INDIAN RAILWAY FINANCIAL CODE

VOLUME-I



GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

INDIAN RAILWAY FINANCIAL CODE

VOLUME-I

(SECOND REVISED EDITION -2022)

((Embodying All Correction Slips Issued upto No. 93 Dated 12.08.2022)

MENU

S.No.	Subject
1	Preface
2	Introductory Notes
3	Contents

PREFACE

Problems of Railway Financial Management and the techniques developed in tackling these have become complex and varied over the years. The Code Revision Cell set up in 1973 in pursuance to the recommendations of the Railway Convention Committee, 1971 has, therefore, rightly considered the need for a separate Railway Financial Code to serve as a compendium of general rules and orders on financial matters including compilation of annual budget.

2. THE INDIAN RAILWAY FINANCIAL CODE includes revised version of a part of the erstwhile Indian Railway General Code, which has now been rewritten in two separate texts of which this book is the second text, the first being the introductory text published separately under the title THE INDIAN RAILWAY ADMINISTRATION AND FINANCE-AN INTRODUCTION.

3. The Indian Railway General Code was first issued as a 'provisional issue' on 5th September, 1938 ; it was up-dated and re-printed on 5th January, 1942 as the first edition, the appendices embodied in the 'provisional issue' being printed for the first time in a separate volume. A re-print was issued in April 1950 and a second re-print in May 1952. A revised edition of the Code, incorporating changes consequent on promulgation of the Constitution, and those arising out of the 1949 Railway Convention, was issued on September 14, 1954. The first re-print of this revised edition was issued five years later, and the second re-print issued on August 22, 1970 has been the edition in use before the present revision of the Code.

4. The book as compiled deals with various important aspects of financial management like Project Appraisal, Budget Formulation, Reporting and Contro1, Parliamentary Financial Control, Award of Contract, Allocation of Expenditure, 'Rules relating to Inter-Railway and Inter Departmental services, Contingent Expenses, Investigation of Losses, etc. A Chapter on the procedure dealing with Audit-Report presented by the Comptroller and Auditor General of India and its consideration by Public Accounts Committee of Parliament has been added, deleting Chapter VIII 'Communications from Audit and action thereon' from the existing Accounts Code. The existing Chapter XI on '*Incidence of the Cost of Works* for non-Railway Departments/Ministries' has been transferred to the Engineering/ Mechanical Code, Chapter XIV on 'Cash, Cheques and Vouchers', excluding the section regarding 'Cash Imprests' has been transferred to the Accounts Code and Chapter XVI on 'Bills for Pay and Allowances' has been transferred to the Establishment manual. The miscellaneous matters dealt with in Chapter XX, excepting the section regarding 'Annual Reports of Railways', have not been incorporated in this Code nor in any other Code or Manual issued by the Board. These should be included in the Manuals of 0ffice Procedure of the Zonal Railways., Production Units, etc. The Appendices which were printed in a separate volume of the General Code have now been embodied in the Financial Code, vol. I, except Appendices relating to the classification of expenditure and earnings which have been embodied in Volume II of this Code.
5. Based on the recommendations of a Task Force constituted in 1973 (in pursuance of the recommendations of the Railway Convention Committee 1971) and as accepted by the Government, restructured Demands for, Grants and Revised Classification of Revenue and Capital Expenditure have been introduced with effect from 1st April, 1979. The provisions contained in this Code reflect the revised System.

6. This Code supersedes all existing rules and orders issued by the Railway Board on the subjects dealt within it. Unless contrary intention is expressed or implied in the wording of the Code rules, provisions of this Code are mandatory and binding on all Indian Railways. For deviations from the mandatory rules, sanction of Railway Ministry should be obtained. In accordance with the Government's policy, this Code is being issued as a diglot edition.

7. The Railway Board will be glad to consider any criticism and suggestions from the Railway Administrations. Any errors or omissions which may be found in this edition may also be brought to the notice of the Secretary, Railway Board.

NEW DELHI **Himmat Singh**
8th April 1981. **Secretary, Railway Board.**

PREFACE
(First Reprint)

This edition is a reprint of the Indian Railway Finance Code, Volume 1, 1982 edition, incorporating additions and alterations introduced through Correction Slips issued up to number 16, dated 30th May 1991.

NEW DELHI **(MASI HUZZAMAN)**

12.06.1991 **Secretary, Railway Board.**

PREFACE

(Second Reprint)

This edition is a reprint of the Indian Railway Finance Code, Volume 1, 1982 edition, incorporating additions and alterations introduced through Correction Slips issued up to number 52 , dated 06th August, 1998.

NEW DELHI **(D.P.TRIPATHI)**

12.06.1999 **Secretary, Railway Board.**

PREFACE

(Second Revised Edition 2022)

Last revision of Indian Railway Financial Code Vol-I was done in the year 1954 which was later re-printed in the year 1998. Since 1998, a lot of changes have taken place in Indian Railways in terms of focus, orientation and decision making. This has changed the approach to financial management of Indian Railways substantially. A need was being felt to make Indian Railway Financial Code dynamic in line with modern times. It was also felt that Indian Railway Financial Code should help Indian Railways in taking sound business decisions without diluting its social and economic responsibilities. With these aspects in mind, Indian Railway Financial Code has been updated comprehensively.

While updating the Code, it has been kept in mind that this document remains as dynamic as possible to avoid need for frequent revisions. One approach which has been taken is to avoid quantifying any monetary limit. In place of quantifiable monetary limit a term '*monetary limit as prescribed by Board from time to time*' has been used. Similarly while mentioning the softwares like IPAS, IRPSM etc a term '*or any other software*' has been used additionally. Though all efforts have been made to include latest guidelines, yet there are chances that some omissions have crept in. Any such omissions or corrections required, may be pointed out to make necessary corrections.

NEW DELHI **(JAYA VARMA SINHA)**

25.11.2022 **Secretary, Railway Board.**

INTRODUCTORY NOTES

1. Index letters for Codes-The following Index letters are used for distinguishing the several Indian Railway Codes from each other :-

A- Accounts Department.
E- Engineering Department.
F- Financial Code.
G- Administration and Finance-an Introduction.
R- Establishment Code.
S- Stores Code.
T- Traffic Department (Commercial).
W- Mechanical Department (Workshops).

2. Paragraph Numbers-For convenience of indexing and of reference, the paragraphs have been numbered according to a 3/4-figure "Code", in which the last two figures give the number of the paragraph and the remaining figures the number of the Chapter. Thus paragraph 101 of any code is paragraph I of Chapter I of that code and paragraph 1421, paragraph 21 of Chapter XIV.

3. Reference to paragraphs-Reference to the paragraphs of a code is made by putting the paragraph number, suffixed by the index letter of the code concerned. Thus 1335-RI means paragraph 35 of Chapter XIII of the Indian Railway Establishment Code Volume I and 5 Appendix VIII-RI means paragraph 5 of Appendix VIII of the Indian Railway Establishment Code Volume I.

4. Reference to "Forms"-The "forms" referred to in any of the Indian Railway Codes (except the Establishment Code) take the number of the paragraph of the code in which they are described, the index letter, of the code in question being prefixed to the number of the paragraph in which the form is illustrated. Thus W-703 is the form that is described and illustrated in paragraph 3 of Chapter VII of the Indian Railway Code for the Mechanical Department (Workshops).

5. Correction Slips-Subsequent correction slips will be printed on one side and issued in separate series for each code so, that these may be cut and pasted against the relevant rules.

6. Index to Correction Slips-To facilitate reference to correction slips that have been issued to the Codes, an up-to-date index of correction slips is published from time to time showing for each Code the paragraph or rule numbers affected by correction slips and the numbers of such correction slips. This index may be pasted inside the cover of each Code.

***

CONTENTS

CHAPTER	SUBJECT
i	Financial Organization Historical Background
ii	Financial Appraisal Of Railway Projects
iii	Budget
iv	Parliamentary Financial Control Appropriation Accounts
v	Budgetary And Expenditure Control Financial/ Management Reporting
vi	Contracts General Principles
vii	Allocation Of Expenditure
viii	Inter Railway And Inter Departmental Service
ix	Statutory Audit
x	Petty Contingent Expenses Cash Imprest
xi	Reporting And Investigation Of Loss Of Cash, Stores Or Other Railway Property

	Appendices

CONTENTS

CHAPTER-I

FINANCIAL ORGANIZATION HISTORICAL BACKGROUND

Evolution of Financial Organization on the Railways and its functions, 101-115, Standards of financial propriety, 116.

CHAPTER-II

FINANCIAL APPRAISAL OF RAILWAY PROJECTS

General Principles, 201- 202. Scrutiny by Accounts officer, 203. Test of Remunerativeness, 204-207. Provision of Rolling Stock, 208-209. Scheme for change of traction, 210. Revenue estimate,211-214. Assessment of working expenses, 215-217. Provision for depreciation, 218. Normal Lives of assets, 219. Technique of financial appraisal of projects, DPR for Technical and financial appraisal of projects, 220-220 A. Accounting rate of return method, 221-222. Pay back period method, 223-224. Discounted cash flow, 225. Net present value (NPV) or Net Present Worth (NPW), 226-227. Annual Cash Flows, 228. Rate of return under D.C.F., 229-232. Residual Value, 233. Alternative Schemes, 234. Economic Evaluation, 235. Replacements and Renewals, 236 - 237. Reconditioning, 238. Scrapping, condemning and abandoning assets, 239-240. Second hand value, 241 - 242. Post-projects appraisal, 243. New Lines, 244-247. Open Line Works, 248-252.

Check list with detailed notes for guidance of zonal Railways and concerned branches in Railway Board's office, in the preparation of Project Estimates, Annexure A. Sinking fund Payment Table, Annexure B. Interest formulas and tables for Discounted Cash flow techniques, Annexure C. Rate of return-using Discounted Cash Flow method, Annexure D. Examples illustrating application of DCF techniques in the financial appraisal of railway projects, Annexure E. Economic evaluation of Railway investments, Annexure F. Examples illustrating the method of financial justification to be adopted in the replacement, reconditioning or abandonment of existing assets, Annexure G. Examples, illustrating the determination of second hand value of assets, Annexure-H. Economic Appraisal Framework for evaluation of railway project, Annexure- I. Proforma for submission of Detailed Project Report, Annexure-J.

CHAPTER-III

BUDGET

Section I-General

Budget- A Constitutional and Management Document, 301. Voted and Charged Expenditure, 302. Charged Expenditure, 303. Budget, and an instrument of Parliamentary financial control and expenditure control, 304. Demands for Grants, 305-307. Glossary of terms used, 308.

Section II -Preparation of Budgets by Railway Administrations

Responsibility for framing the Estimates, 309-312. GROSS RECEIPTS, 313. Coaching Earnings, 314. Goods Earnings, 315. Sundry Other Earnings, 316. Receipts of Worked Lines, 317. Refunds of Revenue, 318. Explanation of variations in receipts, 319 - 322. Review of Traffic outlook, 323. Ordinary Working Expenses, 324 - 325. Explanation of Variations, 326 - 328. Estimate of Cost of Establishments, 329–330. Suspense Heads, 331. Repairs and Maintenance Expenditure of Rolling Stock, 332. Cost of fuel, 333. Miscellaneous Expenditure, 334. List of Credits of Recoveries, 335. Summary of Ordinary Working Expenses, 336. Summary of Revenue Receipts and Expenditure, 337. Appropriations to and Expenditure to be met out of Railway Funds, 338 – 343. Payments to General Revenues, 345. Works Machinery and Rolling Stock Budget, 346 – 347. Inventories, 348. Civil Demands, 349 – 353.

Section III- Compilation and Scrutiny of Budget in the Railway Board.

COMPILATION AND SCRUTINY OF BUDGET IN THE RAILWAY BOARD, 354 - 356. Submission to the Minister, 357 - 358. Appropriation Bill, 360.

Section IV-Administering the Budget

Distribution of funds by the Railway Board, 361-364. Distribution of funds by General Managers to Lower Authorities, 365-368. Responsibility of the Railway Board to avoid Excess over Grants or Expenditure on a New Service, 369-370. Responsibility of Railway Administrations in case of excesses or lapses, 371 - 372. Powers of Railway Administrations in regard to emergent and inevitable expenditure, 373 - 374. Re appropriations, 375. Powers of the Railway Board, 376. Powers of Railway Administrations, 377 - 381. Unforeseen Expenditure operation of the Contingency Fund of India, 382. Review of Expenditure, 383 - 384. Final Modification Statement, 385-389. Supplementary and Excess Grants, 390-391.

Heads of Demands & Authorities Responsible for Control over Expenditure, Annexure-I. List of Budget forms and Connected statements, Annexure-II. Statement of Income-tax, Interest on Advances by Central Government and Interest on Debt and other obligations, Annexure-III. Statement of Debt transactions-I-Small Savings, Provident Fund, etc. J-Reserve Funds, K- Deposit and Advances, Annexure- IV. Statement of Debt Transactions-K-Deposits and Advances L-Suspense and Miscellaneous- under Public Account and F-Loans and Advances under Consolidated Fund, Annexure-V. Statement of Remittance Transactions, Annexure-VI.

CHAPTER-IV

PARLIAMENTARY FINANCIAL CONTROL APPROPRIATION ACCOUNTS

General, 401-402. Form of Accounts and Dates of submission by the Railways, 403 - 407. Figures to be exhibited in the Accounts, 408. Explanations of variations, 409 - 415. Re- appropriation, 416. Savings due to postponement of Expenditure or Abandonment of Schemes, 417. Exhibition of Recoveries or Credits, 418. Unadjusted Assets and Liabilities of Special Schemes or Projects, 419. Offices closed or transferred to another Department/Ministry or Governments, 420. Purchase or Disposal of Immovable Property, 421. Stores and Manufacture Suspense, 422. Consultation with the Executive, 423. Losses, 424 - 425. Ex-gratia payments, 426. Block Accounts (including Capital Statement comprising the Loan Account), Balance Sheet and Profit Loss Account, of Railways, 427. Block Account, 428 - 431. Accounts of Production Units, 432. Other Accounts and Subsidiary Statements, 433. Percentage of Working Expenses to Earnings, 434. Review of Works Programme, 435. Statement of Credits to Capital for Retired Assets, 436. Stores Account, 437. Statement of Stores Transactions, 438. Stock Verification and Revaluation, 439. Summary of Accounts, 440. Reconciliation Statement of Annual Expenditure, 441. Certificate of Sanctioned Expenditure and Statement of Unsanctioned Expenditure, 442 - 446. Estimates provisionally accepted by Accounts or Audit, 447-448. Appropriation Accounts of Civil Grants, 449 - 451. Explanations of Variations in Civil Grants, 452 - 454. Consolidated Appropriation Accounts of Railways, 455-456. Main contents, 457-458. Reconciliation with the combined Finance and Revenue Accounts, 459. Submission to Audit, 460 461. Consolidated Accounts of Civil Grants, 462-463. Review of Appropriation Accounts, 464. Examination by Public Accounts Committee, 465-466.

Formulae for working out the cost of replacement by like asset in respect of various types of Assets, Annexure-I. Capital Statement (Pt. I and II), Annexure-II. Balance Sheet, Annexure-III. Profit and Loss Account, Annexure-IV. Diesel Locomotive Works Manufacturing Account, Annexure-V. Diesel Locomotive Works Statement of Out-turn, Annexure-VI. Depreciation Reserve fund, Annexure-VII. Development fund Account, Annexure-VIII. Pension Fund Account, Annexure-IX. Accident Compensation Safety and Passenger Amenities Fund, Annexure-X (Deleted). Appropriation Accounts (Stores Account), Annexure-XI. Results of Stock Verification and Revaluation of Stores, Annexure-XII . Grain Shops Profit and Loss Accounts, Annexure XIII. Railway Catering Profit and Loss Account, Annexure-XIV. Balance Outstanding under Suspense, Annexure –XV. Statement of expenditure held under objection, Annexure-XVI. Under charges detected by Accounts or Audit, Annexure-XVII. Statement showing Remission and Abandonment of claims to Revenue, Annexure-XVIII. Review of expenditure on important Open 'line Works and New Construction, Annexure XIX. Working Expenses and other revenue charges relating to Strategic Lines ,Annexure XX. Statement of estimated and actual credits or recoveries for the year 2020-21, Annexure XXI. Statement of Losses etc., Annexure-XXII. Irregular re appropriations, Annexure-XXIII. Important misclassification and other mistakes detected, Annexure-XXIV. Consolidated Block account (Commercial).

CHAPTER-V

BUDGETARY AND EXPENDITURE CONTROL FINANCIAL/MANAGEMENT REPORTING

Budget, an instrument of Parliamentary financial control and expenditure control, 501. Gross Revenue, 502 - 503. Revenue and Capital Expenditure, 504-505. Revenue Expenditure, 506 - 507. Proportionate Budget Allotment, 508-510. Monthly Statement of Approximate Receipts and Expenditure, 511. Revenue Allocation Registers, 512. Monthly Financial Reviews, 513-516. Re-appropriations, 517-518. Expenditure on

Acquisition, Construction and Replacement of Railway Assets, 519. Watch over Progress of Expenditure, 520-523. Review of expenditure, 524-526. Review of Capital Expenditure, 527-533. Control of Expenditure against the Capital Suspense Grants, 534 - 535. Monthly Review of Suspense Grant, 536 - 538. Financial Adviser and Chief Accounts Officer's Review of monthly Receipts and Expenditure, 539. Exchequer Control, 540. Importance and limitations of Exchequer Control, 541 – 544. Implementation of Exchequer Control, 545. Assessment of Cash Outgo-General Guidelines, 546. Staff, 547. Fuel, 548. Works and Stores, 549-550. Civil Grants, 551. Railway Board Contracts, 552 - 553. Assessment of Quarterly Cash Outgo, 554. Control of cash disbursements, 555. Calendar of returns, 557. Watch over Expenditure and Revenue of the Last quarter of the year, 559. Annual Review of Expenditure, 560. Annual Reports of Railways, Object and Scope, 561 – 562. Responsibility for preparation, 563. Section –I Report Proper, 564. Section II-Financial Statements**,** 565. Section III -Analysis of Working, 566. Section IV-Appendices, 567. Powers of Chairman Railway Rates Tribunal, Annexure-I (Deleted). Powers of General Managers, of Indian Railways, Annexure –II. Assessment of cash requirement, Annexure –III. Cash Budget for the year, Annexure-IV. Cash Outgo Quarterly Variation Statement, Annexure-V.

CHAPTER-VI

CONTRACTS GENERAL PRINCIPLES

Types of contracts, Departments responsible for awarding them, 601. Tender System, 602-603. Invitation to tender, 605-606. Constitution of Tender Committees, 614-619. Earnest Money and Security Deposits, 620. Contract Agreements, 621. Execution of contract prior to Commencement of Works or supplies, 622-624. Contract Documents, 625. Conditions of Contract, 626-627. Variation of contract Conditions, 628. Settlement of Disputes, 629.

CHAPTER-VII
ALLOCATION OF EXPENDITURE

General Principles of Allocation, 701 - 716. Land, 717 -723. Surveys, 724. New Lines, 725 - 732. Lines partially opened for traffic, 733. Calculating Machines, and other office appliances, 737. Revenue Sidings, 738. Additions of Ballast, 739. Temporary and Experimental Works, 740. Maintenance of Quarters for Construction Staff, 741. Rolling stock, 742 -748. Stand-bys, 749. Spares, 750 - 752. Replacement and Renewals, 753 - 758. Renewals of rails, etc, 759 - 760. Renewals of Carriages and Brake-Vans, 764. Renewal of self-propelled Coaches, 765. Renewals of Wagons, 766 - 767. Renewals of Rolling Stock parts, 768 -771. Incidental Works, 772 - 774. Expenditure on Ceremonial Occasions, 775. Costs of Tools and Plants and Special Posts, 776. Inter-Railway Transfer of Assets, 777 - 780. Assets other than Rolling Stock, 781. Sale of overage or condemned locomotives and wagons, 782. Transfer of assets from open line to Construction, 783. Replaced stock, 784 - 786. Second-hand Rails, 787. Private Railways worked by Indian Railways, 788.

CHAPTER-VIII

INTER RAILWAY AND INTER DEPARTMENTAL SERVICE

Incidence of pay and Allowances

Transfers within the Railways or Offices under the Ministry of Railways, 801. Permanent Transfers to and from other Department/Ministries, 802. Temporary Transfers to and from other Departments/Ministries, 803. Leave and joining Time combined with Transfers, 804. Employment of Armed forces Units, 805 – 806. Army in India Reserve of Officers, 807 – 812. Reservists of Indian Army, 813 – 815. Territorials Army (Non-railway Units), 816 -817. Study Allowances, 818. Compensatory Allowances during leave, 819.

Incidence of Travelling Allowances

Transfers within the Railways or offices under the Ministry of Railways, 820. Permanent Transfers to or from other Departments/Ministries, 821. Temporary Transfers to or from other Departments/Ministries, 822. Attendance at Courts, 823. Journeys on behalf of private bodies, 824.

Incidence of Leave Salary

Persons exclusively employed in the Ministry of Railways, attached offices of the Ministry of Railways, Zonal Railways, Production Units and other offices subordinate to the Ministry of Railways, 825. Open-line staff employed on constructions, and surveys, 826. Persons in foreign service, 827. Persons with service under different Departments/Ministries and Governments, 828 – 835. Persons transferred from Company-managed Railways, 836.

Incidence of Pensions

Ordinary Pension, 837. Calculation of Length of Service, 838 – 839. Pension for a deficiency in Service, 840. Special Pensionary Concessions granted by another Government, 841. Pension for Military Service, 842. Wounded and injury Pensions, 843. Adjustment of Pensionary Charges, 844. Commuted Pensions, 845.

Incidence of Gratuity and Contributions to Provident Fund.

Gratuity and special contribution to Provident Fund, 846 – 849. Contribution to Provident Fund, 850 -855. Incidence of the cost of Railway Police, 856 – 866. Other Inter Railway Adjustments, 867. Apportionment of Earnings, 868. Working Expenses, 869. Miscellaneous, 870.

CHAPTER-IX

STATUTORY AUDIT

Comptroller and Auditor-General of India, 901-908. Railway Accounts Separation from Audit, 909. Director of Railway Audit, 910 - 915. Communications from Audit, 916. Disposal of Audit Objections, 917. Audit Notes and Inspection Reports, 918. Replies to Inspection Reports, 919. Disagreement between the Accounts Officer and the Principal Director of Audit, 920. Audit Objections and Provisional Payments, 921. Rectification of mistakes in Accounts disclosed by Audit, 922. Audit Report-Railways, 923-928. Internal Audit, 929-932.

CHAPTER-X

PETTY CONTINGENT EXPENSES CASH IMPREST

Nature of Contingent charges, 1001- 1003. Classification of contingent charges, 1004. Special contingencies, 1005. Liveries and warm Clothing, 1006 -1007. Conveyance hire, 1008 – 1009. Ordinary Contingencies, 1010. Postal Charges, 1012. Stationery and Printing Stores (including Rubber Stamps), 1016 – 1019. Type writers, Calculating Machines, etc., 1023. Service Contracts, 1027–1028. Other Stores, 1029. Official Publications, 1033 - 1035. Non-official Publications, 1036 - 1039. Recurring Charges, 1040 - 1042. Bills for Contingent Expenditure, 1044. Vouchers of Contingent Expenditure, 1045. Duties of Drawing Officer, 1046. Disbursement of contingent charges, 1047 - 1049. Cash Imprests, 1050 - 1055. Imprest card, 1056.

CHAPTER-XI

REPORTING AND INVESTIGATION OF LOSS OF CASH, STORES OR OTHER RAILWAY PROPERTY.

Losses, frauds and Embezzlements.

Responsibility for Losses, 1101. Report of Losses, 1102 - 1103. Losses involving the Reserve Bank, 1104. Investigation of Losses, 1105. Legal Advice, 1106. Laxity of Control, 1107. Recoveries of Losses, 1108-1110. With holding of Pension and Provident Fund Bonus, 1111 – 1112. Police Investigation, 1113-1114. Prosecution, 1115-1116. Witness, 1117. Appeal against Acquittals, 1118. Reports to the General Manager, 1119-1120. Departmental Inquiries, 1121-1124.

Appendices

Appendix-I - Deleted Paras

Appendix-II - Code Revision Team

* * *

CHAPTER- I

Financial Organization Historical Background

Evolution of Financial Organisation on the Railways and its functions	101-115
Standards of financial propriety	116

*****

CHAPTER-I

Financial Organization Historical Background

101. At the dawn of the 20th Century, nearly fifty years after the first Railway train steamed out of Bori Bunder, there were thirty three separate Railway Administrations in India, operating over 41,000 route kilometers of Railway lines. Of these, four were worked by Government, five by the erstwhile Indian States, and the remaining 24 by private Railway Companies. The Non-Government Railways—i. e., other than the four owned and directly worked by the Government—operated under varying degrees of Government supervision. Their regulation and control vested in the Railway Branch of the Public Works Department of the Government of India. The Department was headed by an officer of the Indian Civil Service who was a member of the Viceroy and Governor General's Executive Council. He was assisted in the Railway Branch, by one Secretary, three Deputy Secretaries (one each for Traffic, Accounts and Construction), 4 Under Secretaries and 4 Assistant Secretaries. The entire Railway system was divided into seven circles, and a team of one Consulting Engineer, and one Government Examiner of Accounts was posted to each of these seven circles. The accounting and auditing functions for the whole Department, including the Railway Branch, were combined in the Accountant General, Public Works Department.

