquired was as per planning done at the survey stage. The requirement had to be curtailed subsequently on further review and then again in the context of exorbitant rate of compensation awarded by the Land Acquisition Officer.

The Railway Administration also added that the matter regarding relinquishment of the surplus land (11.79 acres) was being pursued further.

36. South Central Railway—Delay in finalisation of tenders

The Railway Administration invited tenders in January 1975 for coal and ash handling and cinder picking works (approximate

value : Rs. 3.60 lakhs) at Bitragunta Shed of Vijayawada Division for a period of three years from April 1975 to March 1978. Eight tenders were received and these were opened on 5th February 1975. The lowest offer from a contractor 'A' was estimated to be 20.46 per cent lower than the previous contract rate. The offers were valid for a period of 90 days from the date of opening of the tenders *i.e.*, upto 5th May 1975.

The tender papers were forwarded by the Divisional office to the Headquarters office of the Administration on 16th April 1975 and these were received there on 18th April 1975 *i.e.*, after a period of more than 2 months since the opening of the tenders. The tenderers were asked on 28th April 1975 to extend the validity period of their offers for two months. The 4th, 6th, 7th and 8th lowest tenderers extended their tenders accordingly.

The Tender Committee at the Headquarters office in their meeting held on 15th May 1975 recommended rejection of the offers of the first six lowest tenderers on the basis of the report dated 15th May 1975 of the Chief Security Officer of the Railway that the "Tenderers No. 1 to 6 are not having good reputation as they allegedly have connection with an undesirable person operating in the area". The Committee recommended negotiations with the 7th and 8th lowest tenderers as the rates offered by them were not considered reasonable.

The Chief Security Officer cleared the sixth lowest tenderer on 26th June 1975 and the first lowest tenderer (contractor 'A'), the second and the fourth lowest tenderers on 7th August 1975.

The Tender Committee in its meeting of 26th August 1975 considered the offers only of the sixth, seventh and eighth lowest

tenderers and ignored the offers of the first five lowest tenderers including 1st, 2nd and 4th lowest tenderers who had been cleared by the Chief Security Officer, on the ground that the offers were invalid as they had not extended the validity period of their offers, as desired by the Administration.

The Tender Committee finally recommended the acceptance of the offer of the sixth lowest tenderer whose rate was estimated to be 18.22 per cent more than the previous contract rate. The recommendation of the Tender Committee was accepted by the Administration on 16th September 1975 and the contract was awarded accordingly to the sixth lowest tenderer for a period of three years from 1st October 1975. The delay in the finalisation of the tender resulted in an additional expenditure of about Rs. 1.29 lakhs based on the rates offered by the lowest tenderer *viz.*, contractor 'A'.

The Administration explained that tender could be finalised only after getting the credentials of the contractors examined through the Chief Security Officer of the Railway independently, so as to eliminate undesirable elements from securing the contracts and indulging in malpractices to the detriment of the Railways. It further stated that the credentials of the lowest tenderer (contractor 'A') had not been cleared by the Chief Security Officer in May 1975 and it was only on 7th August 1975 that the Administration was advised that no cases had been booked against that tenderer (contractor 'A').

In this case the following aspects deserve consideration :

- (i) According to the procedure prescribed by the Administration, as early as November 1966

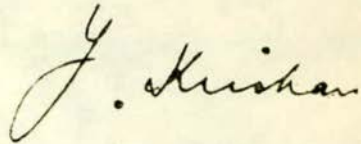
for finalisation of tenders, the Divisional tenders requiring decision at Headquarters level are to be received in the Headquarters office within 13 working days from the date of the opening of the tenders in the Divisional Office and the tenders are thereafter required to be finalised at the Headquarters office within another 12 working days. In this case the tenders were received in the Headquarters office from the Division after more than 2 months of opening of the tenders and in the Headquarters office it had taken another 4 months to finalise the same. As a consequence, as many as 5 tenders (first five lowest) had to be declared as invalid as the tenderers did not extend the validity period of their offers.

- (ii) Though the validity of the offers was upto 5th May 1975, the tenders were referred to the Chief Security Officer for verification of credentials of the tenderers only on 26th April 1975 and no indication was given therein about the time by which the reports were required. Consequently, the Chief Security Officer sent reports in this regard in May 1975, June 1975, July 1975 and August 1975, resulting in delay in finalisation of the tenders.
- (iii) The passing over of the three lower tenderers on the report of the Chief Security Officer, which was *prima facie* not based on proper investigation into the antecedents of those tenderers, resulted in an additional expenditure of Rs. 1.29 lakhs with reference to the rates offered by the lowest tenderer (contractor 'A').

37. Recoveries at the instance of Audit

During the year 1977-78, Rs. 69.17 lakhs were recovered or noted for recovery at the instance of Audit. As a result of

further review made by the Railways of these and similar cases
Rs. 3.37 lakhs more were noted for recovery.



(Y. KRISHAN)

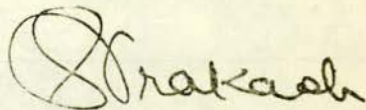
*Additional Deputy Comptroller and
Auditor General of India
(Railways)*

NEW DELHI 1979

Dated the 25th May

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Countersigned



(GIAN PRAKASH)

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Comptroller and Auditor General of India

29th May 1979

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