102. In October 1901, the Secretary of State for India in Council appointed Sir Thomas Robertson, C. V. O., as Special Commissioner for Indian Railways to enquire into and report on the administration and working of the Indian Railways. In his report (1903), Sir Thomas recommended setting up of a Railway Board consisting of a President or Chief Commissioner, and two other Commissioners all of whom should have a practical knowledge of Railway matters and should be 'men of high railway standing'. The Board should be assisted by a Secretary, a Chief Inspector of Railways, the necessary number of ordinary inspectors and the requisite number of Government Auditors. As a consequence of these recommendations, it was decided early in 1905 to abolish the Railway Branch of the Public Works Department and to transfer the control of the Railway systems to a Railway Board consisting of a Chairman and two Members. The Railway Board assumed office in March, 1905, directly responsible to the Government of India in the Department of Commerce and Industry, and their staff included amongst others an Examiner of Accounts, redesignated in the following years as Railway Accounts Officer. Within a short time, however, the set up was re-organized on the recommendations of the Railway Finance Committee (1908) by constituting the Railway Board with its staff as the Railway Department distinct from and independent of the Department of Commerce and Industry under the same Member of the Viceroy and Governor General's Executive Council. The designation of the Chairman, Railway Board, was changed to that of the President of the Railway Board who was to have direct access to the Viceroy and Governor General. At the same time, consequent upon the amalgamation of the Accounts and Civil Audit Establishments of the Public Works Department under the control of the Finance Member of the Government of India, the

post of Accountant General, Public Works Department was abolished and a separate, post of Accountant General, Railways was created.

103. The most important landmark in the history of the financial administration on Railways in India was the appointment of the Financial Commissioner for Railways in April, 1923 with the sanction of the Secretary of State for India, as part of the scheme of reorganization of the Railway Board as recommended by the Acworth Committee (1921). The declared object of this appointment was to secure, firstly, economy in the expenditure of public moneys and secondly, the co-ordination of Railway policy with the general financial policy of the Government of India. This was followed by the Separation Convention of 1924 by which Railway finances were separated from the General Finances of the Government of India*. *Acworth Committee's recommendation on the separation of Railway Finances from the General Finances of the Government of India was as follows:

"We recommend that the Finance Department should cease to control the internal finances of the railway, that the railways should have a separate budget of their own, be responsible for earning and expending their own incomes and for providing such net revenue as is required to meet the interest on the debt incurred or to be incurred by the Government for railway purpose; and that the railway budget should be presented to the Legislative Assembly, not by the Finance Member of the Council but by the Member in charge of Railways",

On consideration, Government of India found that this recommendation was inconsistent with certain provisions of the Government of India Act, 1919. It was, therefore, decided that separation of Railway Finances be effected by means of a Convention to be laid before the Legislative Assembly in the form of a resolution, and that the Assembly be asked to agree to it . Accordingly, the matter was placed before the Legislative Assembly who voted the Convention resolution of 1924 on the 20th September, 1924.

103 A. Railway Budget has since been merged (in the year 2017) with Union Budget and estimates of Ministry of Railways have been included in the estimates of Union Budget which is prepared and presented by Ministry of Finance. This involves presentation of a separate Demand for Grants under Article 113 (2) of the Constitution of India for Ministry of Railways and presentation of a single Appropriation Bill under Article 114 (1) of the Constitution of India.

Ministry of Railways (Railway Board)

104. The Financial Organization on the Railways has thus evolved through the following five stages, viz.—

Stage I: The stage prior to the appointment of the Financial Commissioner for Railways, when the Railway finance administration was a part of the Finance Department of the Government of India. The accounting work was done by the Accountant General, Railways, under the administrative controller of the Auditor

General.

Stage II : Appointment of the Financial Commissioner of Railways in April 1923 as stated in the preceding paragraph.

Stage III : Completion of the process of separation of the Accounting & Auditing functions on the Railways in 1929 as a sequel to the recommendations of the Acworth Committee supported in the report of Sir Arthur Lowes Dickinson (August. 1927). Under this arrangement, the post of Accountant General, Railways (then under the administrative control of the Auditor General) was replaced by—

i) The Controller of Railway Accounts responsible to the Financial Commissioner Railways; and
ii) The Director of Railway Audit under the Auditor General.

At the Railway level also the two functions were separated by appointing a Chief Accounts Officer answerable to the Controller of Railway Accounts, and a Chief Auditor responsible to the Director of Railway Audit. This, incidentally, marked the beginning of the Indian Railway Accounts Service as a Cadre distinct from that of the Indian Audit and Accounts Service.

Stage IV : Placing of the Railway Accounts Department under the General Manager where upon the Chief Accounts Officer was placed under the administrative control of the General Manager 'instead of the Financial Commissioner, Railways. This organizational change was recommended by the Indian Railway Enquiry Committee, 1937. (more commonly known as the Wedgwood Committee) on the pattern of the British Railway practice to ensure full contact an adequate co-ordination between the General Manager and his Chief Accounts Officer. While making this change on the Indian Railways, the Chief Accounts Officer was redesigned as the Financial Adviser & Chief Accounts Officer. It was, however, a condition precedent to this arrangement that the Financial Adviser and Chief Accounts Officer would have access to the Financial Commissioner in all important matters on which he might be in disagreement with the General Manager not only as regards accounting regularity but also on questions of financial prudence. This arrangement was initially tried as an experimental measure on two State Railways (the North Western Railway and the Great Indian Peninsular Railway) with effect from November, 1938 and was made permanent in 1941 when it was extended to all Government Railways.

Ministry of Railways (Railway Board)

Stage V: Setting up of a distinct Finance Branch under the Financial Adviser & Chief Accounts Officer for placing at the 'disposal of the General Manager an improved machinery for financial advice and control'. Again, this scheme was initiated as an experimental measure in November, 1947 on one of the Railways, the then B. B.& C. I. Railway, and was later adopted permanently on all Indian Government Railways.

With the completion of the above- mentioned five stages, the administrative and financial set- up of the Ministry of Railways has achieved its present unique character viz.,

a) This Ministry has been fully delegated with powers relating to all Railway matters;
b) The Railway Ministry is managed entirely by railway men, and
c) The Railways have their own independent and integrated financial set up, i. e.—
    i) The Railway Ministry enjoys full powers of financial sanction to expenditure, and
    ii) Accounts are maintained by the Railway's own accounting Cadres and not by the Comptroller & Auditor General.

105. The Member Finance (erstwhile Financial Commissioner), is the professional head of the Railway Financial Organization and represents the Government of India, Finance Department on the Railway Board. In his capacity as ex-officio Secretary to the Government of India in the Ministry of Railways in financial matters, he is vested with full powers of the Government of India to sanction Railway expenditure subject to the general control of the Finance Minister. This arrangement is intended to ensure that financial control over operations of the Railway Department is exercised from within the Organization by an officer who shares with the Members of the Railway Board and the Chairman the managerial responsibility as a senior partner in the common enterprise of efficient and economic working of the Railway undertaking. In the event of a difference of opinion between the Member Finance and other Members of the Boards the former, has the right to refer the matter to the Finance Minister.

106. In the discharge of his responsibilities as head of the Railway Finance Organization, Member Finance, may issue or cause to be issued, instructions to the Financial Adviser & Chief Accounts Officer, on all accounting and administrative matters. These instructions will be communicated to the General Manager and it is the duty of the Financial Adviser & Chief Accounts Officer, to give effect to them. The latter should, however, keep the General Managers in touch with such correspondence as may be exchanged by him direct with Member Finance, or officers in the Railway Board working under him.

107. At the time of the initial transfer of control over the Railway Accounts Department to the General Manager, the following stipulation was made by the Railway Board on the functions and responsibilities of the Financial Adviser & Chief Accounts Officer in regard to tendering of financial advice—

> "At present the duty is imposed on the Financial Adviser and Chief Account Officer of advising the General Manager to make a reference to the Railway Board in the event of the former disagreeing with the latter on any matter of financial or accounting importance, or making such a reference himself should the General Manager be unwilling to do so. The

change involved in the proposed delegation of control of the Accounts Department will not relieve the Financial Adviser and Chief Accounts Officer of this obligation. It will on the contrary lead to emphasize his special responsibility in this regard which it must be clearly understood relates not only to matters of accounting propriety but also to important matters of financial prudence, whether within the financial powers delegated to the General Managers or not."

This stipulation is still valid.

108. The main function of the Finance Branch under the control of the Financial Adviser & Chief Accounts Officer is to assist the Railway Administration in considering all proposals involving financial implications in accordance with the generally accepted standards of financial prudence and propriety. In the business of rail transportation, as in any other business, there is hardly any activity or service which does not involve considerations of finance in some form or the other. The Finance Branch is thus an important limb of the Administration and its functions are broadly analogous to those of the Management Accountant, viz., to assist management (a) in making rational plans and decisions, (b) in controlling the operations of the Railway Administration as a whole, and (c) in controlling the operations within the various responsibility areas of the Administration. The role of the Finance Officer has changed, over the years, from that of a mere 'friendly critic" to one of complete 'management participation". This role is in no way abated by the fact that in case of disagreement, when he has been over-ruled by the General Manager, the Financial Adviser *&* Chief Accounts Officer may request the General Manager to make a reference to the Railway Board for orders, and the General Manager would be under an obligation to make such a reference incorporating therein fairly and fully the comments and views of the Financial Adviser & Chief Account Officer. The success of the Finance Branch would depend on the spirit and the manner in which its services are utilised by the Executive Departments. The relations between the latter and the Finance Branch should, like all inter-departmental relations, be based on mutual confidence and free and full consultation.

109. One of the important functions of the Financial Adviser & Chief Accounts Officer relates to compilation of budgets and setting up of a satisfactory system of Budgetary Control. While the initial preparation of the budgets is the responsibility of the Departmental Officers concerned, the scrutiny and compilation of the Railway's Budget as a whole will be the responsibility of the Financial Adviser & Chief Accounts Officer.

110. The Financial Adviser & Chief Accounts Officer is assisted at the Headquarters office by Deputy Financial Advisers who, in turn, have a number of Accounts Officers reporting to him in connection with their respective duties involving financial scrutiny of proposals emanating from various departments of the Railway Administration. The Deputy Financial Adviser is also the Budget Officer of the Railway and, as head of the Budget Branch of the General Manager, he is expected to exercise control over the budgetary allocations of the Railway Administrations.

111. While at the Headquarters level the financial functions, as distinct from the functions of internal check, are performed by a separate group of officers, both these functions are combined at the Unit level in the Divisional Accounts Office, or the Workshop/Stores Accounts Office as the case may be.

112. The scope of financial scrutiny of proposals before obtaining the sanction of the competent authority may broadly be considered under the following two situations:—

a) Where a proposal is within the powers delegated to the General Manager and Officers subordinate to him; or

b) Where the proposal requires reference to the Railway Board, being either beyond the powers of the General Manager or involving an important matter of principle/policy.

113. In cases of proposals involving financial implications, which require reference to the Railway Board, it is necessary to furnish not only the technical and administrative aspects of the case but also a review of it from the financial angle, such a review being based on all the information which may be locally available. It is obligatory on the Railway Administration to furnish to the Board a verbatim copy of the opinion expressed by the Financial Adviser & Chief Accounts Officer with every such proposal, unless it has his unqualified concurrence in which case the fact that he has concurred in the proposal should be indicated in the letter addressed to the Railway Board. The Financial Adviser & Chief Accounts Officer's appreciation of the proposal accompanying the Administration's letter should be sufficiently comprehensive and should not only contain his comments, if any, on the facts adduced in justification of the proposal but should also mention its financial and budgetary implications and his views as to its financial prudence.

114. For the speedy disposal of business, the Central Government have delegated most of their powers in financial matters to authorities subordinate to them. These powers have to be exercised, inter alia, subject to observance of the rules and accepted standards of financial propriety. Proposals which are within the competence of sanction of the General Manager and authorities subordinate to him, and which require prior consultation with the Financial Adviser *&* Chief Accounts Officer, should be subjected to close scrutiny from the point of view of need, scope and financial propriety of the proposal in the same manner as in the case of proposals which are referred to the Railway Board for orders.

115. There can be no hard and fast rules on how precisely the financial scrutiny of proposals received from the Executive Departments should be carried out. The objective is to secure maximum efficiency in railway operations at the minimum cost, without unduly sacrificing one for the other. The functions of Railway Finance Officers have now developed beyond the traditional bounds of those of the financial Accountants. These are no longer restricted to tendering advice to the Administration whenever required or necessary in all matters involving railway finances. The Finance

Officer's job as a Management Accountant is to furnish and interpret financial statements, compile cost data and prepare cost reports, explore avenues of controlling staff and material costs, institute and operate budgetary control procedures, and participate in all Capital expenditure and rating/pricing decisions duly employing tools of analyzing financial decision such as IRR, Sensitivity Analysis etc. This involves an irrevocable commitment to Management, and calls for a high degree of professional training and competence. At the same time the Finance Officer should see that the standards of financial propriety (Para 116), expected of all Public Servants in the operation of public funds, are strictly observed.

116. Standards of financial propriety. —In the exercise of their financial powers, the sanctioning authorities must pay due regard to the following principles: —

1) The expenditure should not prima facie be more than the occasion demands, and that every Government servant should exercise the same vigilance in respect of expenditure incurred from public moneys as a person of ordinary prudence would exercise in respect of the expenditure of his own money.

2) No authority should exercise its powers of sanctioning expenditure to pass an order which will be directly or indirectly to its own advantage.

3) Public moneys should not be utilized for the benefit of a particular person or section of the community unless—

    i) The amount of expenditure involved is insignificant; or
    ii) A claim for the amount could be enforced in a court of law; or
    iii) The expenditure is in pursuance of a recognised policy or custom.

4) The amount of allowances, such as travelling allowances, granted to meet expenditure of a particular type, should be so regulated that the allowances are not, on the whole, sources of profit to the recipients.

*****

CHAPTER-II
Financial Appraisal Of Railway Projects

201- 202	General Principles
203	Scrutiny by Accounts officer
204-205- 206-207	Test-of Remunerativeness
208 - 209	Provision of Rolling Stock
210	Scheme for change of traction
211-212- 213-214	Revenue estimate
215-217	Assessment of working expenses
218	Provision for depreciation
219	Normal Lives of assets
220,220A	Technique of financial appraisal of projects, DPR for Technical and financial appraisal of projects
221-222	Accounting rate of return method
223-224	Pay back period method.
225	Discounted cash flow
226-227	Net present value (NPV) or Net Present Worth (NPW)
228	Annual Cash Flows
229-230- 231-232	Rate of return under D.C.F.
233	Residual Value
234	Alternative Schemes
235, 235A	Economic Evaluation
236 - 237	Replacements and Renewals
238	Reconditioning
239 - 240	Scrapping, condemning and abandoning assets
241 - 242	Second hand value
243	Post-projects appraisal
244 - 247	New Lines
248 - 252	Open Line Works

Annexures	
Annexure A	Check list with detailed notes for guidance of zonal Railways and concerned branches in Railway Board's office, in the preparation of Project Estimates.
Annexure B	Sinking fund Payment Table
Annexure C	Interest formulas and tables for Discounted Cash flow techniques
Annexure D	Rate of return-using Discounted Cash Flow method.
Annexure E	Examples illustrating application of DCF techniques in the financial appraisal of

	railway projects.
Annexure F	Economic evaluation of Railway investments
Annexure G	Examples illustrating the method of financial justification to be adopted in the replacement, reconditioning or abandonment of existing assets
Annexure-H	Examples, illustrating the determination of second hand value of assets .
Annexure- I	Economic Appraisal Framework for evaluation of railway project
Annexure-J	Proforma for submission of Detailed Project Report

*****

CHAPTER II

Financial Appraisal Of Railway Projects

201. General Principle -Indian Railways is part of infrastructure Ministry and hence substantial investments are to be made for augmentation of capacity and expansion of network which require large investment. Investment decisions are the most important decisions to be made. It is fundamental to railway system as a commercial undertaking that expenditure other than that wholly chargeable to Ordinary Revenue incurred on new assets or for improvement of existing assets should be financially justified and no expenditure should be incurred without sanction. Moreover these decisions are to be made by keeping long term perspective in mind and treating IR as a national asset.

202. As an exception to Para 201, while no financial justification as such need be given in the following cases, it should be seen that the scale of expenditure incurred is as economical as possible consistent with the extant orders, if any, on the subject:-

a) when the expenditure is incurred on a statutory obligation;
b) when the expenditure is unavoidable on considerations of safety;
c) when the expenditure is incurred on customer amenity works; and
d) when the expenditure is incurred on labour welfare works except residential buildings for which special rules are applicable.

Note -

1) When expenditure on any of the above items forms part of a scheme and is not essential independently of the scheme, the total cost of the scheme, inclusive of the cost of the above works, should be financially justified.

2) In the case of savings in engine days or wagon days or both by avoidance of or reduction in detentions to stock, etc., the financial justification should be worked out on the basis of increased locomotive or wagon, etc., utilization and consequent postponement of the purchase of new engines or wagons, etc., if such saving can be definitely secured, and not on the basis of the earning capacity of the stock saved.

3) Savings on a particular railway should not be taken into account if they mean a loss on another railway. In such cases, the interest of railways as a whole should be considered.

4) No credit should be given to a proposed scheme for a saving which can be achieved regardless of whether the proposed scheme is or is not embarked upon.

5) If flag stations are included in the new scheme, the cost of operating them should be taken into account as an item of expense in working out the financial justification of the scheme.

6) Where a number of works required in connection with and/or increasing the line or transhipment capacity have to be carried out on different stations of a section as part of a scheme, the financial justification should be worked out for the section as a whole, as it might be difficult to allocate anticipated savings to individual stations.

7) Expenditure on works required for meeting statutory obligations or on consideration of safety should be subjected to proper scrutiny to see if the proposal is the result of a fresh development not already covered by the existing rules, or for implementation of a new recommendation of the Standing Safety Committee (accepted by the competent authority) or any Commission of Enquiry set up by Government, as the case may be.

203. Scrutiny by Finance & Accounts Officer -The **Finance &** Accounts Officer in his position as the Financial Adviser to the Administration, should carefully scrutinize the justification for proposed expenditure with reference to the principles enunciated in this Chapter and other orders on the subject. Even in cases where the return on the investment is not the determining factor, it will be incumbent on him to examine and offer his advice on the general merits of the proposal in the spirit of a prudent individual spending his own money.

204. Test of remunerativeness: The net financial gain expected to accrue from a project be either by way of savings in expenditure or increase in net earnings (i.e. gross earnings less working expenses),or a combination of both. Except in case residential buildings, assisted sidings and rolling stock to which special rules are applicable, no proposal for fresh investment will be considered as financially justified unless it can be shown that the net gain expected to be realized as a result of the proposed outgo would after meeting the working expenses or average annual cost of service(see para217) yield a return of not less than 10 percent under DCF method on the initial estimated cost.

(Authority:F(X)-II/2011/ROR/1 dated 05.10.2017)

Note-

1) Interest during construction should be added to the cost (excluding that chargeable to Revenue) of the projects, the construction of which is likely to last for more than one year.

2) Depreciation should be calculated on the total cost of the scheme and not only on the portion chargeable to Capital, unless the contrary procedure can be justified in any particular case. However, depreciation as an element of working expense is to be ignored for assessing annual cash flows under the DCF Method (see para 228).

3) In the case of construction of bridges, maintenance charges should include, besides the Maintenance charges on the bridges proper.

4) The element of interest charges, vide item (d) of para-215, should be ignored in determining the average annual cost of service in the case of a new project, though it should otherwise be included for the purpose of working out the comparative cost of two or more alternative schemes.

205. Following is an illustrative list of the various types of investment proposals which must pass the prescribed test of financial remunerativeness:

a) New Lines: -
   1) Project oriented or 'single purpose'.
   2) General purpose.

b) Line Capacity Works-
   1) Gauge conversions.
   2) Doublings.
   3) Major Signalling Schemes i.e. Tokenless Block Working, Automatic Block Signalling, CTC, Route Relay Interlocking, KAVACH etc.
   4) Lengthening of loops and/or provision of additional loops.
   5) Crossing stations.
   6) Strengthening of electric traction distribution system and/or major modifications to electric traction installations.

c) Yard Remodelling and Terminal Facilities-

1) Marshalling yards.
2) Goods and passenger terminals.
3) Transhipment points.

d) Telecommunication Works.

e) Electrification and provision of Loco Sheds herefore

f) Introduction of new services- Passenger trains, container services, etc.

g) Workshops-
1) Production Units.
2) Repair Units.

206. It may sometimes be necessary to reject a more economical alternative, because of considerations on which it is difficult to put a precise money value. If on the strength of any such factor a proposal is adopted that is less economical than its alternatives, the reasons determining such a choice should be recorded in the report of the estimate containing such proposals. In those cases in which the reasons as recorded are not accepted by the Finance & Accounts Officer, the latter should offer his remarks in his certificate of verification of the estimate concerned, so that these remarks may be taken into consideration by the authority sanctioning the proposal.

207. In regard to works proposals which are intended to increase line capacity, detailed traffic surveys should be conducted by a team consisting of officers of requisite status and experience from the Commercial/Operating Department and the Finance & Accounts Department. Where the traffic survey is conducted along with an engineering survey (Reconnaisance, Preliminary Engineering or Final location), the traffic survey report should be prepared under the general guidance of the Leader of the Team who will be an officer of appropriate status from the Civil Engineering Department.

208. Provision of Rolling Stock –Investment proposals for purchase/manufacture of additional rolling stock are to be justified on the basis of a general increase in the level of traffic which may or may not require line capacity works being taken up at the same time for the anticipated level of traffic. Where a line capacity work is justified due to anticipated increase in traffic, and also in the case of proposals for new line construction, the initial cost estimate should, for the purpose of Project appraisal, invariably include the cost of the rolling stock and the financial return on the project should be measured with reference to the overall initial cost of the project including the cost of rolling stock.

209. A very substantial part of the capital employed on the Railways is represented by the investment in rolling stock. The assessment of rolling stock required for moving additional traffic is directly related to the targets for movement of freight traffic, commodity-wise as projected by the Planning Directorate of the Railway Board. For additional passenger coaches, the Planning Directorate makes a forecast of the rate of growth of passenger traffic over a specified plan period. This detailed exercise should take into account the existing and projected operating parameters and efficiency indices such as wagon turn-round, provision for 'sickness', requirements for busy season, etc. In all cases where a distinctly new type of rolling stock is proposed to be acquired or manufactured, a detailed financial appraisal should be made of the proposed investment to see that it yields the requisite financial return.

210. Scheme for change of traction –Projects connected with the electrification are best formulated on a long term basis after considering the relative claims of the various high density sections of the Railways for better traction. A thorough techno-economic appraisal should be made in respect of each of the various sections proposed to be taken up for change of traction. Wherever possible, priorities for taking up the scheme for change of traction should be determined on the basis of the relative financial return expected from the various alternative schemes.

211. Revenue estimate –The revenues expected from additional traffic whether on the existing line or on a new line should be very carefully estimated in the traffic survey report. The estimate of revenues should be worked out for each commodity and for the lead from its origin up to the point of termination of the traffic. It should be ensured, however, that in case line capacity works are required to be undertaken in the contiguous section or Railway system over which the additional traffic is expected to be moved, the initial cost estimate for the scheme takes into account the cost of such additional line capacity works over the entire lead of the traffic.

212. In the case of a 'project-oriented' new line, i. e., when a new railway line is proposed to be built to serve the needs of a specific project or industrial complex, the estimated revenue from the traffic which will move on the line should be assessed realistically in consultation with the authorities concerned with that specific project. It is, however, essential that the Traffic Survey Team also makes its own independent assessment of the likely traffic which the project is expected to generate, instead of placing complete reliance on the data furnished by the Project Authorities or, in the case of a public sector undertaking, the concerned Department of the Government. The traffic survey officers must deeply probe into the various stages of scheduling of the project; e. g. what commitments have been entered into by the

Project Authorities and whether the progress in the execution of the project is adequate to justify any specific claim in respect of the anticipated traffic. While working out the additional revenue from the traffic expected to move on the new line over its entire lead, the Railway Administration should make a careful assessment of the line capacity works required or terminal or any other facilities to be developed on the contiguous section/Railway system to carry this traffic. As stated in Para- 211, if additional works are considered necessary, the scope and cost thereof should be defined and included in the main project estimate. In case it is considered that adequate line capacity exists in the contiguous section or Railway system so that the additional traffic on the new line can be carried throughout its lead on the Railway without any hindrance the Railway Administration should confirm that no additional works would be required to be undertaken anywhere on the system to carry this traffic.

213. This approach inevitably involves grouping of a number of works with a common (or complementary) objective, such as for movement of additional traffic by improving line capacity, or for avoidance of detention to trains through yards. 'Group Justification' in such cases should be worked out for the project as a whole in case the individual works cannot stand on their own and must necessarily be taken up as part of a single project. However, where each of the works is self-contained, selection of priorities after consideration of various alternatives should necessarily be done with a view to 'sub-optimization', i.e. to realise the optimum benefit for the project by substituting the less remunerative sub-works by those anticipated to improve the return further.

214. Before proposals are made out for new marshalling yards or major remodeling of existing marshalling yards or mechanisation of marshalling yards, goods terminals and transhipment yards, etc., a work study team should go into the actual working and suggest such improvements in operation as can be achieved even with the existing facilities. Additional facilities should be justified only after all the possibilities of improvement in working by optimum utilisation of the existing assets have been fully explored and evaluated. For line capacity works generally Master Charts should be prepared of the existing (optimum) capacity, the extent to which it is presently utilised, and the capacity expected to be available after the provision of the proposed facilities. The additional traffic beyond the optimum existing capacity of the section should only be reckoned for financial appraisal.

215. A. Assessment of Working expenses/Average Annual Cost of Service –
The average annual cost of service of an asset is the sum of:

a) The average annual cost of operation;
b) The average annual cost of maintenance and repairs of the assets;
c) The annual depreciation charges (but see para 228);and
d) Annual interest charges on the cost of the asset.

Note.–In computing working expenses in financial evaluation of any capital expenditure proposal under D.C. F. technique, only items (a) and (b) above should be reckoned.

215 B. Average cost per unit of service -The average cost per unit of service is obtained by dividing the average annual cost of service by the total number of units of service rendered by the asset in a year. In comparing two assets on this basis, care must be taken to see that the number of units of service taken into account in both cases represent the actual number utilised or consumed. Units of service rendered by either of the assets in excess of the actual requirements should be ignored in computing the cost per unit of the asset.

216. For the purpose of assessment of the average annual cost of operation and maintenance, full use should be made of the traffic costing data relevant to the investment proposal under consideration. Correct application of the cost data and, in particular, assessment of the direct/variable and the indirect/fixed or semi-variable costs is very important in arriving at a realistic estimate of the working expenses in respect of the proposed scheme.

217. In applying the unit cost data for working out the cost of moving the additional anticipated traffic, it has to be considered whether it would be reasonable to adopt the 'incremental cost' approach or to take 'fully distributed costs' into account. Logically, it would be realistic to work on the basis of 'incremental costs' for any small increases in traffic and over the short run. In the long run, however, even the so-called fixed costs will vary, and the incremental or marginal costs may fail to cover such semi-variable expenses. On the other hand, it would be equally unreasonable to apply fully distributed costs in all cases while working out the financial implications of a line capacity work. A realistic (though somewhat conservative) approach would, therefore, be to adopt 'long term variable costs' (based on percentages given at the end of Annexure 'A' for each item of cost) which will ensure not only that projects are not thrown out because of the adoption of the 'fully distributed costs' but also that a project is considered as remunerative so long as it yields the requisite return after meeting the 'long term variable costs'.

218. **Provision for depreciation-** Depreciation provision in respect of an asset will be equal to the annual payment to a Sinking Fund which, together with the interest thereon at such rates as may be prescribed by the Railway Board, when compounded annually, will provide the amount required for the replacement of the asset at the end of the normal life. The duration of the Sinking Fund payment will be determined by the 'normal life' of the asset, and the amount of the annual Sinking Fund payment will be ascertained by referring to the table reproduced as Annexure 'B' to this Chapter, which shows the annual amount payable at different rates of interest ranging from 2% to 8% (over periods extending up to 100 years).

219. Normal lives of assets– For the purpose of the annual Sinking Fund payment referred to in para 218, the normal life of the various classes of railway assets should be taken as in the table below (However, instructions issued from time to time from Board's Office regarding Codal Life may also be referred to):-

(i) CIVIL ENGINEERING ASSETS:					
S.No.	**Class of Assets**	**Average life in years**			
		ROUTES			
		A & B	**C(Sub)**	**D**	**E***
1. **RAIL & FASTENTING etc.**					
1	**Rail & Fastenings**				
(a.1).	Rails (60kg)	25	19	38	38
(a.2)	Rails (52 kg)	20	15	30	30
(b).	Wooden Sleepers	10	10	10	10
(c.1)	Metal sleepers (Cast Iron & Steel)	20	20	20	20
(c.2)	Fittings steel trough	10	10	10	10
(d).	PSC Sleepers	35	35	40	40
(e).	**Elastic Fastenings**				
(i)	Elastic Rail clips	8	8	10	10
(ii).	Rubber Pads (GRSP)	4	4	4	4
(iii)	Rubber Pad (CGRSP)	8	8	8	8
(iv)	Metal Liners	8	8	8	8
(v)	GFN Liners	4	4	4	4
(f) Switches					
(f.1)	Switches (52 kg)	4-6	4-5	8-10	8-10

(f.2)	Switches (60 kg)	5-8	4-6	10-12	10-12
(f.3)	Thick Web Switches	14-18	13-16	20-24	20-24
(g).	Crossings	7-8	6-7	10-11	10-11
2 (A). MAJOR BRIDGES					
(a).	Bridges work- Steel work	60			
(b).	Bridge Masonry	100			
(c).	Structures Steel	60			
(d).	Structure- masonry and cement concrete	65			
(e).	RCC Bridge Works	60			
(f).	Pre-stressed concrete-Bridge work	40			
(B). MINOR BRIDGES					
(a).	Bridges work-Steel work	60			
(b).	Bridge Masonry	100			
(c).	Structures Steel	60			
(d).	Structure- masonry and cement concrete	65			
(e).	RCC Bridge Works	60			
(f).	Pre-stressed concrete-Bridge work	40			
3. FOOT OVER BRIDGES					
(a).	Bridges work-Steel work	60			
(b).	Bridge Masonry	100			
(c).	Structures Steel	60			
(d).	Structure- masonry and cement concrete,	65			
(e).	RCC Bridge Works	60			
(f).	Pre-stressed concrete-Bridge work	40			
4	TRACK MACHINE (All Categories)	15			

*Service life as indicated in the table is general life/service life for track components. However, renewal/replacement will be subject to various criteria laid down in IRPWM about its condition.

(ii) **COMPUTERS AND OTHER IT SYSTEMS:**		
S.No.	**Class of assets**	**Average life in years**
1(a)	Servers and storage devices (enterprise class)	8
1(b)	Network active devices (Routers, switches etc.)	6
1 (c)	Network passive devices (Patch panels, outlets, network cables)	10
1(d)	UPSs (>/= 50 KVA), cooling equipment (PACs, Chillers) Fire suppression systems for Data centers	8
2 (a)	UPSS< 1KVA	4
2(b)	UPS>1KVA, <50 KVA	8
3	PCs	4
4	Portable computers/Laptops, Tablets, Workstations	4
5	Thin clients / Dumb terminals (for PRS/UTS/ATVMs etc	4 years
6	Printers (All type) including MFD	5 years
7	Biometric Machines	4

Note *ATVM (composite unit) earlier at S.No.7 deleted

(iii) <u>ELECTRICAL ASSETS</u>

S.No.	Class of assets	**Average life in years**
1	Electric Locomotives	35
2	EMU/Metro Motor Coaches and EMU/Metro Trailor Coaches	25
3	Rail Bus	15
4	Over Head Power Lines	40
5	Over Head Traction Line excluding contact wire	60
6	Electric under ground Cables	30
7 (a)	Electric contact wire (Alm.)	25
(b)	Electric contact wire (Copper)	40
8	Electric Power plant excluded oil engine driven	25

9	Electric Plant above 25 HP		25
10	Electric power plant oil engine driven (diesel)		15
11	Overhead traction lines contact wire		40
12	Electric Machinery others		30
13	Electric Sub Station Building		50
14	Water Cooler, Refrigeration, Air Conditioner, hospital and domestic appliance		10
15	Internal wiring of building	Coastal area	15
		Non-coastal area	20
16	Switch Gear		25
17	Instruments		25
18	Electric Pumps		20
19	Electric Lifts & Hoist		20
20	Ceiling Fans		20
21	Electric Battery charging set		15
22	Flood Light Projection		10
23	Battery lead Acid		4
24	(a) Coach wiring (old)		12
	(b) Coach wiring (e beam)		18
25	Carriage Fans		10
26	Air conditioner Central unit – above 3 tons		10
27	Safe load Indicator		8
28	Pantry equipments		6
B) Equipments required for replacement through DRF/ Sinking Fund			
S.No.	**Class of assets**		**Average life in years**
1	**AC EQUIPMENT**		
(i)	25 KVA Inverter		15
(ii)	AC Control Panel		15
(iii)	Inverter Panel		15
2	**TL Power Equipment**		
(i)	4.5/25 KW Alternator		12

(ii)	800 A.H.L.A Battery	Delete
(ii)	1100 AH VRLA (SMF) Battery	4.5
(iii)	Diesel Engine for Power Cars	(i) 20 years for those assets which have completed less than 10 years (ii) 16 years for those assets which have completed over 10 years.
(iv)	Alternator for Power Car	
3	**Electric Locomotive Equipments**	
(i)	All Electric rotating machines up to 25 HP used on Electric Locomotives, EMU's Coaches and stationary items	12
(ii)	All Electric rotating machines above 25 HP and upto 750 HP used on Electric Locomotives, EMU's Coaches and for stationary items	12
(iii)	Traction Motor	18
(iv)	Traction Converters	18
(v)	Auxiliary Converters	18
(vi)	Control Electronics	18
(vii)	Tap-Changer	35
(viii)	Rectifier Block	18
(ix)	Traction Gears	12
(x)	Motor Suspension	12
(xi)	Bogies with Wheel	18
(xii)	Armature for Traction Motors	15
(xiii)	Stator for Traction Motor	18
(xiv)	Commutator for Traction Motor	15
(xv)	Locomotive re-cabling	18
4	Microprocessor based control and fault diagnostic system	12
5	Speedometer cum recorder and monitoring system	10
6	BA Panel	18

7	VCB		18
8	DBR (roof mounted)		9
9	DBR (vertical mounted)		9
10	Pantograph		12
11	**TRD Equipments**		
(i)	Current/Potential/transformer		30
(ii)	Earthling system in sub-station etc.		15
(iii)	Lightning arrestor (Gapless type)	(a) 42 KV)	15
		(b) 96 KV/120 KV/198 KV	20
(iv)	Lightning arrestor (Convertor type)		15
(v)	Buster & Terminal connection		30
(vi)	Battery charger		20
(vii)	Relay (Electromechanical)		15
(viii)	Relay (Electronic)		15
(ix)	Instruments (Electrical)		30
(x)	Instruments (Electronic)		30
(xi)	Relay testing kit & other testing equipment		15
(xii)	**OHE conductors & components - For Normal Zone**		
(a)	**OHE fixed structures**		
(i)	Mast / Structure / Guy Rod / foundation		80
(b)	**Other than fixed structures**		
(i)	a) Cantilevers assembly		45
(i)	b) All types of insulators	(a) Porcelain	40
		(c) Composite	25
	(ii) Isolators / ATD	(a) Isolators	30
		(b) ATD	32
(c)	**Wires**		
	(i) Catenary / feeder wire / return conductor	60	
	(ii) Contact wire	45	
(xiii)	**OHE conductors & components - For Polluted Zone ****		

**Definition of polluted zone for item xiii under OHE conductors & components (for Polluted Zone)- Zones having ESDD(Equivalent Salt Deposit Density) >0.3 should be considered as Polluted Zone.			
i)	Cantilever assembly &	Cantilever assembly	45
	Insulators:		
	All types of insulators	Composite	25
ii)	ATD		24
iii)	Contact Wire	(a) Silver Brazed/ERB W	40 years/on the basis of condemning dia. whichever is earlier
		(b)Continuous Cast(CC) type	45 years/ on the basis of condemning dia. whichever is earlier
(xiv)	**PSI Equipments**		
(a)	Substation's equipments		
	(i) Power Transformer / Auxiliary Transformers		40
	(ii) All types of cables		30
	(iii) Fixed capacitor bank		20
(b)	**Control equipments**		
	(i) Circuit Breaker, panels, all switchgear and protective circuits		25
	(ii) SCADA system		10
(xv)	**Transmission line equipments & components**		
	(i) 110KV/132 KV, ACSR conductors / Earth wire / insulators / Tower fittings		60
12	Tower Wagons (both 4 wheeler, 8 wheeler & all types)		40
C). Equipments required for replacement through Revenue			
S.No.	**Class of assets**		**Average life in years**

1	**Electric Loco Equipment**	
(i)	Armature for Traction Motor	15
(ii)	Stator for Traction Motor	18
(iii)	Commutator for Traction Motor	15
(iv)	Auxiliary Motor	18
(v)	Arno Converter	18
(vi)	Blower Impeller/Casing	10
(vii)	Locomotive re-cabling	18
(viii)	Power Cables	18
(ix)	Control Cables	18
(x)	Compressor with exhausters complete recondition /replacement	`10/15
2	**AC Equipment**	
(i)	Compressor ACCEL/ CARRIER	Deleted
(ii)	Sealed Compressor KCL make	Deleted
(iii)	Sealed Compressor Maneurope make	Deleted
(iv)	Compressor Motor (DC)	Deleted
(v)	Compressor Motor (AC)	Deleted
(vi)	Condenser Fan Motor (DC)	Deleted
(vii)	Condenser Fan Motor (AC)	Deleted
(viii)	Condenser Fan Motor (RMPU)	12
(ix)	Evaporater Fan Motor (AC)	Deleted
(x)	Evaporater Fan Motor (DC)	Deleted
(xi)	Evaporater Fan Motor (RMPU)	12
(xii)	Compressor (Scroll)	12
(xiii)	Condenser fan	12
(xiv)	Condenser Unit	Deleted
(xv)	Condenser Unit (RMPU)	12
(xvi)	Evaporater unit	Deleted
(xvii)	Evaporater unit (RMPU)	12
(xviii)	Mercury in glass thermostat	Deleted
(xix)	Evaporator Blower Drum	12
(xx)	Microprocessor Controller	12
3	**TL/Power Equipment**	

(i)	4.5/25 KW alternator regulator	12
(ii)	Emergency 90 AH VRL (SMF) Battery	4
(iii)	120 AH VRLA (SMF) Battery	4.5
(iv)	290 AH starting L.MLA Batteries for Power Car	4
(v)	70 AH VRLA Batteries	4.5
(vi)	Power Car power panel	15
(vii)	Power panel (AC coaches)	15
(viii)	Pre Cooling cum battery charging transformer rectifier unit	12
(ix)	50 KVA /60 KVA (750/415 V) transformer unit	15
(x)	3 KVA 415/190 V transformer	Deleted
(xi)	15 KVA, 9KVA, 5KVA, 3KVA coach transformer and control metering transformers (1KVA,500VA, 250VA, 200VA, 100VA)	15
(xii)	Water Raising Apparatus (WRA)	5
(xiii)	Water Boiler for Pantry	5
(xiv)	Hot Case for Pantry	5
(xv)	Bottle Cooler cum deep freezer	5
(xvi)	Ventilation Blower Motor for Power Car	12
(xvii)	Radiator for Power car	15
(xviii)	Radiator Motor for Power Car	15
(xix)	Pump controller	12
(xx)	I.V. Coupler 400A/500A	18
(IV)	**MECHANICAL ASSETS**	
S.No.	Class of assets	Average life in years
	Machinery & Plant	
1	Machine Tools like Lathes, Planners, Drilling, Boring and	20

	Milling machines etc.	
2	High Precision and special purpose machines like wheels Lathes etc.	20
3	Tool Room and Testing Laboratory equipment	15
4	Foundry and Forge Equipment	20
5	Heat Treatment Equipment	20
6	EOT Cranes	36
7	Power Generation Machinery & Switches	Deleted
8	General purpose light machinery e.g. band saw, floor grinder etc.	15
9	Air Compressors	20
10	Other miscellaneous machines eg. Light cleaning machines, test equipment in loco sheds , workshops, depot & sick lines	Deleted
11	(i) Construction Machinery equipment	Deleted
(ii). Track Maintenance equipment		
	(a)Tamping, Ballast cleaning and handling, DTS and relaying machines	20
	(b) Material handling machines	25
	(c) Rail Grinding Machines	15
12	Station machinery like weighing machines etc.	15
13	Miscellaneous machinery and equipment for hospital, offices etc.	10
14	Mechanical Weigh Bridges	Deleted
15	Electronic in motion Weigh Bridges	12

16	Wheel impact Load detector(WILD)	12
17	Diesel Pumps	15
18	Welding equipment	10
19	Diesel Refrigeration equipment	Deleted
20	Material handling equipment like FLT, Lister trucks etc.	10
21	Traversers	25
22	Fuel Station Dispensation Equipment	10
23	(i) Bulldozers and	20
	(ii) Other earth moving equipment	Deleted
24	Motor Boats	15
25	Hydraulic re-railing equipments	16
ROAD VEHICLES		
26	Staff Cars including Jeeps	7
27	Light Motor Vehicles	10 years for Diesel and 15 years for Petrol as per norms
28	Heavy Motor Vehicles	
29	Tractors	
(IV) MECHANICAL ASSET		
ROLLING STOCK		
30	Diesel Electric/ Hydraulic Locomotives	36
30	Diesel Engine	18
31	Shunting Locomotives	36
32	Steam Locomotives	40
33	Boiler and Tender	20
34	Steam Cranes	30
35	Diesel Hydraulic Cranes	25
36	Steel Body Coaches including DMUs / EMUs, Restaurant	25

	Cars etc.		
37	Full Stainless Steel Body Coaches including DMUs/EMUs, Restaurant Cars etc.		30
38	Light utilisation categories of coaches (steel body) like inspection carriages etc.		40
39	IRS Coaches		30
40	Open Bogie wagons with air brakes and Casnub bogies		
(a)	BOXN, BOY, BOBRN, BOBSN		35 years (subject to outcome of structural and financial justification to be conducted for extension beyond 30 years)
(b)	BOBYN		38
(C)	Other open wagons		30
41	Bogie tank wagons with air brakes and Casnub bogies		
(a)	BTPN		45 years (subject to outcome of structural audit to be conducted for extension beyond 40 years)
(b)	Other tank wagons		40
42	All other types of Bogie wagons with air brakes and Casnub bogies		
(a)	BCN		40 years(subject to outcome of structural audit and financial justification to be conducted for extension beyond 35 years)

(b)	All other wagons	35
43	Open Wagons with vacuum brakes and UIC bogies	Deleted
44	Other Wagons with vacuum brakes and UIC bogies	Deleted
45	4- wheeler wagons (open and covered)	Deleted
46	4 – wheeler tank wagons (with plain bearings)	Deleted
47	4- wheeler tank wagons (with roller bearings)	Deleted
	Equipment/Sub assemblies of Diesel locos	
48	Engine Block	18
49	Crank Shaft	18
50	Turbo Super Charger	12
51	Governor	18
52	ECC assembly with RA Gear Box	18
53	Radiator Fan	16
54	Heat Exchangers including radiator	10
55	Expressor/Compressor	16
56	Bogies with wheels	18
57	Traction Motor	18
58	Traction Generator/Alternator	18
59	All electrical rotating machines above 5 HP on Diesel locos	18
60	Rectifiers	18
61	Traction Gear	18
62	Loco Batteries	4
63	Power Cables	18
64	Control Cables	18
65	Blowers	10

66	Armature for Traction Motor	18
67	Stator for Traction Motor	20
68	Control Equipments	18
	Equipment/Sub assemblies of DMUs	
69	Power Pack	16
70	Bogies with wheels	18
71	Traction Motor	18
72	Traction Generator/Alternator	18
73	All electrical rotating machines above 5 HP on DMUs/Rail bus/Railcar	18
74	Rectifiers	18
75	Heat Exchangers	10
76	Batteries	4
77	Power Cables	18
78	Control Cables	18
79	Control Equipments	18
80	Hydraulic Transmission Rehabilitation/Replacement	16

(V) SIGNAL & TELECOMMUNICATION ASSETS			
(A) SIGNALLING SYSTEM			
S.No.	Class of assets	**Routes**	**Average life in years**
1	Electrical/ Mechanical Signalling System	Route-' A'	25
		Route-'C'/Sub Urban section	
		Big Yard (more than or equal to 200 routes) on all Routes	
2	Electronic interlocking	For all routes	20 years or based on obsolescence
3 (i)	Electronic Signalling system like Axle Counter, ATP, AFTC, IPS etc		20 years or based on obsolescence

3(ii)	Kavach (Automatic Train Protection- ATP)	15

(A) SIGNALLING EQUIPMENT

S.No	Class of assets	Life in terms of operations	Average life in years				
			Routes				
			A	B	C/ Suburban	D & D-Spl	E & E-Spl
1	Cranks and Compensators	50,000	2	2	1	4	4
2	Lock Bar Clips	1,00,000	3	3	3	5	7
3	Facing Point Lock with bolt detection	3,00,000	8	8	8	15	15
4	Mechanical Detectors	5,00,000	-	15	—	20	25
5	Circuit breakers	5,00,000	15	15	15	25	30
	Lever locks	-	7	7	7	12	15
6	EK Transmitter	-	10	10	10	15	15
7	SM's Slide Frame	-	30	30	30	30	30
8	Electric Point Detector & Reversors	-	15	15	15	20	20
9	Signal Machines	1,50,000	-	10	-	20	20
10	Signal Wire Transmission	-	3	3	3	3	3
11	Point Machine	3,00,000	12	12	7	15	15
12(i)	Plug-in relay (metal to metal)	15,00,000	25	28	25	28	30
12(ii)	Plug in relays (metal to carbon)	10,00,000	25	28	25	28	30
12(iii)	Track Relay, QL1 and QBCA1 relay		10	10	10	10	10
13	Track Feed battery chargers	-	10	10	10	10	10
14(i)	Transformers		30	30	30	30	30
14(ii)	Battery chargers, DG		10	10	10	10	10

	Sets, inverters, ELD						
15 (i)	Batteries (VRLA)		4	4	4	4	4
15(ii)	Batteries (LMLA)		5	5	5	5	5
16	Block Instruments		25	25	25	25	25
17	Cable		25	25 to 28	25	**30**	**30**
18	Block Instrument Electro Mechanical/Electronics		20	20	20	20	20
19	Electric Lifting Barrier		10	10	10	10	10
20	LED Signals (all aspect types) of specification prior to version 2011		6	6	6	6	6
21	LED Signals (all aspect types) of specification version 2011 or later		8	8	8	8	8

(B) Telecommunication Equipments		
S.No.	Class of Assets	Average life in years
1	Microwave Equipments	12-15 years
2	MTRC Equipments/LTE	15 years
3	(i) Exchange and accessories including telephone equipment	12-15 years
	(ii)Telephone instruments IP/Non IP, Push button telephone, Magneto phones & FCT	8 years
4	Server based IP Exchanges	12 years
5	Underground cables	
	(a) Quad PIJF	25 years
	(b) OFC	25 years
6	Overhead alignment	25 years
7	All other electronic/wireless items including OFC equipment	(i) 10 years for items with RDSO approved specification (ii) 5 years for COTS items
8	OFC measuring equipment	8 years

9	Cell phones	3 years
10	Video Phone & WLL phone	8 years
11	Portable VSAT, Satellite phone	6 years
12	Walkie-Talkie sets/VHF	(i) 6 years – WT
		(ii) 8 years – 25 W VHF
		(iii) 1year-Battery of WT for Drivers/Guards
		(iv) 2 years- Battery of WT for others
13	Datacom Equipments, Router, Modem, Switch (including Core/Aggregation/L-2 switch), Media converter, Active system (viz. MIS systems including external storage systems and their connects) & Passive systems (viz. Networking equipments and cabling), Remote Diagnostics and Predictive maintenance system (NMS), Servers, Network video recorder &Video Conferencing System.	8 years
14	LED display Boards for passenger information system, true colour video cum train information display system and Public Address System (including IP based)	(i) 8 years for items with RDSO approved specification (ii) 5 years for COTS items.
15	GPS based Digital Clocks	(i) 8 years for items with RDSO approved specification (ii) 5 years for COTS items.
16	VOIP based Train Control Communication systems	10 years
17	Voice Logger for Control, auto phones, BSNL phones & LC gate telephone	(i) 8 years for items with RDSO approved specification (ii) 6 years for COTS items.
18	Control Communication & Gate comm..Equipment	8
19	Telecom Battery Charges /SMPS Based power Supply Equipment/Inverters	15

20	CCTV Camera (Fixed dome, PTZ and other type) and associated equipment, video camera	8
21	Large format display monitor/ Video wall & LED/ LCD TV	8
22	Fax	Earlier appearing as item 7 in RBA 25/2006. Shall not be replaced after its normal life.
Note 1.: PCs and Secondary System may be deleted from list of Telecom assets and their life will be as indicated under (ii) Computer and Other IT systems		
Note 2. Para 219 ibid includes all correction slips circulated vide RBA circulars issued upto 12.8.2022		
Note 3: The average life of the assets is detailed above however the actual replacement of all assets shall be based on the condition of the asset.		

220. Technique of financial appraisal of projects- The following methods of appraisal of capital expenditure proposals are commonly used in industrial and commercial undertakings:

a) Accounting rate of return,
b) Pay back period, and
c) Discounted Cash Flow.

Of these, methods, (a) *&* (b) are employed without considering the time value of money. These are also known as the 'Financial statement' methods since the calculation involves data taken from and used essentially in the same form as in financial statements. When time is considered, the method employed for financial appraisal is the Discounted Cash Flow method, also called the 'Present value method', since the time value of money is an explicit consideration.

220 A. DPR for Technical and financial appraisal of projects- Detailed Project Report (DPR) for projects are to be prepared as per Board's guidelines. Proforma for submission of Detailed Project Report is given in Annexure – 'J'.

221. Accounting rate of return method - Under this method, the rate of return is worked out by arriving at a percentage ratio of the net gain (i. e., revenue less working expenses) over the initial anticipated investment of the project. Simply illustrated, it is proposed to construct a masonry building at a cost of Rs.1 lakh to accommodate an

office which is now housed in a building at a rental of Rs.15,000 per annum. It will be necessary to ascertain (a) the average annual cost of maintenance and repairs of the proposed building and (b) its scrap value at the end of its normal life. If these are taken to be (say) Rs. 5,000 and Rs. 10,000 respectively, then the average annual cost of the proposed new building will be (a) Rs.5,000 plus (b) Rs. 801 being the annual sinking fund payments (at 3 per cent for 50 years which is equal to 0.0089 multiplied by Rs.1 lakh minus Rs.10,000), or Rs.5,801 in all. This will result in a saving of Rs. 9,199 (Rs.15,000 minus Rs. 5,801) in the annual rental charges that are presently being paid, or a net return of 9.2 percent on the investment of Rs.1 lakh.

222. A minor variant of the above illustration would be to take the average investment over the life of the asset at half the initial cost, viz., Rs.50,000 on the assumption that depreciation is written off in equal instalments over the life of the asset and the amount invested on the asset will decrease each year as funds are released through the effect of the depreciation charge. In that case the return on the average investment will work out to 18.4%.

223. **Pay back period method -**Since recoupment of the original capital invested in a project is an important consideration in appraising a capital investment, the method of working out the pay back period lays emphasis on the calculation of the time it takes to recoup the expenditure incurred on the project. In the table given below, the pay back period is 5 years, as the accumulation of the net cash flow, year by year equals the initial investment at the end of 5 years:

Original Investment-Rs. 1,00,000
Net Cash Flows (i. e., net earnings or reduction in expenditure) : -

Year	Annual	Cumulative
	Rs.	Rs.
1	10,000	10,000
2	12,000	22,000
3	20,000	42,000
4	30,000	72,000
5	28,000	1,00,000

Under this method no attempt is made to assess the return on the capital invested. It only shows the length of time required to recoup the amount invested on the project, the assumption being that projects with short pay back period are better investment

propositions than those with long pay back periods. Bare recoupment of the amount invested under the pay back period method would yield no return unless a suitable rate of interest return on the capital outstanding in each of the years involved is built into the calculation of the net cash flow.

224. The method of ranking projects, or project grading, on the basis of pay back period is of limited application as it can be employed only in situations where there is a strict time limit to the investment before the expiry of the useful life of the project. An example would be of a proposed investment in a project in a foreign country where the political stability can be foreseen only for a limited number of years, or in plant and machinery involving processes or products that are likely to be replaced by technological changes within a few years or a 'single purpose' new line where the known reserves of coal, iron ore, etc., are expected to be depleted/exhausted after a specific number of years. Though presently not in vogue on the Indian Railways, there is no bar to the application of the Pay Back Period method to evaluation of Railway Projects in consultation with the Financial Adviser and Chief Accounts Officer in the special circumstances illustrated in this Para.

225. Discounted Cash Flow -The accounting 'Rate of Return' (R.O.R.) Method commonly in use on the Railways does not take into account the time value of money. Also, the return on investment is worked out as at the time of completion of the project or at a single point of time (6th year or 11th year) and not through the entire useful life of the project. The R.O.R. method may, therefore, yield an incorrect result depending on the point of time selected for the purpose of project appraisal. A factor of fundamental importance to investment decisions and one which the R.O.R. method does not take into account is the timing of profits and cash flows that result from an investment and this factor is crucial to the Discounted Cash Flow Method of project appraisal.

226. **Net Present Value (NPV) or Net Present Worth (NPW) -**The concept of the time value of money which is basic to the Discounted Cash Flow Method is illustrated thus **:**

Rs.100 receivable today is more than Rs.100 receivable a year hence, as Rs. 100 received today will earn interest or profits and shall accumulate to more than Rs. 100 in a year's time. Alternatively, Rs. 100 received today can be used to reduce borrowing thereby avoiding interest payments as well as reducing debts by Rs.100. Assuming that the Railways' cost of finance is its current dividend rate (say 10% per annum), Rs. 110 received a year hence should be worth Rs.100 today and Rs.100 which may be

received in a year's time is worth about Rs. 91 today (actually it is worth Rs.90.91). Likewise, the present value of Rs.100 receivable 2 years hence is about Rs.82.64, and so on. In this way the cash flow for the project in any future year can be discounted to obtain the present value.

227. The NPV/NPW of a project is sum of the present values of the net cash flows for all the years of the project's economic life. The net cash flow in each year will be the expected net reduction in expenditure or increase in net earnings. The net cash flows are discounted to arrive at the NPV of a project by applying a pre-determined discount rate. For example, consider the following excerpts:

TABLE - A From Col.2 under 'Single payment'			
Present value of Re. 1			
Year	12%	15%	20%
1	0.893	0.870	0.833
2	0.797	0.756	0.694
3	0.712	0.657	0.579
4	0.635	0.572	0.482
5	0.567	0.498	0.402

TABLE-B From Col. 4 under 'Uniform series'			
Year	Present Value of Re.1 received annually		
	12%	15%	20%
1	0.893	0.870	0.833
2	1.690	1.626	1.528
3	2.402	2.283	2.106
4	3.037	2.855	2.589
5	3.605	3.352	2.991

TABLE -B is derived by adding the data in TABLE -A**.** At 20% the 0.833 in TABLE-B is the same as the 0.833 in TABLE-A since the time involved is only one year. The 0.833 and the 0.694 for years 1 and 2 under 20% represent the 1.528 under TABLE-B at 20% in year 2. The 0.833, 0.694 and 0.579 in TABLE-A are added to form the 2.106 in TABLE-B. Thus, it can be seen that TABLE-B is essentially a summation of TABLE-A. With TABLE-B, present value calculations can be made more quickly if the cash inflows

or out flows are constant. Instead of multiplying the same cash flows by the individual items of TABLE-A, one can multiply the annual cash flow only once by the sum of the data in TABLE-A which is conveniently arranged in TABLE-B.

228. **Annual Cash Flows-** It is important that the annual cash flows should be estimated on a realistic basis. By definition, the cash flow will take into account only the realisable revenue and cash expenditure or, in the case of expenditure reducing projects, the net reduction in cash expenditure. Purely accounting adjustments such as depreciation and other provisions are to be completely ignored. The reason is that cash flow is the foundation of the NPV and depreciation is an expense item not involving a flow of cash. It is implicit in the basic arithmetic of the D.C.F. Method of project appraisal that so long as the cash flows are adequate from year to year and the NPV computed at the requisite discount rate equals or exceeds the investment, the capital invested in the Project will remain intact. This is shown by a solved example below :

Basic data-
Initial investment- Rs. 4,00,000
Annual Cash Flow- Rs. 1,00,000
Life of the Project- 10 years
DCF rate of return (say)- 21.4%(See Para 230)

Year	Capital in the beginning of the year	Net surplus the year	Payment of interest @ 21.41 %	Recovery of Capital	Capital at the end of the Year
(1)	(2)	(3)	(4)	(5)	(6)
1	4,00,000	1,00,000	85,652	14,348	3,85,652
2	3,85,652	1,00,000	82,580	17,420	3,68,232
3	3,68,232	1,00,000	78,919	21,081	3,47,151
4	3,47,151	1,00,000	74,335	25,665	3,21,486
5	3,21,486	1,00,000	68,840	31,160	2,90,326
6	2,90,326	1,00,000	62,168	37,832	2,52,494
7	2,52,494	1,00,000	54,067	45,933	2,06,561
8	2,06,561	1,00,000	44,231	55,769	1,50,792
9	1,50,792	1,00,000	32,289	67,711	83,081
10	83,081	1,00,000	17,790	82,210	871
				3,99,129	

The small margin of difference (Rs.871) is accounted by the error in interpolation of the rate of return. It will be seen that at the discount rate of 21.41%, the project has recovered the original cost in full (Col. 5), apart from paying off interest at the same rate.

229. **Rate of return under D. C. F.-**Two alternative methods can be used for assessing the viability of a project under the D. C. F. technique. For example, assuming an even cash flow of Rs.4,000 per annum over a period of 10 years in respect of a project where the original investment is estimated to be Rs.18,000, it will be observed from the following table that the discount factor of 4.5 (18,000 ÷ 4,000) occurs against the 10th year under the discount rate of 18%:

	Present value of the Re. 1 received annually		
Year	16%	18%	20%
8	4.344	4.078	3.837
9	4.607	4.303	4.031
10	4.833	4.494	4.192
11	5.029	4.656	4.327

In this case the rate of return under the D.C.F method for an even cash flow of Rs.4,000 per annum for an investment of Rs.18,000 will be about 18%. Since the D.C.F. return of 18% is more than the minimum acceptable rate of return (say 10%) , the project would be considered desirable from the financial point of' view. Under an alternative method, the minimum acceptable rate of return (say 10%) would be applied to calculate the NPV of the project. If the NPV is (zero or) positive, it would be financially acceptable, and if the NPV is negative, the project will not be financially acceptable. In judging the ranking of competing projects, under the first method, the D. C. F. rate of return would be used and whichever project gives the higher rate of return would be preferred. Under the second method, the competing projects will be ranked according to their NPV and whichever project gives a higher NPV at the minimum acceptable rate of return would be the preferred project.

230. Another illustration may be given of a case where the initial outgo of (say) Rs. 4,00,000 is incurred in one year and the project starts giving a net cash flow of Rs.1,00,000 per annum over 10 years thereafter. Discounted cash flow at various rates of interest would be as shown below where the cash flows are uniform throughout the project life:

	10%	20%	25%
Factor for 10th year	6.145	4.192	3.571
NPV for even cash flow of Re. 1 lakh per annum	6,14, 500	4,19,200	3,57,100
	R.O.R. will be about 21.41%		

231. The simple illustrations given above presume that the investment is completed in one year and the project starts yielding a return immediately thereafter. Where the investment is spread over a number of years, it is necessary to work out the value of the investment, by applying the relevant rate of interest, from the inception up to the point when the project is expected to be ready for operation, the rate of interest being the minimum acceptable rate of return of (say) 10%. In the illustration given in the preceding para, if the investment of Rs. 4,00,000 is assumed to have been spread over a period of three years including the year in which the project was completed, the total investment, inclusive of interest, up to the year of completion would be as shown below :-

	0%	10%
Year	Interest Rs.	Interest Rs.
-2	1,00,000	1,21,000
-1	1,50,000	1,65,000
0	1,50,000	1,50,000
Total investment	4,00,000	4,36,000

In this case, if the net return over the life of the project of ten years assumed in the earlier illustration is constant amount of Rs.100,000, the return would be about 18% instead of 21.41 % worked out in Para 230.

232. A short write-up on the technique of working out the rate of return under the Discounted Cash Flow Method is at Annexure 'D'. Detailed examples of railway projects showing application of the D. C. F. technique are given in Annexure 'E'.

233. **Residual Value -**Each project will have an estimated life span at the end of which the various assets will be disposed of or put to other uses. The flow of funds created by the sale or disposal of the assets at the end of the life of the project should

be estimated so that appropriate credit can be given to the project in the year in which the flow of funds is expected to occur by the sale or disposal of the assets. Since all the assets may not be discarded or sold at the same time, the cash flows resulting from residual values should be allocated to the years in which they are likely to be received. If some of the assets are to be taken out of service and disposed of before the termination of the project, the resultant cash flows must be included in the appropriate years.

234. **Alternative Schemes -** Equivalent Annual Cost **-** The criterion of choice between alternative schemes, each of which is capable of rendering the required service, is the principle of least cost in the long run. This approach is particularly applicable when the cash outflows under each competing project have sharply different time patterns. To obtain the annual cost, the outlays of the project are summarised into a single present worth amount and then spread over the years of the project life as an equal amount per year, which includes interest at a standard rate. By the same summarization and spreading for an alternate project, the two projects can be compared by reference to the per year figure for each. The comparison is usually of cost only, revenues being assumed as the same under either project. An illustration appears below :

	Year	0	1	2	3	4	Total.
Project A :							
cash inflows		(the same as for Project B)					
cash outflows		(104)	(5)	(1 0)	(1 5)	(20)	(154)
Project B :							
cash inflows		(the same as for Project A)					
cash outflows 10%		(45)	(30)	(30)	(30)	(30)	(165)
Worth Factors		1.00	.91	.83	.75	.68	....
Present Worth : Project							
A		(104)	(5)	(8)	(11)	(14)	(142)
Project B		(45)	(27)	(25)	(22)	(20)	(139)
***Equivalent Annual Cost** :							
Project A		....	(45)	(45)	(45)	(45)	...
Project B		...	(44)	(44)	(44)	(44)	...

*These annual amounts are determined by dividing the project present worth by the present worth of a four-year Re.1/ - per year annuity. This is the sum of the individual present worth factors .91, .83, .75, .68 which totals Rs 3.17.

The above analysis shows that Project 'B' has the lower uniform annual cost, by a small margin, even though it shows a larger total outlay. The reason for this is that the project outlays take place later under Project 'B', which reduces its present worth and lowers its annual cost including interest, relative to Project 'A'.

235. **Economic Evaluation.** -As a commercial undertaking, it is incumbent on the Railways to ensure that a proper financial return is earned from every investment subject to the exceptions given in Para 202. At the same time it has to be borne in mind that the Railways are an important instrument of economic and industrial development of backward areas not connected by a reliable transport network. In the case of major projects such as new line constructions, or change of traction from diesel to electric, the benefits likely to be realised by the economy as a whole are assessed by the Economic Adviser to the Railway Board. The principles on which economic evaluation of Railway investments should be carried out as distinct from working out a financial return to the Railways, are indicated in the note (together with an illustration) at Annexure 'F'.

235A. A detailed economic appraisal framework is given in Annexure- 'I'.

236. **Replacements and Renewals -**The proposal for replacement of an existing asset (whether involving improvement or otherwise) should be examined critically with a view to seeing whether it would not be possible to avoid, or, at least, postpone such replacement by suitable repairing or reconditioning the asset at a cost that could be comparatively justified financially. In all cases in which it is considered necessary to replace an asset, instead of reconditioning it, it should be examined whether the estimated average annual cost of service (i. e. cost of operation and maintenance, sinking fund payment to the depreciation fund, and the interest on the cost of the asset), or the estimated average cost per unit of service of the new asset is likely to be less than that of the old asset after reconditioning. Except when renewals or replacements are inevitable, the expenditure chargeable to the Depreciation Reserve Fund, should be financially justified in the same manner as any other expenditure of capital nature.

237. Where a replacement is proposed on grounds of economy in operation and maintenance costs, the estimate therefore should justify the outgo on the proposed replacement by showing that the average annual cost of service or the average cost per unit of service, that will be rendered by the new asset, is less than that of the existing asset.

Note -The above two paragraphs will not apply to cases of casual or programme renewals, not involving any improvement.

238. **Reconditioning** – When an as asset is repaired at a comparatively high cost in preference to its being replaced, it is referred to as being 'reconditioned'. The cost of such reconditioning is chargeable to Ordinary Repairs and Maintenance. It may be noted that reconditioning is different from routine repair. For all reconditioning works, detailed estimates should be prepared.

239. **Scrapping, condemning and abandoning assets -** An asset may be scrapped, condemned or abandoned without replacement, when the service rendered by it is no longer required. If the service rendered by it is still necessary and if it is proposed to make other arrangements for such service, it should be definitely established that it is more economical to scrap, condemn or abandon the existing asset and obtain the required service from the new arrangement than to continue to obtain the required service from the existing asset. Here also the relative economics of the two proposals should be assessed on the basis of the average annual cost of service or the average cost per unit of service, as the case may be.

Note -The preparation of financial justification as contemplated in this paragraph is not necessary for condemning rolling stock in the following cases:-

i) Overaged stock due to be replaced by virtue of their age but condemned before replacement.
ii) Under or overage stock involved in accidents and certified to be irrepairable (not included under the category of "beyond economical repairs").
iii) Non I.R.S. type coaches and wagons of inherently weak design proposed to be condemned on condition basis whether under or overage.

240. Examples are given in Annexure 'G' illustrating the method of financial justification to be adopted in the case of replacement, reconditioning or abandonment of existing assets. The data used in the illustrations are hypothetical and the methods adopted are not to be regarded as exhaustive or as precluding the use of other methods that may be found to be more appropriate. The D.C.F. method can be conveniently used in some cases as has been shown in Example (1) of Annexure 'G'.

241. Second-hand Value- The second-hand value of an asset is what it is presently

worth and has often to be distinguished from its scrap value. For purposes of financial justification of transfer, purchase or sales, the second-hand value of assets may, except in certain cases (e.g. rails, locomotives, boilers, etc.) where separate rules have been prescribed for the determination of the second-hand value, be determined as provided below :-

i) The first cost of an asset (based on which its second-hand value has to be computed) should be taken as the value of a similar asset at present day prices and not the value actually paid for the asset when it was originally purchased.
ii) The second-hand value of an asset that does not depreciate is the same as the first cost.
iii) The second-hand value of a depreciating asset should be so appraised that the average annual cost of service or the average cost per unit of service, as the case may be, of the second-hand asset is equal to that of the same or similar asset while new.

242. Examples illustrating the application of the principles enunciated in the preceding paragraph are given in Annexure 'H'.

243. **Post project appraisal -** It is important that an investment proposal is subjected to proper financial appraisal not only before it is a sanctioned but also a certain period of time after the project has been in operation. Whether the financial return anticipated from a project at the estimate stage is actually realised in due course or not should be determined by conducting a 'Productivity test' in respect of all major works. For any such comparison to be meaningful and realistic, it is important that the computation of the actual additional earnings and working expenses is done on the same lines as at the project estimate stage. As commercial profitability is liable to be affected by escalation in prices or any other extraneous development, in order to have a more reliable and accurate evaluation wherever relevant, a comparison in terms of physical units of throughput may be carried out. Such a comparison should preferably be done class-wise in the case of passenger traffic and commodity-wise in the case of goods traffic. The post project appraisal should be conducted by the user department in consultation with Engineering and Finance.

Further, all projects sanctioned on the basis of ROR, should be subjected to mid term review at the time of every revision of estimated cost. Such review shall consist of review of both existing projection in current scenario, revised estimated cost and consequential change in ROR. Financial feasibility of project need be assessed and

commented by General Managers of Zonal Railway.

244. **New Lines -** In respect of each new line opened for traffic, the railway administration should submit to the Railway Board a statement, showing the financial results of its working in Form No. 244 shown below. The statement should reach the Railway Board not later than the 31st December following the financial year to which it refers and should be accompanied by a covering memorandum in which brief explanations should be given of important variations between the actual realisation and the estimated revenue, together with a Note by the General Manager indicating how the actual net cash flow compares with what was estimated at the project stage. The Note should also bring out the probable traffic prospects of the line in the sixth and the eleventh year of opening.

Statement showing Financial Results of working of New Branch Lines.
Form No.F.244

Railway **----------** Name of branch **----------**
Length in Kilometers---------- Gauge ----------Opened on----------

Year	Cost on 31st March plus calculated interest during construction.		Earnings of Branch line proper		Actual expenditure of branch assessed on the basis of costing/financial data applied to the traffic over the branch line		Net earning of branch proper (Col.3-4)	
					Working expenses (excluding depreciation & interest)			
	As originally Estimated	Actuals	As originally Estimated	Actuals	As originally Estimated	Actuals	As originally Estimated	Actuals
(1)	(2)		(3)		(4)		(5)	

Actuals afteropening -- 1st year 2nd year 3rd year 4th year 5th year 6th year 7th year 8th year 9th year 10th yr and so on upto 30 years				

Main line				Additional net earnings (Col.6-7).		Total net earnings (Col.5+8)		Return on Total cost Col.9 x 100	Remarks
Additional revenue minus any loss due to short circuiting or diversion of traffic.		Additional expenses calculated on the basis of costing/ financial data applied to traffic from the existing line to branch line and vice-versa							
		Working expenses (excluding Depreciation & interest)						Col.2	
As originally estimated	Actuals	As originally estimated	Actuals	As originally estimated	Actuals	As originally estimated	Actuals		
6		7		8		9		9A	10

Foot notes to Form No. F. 244.-

i) Actuals will be actuals to end of the year for which accounts have been closed, and fresh estimatesfor the years thereafter.

ii) Special steps taken in the course of the year -

(a) To develop the traffic revenue-

(i)
(ii)
(iii)
(iv)

(b) To reduce the expenses

(i)
(ii)
(iii)
(iv)

iii) Probable future development of traffic and possibility of the line paying its way (short note)—

Head of Traffic Department Head of Account Deportment

Note- The traffic data required to be maintained vide Para 245 should be used for costing purposes so as to arrive at the expenditure of the Branch proper and of traffic moving from the existing line to the Branch line and vice versa.

245. The following statistics should be maintained from year to year in respect of all new lines opened for traffic and submitted to the Railway Board by l st August of each year :-

i) a) Passenger revenue from traffic local to the branch line.
   b) Other coaching revenue from traffic local to the branch line.
ii) a) Passenger revenue from traffic from the new line to the existing lines and vice versa.
   b) Other coaching revenue from traffic from the new line to the existing lines and vice versa.
iii) a) Tonnage of goods traffic local to the branch line.
   b) Tonnage of goods traffic inter-changed with the existing lines
iv) a) Revenue from goods traffic local to the branch line.
   b) Revenue from goods traffic interchanged with the existing lines.

246. The following instructions should be followed in preparing the statement F-244 :-

i) Column 3 should indicate the revenue of the branch from all traffic originating therein, whether local or foreign (Proportion due to the branch) and all traffic received from the main line.
ii) Columns 4 & 5 should be worked out on the basis of the costing/financial data under Group 'C' (see Annexure 'A') in respect of the traffic referred to in (i) above.
iii) The additional or new traffic interchanged to be shown in column 6 should include only that portion of the traffic received by the main line from the new branch and of the traffic from the main line to the branch, which arises solely from the construction of the new branch line. In the absence of actual figures of additional traffic interchanged with the existing lines, a reasonably approximate figure may be adopted. In the case of chord line short-circuiting

a previously existing route, figures relating to cross traffic which would have been carried by the previously existing route, if the chord line had not been constructed, may be omitted from this statement and a proportionate reduction in the working expenses on the branch line made. Column 7 should be worked out on the basis of costing financial data under group 'C' (See Annexure 'A' and para 217).

247. The statements vide Paras 244 & 245 should be submitted for every completed financial year after the date of opening of the new line for a period of 11 years. The actuals for the years to end of which accounts have been closed and the cash flows for the remaining years of the assumed project life should be arrived at on the basis of the best possible estimation. The entire series of net cash flows should then be discounted to arrive at the rate of return compared to the originally expected return. In case the actual cash flows shown in statement F.244 indicate a fair degree of proximity to the original estimates, it may be assumed that the cash flows for the remaining years of the project life will also follow the same trend unless definite foreknowledge is available to the contrary. If a review of the annual cash flows for a sufficiently long period (say 5 to 7 years) indicates that the cash flows have settled down, within limits, to a 'uniform' series, the Railway Board may decide that submission of the Statements F. 244 & F. 245 for future years in the case of a particular new line be discontinued.

248. **Open Line Works –** For the purpose of applying the productivity tests to open line works, i.e. works undertaken with the definite object of increasing revenue or reducing expenditure and to which such tests can be applied within five to seven years of their completion, selection will be made out of these works sanctioned (and/or charged to Capital) on grounds of remunerativeness. All such works costing over Rs. 1 crore will invariably be subjected to this test. The result of the test should be reported by the General Managers to the Railway Board. As stated earlier in the preceding para in the case of New Lines, the actual net cash inflow for each year, to end of the $5^{th}/7^{th}$ year from the date of commissioning should be recorded for each open line work to be subjected to the productivity test, and the cash flows for the rest of the project life assessed on the basis of the latest estimate. The whole series of net cash flow should then be discounted to arrive at the rate of return compared to the return originally expected.

249. In addition to productivity test to be conducted as provided in paragraph 248 above, a productivity review should also be undertaken in respect of selected works costing over Rs. 50 lakhs which are estimated to fetch some return, even though not the return prescribed for a work being classified as remunerative. The methodology to

be followed will be the same as prescribed in the preceding para in respect of works costing over Rs.1 crore each.

Note-Justification for works or part of a scheme should show the probable period ,that will elapse between the completion of the works and the time when the productivity review can be made. This note equally applies to paragraph 248.

250. The fact that productivity tests are to be applied to a particular work should be intimated to the authorities entrusted with its execution as also to the Finance and Audit officers. In respect of all such selected works, the Financial Adviser and Chief Accounts Officer should also keep such statistics as would be necessary for the verification of the tests conducted by executive, in addition to those usually available.

251. In order to ensure that a work selected either by the Railway Board or by the General Manager for the application of productivity tests or review is not lost sight of, Executive Officers and Finance Officers should maintain a register containing a list showing the following particulars :-

i) Reference to sanction of the estimate.
ii) Brief particulars of work selected for the application of productivity tests or review.
iii) Total estimated expenditure.
iv) Nature and extent of "productivity" claimed in the estimate.
v) When the test or review is to be applied.
vi) Brief remarks about the results of the test or review.

This list should be reviewed half-yearly and timely action taken to apply the test or review to all works due for examination during each half-year.

252. When, in due course, the tests or reviews are actually applied or carried out, the Financial Adviser and Chief Accounts Officer after verifying should submit a report embodying the results of the test or review to the General Manager. In case of works sanctioned by the Railway Board, the General Manager will submit the Financial Adviser and Chief Accounts Officer's report to the Railway Board with his own comments. The object of these reports is not only to furnish information about results actually achieved to the authority who sanctioned the expenditure but also to serve as a lesson for the future.

*****

ANNEXURE -A

(Please refer to Annexure I & J also)
(Ref. paras 216 *and* 217)

Check List With Detailed Notes For Guidance Of Zonal Railways And Concerned Branches In Railway Board's Office, In The Preparation Of Project Estimates

The procedures and methodology to be adopted for a proper financial appraisal of projects are laid down in the Engineering Code and in the Report of the Committee on Technique of Financial Appraisal of Railway Projects as well as the circulars issued by the Railway Board from time to time.

2. Some of the survey reports submitted by the Zonal Railways were scrutinised by the Cost Analysis Cell of the Board's office. It was found that the estimates of working expenses have been substantially understated owing to many important elements such as empty haulage, number of marshallings, tare tonne kilometres, etc., not having been taken into account by the Zonal Railways. In some cases, instead of applying the unit costs the Railways have adopted the operating ratio to estimate the working expenses. The operating ratio is only an end figure and should not, therefore, be used for estimating working expenses. Further, the revenues depend on the product mix, i. e., the proportion of the high-rated, low-rated commodities or short lead or long-lead traffic and the estimate made thereof should be reasonably correct.

3. In order to ensure that no item of cost is excluded and no item of cost is over stated / understated, a check list, together with detailed notes, has been prepared for the guidance of the Zonal Railways and the concerned staff of the Railway Board's office (E.A. Branch F (X) Branch and Planning Branch). The more common mistakes and deficiencies noted in the calculations at present can be avoided if the check list is adhered to.

4. Unit costs are worked out for the broad and metre gauge systems of each of the Zonal Railways under 3 main groups-

Group 'A' – Gives the unit costs applicable for all- traction movement. These unit costs include the direct costs as well as the element of overheads.

Group 'B' - Gives unit costs for particular facets, as cost per shunting engine

hour, train engine hour, engine hour etc., for each traction. The unit costs in this group include the element of overheads.

Group 'C'- Gives unit costs traction-wise. The wagon provision costs which include the element of repairs and maintenance, interest and depreciation, are separately shown. The overheads and the central charges are separately indicated.

Unit costs of line haul are worked out separately for through trains and van and shunting trains under both groups 'A' and 'C'.

All the unit costs are furnished separately under 3 heads - Working Expenses, Depreciation and Interest, so that the rate of return can be worked out both under the conventional method or D.C.F. technique.

Group 'A' and Group 'C' costs are more widely used for assessing the costs of specific flows or streams of traffic. If the traction is known, the Group 'C' costs are adopted. If the traction of line haul is not defined or specific, then all-traction figures in Group 'A' are adopted. Group 'C' costs are much more refined and specific and, therefore, by taking note of special characteristics of operation the costs may be estimated with a higher degree of accuracy. Group 'B' costs are generally used for estimating the savings in monetary terms of engine hours, wagon hours and shunting engine hours.

5. Study has been made to estimate broadly the variability of different items of expenditure with appropriate units of performance. The results of the study are summarised at the end of this Annexure.

6. In estimating the expenditure in respect of additional traffic the variability factors mentioned above should be adopted to arrive at the long- term variable costs. In estimating the expenditure in respect of existing traffic, however, the fully distributed cost should be used.

7. **Check list -**The check list and procedures/steps for estimating the costs are detailed below :-

	Existing line		Project line	
	Existing traffic	Additional traffic	Existing traffic	Additional traffic
Freight Traffic-				

a) b) c) d) e) f) g) h) i) j) k) 1) m) n) o) p)	Tonnage loaded under specific commodities Tonnage unloaded under specific commoditiesTonnage transhipped Tonnage repacked Tonnage of cross trafficLoad of specific traffic Net tonne kilometres Loaded wagon kms. Empty wagon kms. Tare tonne Kilometres Gross tonne Kilometres Engine Kilometres Train Kilometres No. and name of marshalling yards. No. and name of Repacking points. No. and name of Transhipment points				
	Coaching/Passenger traffic- a) No. of Passengers- (i) Originating (ii) incoming b) Train Kilometres c) Engine Kilometres d) Vehicle Kilometres.				

8. The Traffic Survey Report should give in detail the quantum of existing freight traffic (originating, terminating, transhipped, cross, etc.) under important commodity groups, the pattern of movement (origin and destination of the important flows), the quantum assessed, both in terms of tonnes and in terms of B.G. or M.G.4-wheeler wagons. The additional traffic should also be assessed in a similar fashion. In case any difficulty is experienced in converting the tonnes into wagons, the figures of average starting loads (separately for originating and transhipped traffic) shown in the monthly wagon loading statements may be adopted. Otherwise, the minimum weight condition as per goods tariff may be taken into account.

9. Empty haulage should be carefully calculated taking into account the outward and inward traffic commodity-wise and equipment-wise. The source of empties should also be indicated so that the empty haulage may be reasonably assessed. Otherwise, following norms may be adopted :-

BFRs, Oil tanks, BOBs , BOI and Special types, etc. (B.G. and M.G.)	100%
POL Traffic, iron ore traffic, industrial raw material to steel plants, etc.(B.G. & M.G.)	100%
Coal--Average B. G.	80 %
Other commodities -B.G.	23 %
M. G. (including coal)	33 %

The correct estimate of empty haulage is very essential as this element appears in the calculation of –

i) Wagon kilometres,
ii) Gross tonne kilometres,
iii) Engine kilometres,
iv) Train kilometres,
v) Wagon days,
vi) Engine days, and
vii) Number of marshalling yards.

10. Marshalling yards. --The survey report should specify the Inward, outward and cross traffic dealt with at different marshalling yards on the project line and the existing main line. This should be separately assessed for the existing traffic and the additional traffic. We should take into account not only the loaded journeys but also the empty journeys of wagons. In case traffic bypasses the marshalling yard, detention to stock for carriage and wagons/train examination for engine changing and crew changing should be taken into account.

There are at least 2 marshalling yards for any movement irrespective of distance. The study reveals frequency of marshalling as indicated below:

	Broad Gauge	Metre Gauge
1-40 Kms.	2.00	2.00
41-120 Kms.	3.00	3.00
121-240 Kms.	3.50	3.50
241-500 Kms.	4.00	4.00
501-800 Kms.	4.50	5.00
801-1300 Kms.	5.00	6.50
1301 and above	5.50	7.50

The above is only for wagons moving in piece-meal. Where the wagons

are moving in a specific stream of Traffic, the actual marshalling requirements should be assessed on the concerned route.

11. Terminal:- Documentation charges are calculated on the basis of one invoice per 4-wheeler wagon in the case of wagon load traffic and one invoice for 0.54 tonne of smalls traffic.

In the case of train load movement, one invoice may be adopted for 10 four-wheeler wagons.

There are cases under which one-end terminal documentation is performed by the staff employed by the consignee or the consignor. In those cases, this element of cost for one end may be omitted.
Two terminal costs should be taken, one for the originating end and the other for the destination end.

12. A special study has been made in the case of coal traffic. The coal terminal costs at the originating end for 1970-71 are given below :-

Cost Per Wagon

Rail way	Terminal Cost	Trip haul between base yard and collieries	Other costs	Total originating Terminal costs
	Rs.	Rs.	Rs.	Rs.
Central	15.485	8.046	24.649	48.180
Eastern	17.436	8.307	19.870	45.613
South Central	8.605	4.918	17.210	30.733
South Eastern	19.118	11.101	19.514	49.733
Total Indian Railways (B.G.)	17.202	8.803	19.917	45.922

At the destination end, the average unit costs would apply even in the case of coal traffic.

13. Wagon days - It is not correct to adopt wagon kilometres per wagon day for assessing the wagon requirements. To illustrate this point, the example of a short distance traffic of lead of 40 kilometres with an empty return ratio of 100% may be considered. The wagon requirement on the basis of wagon kilometres per wagon day would work out to only one wagon day. It is common knowledge that it would take at least 3 days for the wagon to be loaded, unloaded and brought back to the loading point for the subsequent loading, if the detention to stock at the

originating end, terminating end, transit time and contiguous marshalling yards were properly taken into account. In the case of fairly long-lead traffic, the wagon user index may be adopted.

14. Engine kilometres - After calculating the train kilometres on the basis of the permissible load (in terms of BOX or 4-wheelers and the gross load) on various sections, the engine kilometres should be assessed on the basis of -

i) Single engine operation or multiple engine operation,
ii) Banking engines over gradient sections; and
iii) Light engines.

Figures of engine kilometres per engine day used for goods traffic are readily available in the Annual Reports and Statistical Pamphlets for each traction. It should be possible to work out engine days required on this basis after giving due allowance for the element of repairs and spares.

For example, 4 million tonnes of iron ore are to be moved over a section 100 kms. in length. The movement will be in BOX wagons with load of 55 tonnes each. The section is heavily graded and the trains will run triple headed (diesel traction) with a load of 40 BOX's plus an additional banking engine over a section of 8 kms. Estimates of engine km/engine days will be as follows :-

1)	No. of trains each way	1,818
2)	Train kms. both ways with 100% empty return (1818 x 2 x 100)	3,63,600
3)	Assisting required and Assisting not required Engine km.	7,27,200
4)	Banking engine kms. (1818 x 2 x 8)	29,088
5)	Light engine kms. (say 6% of train kms.)	21,816
		1,41,704
6)	Bare-engine days required @ say 360 km. per engine day in use (goods).	3172
7)	Total engine days required (add 16% for POH, spares, etc.)	3680 or 10 engines

The nature of movement should also be taken into account, i. e., whether the traffic is carried by shunting and van train or by through trains. The cost characteristics are different and separate unit costs are available.

15. Fuel and lubrication costs are calculated on the basis of GTKms. Other

operating costs (line haul) are calculated on the basis of train kilometres/engine kilometres.

16. Track and signalling line haul -This is calculated on the basis of GTKms. The average unit costs are not adopted for estimating the cost under track and signalling. A slight refinement is made taking into account the variability of this item of expenditure with reference to GTKms. The variability studies reveal that 50% of this expenditure is variable with GTKms. The average unit costs applicable to B.G. or M. G. systems of an individual Railway are adjusted by taking into account the specific density of traffic on the route or sections involved and the average density of the Zonal Railway system. As an illustration, a section with an average density of 18,000 tonnes per day as against the average density of 12,000 tonnes per day on the gauge may be considered. If the average unit cost for the gauge is Rs. 6.00 per 1000 GTKms., then the average unit cost for the section will be

$$= \text{Rs.3} + \left[\frac{\text{Rs.3} \times 12000}{18000} \right] \quad \text{or Rs.5 per 1000G.T.Kms.}$$

Particulars of Service for which unit costs of freight services are worked out on Indian Railways (See para 4 of Annexure A).

Line No.	Particulars
	GROUP A
1. 2.	Terminal Cost per Tonne-Smalls. Terminal Cost per Tonne-Full Loads.
3. 4.	Total Terminal Cost per Wagon-Full Loads. Repacking Cost of smalls per tonne per handling.
5. 6.	Transhipment Cost at Break of Gauge per tonne per transhipment.Marshalling Cost per Wagon per yard handled.
7. 8.	Line Haul Cost -per train kilometre. Line Haul Cost-per Wagon kilometre (Rev.)
9. 10.	Line Haul Cost-per net tonne kilometre (Pay Load). Line Haul Cost-per Wagon kilometre (Carrying Unit). (i) Through Goods Trains.
11. 12.	Line haul Cost per train Km. Line haul Cost per Wagon Km. (Rev.)
13. 14.	Line haul Cost per NTKm (Pay Load). Line haul Cost per Wagon Km. (Carrying units). (ii) Van and Shunting Goods.

15. 16. 17. 18.	Line haul Cost per train Km. Line haul Cost per Wagon Km. (Rev.) Line hau1 Cost per NTKm. (pay load). Line haul Cost per Wagon Km. (Carrying Units).	
GROUP B		
19.	Cost of Documentation per Invoice.	
20	Cost of Traction per Engine Hour (Other than shunting and siding)	Diesel (Total).
21.	,, ,, ,, ,, ,, ,,	Electric (Total).
22.	,, ,, ,, ,, ,,	Diesel (Fuel and stores)
23.	,, ,, ,, ,, ,,	Electric (Electric current consumed)
24. 25.	Cost of Traction per Train Engine Hour. ,, ,,	Diesel (Total) Electric (Total).
26 27	,, ,, ,, ,,	Diesel (Fuel and Stores). Electric (Electric current consumed).
28. 29	Cost of Traction per 1000 G.T.Kms.. ,, ,,	Diesel (Total) Electric (Total).
30. 31.	Cost of Traction per 1000 G.T.Kms.. ,, ,,	Diesel (Fuel and Stores). Electric (Electric current consumed).
32 33.	Cost of Traction per Shunting Hour (Shunting Engines). ,, ,,	Diesel (Total) Electric (Total).
34 35.	Cost of Traction per Shunting Hour (Shunting Engines). ,, ,,	Diesel (Fuel and Stores). Electric (Electric current consumed).
36. 37	Track and Signalling ,, ,,	Provision and Maintenance Cost per train Kilometre Provision and Maintenance Cost per.1000 G.T Kms.

Group C
38. Terminal Services-Cost of Documentation per Invoice. 39. Terminal Services-Cost of Handling per tonne. 40. Terminal Services-Cost of other Terminal Services per tonne-Smalls. 41. Terminal Services-Cost of other Terminal Services per tonne-Full Loads. 42. Terminal Services-Cost of other Terminal Services per wagon (Full Loads). 43. Cost of Repacking of Smalls per tonne per handling. 44. Cost of Transhipment at Break. of Gauge per tonne per Transhipment. 45 Cost of Marshalling per Wagon per yard handled. 46 Carrying Units-Provision and Maintenance per wagon day. 47. Line Haul (Movement) service Traction Cost – Steam per 1000 GTKMS Diesel. 48. Line Haul (Movement) service Traction Cost – Steam per 1000 GTKMS Electric.
49. Line Haul (Movement) Service-Other Transportation expenses including Train Passing Staffper Train kilometre. 50. Line Haul (Movement) Service-Other Transportation Expenses including Train Passing Staffper 1000 G. T. Kms. 51. Line Haul (Movement) Service-Cost of Track and Signalling per train kilometre. 52. Line Haul (Movement) Service-Cost of Track and signalling per 1000 G. T. Kms. 53. General Overhead Charges-Percentage of Direct Costs.
54. Central Charges (Cost of Railway Board, Audit etc.)- Percentage of the total expenses. (i) Through Goods Trains.
55. Cost of traction per 1000 G. T. Km. (Diesel). 56. Cost of Traction per 1000 G. T. Km. (Electric). 57. Other Transportation Expenses per 1000 G. T. Km. (ii) Van and Shunting Goods.
58. Cost of Traction per 1000 G. T. Km. (Diesel). 59. Cost of Traction per 1000 G. T. Km. (Electric). 60 Other Transportation Expenses per 1000 G.T.Km.

Percentage of 'variable costs' to total costs average- all Railways.									
S. No.	Facets of operation	BROAD GUAGE				METER GAUGE			
		Working exp.	DRF	Interest	Overall	Working exp.	DRF	Inter-est	Over-all
	(i) For cost in group A -								

1. 2.	Terminal Marshalling	76 74	75 83	77 85	76 78	75 74	70 80	70 80	74 77
3.	Transhipment at break-of-gauge point	80	70	74	79	80	70	74	79
4.	Repacking of Smalls	84	70	74	82	79	70	70	78
5.	Line Haul- (a) Pay load (b) Carrying Unit	 74 72	 46 70	 50 72	 67 72	 73 61	 45 65	 45 70	 67 62
	(ii) For costs in Group 'C -@								
1. 2 3. 4.	Terminal Marshalling Transhipment at break of gauge point Repacking of small	87 88 91 91	50 55 55 54	50 55 57 60	80 80 86 87	85 85 91 90	50 50 55 50	50 60 57 55	80 80 86 85
5.	Line Haul--- (i) Traction :								
	a) Steam b) Diesel c) Electric*	100 100 100	100 100 100	100 100 100	100 100 100	100 100 100	100 100 100	100 100 100	100 100 100
	(ii) Other Transportation	85	45	45	70	85	45	45	77
	(iii) Tracks Signalling	90	45	45	47	48	45	45	47

@ -	1) Variability factors indicated for different facets of operation in Group Care exclusive of costs of provision and maintenance of wagons. The variability for provision and maintenance of wagons is 100% for D.R.F. and interest charge for both B.G. & M. G.
	2) Variability factors for overhead expenses will be in the ratio of constant and variable expenses asworked out about to the total expenses under these heads.
	3) For a quick and broad analysis, a variability of 78.5% may be taken as representing working expenses.
*	The variability factor relates to total cost including cost on overhead equipment.

*****

ANNEXURE-B

SINKING FUND PAYMENT TABLE

N-Normal life of assets in years

N	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	0.4975	0.4950	0.4926	0.4902	0.4878	0.4854	0.4831	0.4808	0.4785	0.4762
3	0.3300	0.3268	0.3235	0.3203	0.3172	0.3141	0.3111	0.3080	0.3051	0.3021
4	0.2463	0.2426	0.2390	0.2355	0.2320	0.2286	0.2252	0.2219	0.2187	0.2155
5	0.1960	0.1922	0.1884	0.1846	0.1810	0.1774	0.1739	0.1705	0.1671	0.1638
6	0.1625	0.1585	0.1546	0.1508	0.1470	0.1434	0.1398	0.1363	0.1329	0.1296
7	0.1386	0.1345	0.1305	0.1266	0.1228	0.1191	0.1156	0.1121	0.1087	0.1054
8	0.1207	0.1165	0.1125	0.1085	0.1047	0.1010	0.0975	0.0940	0.0907	0.0874
9	0.1067	0.1025	0.0984	0.0945	0.0907	0.0870	0.0835	0.0801	0.0768	0.0736
10	0.0956	0.0913	0.0872	0.0833	0.0795	0.0759	0.0724	0.0690	0.0658	0.0627
11	0.0865	0.0822	0.0781	0.0741	0.0704	0.0668	0.0634	0.0601	0.0569	0.0540
12	0.0788	0.0746	0.0705	0.0666	0.0628	0.0593	0.0559	0.0527	0.0497	0.0468
13	0.0724	0.0681	0.0640	0.0601	0.0565	0.0530	0.0497	0.0465	0.0436	0.0408
14	0.0669	0.0626	0.0585	0.0547	0.0510	0.0476	0.0443	0.0413	0.0384	0.0357
15	0.0621	0.0578	0.0538	0.0499	0.0463	0.0430	0.0398	0.0368	0.0341	0.0315
16	0.0579	0.0537	0.0496	0.0458	0.0423	0.0390	0.0359	0.0330	0.0303	0.0278
17	0.0543	0.0500	0.0460	0.0422	0.0387	0.0354	0.0324	0.0296	0.0270	0.0247
18	0.0510	0.0467	0.0427	0.0390	0.0355	0.0324	0.0294	0.0267	0.0242	0.0219
19	0.0481	0.0438	0.0398	0.0361	0.0327	0.0296	0.0268	0.0241	0.0217	0.0195
20	0.0454	0.0412	0.0372	0.0336	0.0302	0.0272	0.0244	0.0219	0.0195	0.0175
21	0.0430	0.0388	0.0349	0.0313	0.0280	0.0250	0.0223	0.0198	0.0176	0.0156
22	0.0409	0.0366	0.0327	0.0292	0.0260	0.0230	0.0204	0.0180	0.0159	0.0140
23	0.0389	0.0347	0.0308	0.0273	0.0241	0.0213	0.0187	0.0164	0.0144	0.0126
24	0.0371	0.0329	0.0290	0.0256	0.0225	0.0197	0.0172	0.0150	0.0130	0.0113
25	0.0354	0.0312	0.0274	0.0240	0.0210	0.0182	0.0158	0.0137	0.0118	0.0102
26	0.0339	0.0297	0.0259	0.0226	0.0196	0.0169	0.0146	0.0125	0.0107	0.0092
27	0.0324	0.0283	0.0246	0.0212	0.0183	0.0157	0.0134	0.0114	0.0097	0.0083
28	0.0311	0.0270	0.0233	0.0200	0.0171	0.0146	0.0124	0.0105	0.0089	0.0075
29	0.0299	0.0258	0.0221	0.0189	0.0160	0.0136	0.0114	0.0096	0.0081	0.0067
30	0.0287	0.0246	0.0210	0.0178	0.0151	0.0126	0.0106	0.0088	0.0073	0.0061
31	0.0277	0.0236	0.0200	0.0169	0.0141	0.0118	0.0098	0.0081	0.0067	0.0055
32	0.0267	0.0226	0.0190	0.0159	0.0133	0.0110	0.0091	0.0075	0.0061	0.0050
33	0.0257	0.0217	0.0182	0.0151	0.0125	0.0103	0.0084	0.0069	0.0056	0.0045
34	0.0248	0.0208	0.0173	0.0143	0.0118	0.0096	0.0078	0.0063	0.0051	0.0041
35	0.0240	0.0200	0.0165	0.0136	0.0111	0.0090	0.0072	0.0058	0.0046	0.0037

36	0.0232	0.0192	0.0158	0.0129	0.0104	0.0084	0.0067	0.0053	0.0042	0.0033
37	0.0225	0.0185	0.0151	0.0122	0.0098	0.0079	0.0062	0.0049	0.0039	0.0030
38	0.0218	0.0178	0.0145	0.0116	0.0093	0.0074	0.0058	0.0045	0.0035	0.0027
39	0.0211	0.0172	0.0138	0.0111	0.0088	0.0069	0.0054	0.0042	0.0032	0.0025
40	0.0205	0.0166	0.0133	0.0105	0.0083	0.0065	0.0050	0.0039	0.0030	0.0023
41	0.0199	0.0160	0.0127	0.0100	0.0078	0.0061	0.0047	0.0036	0.0027	0.0020
42	0.0193	0.0154	0.0122	0.0095	0.0074	0.0057	0.0043	0.0033	0.0025	0.0019
43	0.0187	0.0149	0.0117	0.0091	0.0070	0.0053	0.0040	0.0030	0.0023	0.0017
44	0.0182	0.0144	0.0112	0.0087	0.0066	0.0050	0.0038	0.0028	0.0021	0.0015
45	0.0177	0.0139	0.0108	0.0083	0.0063	0.0047	0.0035	0.0026	0.0019	0.0014
46	0.0172	0.0135	0.0104	0.0079	0.0059	0.0044	0.0033	0.0024	0.0017	0.0013
47	0.0168	0.0130	0.0100	0.0075	0.0056	0.0041	0.0030	0.0022	0.0016	0.0011
48	0.0163	0.0126	0.0096	0.0072	0.0053	0.0039	0.0028	0.0020	0.0015	0.0010
49	0.0159	0.0122	0.0092	0.0069	0.0050	0.0037	0.0026	0.0019	0.0013	0.0009
50	0.0155	0.0118	0.0089	0.0066	0.0048	0.0034	0.0025	0.0017	0.0012	0.0009

The use of the Table – What sum must be paid at the end of each year to Sinking Fund so that the annual payments together with interest therein at 4 per cent compound annually, will at the end of 18 years amount to Rs.2,000/-

Opposite 18 under 4 per cent we find 0.0390 which is the annual payment required for Re.1/- so for Rs. 2,000 the annual payment is 2,000 x 0.0390 i.e. Rs. 78/-

*****

ANNEXURE -C

(See Para 227)

Interest Formulas And Tables For Discounted Cash Flow Techniques

Interest Formulas

The interest formula and tables that follow may be found of considerable use in evaluating thefinancial aspects of Engineering projects.

Symbols:- The symbols used in these formulas and Tables are:

i represent rate of interest per interest period.

n represent number of interest periods

p represent sum of money

S - do - sum of money that is equivalent to p with interest i, at the end of n

R - do - the end of period payments/receipt in a uniform series continuing for the coming n periods, the entire series equivalent to p at interest rate i.

Formulas :- The interest formulas expressing the relationship between P, S and R

in terms of i and n are :-Given P, to find S

$$S = P\left[(1+i)^n\right] \quad (1)$$

Given S, to find P . $$P = S\left[\frac{1}{(1+i)^n}\right] \quad (2)$$

Given S, to find R , $$R = S\,\frac{1}{(1+i)^{n-1}} \quad (3)$$

Given P, to find R , $$R = P\left[\frac{i(1+i)^n}{(1+i)^{n-1}}\right] \quad (4)$$

Given R, to find S , $$S = R\left[\frac{(1+i)^{n-1}}{i}\right] \quad (5)$$

Given R, to find P , $$P = R\left[\frac{(1+i)^{n-1}}{i(1+i)^n}\right] \quad (6)$$

In the following explanations of these formulas the interest period is taken as one year; theexplanations can be made general by substituting "Period" for "year".

Development of Formulas for Single Payment- If P is invested at interest rate l, the interest for thefirst year is iP and the total amount at the end of the first year is P(l+i).

The second year the interest on this is ip(l+i), and the amount at the end of this year is $P(l+i)+iP(l+i) = P(l+i)^2$. Similarly at the end of the third year the amount is $P(l+i)^3$; at the

end of n years it is $P(1+i)^n$.

This is the formula for the compound amount, S, obtainable in n years from a principal, P.

$$S = P \quad (1+i)^n \qquad (1)$$

If we express P in terms of S, i and n

$$P = S \left(\frac{1}{(1+i)^n} \right) \qquad (2)$$

P may then be thought of as the principal that will give a required amount S in n years; in other words, P is the present worth of a payment S, n years hence.

The expression $(1+i)^n$ is called the single payment compound amount actor (denoted as cu'). Its reciprocal $1/(1+i)^n$ is called the single payment present worth actor (denoted as pwf.)

Formulas for Uniform Annual Series of End-of Year Payments - If R is invested at the end of each year for n years, the total amount at the end of n years will be the sum of the compound amounts of the individual investments. The money invested at the end of the first year will earn interest for (n-1) years; its amount will thus be $R(1+i)^{n-1}$. The second years payment will amount to $R(1+i)^{n-2}$; the third years to $R(1+i)^{n-3}$; and so on until the last payment, made at the end of n years which has earned no interest. The total sum S is then given by the expression-

$$S=R[\,(1+(1+i)+(1+i)^2 \quad \ldots+(1+i)^{n-2}+(1+i)^{n-1}] \qquad (i)$$

To simplify, multiply both sides of the equation by (1+i),

$$(1+i)S= R[(1+i)+(1+i)^2+(1+i)^3 \quad \ldots +(1+i)^{n-1}+(1+i)^n] \qquad (ii)$$

Subtracting (i) from (ii)

$$iS = R[(1+i)^{n-1}]$$

$$\text{or } S = R \left[\frac{(1+i)^{n-1}}{i} \right]$$

$$\text{And } R=S \left(\frac{i}{(1+i)^{n-1}} \right) \qquad (3)$$

A fund established to produce a desired amount at the end of a given period of time by means of a series of payments through out the period is called a

sinking fund. The expression—

$$\frac{1}{(1+i)^{n-1}}$$

is called the sinking fund deposit factor (denoted as sff).

To find the uniform end-of year payment, R which can be secured for n years from a present investment P, substitute in equation (3) the value given for S in equation (I)

$$R=S\left[\frac{I}{(I+i)^{n-1}}\right] \qquad = P\cdot(I+i)^{n}\left[\frac{i}{(I+i)^{n-1}}\right]$$

$$\text{or } R=P\left[\frac{i(I+i)^{n}}{(I+i)^{n-1}}\right] \qquad (4)$$

The expression—

$$\frac{i(1+i)^{n}}{(1+i)^{n-1}}$$

is called the capital recovery factor (denoted as crf).

When multiplied by a present debt (which, from the point of the lender, is a present investment,) it gives the uniform end-of-year payment necessary to repay the debit (the lender's investment) in n years with interest rate i.

Formulas (3) and (4) may be reversed to show S and P in terms of R as follows:

$$S=R\left[\frac{(I+i)^{n-1}}{i}\right] \qquad (5)$$

$$P=R\left[\frac{(1+i)^{n-1}}{i(1+i)^{n}}\right] \qquad (6)$$

The expression— $\left[\frac{(1+i)^{n-1}}{i}\right]$

is called the uniform series compound amount factor (denoted as caf)

The expression $\left[\frac{(I+i)^{n-1}}{i(I+i)^{n}}\right]$

is called the uniform series present worth factor (denoted as pwf).

*****

ANNEXURE -C (Contd.) Table-1										
Future Value Interest Factor for 1 Rupee discounted at i % for 'n' periods										
n	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	1.0100	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000
2	1.0201	1.0404	1.0609	1.0816	1.1025	1.1236	1.1449	1.1664	1.1881	1.2100
3	1.0303	1.0612	1.0927	1.1249	1.1576	1.1910	1.2250	1.2597	1.2950	1.3310
4	1.0406	1.0824	1.1255	1.1699	1.2155	1.2625	1.3108	1.3605	1.4116	1.4641
5	1.0510	1.1041	1.1593	1.2167	1.2763	1.3382	1.4026	1.4693	1.5386	1.6105
6	1.0615	1.1262	1.1941	1.2653	1.3401	1.4185	1.5007	1.5869	1.6771	1.7716
7	1.0721	1.1487	1.2299	1.3159	1.4071	1.5036	1.6058	1.7138	1.8280	1.9487
8	1.0829	1.1717	1.2668	1.3686	1.4775	1.5938	1.7182	1.8509	1.9926	2.1436
9	1.0937	1.1951	1.3048	1.4233	1.5513	1.6895	1.8385	1.9990	2.1719	2.3579
10	1.1046	1.2190	1.3439	1.4802	1.6289	1.7908	1.9672	2.1589	2.3674	2.5937
11	1.1157	1.2434	1.3842	1.5395	1.7103	1.8983	2.1049	2.3316	2.5804	2.8531
12	1.1268	1.2682	1.4258	1.6010	1.7959	2.0122	2.2522	2.5182	2.8127	3.1384
13	1.1381	1.2936	1.4685	1.6651	1.8856	2.1329	2.4098	2.7196	3.0658	3.4523
14	1.1495	1.3195	1.5126	1.7317	1.9799	2.2609	2.5785	2.9372	3.3417	3.7975
15	1.1610	1.3459	1.5580	1.8009	2.0789	2.3966	2.7590	3.1722	3.6425	4.1772
16	1.1726	1.3728	1.6047	1.8730	2.1829	2.5404	2.9522	3.4259	3.9703	4.5950
17	1.1843	1.4002	1.6528	1.9479	2.2920	2.6928	3.1588	3.7000	4.3276	5.0545
18	1.1961	1.4282	1.7024	2.0258	2.4066	2.8543	3.3799	3.9960	4.7171	5.5599
19	1.2081	1.4568	1.7535	2.1068	2.5270	3.0256	3.6165	4.3157	5.1417	6.1159
20	1.2202	1.4859	1.8061	2.1911	2.6533	3.2071	3.8697	4.6610	5.6044	6.7275
21	1.2324	1.5157	1.8603	2.2788	2.7860	3.3996	4.1406	5.0338	6.1088	7.4002
22	1.2447	1.5460	1.9161	2.3699	2.9253	3.6035	4.4304	5.4365	6.6586	8.1403
23	1.2572	1.5769	1.9736	2.4647	3.0715	3.8197	4.7405	5.8715	7.2579	8.9543
24	1.2697	1.6084	2.0328	2.5633	3.2251	4.0489	5.0724	6.3412	7.9111	9.8497
25	1.2824	1.6406	2.0938	2.6658	3.3864	4.2919	5.4274	6.8485	8.6231	10.8347
26	1.2953	1.6734	2.1566	2.7725	3.5557	4.5494	5.8074	7.3964	9.3992	11.9182
27	1.3082	1.7069	2.2213	2.8834	3.7335	4.8223	6.2139	7.9881	10.2451	13.1100
28	1.3213	1.7410	2.2879	2.9987	3.9201	5.1117	6.6488	8.6271	11.1671	14.4210
29	1.3345	1.7758	2.3566	3.1187	4.1161	5.4184	7.1143	9.3173	12.1722	15.8631
30	1.3478	1.8114	2.4273	3.2434	4.3219	5.7435	7.6123	10.0627	13.2677	17.4494
31	1.3613	1.8476	2.5001	3.3731	4.5380	6.0881	8.1451	10.8677	14.4618	19.1943
32	1.3749	1.8845	2.5751	3.5081	4.7649	6.4534	8.7153	11.7371	15.7633	21.1138
33	1.3887	1.9222	2.6523	3.6484	5.0032	6.8406	9.3253	12.6760	17.1820	23.2252
34	1.4026	1.9607	2.7319	3.7943	5.2533	7.2510	9.9781	13.6901	18.7284	25.5477
35	1.4166	1.9999	2.8139	3.9461	5.5160	7.6861	10.6766	14.7853	20.4140	28.1024
36	1.4308	2.0399	2.8983	4.1039	5.7918	8.1473	11.4239	15.9682	22.2512	30.9127
37	1.4451	2.0807	2.9852	4.2681	6.0814	8.6361	12.2236	17.2456	24.2538	34.0039
38	1.4595	2.1223	3.0748	4.4388	6.3855	9.1543	13.0793	18.6253	26.4367	37.4043
39	1.4741	2.1647	3.1670	4.6164	6.7048	9.7035	13.9948	20.1153	28.8160	41.1448

40	1.4889	2.2080	3.2620	4.8010	7.0400	10.2857	14.9745	21.7245	31.4094	45.2593
41	1.5038	2.2522	3.3599	4.9931	7.3920	10.9029	16.0227	23.4625	34.2363	49.7852
42	1.5188	2.2972	3.4607	5.1928	7.7616	11.5570	17.1443	25.3395	37.3175	54.7637
43	1.5340	2.3432	3.5645	5.4005	8.1497	12.2505	18.3444	27.3666	40.6761	60.2401
44	1.5493	2.3901	3.6715	5.6165	8.5572	12.9855	19.6285	29.5560	44.3370	66.2641
45	1.5648	2.4379	3.7816	5.8412	8.9850	13.7646	21.0025	31.9204	48.3273	72.8905
46	1.5805	2.4866	3.8950	6.0748	9.4343	14.5905	22.4726	34.4741	52.6767	80.1795
47	1.5963	2.5363	4.0119	6.3178	9.9060	15.4659	24.0457	37.2320	57.4176	88.1975
48	1.6122	2.5871	4.1323	6.5705	10.4013	16.3939	25.7289	40.2106	62.5852	97.0172
49	1.6283	2.6388	4.2562	6.8333	10.9213	17.3775	27.5299	43.4274	68.2179	106.7190
50	1.6446	2.6916	4.3839	7.1067	11.4674	18.4202	29.4570	46.9016	74.3575	117.3909

	Annexure -C (Contd.) Table - 2									
	Future Value Interest Factor for 1 Rupee annuity compounded									
n	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	2.0100	2.0200	2.0300	2.0400	2.0500	2.0600	2.0700	2.0800	2.0900	2.1000
3	3.0301	3.0604	3.0909	3.1216	3.1525	3.1836	3.2149	3.2464	3.2781	3.3100
4	4.0604	4.1216	4.1836	4.2465	4.3101	4.3746	4.4399	4.5061	4.5731	4.6410
5	5.1010	5.2040	5.3091	5.4163	5.5256	5.6371	5.7507	5.8666	5.9847	6.1051
6	6.1520	6.3081	6.4684	6.6330	6.8019	6.9753	7.1533	7.3359	7.5233	7.7156
7	7.2135	7.4343	7.6625	7.8983	8.1420	8.3938	8.6540	8.9228	9.2004	9.4872
8	8.2857	8.5830	8.8923	9.2142	9.5491	9.8975	10.2598	10.6366	11.0285	11.4359
9	9.3685	9.7546	10.1591	10.5828	11.0266	11.4913	11.9780	12.4876	13.0210	13.5795
10	10.4622	10.9497	11.4639	12.0061	12.5779	13.1808	13.8164	14.4866	15.1929	15.9374
11	11.5668	12.1687	12.8078	13.4864	14.2068	14.9716	15.7836	16.6455	17.5603	18.5312
12	12.6825	13.4121	14.1920	15.0258	15.9171	16.8699	17.8885	18.9771	20.1407	21.3843
13	13.8093	14.6803	15.6178	16.6268	17.7130	18.8821	20.1406	21.4953	22.9534	24.5227
14	14.9474	15.9739	17.0863	18.2919	19.5986	21.0151	22.5505	24.2149	26.0192	27.9750
15	16.0969	17.2934	18.5989	20.0236	21.5786	23.2760	25.1290	27.1521	29.3609	31.7725
16	17.2579	18.6393	20.1569	21.8245	23.6575	25.6725	27.8881	30.3243	33.0034	35.9497
17	18.4304	20.0121	21.7616	23.6975	25.8404	28.2129	30.8402	33.7502	36.9737	40.5447
18	19.6147	21.4123	23.4144	25.6454	28.1324	30.9057	33.9990	37.4502	41.3013	45.5992
19	20.8109	22.8406	25.1169	27.6712	30.5390	33.7600	37.3790	41.4463	46.0185	51.1591
20	22.0190	24.2974	26.8704	29.7781	33.0660	36.7856	40.9955	45.7620	51.1601	57.2750
21	23.2392	25.7833	28.6765	31.9692	35.7193	39.9927	44.8652	50.4229	56.7645	64.0025
22	24.4716	27.2990	30.5368	34.2480	38.5052	43.3923	49.0057	55.4568	62.8733	71.4027
23	25.7163	28.8450	32.4529	36.6179	41.4305	46.9958	53.4361	60.8933	69.5319	79.5430
24	26.9735	30.4219	34.4265	39.0826	44.5020	50.8156	58.1767	66.7648	76.7898	88.4973
25	28.2432	32.0303	36.4593	41.6459	47.7271	54.8645	63.2490	73.1059	84.7009	98.3471
26	29.5256	33.6709	38.5530	44.3117	51.1135	59.1564	68.6765	79.9544	93.3240	109.1818
27	30.8209	35.3443	40.7096	47.0842	54.6691	63.7058	74.4838	87.3508	102.7231	121.0999

28	32.1291	37.0512	42.9309	49.9676	58.4026	68.5281	80.6977	95.3388	112.9682	134.2099
29	33.4504	38.7922	45.2189	52.9663	62.3227	73.6398	87.3465	103.9659	124.1354	148.6309
30	34.7849	40.5681	47.5754	56.0849	66.4388	79.0582	94.4608	113.2832	136.3075	164.4940
31	36.1327	42.3794	50.0027	59.3283	70.7608	84.8017	102.0730	123.3459	149.5752	181.9434
32	37.4941	44.2270	52.5028	62.7015	75.2988	90.8898	110.2182	134.2135	164.0370	201.1378
33	38.8690	46.1116	55.0778	66.2095	80.0638	97.3432	118.9334	145.9506	179.8003	222.2515
34	40.2577	48.0338	57.7302	69.8579	85.0670	104.1838	128.2588	158.6267	196.9823	245.4767
35	41.6603	49.9945	60.4621	73.6522	90.3203	111.4348	138.2369	172.3168	215.7108	271.0244
36	43.0769	51.9944	63.2759	77.5983	95.8363	119.1209	148.9135	187.1021	236.1247	299.1268
37	44.5076	54.0343	66.1742	81.7022	101.6281	127.2681	160.3374	203.0703	258.3759	330.0395
38	45.9527	56.1149	69.1594	85.9703	107.7095	135.9042	172.5610	220.3159	282.6298	364.0434
39	47.4123	58.2372	72.2342	90.4091	114.0950	145.0585	185.6403	238.9412	309.0665	401.4478
40	48.8864	60.4020	75.4013	95.0255	120.7998	154.7620	199.6351	259.0565	337.8824	442.5926
41	50.3752	62.6100	78.6633	99.8265	127.8398	165.0477	214.6096	280.7810	369.2919	487.8518
42	51.8790	64.8622	82.0232	104.8196	135.2318	175.9505	230.6322	304.2435	403.5281	537.6370
43	53.3978	67.1595	85.4839	110.0124	142.9933	187.5076	247.7765	329.5830	440.8457	592.4007
44	54.9318	69.5027	89.0484	115.4129	151.1430	199.7580	266.1209	356.9496	481.5218	652.6408
45	56.4811	71.8927	92.7199	121.0294	159.7002	212.7435	285.7493	386.5056	525.8587	718.9048
46	58.0459	74.3306	96.5015	126.8706	168.6852	226.5081	306.7518	418.4261	574.1860	791.7953
47	59.6263	76.8172	100.3965	132.9454	178.1194	241.0986	329.2244	452.9002	626.8628	871.9749
48	61.2226	79.3535	104.4084	139.2632	188.0254	256.5645	353.2701	490.1322	684.2804	960.1723
49	62.8348	81.9406	108.5406	145.8337	198.4267	272.9584	378.9990	530.3427	746.8656	1057.1896
50	64.4632	84.5794	112.7969	152.6671	209.3480	290.3359	406.5289	573.7702	815.0836	1163.9085

	Annexure -C (Contd.) Table - 3									
	Present Value interest factor for 1 rupee discounted									
n	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091
2	0.9803	0.9612	0.9426	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264
3	0.9706	0.9423	0.9151	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513
4	0.9610	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830
5	0.9515	0.9057	0.8626	0.8219	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209
6	0.9420	0.8880	0.8375	0.7903	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645
7	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6227	0.5835	0.5470	0.5132
8	0.9235	0.8535	0.7894	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665
9	0.9143	0.8368	0.7664	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241
10	0.9053	0.8203	0.7441	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855
11	0.8963	0.8043	0.7224	0.6496	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505
12	0.8874	0.7885	0.7014	0.6246	0.5568	0.4970	0.4440	0.3971	0.3555	0.3186
13	0.8787	0.7730	0.6810	0.6006	0.5303	0.4688	0.4150	0.3677	0.3262	0.2897
14	0.8700	0.7579	0.6611	0.5775	0.5051	0.4423	0.3878	0.3405	0.2992	0.2633
15	0.8613	0.7430	0.6419	0.5553	0.4810	0.4173	0.3624	0.3152	0.2745	0.2394

16	0.8528	0.7284	0.6232	0.5339	0.4581	0.3936	0.3387	0.2919	0.2519	0.2176
17	0.8444	0.7142	0.6050	0.5134	0.4363	0.3714	0.3166	0.2703	0.2311	0.1978
18	0.8360	0.7002	0.5874	0.4936	0.4155	0.3503	0.2959	0.2502	0.2120	0.1799
19	0.8277	0.6864	0.5703	0.4746	0.3957	0.3305	0.2765	0.2317	0.1945	0.1635
20	0.8195	0.6730	0.5537	0.4564	0.3769	0.3118	0.2584	0.2145	0.1784	0.1486
21	0.8114	0.6598	0.5375	0.4388	0.3589	0.2942	0.2415	0.1987	0.1637	0.1351
22	0.8034	0.6468	0.5219	0.4220	0.3418	0.2775	0.2257	0.1839	0.1502	0.1228
23	0.7954	0.6342	0.5067	0.4057	0.3256	0.2618	0.2109	0.1703	0.1378	0.1117
24	0.7876	0.6217	0.4919	0.3901	0.3101	0.2470	0.1971	0.1577	0.1264	0.1015
25	0.7798	0.6095	0.4776	0.3751	0.2953	0.2330	0.1842	0.1460	0.1160	0.0923
26	0.7720	0.5976	0.4637	0.3607	0.2812	0.2198	0.1722	0.1352	0.1064	0.0839
27	0.7644	0.5859	0.4502	0.3468	0.2678	0.2074	0.1609	0.1252	0.0976	0.0763
28	0.7568	0.5744	0.4371	0.3335	0.2551	0.1956	0.1504	0.1159	0.0895	0.0693
29	0.7493	0.5631	0.4243	0.3207	0.2429	0.1846	0.1406	0.1073	0.0822	0.0630
30	0.7419	0.5521	0.4120	0.3083	0.2314	0.1741	0.1314	0.0994	0.0754	0.0573
31	0.7346	0.5412	0.4000	0.2965	0.2204	0.1643	0.1228	0.0920	0.0691	0.0521
32	0.7273	0.5306	0.3883	0.2851	0.2099	0.1550	0.1147	0.0852	0.0634	0.0474
33	0.7201	0.5202	0.3770	0.2741	0.1999	0.1462	0.1072	0.0789	0.0582	0.0431
34	0.7130	0.5100	0.3660	0.2636	0.1904	0.1379	0.1002	0.0730	0.0534	0.0391
35	0.7059	0.5000	0.3554	0.2534	0.1813	0.1301	0.0937	0.0676	0.0490	0.0356
36	0.6989	0.4902	0.3450	0.2437	0.1727	0.1227	0.0875	0.0626	0.0449	0.0323
37	0.6920	0.4806	0.3350	0.2343	0.1644	0.1158	0.0818	0.0580	0.0412	0.0294
38	0.6852	0.4712	0.3252	0.2253	0.1566	0.1092	0.0765	0.0537	0.0378	0.0267
39	0.6784	0.4619	0.3158	0.2166	0.1491	0.1031	0.0715	0.0497	0.0347	0.0243
40	0.6717	0.4529	0.3066	0.2083	0.1420	0.0972	0.0668	0.0460	0.0318	0.0221
41	0.6650	0.4440	0.2976	0.2003	0.1353	0.0917	0.0624	0.0426	0.0292	0.0201
42	0.6584	0.4353	0.2890	0.1926	0.1288	0.0865	0.0583	0.0395	0.0268	0.0183
43	0.6519	0.4268	0.2805	0.1852	0.1227	0.0816	0.0545	0.0365	0.0246	0.0166
44	0.6454	0.4184	0.2724	0.1780	0.1169	0.0770	0.0509	0.0338	0.0226	0.0151
45	0.6391	0.4102	0.2644	0.1712	0.1113	0.0727	0.0476	0.0313	0.0207	0.0137
46	0.6327	0.4022	0.2567	0.1646	0.1060	0.0685	0.0445	0.0290	0.0190	0.0125
47	0.6265	0.3943	0.2493	0.1583	0.1009	0.0647	0.0416	0.0269	0.0174	0.0113
48	0.6203	0.3865	0.2420	0.1522	0.0961	0.0610	0.0389	0.0249	0.0160	0.0103
49	0.6141	0.3790	0.2350	0.1463	0.0916	0.0575	0.0363	0.0230	0.0147	0.0094
50	0.6080	0.3715	0.2281	0.1407	0.0872	0.0543	0.0339	0.0213	0.0134	0.0085

	ANNEXURE -C (Contd.) Table - 4									
	Present Value Interest Factor for 1 rupee Annuity discounted									
n	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136
21	18.8570	17.0112	15.4150	14.0292	12.8212	11.7641	10.8355	10.0168	9.2922	8.6487
22	19.6604	17.6580	15.9369	14.4511	13.1630	12.0416	11.0612	10.2007	9.4424	8.7715
23	20.4558	18.2922	16.4436	14.8568	13.4886	12.3034	11.2722	10.3711	9.5802	8.8832
24	21.2434	18.9139	16.9355	15.2470	13.7986	12.5504	11.4693	10.5288	9.7066	8.9847
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770
26	22.7952	20.1210	17.8768	15.9828	14.3752	13.0032	11.8258	10.8100	9.9290	9.1609
27	23.5596	20.7069	18.3270	16.3296	14.6430	13.2105	11.9867	10.9352	10.0266	9.2372
28	24.3164	21.2813	18.7641	16.6631	14.8981	13.4062	12.1371	11.0511	10.1161	9.3066
29	25.0658	21.8444	19.1885	16.9837	15.1411	13.5907	12.2777	11.1584	10.1983	9.3696
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269
31	26.5423	22.9377	20.0004	17.5885	15.5928	13.9291	12.5318	11.3498	10.3428	9.4790
32	27.2696	23.4683	20.3888	17.8736	15.8027	14.0840	12.6466	11.4350	10.4062	9.5264
33	27.9897	23.9886	20.7658	18.1476	16.0025	14.2302	12.7538	11.5139	10.4644	9.5694
34	28.7027	24.4986	21.1318	18.4112	16.1929	14.3681	12.8540	11.5869	10.5178	9.6086
35	29.4086	24.9986	21.4872	18.6646	16.3742	14.4982	12.9477	11.6546	10.5668	9.6442
36	30.1075	25.4888	21.8323	18.9083	16.5469	14.6210	13.0352	11.7172	10.6118	9.6765
37	30.7995	25.9695	22.1672	19.1426	16.7113	14.7368	13.1170	11.7752	10.6530	9.7059
38	31.4847	26.4406	22.4925	19.3679	16.8679	14.8460	13.1935	11.8289	10.6908	9.7327
39	32.1630	26.9026	22.8082	19.5845	17.0170	14.9491	13.2649	11.8786	10.7255	9.7570

40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791
41	33.4997	27.7995	23.4124	19.9931	17.2944	15.1380	13.3941	11.9672	10.7866	9.7991
42	34.1581	28.2348	23.7014	20.1856	17.4232	15.2245	13.4524	12.0067	10.8134	9.8174
43	34.8100	28.6616	23.9819	20.3708	17.5459	15.3062	13.5070	12.0432	10.8380	9.8340
44	35.4555	29.0800	24.2543	20.5488	17.6628	15.3832	13.5579	12.0771	10.8605	9.8491
45	36.0945	29.4902	24.5187	20.7200	17.7741	15.4558	13.6055	12.1084	10.8812	9.8628
46	36.7272	29.8923	24.7754	20.8847	17.8801	15.5244	13.6500	12.1374	10.9002	9.8753
47	37.3537	30.2866	25.0247	21.0429	17.9810	15.5890	13.6916	12.1643	10.9176	9.8866
48	37.9740	30.6731	25.2667	21.1951	18.0772	15.6500	13.7305	12.1891	10.9336	9.8969
49	38.5881	31.0521	25.5017	21.3415	18.1687	15.7076	13.7668	12.2122	10.9482	9.9063
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148

	ANNEXURE -C (Contd.) Table - 5									
	Capital Recovery Factors									
n	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	1.0100	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000
2	0.5075	0.5150	0.5226	0.5302	0.5378	0.5454	0.5531	0.5608	0.5685	0.5762
3	0.3400	0.3468	0.3535	0.3603	0.3672	0.3741	0.3811	0.3880	0.3951	0.4021
4	0.2563	0.2626	0.2690	0.2755	0.2820	0.2886	0.2952	0.3019	0.3087	0.3155
5	0.2060	0.2122	0.2184	0.2246	0.2310	0.2374	0.2439	0.2505	0.2571	0.2638
6	0.1725	0.1785	0.1846	0.1908	0.1970	0.2034	0.2098	0.2163	0.2229	0.2296
7	0.1486	0.1545	0.1605	0.1666	0.1728	0.1791	0.1856	0.1921	0.1987	0.2054
8	0.1307	0.1365	0.1425	0.1485	0.1547	0.1610	0.1675	0.1740	0.1807	0.1874
9	0.1167	0.1225	0.1284	0.1345	0.1407	0.1470	0.1535	0.1601	0.1668	0.1736
10	0.1056	0.1113	0.1172	0.1233	0.1295	0.1359	0.1424	0.1490	0.1558	0.1627
11	0.0965	0.1022	0.1081	0.1141	0.1204	0.1268	0.1334	0.1401	0.1469	0.1540
12	0.0888	0.0946	0.1005	0.1066	0.1128	0.1193	0.1259	0.1327	0.1397	0.1468
13	0.0824	0.0881	0.0940	0.1001	0.1065	0.1130	0.1197	0.1265	0.1336	0.1408
14	0.0769	0.0826	0.0885	0.0947	0.1010	0.1076	0.1143	0.1213	0.1284	0.1357
15	0.0721	0.0778	0.0838	0.0899	0.0963	0.1030	0.1098	0.1168	0.1241	0.1315
16	0.0679	0.0737	0.0796	0.0858	0.0923	0.0990	0.1059	0.1130	0.1203	0.1278
17	0.0643	0.0700	0.0760	0.0822	0.0887	0.0954	0.1024	0.1096	0.1170	0.1247
18	0.0610	0.0667	0.0727	0.0790	0.0855	0.0924	0.0994	0.1067	0.1142	0.1219
19	0.0581	0.0638	0.0698	0.0761	0.0827	0.0896	0.0968	0.1041	0.1117	0.1195
20	0.0554	0.0612	0.0672	0.0736	0.0802	0.0872	0.0944	0.1019	0.1095	0.1175
21	0.0530	0.0588	0.0649	0.0713	0.0780	0.0850	0.0923	0.0998	0.1076	0.1156
22	0.0509	0.0566	0.0627	0.0692	0.0760	0.0830	0.0904	0.0980	0.1059	0.1140
23	0.0489	0.0547	0.0608	0.0673	0.0741	0.0813	0.0887	0.0964	0.1044	0.1126
24	0.0471	0.0529	0.0590	0.0656	0.0725	0.0797	0.0872	0.0950	0.1030	0.1113

25	0.0454	0.0512	0.0574	0.0640	0.0710	0.0782	0.0858	0.0937	0.1018	0.1102
26	0.0439	0.0497	0.0559	0.0626	0.0696	0.0769	0.0846	0.0925	0.1007	0.1092
27	0.0424	0.0483	0.0546	0.0612	0.0683	0.0757	0.0834	0.0914	0.0997	0.1083
28	0.0411	0.0470	0.0533	0.0600	0.0671	0.0746	0.0824	0.0905	0.0989	0.1075
29	0.0399	0.0458	0.0521	0.0589	0.0660	0.0736	0.0814	0.0896	0.0981	0.1067
30	0.0387	0.0446	0.0510	0.0578	0.0651	0.0726	0.0806	0.0888	0.0973	0.1061
31	0.0377	0.0436	0.0500	0.0569	0.0641	0.0718	0.0798	0.0881	0.0967	0.1055
32	0.0367	0.0426	0.0490	0.0559	0.0633	0.0710	0.0791	0.0875	0.0961	0.1050
33	0.0357	0.0417	0.0482	0.0551	0.0625	0.0703	0.0784	0.0869	0.0956	0.1045
34	0.0348	0.0408	0.0473	0.0543	0.0618	0.0696	0.0778	0.0863	0.0951	0.1041
35	0.0340	0.0400	0.0465	0.0536	0.0611	0.0690	0.0772	0.0858	0.0946	0.1037
36	0.0332	0.0392	0.0458	0.0529	0.0604	0.0684	0.0767	0.0853	0.0942	0.1033
37	0.0325	0.0385	0.0451	0.0522	0.0598	0.0679	0.0762	0.0849	0.0939	0.1030
38	0.0318	0.0378	0.0445	0.0516	0.0593	0.0674	0.0758	0.0845	0.0935	0.1027
39	0.0311	0.0372	0.0438	0.0511	0.0588	0.0669	0.0754	0.0842	0.0932	0.1025
40	0.0305	0.0366	0.0433	0.0505	0.0583	0.0665	0.0750	0.0839	0.0930	0.1023
41	0.0299	0.0360	0.0427	0.0500	0.0578	0.0661	0.0747	0.0836	0.0927	0.1020
42	0.0293	0.0354	0.0422	0.0495	0.0574	0.0657	0.0743	0.0833	0.0925	0.1019
43	0.0287	0.0349	0.0417	0.0491	0.0570	0.0653	0.0740	0.0830	0.0923	0.1017
44	0.0282	0.0344	0.0412	0.0487	0.0566	0.0650	0.0738	0.0828	0.0921	0.1015
45	0.0277	0.0339	0.0408	0.0483	0.0563	0.0647	0.0735	0.0826	0.0919	0.1014
46	0.0272	0.0335	0.0404	0.0479	0.0559	0.0644	0.0733	0.0824	0.0917	0.1013
47	0.0268	0.0330	0.0400	0.0475	0.0556	0.0641	0.0730	0.0822	0.0916	0.1011
48	0.0263	0.0326	0.0396	0.0472	0.0553	0.0639	0.0728	0.0820	0.0915	0.1010
49	0.0259	0.0322	0.0392	0.0469	0.0550	0.0637	0.0726	0.0819	0.0913	0.1009
50	0.0255	0.0318	0.0389	0.0466	0.0548	0.0634	0.0725	0.0817	0.0912	0.1009

ANNEXURE -D
Rate Of Return- Using Discounted Cash Flow Method

To simplify calculations, a project evaluation sheet (Exhibit I) together with an Interpolation Chart (Exhibit II) has been prepared to obtain rate of return using the discounted cash flow method.

Procedure- Using project evaluation sheet:

a) In column Trial I enter as disbursements the net estimated investment by years. Enter estimated annual returns for the years in which they will occur, and include terminal salvage value (if any) as a return in the year in which it will be realized.

b) Total the disbursements and the annual returns for trial I and enter the results in A and B lines respectively.

c) To obtain the interest rate which equates the present value of the disbursements and annual returns, calculate their present worth in trials 2,3,4 and 5 by multiplying the amounts in trial I by the factors indicated in trials 2 to 5. Add columns to obtain totals A and B.

d) Calculate the ratio of A to B for each trial by dividing the total present worth of disbursements, Totals (A), by the total present worth of annual returns, Totals (B).

Note - Trial 5 should be completed only if trial 4 has a ratio of A to B less than 1

e) On interpolation chart, plot ratios A/B against the trial rate at which they were calculated.

f) Join points with a smooth curve and read rate of return on the vertical axis opposite the intersection of the smooth curve with the vertical line representing a ratio of A to B of I. This is the interest rate which equates the present value of investments with the present value of annual returns.

Note- If a smooth curve does not result from joining the four points plotted, an error has been made in calculations or plotting. A minimum of 4 points is, therefore, necessary to check accuracy.

Exhibit I

PROJECT EVALUATION SHEET

Timing	Trial 1 0% Int. Rate	Trial 2 10% Int. Rate		Trial 3 25% Int. Rate		Trial 4 40% Int. Rate		Trial 5 60% Int. Rate	
Period	Disbursement	Factor	Present worth	Factor	Present worth	Factor	Present worth	Factor	Present worth
5th Year	..	1.46		2.44		3.84		6.56	
4th	..	1.33		1.95		2.74		4.10	
3rd	..	1.21		1.56		1.96		2.56	
2nd	..	1.10		1.25		1.40		1.60	
1st	..	1.00		1.00		1.00		1.00	
Totals (A)		…							

ANNEXURE -D –(Concld.)

Period	Annual Return	Factor	Present worth	Factor	Present worth	Factor	Present worth	Factor	Present worth
		10% Int. Rate		25% Int. Rate		40% Int. Rate		60% Int. Rate	
1st Year	..	.91		.80		.71		.63	
2nd	..	.83		.64		.51		.39	
3rd	..	.75		.51		.36		.24	
4th	..	.68		.41		.26		.15	
5th	..	.62		.33		.19		.10	
6th	..	.56		.26		.13		.06	
7th	..	.51		.21		.09		.04	
8th	..	.47		.17		.07		.02	
9th	..	.42		.13		.05		.01	
10th	..	.39		.11		.03		.01	
11th	..	.35		.09		.02		.01	
12th	..	.32		.07		.02			
13th	..	.29		.06		.01			
14th	..	.26		.04		.01			
15th	..	.24		.04					

16th	..	.22		.03					
17th	..	.20		.02					
18th	..	.18		.02					
19th	..	.16		.01					
20th	..	.15		.01					
21st	..	.14							
22nd	..	.12							
23rd	..	.11							
24th	..	.10							
25th	..	.09							
26th	..	.08							
27th	..	.08							
28th	..	.07							
29th	..	.06							
30th	..	.06							
Totals (B)									

Exhibit II

INTERPOLATION CHART

RATE OF RETURN	60																
	55																
	50																
	45																
	40																
	35																
	30																
	25																
	20																
	15																
	10																
	5																
	0																
	0		0.5			1.0			1.5			2.0			2.5		3.0		3.5

RATIO A/B

*****

ANNEXURE- E

EXAMPLE (I) :-

Yard re-modeling and provision of crossing stations on X-Y section of N. Railway.

Estimated capital cost	Rs. 27,56,000
Interest during construction	Rs. 3,93,011
Total	Rs. 31,49,011

Financial Implications-

Revenue in 2021-22-

(i) Additional traffic expected-

Wagon per day

		2021-22	2022-23
Inward	LSHS	28	38
	Coal	20	27
		48	65
Outward		38	50
	G. Total	86	115

(ii) Lead from X to Y — 157 Km.

(iii) Average load per 4-wheeler LSHS/HSHS — 18 tonnes in tank wagons
Other heavy merchandise — 19.5 tonnes.
Coal. — 21.3 tonnes.
Over all average load — 19.5 tonnes.

(iv) Tare weight of a wagon — 10 tonnes.

(v) Turn round on A Division — 3.71 days.

(vi) Revenue per tonne.-
Fertillizer — 4.71
Coal — 3.26
LSHS/HSHS — 8.33

(vii) Revenue for 2021-22 for entire year

$$= Rs\frac{(28\times18\times8.33)}{100}+\frac{(20\times21.3\times3.26)}{100}+\frac{(38\times19.5\times4.71)}{100}$$

$$= Rs\ 41.98 + 13.88 + 34.90$$

$$= Rs.\ 157\times365\times90.76 = Rs.\ 52,01,001.80$$

Cost of moving additional traffic-

i)	Traction		Diesel		
ii)	Number of marshalling yard/yards		…		
iii)	Number of engine changing points		…		
iv)	Total wagon days		365x86x3.71	=	116457
v)	Total No. of wagons run loaded		365x86	=	31390
vi)	trip Total No. of wagons run empty trip		365x66	=	24090
vii)	Documentation charges @ Rs 1.78 per invoice.	Rs.	31390x1.78	= Rs.	55874.20
viii)	Other terminal charges @ Rs. 12.41 per wagon.	Rs.	31390x12.41	= Rs	389549.90
ix)	Provision and maintenance of carrying units @ Rs1.49 per wagon per day	Rs.	116457x1.49	= Rs	173520.93
x)	(a) GTKM for diesel engines loaded trip	Rs.	31390x29.5x157	= Rs	145382785
	Haulage charges @ Rs. 3.73 per 1000 GTKM.	Rs.	(145382785x3.73)/ 1000	= Rs	5,42,277.78
	(b) GTKM for diesel engines empty trip	Rs.	24090x10x157	= Rs	37821300
	Haulage charges @ Rs. 3.73 per 1000 GTKM.	Rs.	(37821300x3.73)/ 1000	= Rs	141073.45
	(c) Line haul (movement) service- other than transportation expenses, including train passing staff @ Rs. 1.53 per 1000 GTKM For loaded trip	Rs.	(31390x29.5x157x 1.53)/ 1000	= Rs	2,22,453.60
	--do—For empty trip.	Rs.	(24090x10x157x 1.53)/ 1000	= Rs	57,866.59
	(d) Line Haul (movement) services cost of track and signalling @ Rs. 1.33 For loaded Trip	Rs.	(31390x29.5x157x 1.33)/ 1000	= Rs	1,93,359.10

	For empty trip	Rs.	(24090x10x157x 1.33)/ 1000	= Rs	50,302.33
(e)	Marshalling yard cost	Nil			
(f)	Engine changing cost	Nil			
(g)	Total haulage cost	Rs.	18,26,260.04		
(h)	Add allowance for 10%	Rs.	20,08,886.04		
(i)	Marginal cost @ 78%	Rs.	15,66,931.11		
(j)	Annual maintenance charges per first and subsequent years	Rs.	1,14,564.00		
	Total working expenses	Rs.	16,81,495.11		

Net earnings in 2021-22-

Revenue		Rs	52,01,001.80
Working expenses	(-)	Rs	16,81,495.11
Net revenue per year		Rs	35,19,506.69

Revenue in 2022-23 and onwards-

(i) Revenue per year Rs. $157 \times 365 \left[\frac{(38 \times 18 \times 8.33)}{100} + \frac{(27 \times 21.3 \times 3.26)}{100} + \frac{(50 \times 19.5 \times 4.17)}{100}\right]$

Rs. 157x365x56.98 + 18.74 + 45.92

Rs. 157x365x121.64 = Rs. 69,70,580.20

Cost of moving additional traffic

(i) Total wagon days	365x115x3.71	=	155727	
(ii) Total No. of wagons run- loaded trip	365x115	=	41975	
(iii) Total No. of wagons run- empty trip	365x85	=	31025	
(iv) Documentation charges @ Rs 1.78 per invoice.	Rs. 41975x1.78	=	Rs.	74715.50
(v) Other terminal charges @ Rs. 12.41 per wagon.	Rs. 41975x12.41	=	Rs.	520902.75
(vi) Provision and maintenance of carrying units @ Rs1.49 per wagon per day.	Rs. 155727x1.49	=	Rs.	232033.23

(vii)	(a)	GTKM for diesel engines- loaded trip	Rs.	41975x29.5x157	=	Rs. 194407212

	Haulage charges @ Rs. 3.73 per1000/GTKM	Rs.	$\frac{194407212 \times 3.73}{1000}$	=	Rs.	725139
(b)	GTKM for diesel engine empty trip	Rs.	31025x10x157	=	Rs.	48709250
	Haulage charges @ Rs. 3.73 per1000/GTKM	Rs.	$\frac{48709250 \times 3.73}{1000}$	=	Rs.	181685.50
(c)	Line haul (movement) service-other than transportation expenses including train passing staff @ Rs. 1.53 per 1000 GTKM:	Rs.	$\frac{41975 \times 29.5 \times 157 \times 1.53}{1000}$	=	Rs.	297443.00
	For loaded trip					
	For empty trip	Rs.	$\frac{51025 \times 10 \times 157 \times 1.53}{1000}$	=	Rs.	74525.15
(d)	Line Haul (movement) services: For loaded trip	Rs.	$\frac{41975 \times 29.5 \times 157 \times 1.33}{1000}$	=	Rs.	258561.52
	cost of track and signalling trip @Rs. 1.33	Rs.	$\frac{31025 \times 10 \times 157 \times 1.33}{1000}$	=	Rs.	64,783.30
	--do— For empty trip.					
(e)	Marshalling yard cost	Nil				
(f)	Engine changing cost	Nil				
(g)	Total haulage cost	Rs	24,29,798.00			
(h)	Add allowance for 10%	Rs.	26,72,775.00			

(viii)	Marginal cost @ 78%	Rs	20,84,765.00
(ix)	Annual maintenance charges for first and subsequent years	Rs.	1,14,564.00
(x)	Total working expenses	Rs.	21,99,329.00
	Net earnings 1997-98 and onwards-	Rs	69,70,580.00
	Earnings	Rs	21,99,329.00
	Working expenses (-)		
	Net earnings per year	Rs	47,71,251.00

Rolling Stock Requirement in 2022-23 and onwards-

(1) Diesel engines (cost Rs. 21,00,000)

	(a)	Average lead of a diesel	65 wagons
	(b)	engineLead from C to D	157 Km
	(c)	Total No. of trains per day 100/65	1.5
	(d)	Train Kms. Per day .	1.5x2x157 =471
	(e)	Engine Km. Per day per engine in use	387
	(f)	(diesel)Bare No. of diesel engine required	471/387 = 1.2
	(g)	Add for spares @ 6.96%	1.2 x106.96 =1.28 100 Say 1.3
	(h)	Cost of 1.3 engines @ Rs. 21,00,000	Rs. 27,30,000
(ii)		Covered wagons (Cost Rs.21,014).	
		Wagons required per day for carrying coalfor carrying urea	27 (15 to be back loaded) 35
		Total	62

Total bare number of covered wagons required (62x3.71 turn round) 230.02

Add spares @ Rs. 5.32% 230.02x105.32 / 100 = 242.25

Say 242

Cost of 248 wagons @ Rs 21,014 ..Rs. 21014x242 = 50,85,388

(iii) Tank wagons (cost bare number of wagons Required) Rs. 45,696

(38x3.71 turn round) = 140.98

Add for spares @ 5.32% 140.98x105.32 / 100 = 148.43

Say 148

Cost of 148 wagons @ Rs. 45,696 Rs. 45696x148 = Rs. 67,63,008

Grand total of rolling stock as per items (i), (ii), (iii) above Rs. 1,45,78,396

Cost of work including interest for 4 years as per details given below Rs. 31,49,011

Cost of rolling stock 1,45,78,396

Total **1,77,27,407**

Interest during construction:-

1st Year	10,00,000				$\frac{1000000 \times 6}{2 \times 100}$	= Rs.	30,000
2nd Year	6,00,000	[	$\frac{600000}{2}$ + 1030000	]	x $\frac{6}{100}$	= Rs.	79,800
3rd Year	6,00,000	[	$\frac{600000}{2}$ + 1709800	]	x $\frac{6}{100}$	= Rs.	1,20,588
4th Year	5,60,000	[	$\frac{5,60,000}{2}$ + 2430388	]	x $\frac{6}{100}$	= Rs.	1,62,623
Total	27,60,000					=	3,93,011

Rate of return by DCF method-

(i) Capital cost	Rs.	1,77,27,407
(ii) Life of assets		30 Years
(iii) Salvage value @ 10% (excluding earth work)	Rs.	2,17,413
(iv) Net earnings 2021-22	Rs.	35,19,507
Net earnings 2022-23	Rs.	47,71,251

(v) Present worth calculations-

@ 25% (-177.27) + [(35.20) (0.8)] + [47.71 (3.995-0.8)] + [(2.17x.0012)]

- 177.27 + 28.16 + 152.43 + 0.0026

- 177.27 + 180.59

+ 3.32

ROR is about 25%

Note - in this computation, at 25% discount rate

0.8 is the single payment PWF for the Ist Year, 3.995 is the PWF for uniform cash Flow in the 30th year 0.0012 is the

PWF for
Single payment in the 30th year.

EXAMPLE (2) :-

Provision of departmental line wires on A-B Section of X Railway.

Estimated initial cost : Rs.25.08 lakhs (including Rs.1.47 lakhs for staff quarters).
Outflow of cash during the Project Construction stage-

Year	0%	6%	10%	15%
- 2	(-) 6,00,000	(-) 6,54,000	--	--
- 1	(-) 12,00,000	(-) 12,72,000	--	--
0	(-) 7,08,000	(-) 7,08,000	--	--
	(-) 25,08,000	(-) 26,34,000	--	--

NPV of the Project, assuming even cash flow of Rs.2,81,184 (details given below), at 10% over a lifeof 60 years will be 2,81,184 x 9.967 = 28,02,561.

As the NPV is more than the initial investment inclusive of interest during construction, the project isfinancially justified.

Details of the anticipated annual saving of Rs.2,81,184
Financial Implication:-

		Increase	Decrease
1.	Annual repairs and maintenance charges on Rs.25,08,000 @ 3%	75,240	-
2.	Annual rental savings		
	(a) Iron wire per mile @ Rs.54.23 x4 per conductor (136 miles)	-	29,501
	(b)Copper wire per mile @ Rs.72.27 x 4 per conductor (136miles)	-	39,314
3.	Annual operational savings as per details attached	-	2,83,764
4.	Financial implications arising out of Engg's portion as per details attached	-	3,845
5.	Total	75,240	3,56,424

Net saving during 1st and subsequent years = 3,56,424 –75,240 = 2,81,184

Details of item 4 :-

	Increased by	Decreased by
Annual rent recoverable from type II quarters (7 units) $\frac{7x(110+380)x12}{2}$ @ 10%	...	2,982
Annual rent recoverable from staff of type I quarters(7 units) $\frac{7x(70+110)+47x12}{4}$ @ 7.1/2%	....	863
	....	3,845

Net annual increase during the first and the subsequent year = Rs.3845

Details of items 3

Details of operational savings -It is expected that with the provision of ACSR line wire, the control efficiency will be 90% and above. The efficiency below 90 is primarily due to copper wire thefts. During February, 1970 for 13 days the efficiency was 90% and above and average hours per train is 4 hrs-55 mts. as against 5 hrs-45 mts. per train during the balance of 15 days. The difference in the hours on road is 50 mts or
.83 mts per train.

1.	Average number of trains (only Dn trains excluding one works train as per line capacity statement 1968-69)	=		13.1
2.	Total T.G. accounted for	=		370
3.	Number of trains effected below 90% efficiency	=		197
4.	Percentage of trains effected to total trains accounted for	=	$\frac{197 \times 100}{370}$ =	53.24
5.	Percentage of average trains effected to total T.G. running onsection i.e. 13.1	=	$\frac{53.24 \times 13.1}{100}$ =	6.97
6.	Average load per train on branch line	=		56

'A' Saving on wagons:-

a)	No. of hours to be save	=	6.97x56x .83 wagon hrs.

b) Converting wagon hours into wagon days = $\frac{6.97 \times 56 \times .83}{24}$

c) By adding spares @ 3.23% = $\frac{6.97 \times 56 \times .83}{24} \times \frac{103.23}{100} = 13.87$

d) Saving on one wagon = Rs. 2229/-

e) Annual saving on 13.87 = 2229x13.87 = Rs.30916

'B' Saving on engine :-

a. Total detention to be saved = 6.97 x .83

b. Converting into No. of Diesel Engine @ 19.1 hrs. (Daily effective hourse) = $\frac{6.97 \times .83}{19.1}$

c. By adding spare @ 8.22% = $\frac{6.97 \times 83}{19.1} \times \frac{108.22}{100} = .32$

d. Saving on .32 engine @Rs.7,90,152(fraction of an engine W/O interest and depreciation) = 790152 x .32 = Rs.2,52,848

e. Total saving of 'A' and 'B' = 30916 + 252848 = Rs.2,83,764

EXAMPLE (3):-

Provision of line capacity of 'X' Railway.

A section (82 Kms) is partially doubled in two patches over two stretches totalling 52 Kms. On the 30 Kms. long single line section, there are 4 block stations and all these stations have two reception lines at present thereby limiting the capacity of the stations either to crossing of a train or merely to give precedence at the station, both crossing and precedence cannot take place at the same time.

2. The traffic is expected to increase from 20 trains each way on the single line section at present to 24 trains in the course of a year or two. At the end of 5 years, one more passenger train and two goods trains are expected to be introduced, increasing the train density to 27 either way. As against the projected line capacity required at 80% utilization for the above level of traffic at 30 and 34 in the 1st and the 5th the year respectively, the line capacity at present is restricted to 27. All capacity calculations assume diesel traction.

3. The following alternative are being considered for increasing the line capacity to match theprogressive traffic requirement :-

Alternative (1) : Doubling of the entire 30 Kms section - Cost Rs.1.90 crores; capacity 44 paths either way.

Alternative (2) : Doubling the section in two phases:

(a) Immediate doubling of 20 Kms section - Cost Rs.1 crore; capacity 32 paths either way.

(b) Doubling of the remaining 10 Kms length at a cost of Rs.90 lakhs in 5th year - capacity44 paths each way

Alternative (3) : (a) Provision of one additional reception line at each of the 4 block stations at an approximate cost of Rs. 10 lakhs straightaway; capacity 30 paths each way.

(b) Doubling of the entire 30 Kms section in 5th year-cost Rs.1.90crores; capacity 44 paths each way.

The additional Revenue likely to accrue on account of additional traffic worked out, commodity wise, as apportioned to the section in the 1st and the 5th years on the traffic projections for these years assuming the level of traffic to remain constant during this period and 5th year and beyond, are tabulated below :-

Sr. No.	Commodities	2016-17 and onwards	2019-20 to 2020-21	2021-22 and onwards
1.	Cement	56,450	1,25,823	1,95,197
2.	Pulses	19,549	46,149	72,843
3.	Salt	1,28,745	2,37,120	3,45,495
4.	Onions	15,626	38,756	61,887
5.	Rock Phosphate	46,097	1,23,315	2,00,534
6.	Vegetable Oil	89,363	1,69,253	2,49,143
7.	POL	4,84,477	6,01,383	8,38,289
	TOTAL	8,40,307	14,01,799	19,63,288
		(a)	(b)	(c)

(a) Plus 1 goods train.
(b) Plus 1 + 1 = 2 goods train.
(c) Plus 2 + 1 = 3 goods train.

4. The financial implications for the three alternatives worked out on the D.C.F. technique are given inthe statements annexed. It may be pointed out that only goods earnings have been taken for working out the financial implications and unit cost data with interest has been applied.

Alternative (1)

Full Doubling:

If doubling is done straightaway, the return comes to 8%. In this case the cash out-flow is Rs.1.90 crores during 2016-17 and 2017-18 while the cash in flow is at the level of 8,40,000 for 2016-17 to 2018-19, Rs.14,01,800 from 2019-20 to 2020-21 and Rs.19,63,000 for the remaining period 2021-22 to 2046-2047.

Year	Cash flow	Cumulative discount (8%) factor for			
		1st Year	Next 2 Years	Remaining 25 years	Present Value
2016-17	1,00,00,000	-	-	-	-100,00,000
2017-18	90,00,000x.85	-	-	-	-76,50,000
2016-17 to 2018-19	8,40,000 each year	2.57	-	-	+21,58,000
2019-20 to 2020-21	14,01,800	-	1.42	-	+19,90,500
2021-22 to- 2046-47	19,63,000 each year	-	-	7.26	+142,51,000
				TOTAL	+7,49,000

Note: It is assumed that simultaneously with the doubling work in progress, it will be possible tocarry the additional traffic in 2016-17 and 2017-18.

Alternative (2)

Doubling in two Phases:

In case the doubling is taken up in two Phases, the first phase of doubling A-B taken up immediately, i.. e. in 2016-17, and the second phase viz, doubling of B-C taken up in 2021-22, the rate of return would be about 9% as worked out below:-

Cost of first phase	Rs.100,00,000
Cost of second phase	Rs. 90,00,000

Year	Cash flow	Cumulative discount(8%)	Present Value

		Factor for 1st 3 years	Next 2 years	For remaining 25 years	
2016-17	100,00,000	-	-	-	-100,00,000
2016-17 to 2018-19	8,40,000	2.57	-	-	+21,58,000
2019-20 to 2020-21	14,01,800	-	1.42	-	+19,90,500
2021-22	90,00,000	.68	-	-	-61,20,000
2021-22 to 2051-52	19,63,000	-	-	7.26	+142,51,000
				TOTAL	+22,79,00

At 10% the computation will be:

(-100,00,000)+(8,40,000x2.49)+(14,01,800x1.30) - (90,00,000x0.62)+(19,63,000x5.64)
= -100,00,000+20,91,600+18,22,34 - 55,80,000+110,71,320 = - 5,94,740
The return is a little over 9%

Alternative (3)

(Extra reception lines followed by full Doubling: -)

The complete project inclusive of the first phase viz., provision of additional reception line at threestations and the second phase viz., doubling (after 5 years) the total life span being 30 years.

The rate of return works out to slightly above 13% as under :-

Year	Cash flow	Cumulative discount factor in 30 years at 12%		Present Value
		1st 5 year	Remaining 25years	
2016-17	10,00,000	-	-	- 10 lakh
2016-17 to 2020-21	8,40,000 each year	3.605	-	+30.28 lakh

2020-21	100,00,000	.5674	-	-56.74 lakh
2021-22	90,00,000	.5066	-	-45.59 lakh
2021-22 to 2046-47	19,63,000 each year		4.45	+87.35 lakh 5.30 lakh

With this scheme an extra goods train cannot be introduced for two years during (2019-20 to 2020-21). This entails an annual loss of Rs.1.26 lakh. (Extra wagons Rs.14175, extra locos 1,12,704 because of detentions as capacity utilization over 80%). Discounted to present values, this will reduce the above net figure of Rs.5.30 lakhs by further Rs.1.80 lakh but the rate of return will not be altered significantly.

EXAMPLE (4):-

Providing a Diesel Loco Shed for homing 50 mainline B.G. DieselElectric Locomotives 'X' Railway

(A) Capital costs (estimated) and phasing of expenditure (Rs. lakhs)

(1) Diesel	Total	Loco Shed	Loco Motives	
2019-20	295	25	270	(10 WDM 2 Locos at Rs.27 lakhs each)
2020-21	320	50	270	- do -
2021-22	311	41	270	- do -
2022-23	270	..	270	- do -
2023-24	270	..	270	- do -
		116	1350	
Scrap value of locos (at Rs.1,00,000 per loco)			(-)50	
			1300	

(II) Steam (replacement of existing locos)	Loco Shed	Loco Motives

2019-20	..	145	2.5 steam taken as equivalent to one WDM2
2020-21	..	145	Cost per Steam Loco assumed at Rs.5.8 lakhs.
2021-22	..	145	
2022-23	..	145	
2023-24	..	145	
	..	725	
Estimated scrap value (at Rs.23000 per loco)		(-)29	
		696	

Estimated economic life : Even though 40 years per steam and 30 years per diesel, the life is assumed to be 30years in both cases. (Discount factor after 30 years is negligible).

(B) Operating and Maintenance costs:-

(i) Basic Data:-

		Steam	Diesel
(a)	Km. per day for goods services(for steam and all Railway B.G. for diesel loco)	83	323
(b)	Average gross load per train (excluding loco)	1329 t	1591 t
(c)	Locos in use daily (with 17.6% repairs allowance for steam, or 15% of total holding and 12.1/2% for diesels)	...	43.75 WDM2
(d)	Steam locos on line equivalent to 50 WDM2Locos- vide (a) to (c) above. (This gives a ratio of 4.68 steam equal to one diesel however in the computations for this appraisal, the conservative and generally accepted ratio of 2.5 steam to one diesel has been adopted.)	234	$\frac{43.75 \times 323 \times 1591}{85 \times 1329} \times \frac{100}{85}$
(e)	Km per loco per annum (derived from dieselloco operation).	$\frac{103.158 \times 1591}{1329 \times 2.5}$ = 49.398	$\frac{323 \times 365 \times 7}{8}$ = 103.158
(f)	Cost of fuel per 1000 GTKM	Rs.2.94	Rs. 2.31

(g)	Cost of repairs and maintenance per engineKm.	Rs.0.71	Rs. 0.45
(h)	Consumption of lubricating oil per 100 engineKm.	4.50 litres	11.2 litres
(i)	Cost of lubricant per litre (in terms of latest purchase rate etc.)	Rs.1.71	Rs.2.42

(ii) Cost Data

(a)	Repairs and maintenance per annum	0.71x49,398 =Rs. 35,073	0.45x103,158 Rs.46,421
(b)	Cost of fuel per annum	1329x49398 x2.94x.001 =Rs. 1,93,011	1,591x103.158 x2.31x.001 = Rs. 379,127
(c)	Cost of lubricating oil per annum	$\frac{49,398 \times 4.5 \times 1.71}{100}$ = Rs. 3801	$\frac{103,158 \times 11.2 \times 2.42}{100}$ = Rs. 27,960
(d)	Wages of running staff per annum (estimated for staff requirement)	Rs.23,493	Rs.28,458
(e)	Kilometrage allowance per annum	Rs.8,052	Rs.13,411
(f)	Total cost per locomotive per annum	Rs.2,63,430	Rs.4,95,377
(g)	Equivalent cost at 2.5 steam : 1 diesel	Rs.6,58,575	Rs.4,95,377
(h)	Saving in diesel operation per loco per annum	Rs.1,63,198 (say) Rs.1.63 lakh	.....

(C) Financial Analysis (DCF) (Cash outflows) Rs. lakhs

Year	Index	Interest/ Discount factor @ 10%	Steam	Diesel	Saving (+) Additional (-)	
					Absolute	Discounted
2019-20	-2	1.21	(145+66)*	(295+49)*	-133	-161
2020-21	-1	1.10	(145+132)	(320+98)	-141	-155
2021-22	0	1.0	(145+198)	(311+147)	-115	-115
2022-23	1	0.91	(145+263)	(270+198)	-50	-45
2023-24	2	0.83	(145+329)	(270+245)	-41	-34
2024-25 to 2054-55	3 to 30	6.93	329	245	+84	+582

Residual value	30	0.057	+29	+50	+21	+1
						+23

* Capital and Revenue cash outflows are shown separately for easy reference. This analysis shows that the proposed diesel shed to home 50 WDM2's is financially justified, the return underDCF being a little over 10%

*****

ANNEXURE -F

ECONOMIC EVALUATION OF RAILWAY INVESTMENTS

A purely financial appraisal of investment proposals does not necessarily lead to the selection of projects which best serve the needs of the community. The inadequacy of. financial analysis in this regard derives from the fact that projected cash inflows and outflows associated with feasible investment alternatives do not correctly reflect the actual benefits to the community flowing from them or the costs that they impose on the economy. Financial and economic appraisals, however, need not always lead to conflicting decisions a financially viable project will also be acceptable on economic grounds whenever the economic return on investment is likely to be at least as high as its financial yield. But, there can be instances of financially sound investment proposals which may not turn out to be worthwhile propositions because the relevant cash outflows do not include all the associated costs to the economy. Again, on investment which is not expected to be profitable, may still yield an adequate, or even a fairly high, economic return if the projected cash. revenue represent only a part of the benefits or incomes that are likely to be generated by it.

2. Economic benefits attributable to a particular investment can, for a number of reasons, exceed the revenues directly accruing to the Railways in the form of fare and freight receipts. In the first place, most users of a facility may be willing and able to pay somewhat more than what they are actually charged by the Railways. Secondly, there may also be instances where what the consumers are actually able to pay for rail transportation is (because of uneven-income distribution) less than the benefit they derive from it. This, indeed, is the main justification for a preferential fare structure for certain passenger and suburban services. Finally, for economic or social policy reasons freight rates on certain key commodities may be set at levels which do not fully cover rail transportation costs. The entire benefit derived by the users of Railways can never be qualified; however, at least that part of it which consists of the difference between cost of transportation and fares or freight rates actually charged-can be precisely ascertain. *The provision of a rail transport facility thus directly adds to the well-being of the community by more than the receipts that accrue thereby to the Railways.

*Likewise, the difference between the cost to the consumer of rail transportation and that of other modes of transport replaced (partly or wholly)

by it is a tangible and measurable social gain.

Productivity test may not be required for projects sanctioned on considerations other than hurdle rate/IRR. Further, all projects sanctioned on the basis of ROR, should be subjected to mid term review at the time of every revision of estimated cost. Such review shall consist of review of both existing projection in current scenario, revised estimated cost and consequential change in ROR. Financial feasibility of project need be assessed and commented by General Managers of Zonal Railway. As IR will be shifting from the existing Economic Internal Rate of Return (EIRR) based project assessment to a more comprehensive method i.e. Modified Economic Internal Rate of Return (MEIRR) to capture the economic and social network impact of any project interventions comprehensively, MEIRR at different levels will be compared and examined before reaching any investment decision.

3. Rail transportation, however, can make a substantial indirect contribution as well to general well- being by facilitating economic expansion. A new line, in a backward region not well endowed with alternative modes of transportation, stimulates the growth of output and employment by widening the market for local products as well as by creating a market for some hitherto unexploited natural resource. The quantification of such indirect benefits can at best be approximative. For one thing, the expected expansion of regional or local economic activity is difficult to forecast. For another, the quantification of "developmental benefits" poses the problem of allocating expected additions to output and incomes between the Railway project and other complementary investments in industry, agriculture or commerce.

4. Great care should be taken in estimating social benefits for the purpose of economic appraisal of railway investments. Such benefits should, to the extent possible, be quantified with a reasonable degree of accuracy. Thorough investigations at the traffic survey stage would help in identifying the "developmental effects" and in estimating broadly the magnitude the complementary investments that may be required. Also, the assumptions and reasons underlying any judgement about non-quantifiable benefits. should be clearly spelt out. Fortunately, the assessment of social benefits is necessary only in the case of proposed investments in new rail lines or operations ; as regards investment for modernisation and improvement, which constitute the bulk of the Railways' capital outlay, one need only estimate the social costs entailed by investment alternatives In order to pick out the least cost solution from the point of view of the economy.

5. The expenditure flows associated with Railway projects can, to varying extents, diverge from the cost to the economy of acquiring resources needed for their implementation and operation. The prices at which certain inputs and resources are made available to the Railways, for instance, may understate or exaggerate their, real cost to the economy. Similarly ,the rupee equivalent of direct foreign exchange expenditure may differ from the cost of saying or earning an equivalent amount of foreign exchange. Moreover, the relative prices of various types of equipment and materials purchased by the railways will be different from the comparative costs of producing them for the reason that the rates of indirect taxes (or subsidies) vary from product to product. Lastly, there are certain types of real costs which do not at all get recorded in the financial cash flows. Environmental damage can, for example, be a major unrecorded element of cost.

6. In selecting investments which impose the least cost on the economy, cash out flows have to be recomputed in such a way as to minimise the distortions caused by the use of prices actually paid for inputs (including the prices of capital and foreign exchange) and by the neglect of other costs which do not figure at all in expenses. Environmental effects of investments are the most difficult to estimate However in a number of cases the choice of projects may be influenced much more by the interest and exchange rate, that are utilised than by the correction of distortions introduced by indirect taxes, subsidies and environmental effects. A preliminary sensitivity analysis is useful for picking out the more important, of the factors distorting costs; such factors can then be subjected to a detailed investigation.

7. For economic evaluation of Railway Projects, the interest or discount rate is currently set at 10 percent. This implies that the cost of capital comprises a depreciation or capital recovery factor and interest charged at 10 per cent per annum; a project is thus just acceptable if the expected earnings from it during its lifetime make it possible to recover the investment with a return if 10 per cent per annum, that is, if the DCF rate of return on it is 10 percent.

8. In the cash flows utilised for economic, evaluation of high speed diesel oil is not valued at the price actually paid by the Railways for it. Instead, all taxes and duties payable on it are excluded from the price; and, the duty-free price is adjusted upwards so as to allow for the comparative scarcity of crude oil in the Indian economy. At present this adjustment factor is exactly half the current rate of excise duty on high-speed diesel oil.

9. There is no direct readjustment of the official exchange rate for the purpose of computing the scarcity value of imported. equipment, spares and materials. However, there is an implicit adjustment in as much as the duty paid on imports is retained as a cost item in the cash-flows ideally, other indirect taxes like excise duties, sales taxes, local taxes and other cesses and levies, should be excluded from the cost of domestically procured inputs. But in many cases it has been found, particularly in the analysis of investment for modernisation of traction, that the exclusion of indirect taxes and similar levies does not make any material difference to the ranking of the proposed alternatives.

10. Electric power is valued not at the price at which it is sold to the Railways by the State Electricity Boards but at its estimated cost to the economy. The latter is derived from actual production cost by revaluing its interest component at the rate of 10 per cent per annum and its foreign exchange component at an exchange rate 33 per cent-higher than the current official rupee price of foreign currencies.

FINANCIAL AND ECONOMIC EVALUATION OF-INVESTMENT ALTERNATIVES

An Example

A highly simplified hypothetical example of choice between diesel and electric traction is presented here for the purpose of illustrating the essential difference between financial and economic evaluation. This type of choice is basically a problem of minimising the cost of handling a given volume of traffic over specified sections.

The two project alternatives, dieselisation and electrification, are defined as follows-

(i) The project life, which includes the construction period, extends in both cases upto 44 years.

(ii) The level of traffic remains unchanged over the life time of the project.

(iii) Annual operating expenses exclude depreciation and do not vary from one year to another.

(iv) Capital costs exclude interest during construction**

(v) Capital outlay on dieselisation is spread over a period of

three years; it comprises the expenditure on acquisition of rolling stock and construction of sheds.

(vi) Capital outlay on electrification is phased over four years; it comprises the expenditure on rolling stock and construction of OHE.

**If the income flows are computed from the date of completion of the project, the capital outlay will be compounded at the desired interest rate.

Given these assumptions, the financial cost cash-flows associated with the two illustrative traction alternatives can be presented in the following manner :

Financial cost to Railways (Rs. crores).

Year	Diesel	Electric
1	..	3.0
2	0.5	6.0
3	0.5	15.0
4	10.0	6.0
5th to 44th (each year)	4.0	2.5

Discounted Present Worth of Financial Costs.

Interest Rate.	Diesel	Electric
6%	56.5	55.3
7%	49.2	50.3

It would be seen that when discounted at 6 per cent the present worth of the financial cost flow relating to electrification works out to be lower than that of the financial cost flow associated with dieselisation by Rs. 1.2 crores. But the situation is reversed when the cost flows are discounted at 7 per cent, in which case dieselisation turns out to be cheaper by Rs. 1.1 crores. Thus, in this hypothetical case, the depreciation inclusive financial cost of electrification is lower only at rates of interest below 7 per cent. The rate of interest at which the two alternatives will impose identical costs can be found out by linear interpolation.

This turns out to be 6.5 percent; at lower rates of interest electrification is the cheaper alternative; but becomes the costlier one at interest rates exceeding 6.5 per cent. This is as it should be; for electrification is the more capital intensive mode of traction.

The estimation of cash-flows relevant for the computation of the cost to the economy is based on the following assumptions :-

(i) The basic price, inflated to the extent of 50 per cent of the excise duty, is taken as the appropriate scarcity value of high-speed diesel oil.

(ii) The cost to the economy of electricity generation and transmission is assumed to be 7 paise per KWH as compared to 10 paise per KWH assumed to be actually paid by the railways.

(iii) Fuel costs constitute 70 per cent of operating expenses under diesel and 50 per cent of operating expenses under electric traction.

Under these assumptions, the cost to the economy of the uniform annual operating expenses associated with dieselisation and electrification works out to be Rs. 3.00 and Rs. 2.12 crores respectively. But, the cost to the economy of capital outlays continues to be the same as the financial cost. The discounted present worth of the cash flow corresponding to the cost to the economy at 3 and 4 percent interest rates is as follows:

Discounted Present Worth of Costs to the Economy.

Interest Rate	Diesel	Electric
3%	71.4	70.8
4%	60.2	62.4

It will be seen from the above that in this hypothetical case, from the point of view of cost to the economy, electrification turns out to be cheaper than dieselisation only at rates of interest which do not exeed 4 per cent. The break even rate of interest, at which both alternatives involve identical costs, is approximately 3.2 per cent.

*****

ANNEXURE - G

(See Paragraph 240)

The examples given below are intended to illustrate the principles set out in paragraph 238 et seq. The data assumed are hypothetical and the conclusions arrived at in these examples are purely illustrative. The methodsadopted are not to be regarded as exhaustive or as precluding the use of alternative methods which may be found to be more appropriate.

1. Renewal of a Locomotive.-

(i) Whether to recondition or to renew a locomotive, given the following data :-

Particulars.	Old Locomotive.	New Locomotive
Cost of the locomotive	Rs. 50,000 (Second-hand cost).	Rs. 5,00,000 (New cost).
Cost of reconditioning	Rs. 50.000	.....
Rate of interest	10 percent.	10 percent.
Life	10 years	40 years
Scrap Value	Rs. 10,000	Rs. 20,000
Maintenance Operation and Repair Charges	Rs. 50,000 a year.	Rs. 40,000 a year

(ii) The average annual cost of the existing locomotive after reconditioning would be Rs. 65,643 made up of the following :-

	Rs.
(a) Cost of maintenance, operation, repairs, etc.	50,000
(b) Interest at 10 per cent on Rs. 1,00,000 (Rs. 50,000 Plus Rs. 50,000)	10,000
(c) Sinking Fund Payment at 10 per cent (90,000 x 0.0627)	5,643
Total	65,643

(iii) The average annual cost of the new locomotive would be Rs. 95,104 made up of the following:-

		Rs.
(a)	Cost of maintenance, operation, repairs, etc.	40,000
(b)	Interest at 10 per cent on Rs.5,40,000 (i.e., new cost Rs.5,00,000+ the second hand cost of the old locomotive, Rs.50,000- the scrap value of old locornotive Rs. 10,000).	54,000
(c)	Sinking Fund Payment at 10 per cent (4,80,000 x 0.0023).	1,104
	Total	95,104

(iv) It follows from the above figures that, with the data assumed, it is cheaper to recondition the old locomotive than to replace it by a new one.

(v) Applying the DCF method also, it is observed that for an initial investment of Rs. 5 lakhs, the NPV for 40 years on the basis of the saving of Rs.10,000/- reckoned at 10 per cent p.a. adds up to Rs.1,02,210 only (10,000x9.779)+(20,000x0.0221). The purchase of new locomotive is, therefore, not justified.

2. Renewal of a Bridge.- (i) Whether to recondition or to renew a bridge, given the following data:-

Particulars.	Old Locomotive.	New Locomotive.
Cost	10,000	40,000
Scrap Value	2,000	4,000
Scrap Value (after reconditioning)	4,000	.....
Interest	10 per cent	10 per cent
Life	30 years	60 years
Reconditioning Cost	10,000	.....

Note.-Maintenance cost is the same for both the reconditioned and new bridge

(ii) The annual cost of service of the reconditioned unit will be Rs. 1,402 vide details given below:-

	Rs.
(a) Interest at 10 percent on Rs.20,000 (i.e. Rs:10,000+10,000)	1,200
(b) Sinking Fund Payment at 10 percent on Rs16,000 (i.e. 16,000 x 0.0061)	98
Total	1,298

(iii) The annual cost of service of the new girders ,will be Rs.2,948 vide details below.-

	Rs.
(a) Interest at 10 per cent on Rs.48,000, i. e., on cost of new girders + second hand value of old girders-scrap, value of old girders) Rs. 40,000+ Rs 10,000-Rs.2,000).	2,880
(b) Sinking Fund Payment at 10 per cent on Rs.36,000 (Rs,40,000-Rs.4,000) 36,000 x 0.0003)	11

Total	2,891

(iv) It follows that reconditioning is cheaper.

3. Renewal of Permanent Way- (i) To determine whether a line of 85 lb. B. H. rails should be fitted with 2 additional sleepers, one, Duplex joint sleeper and new fish-plates and bolts, or replaced with 90 lb. F. F. rails, given the following data :-

For providing additional fittings.		Fitting new 901b.rails	
Cost of two additional sleepers including fittings	Rs 60	Cost of 2 new 90 lbs. rails	Rs.550
Cost of Duplex joint sleepers including fittings	64	Including carriage and laying.....	
Cost of fish-bolts and plates	10	Life	60 years.
Cost of fitting these in each	7	Scrap value	Rs. 207
Life of 85 lb. rails	30 years	Rate of interest	10 per cent.
Scrap value of rails 36 ft. long	Rs. 100		
Scrap value of fittings	5		
Second-hand cost of two 85 lb. rails, 36 ft. long.	243		
Rate of interest	10 per cent		

Note -(1) Maintenance and repair cost are considered to be the same in both cases.

(2) Steel scrap has a very high price in the market and new rails are comparatively cheapfrom indigenous sources.

(3) The old rails cannot be used elsewhere.

(ii) The average annual cost of service of the existing 85 lb. track after additional fittings are made will be Rs.26.27 vide calculations below:-

(a) Interest at 10 per cent on the—

	Rs.
Cost of 2 sleepers	60
Cost of Duplex Joint sleepers new	64
Cost of fish-plates and bolts	10
Cost of fitting	7
Second-hand value of old rail	243
	384
Less scrap value of fish- plates and bolts	5
	379
Interest at 10 percent	37.90
(b) Sinking Fund Payment at 10 percent on Rs. (60+64+10+7+243) - (100+5) or Rs.279 = 0.0061 x 279)	1.70
Total	39.60

(iii) The average annual cost of service of new rails will be Rs.41.93, vide calculations below.-

	Rs.
(a) interest at 10 percent on-	
.	
Cost of new rails and fittings, etc.	550
Plus second-hand cost of old rails.	243
	793
Less scrap value of old rails and fittings.	105
	688
Interest at 10%	68.80
(b) Sinking Fund Payment at 10 per cent on Rs.550 -207= (343 x 0.0003)	0.10
Total	68.90

(iv) With the data assumed it is cheaper to provide 2 extra sleepers 1 Duplex Point sleepers and new fish- plates and bolts to the existing track than to replace it with 90 lb. F. F. rails. If, however, it were possible to use the B. H. rails elsewhere on the line, it might be cheaper to provide new rails than to provide these additional fittings.

4. Re-alignment of Line.-(i) To determine whether the re-alignment of a track by abandoning thearc and following the chord, is justifiable, given the following data :-

Length of arc		15 miles
Length of chordCost of chord		10 miles
	Rs.	5,00,000
Scrap value of items recoverable from the arc Scrap value of items recoverable from the chordSecond-hand value of all assets of the arc Savings in operation and maintenance costs Loss on tickets owing to reduction of mileage Extra traffic expected. Rate of interest.	Rs.	50,000
	Rs.	40,000
	Rs.	3,00,000
	Rs.	70,000
	Rs.	10,000
	Rs.	15,000
		10 per cent

Note.-There is keen bus competition on the section running along the arc and the chord will cut this competition as the road runs along the arc and not the chord, and it is very unlikely another road will be built along the chord.

(ii) The net saving due to re-alignment is Rs.75000 (70,000-10,000+ 15,000).

(iii) The average annual cost excluding the cost of operation and maintenance of the realigned track will be Rs.76,702 vide calculations below.-

	Rs.
(a) Interest on Rs. 7,50,000 (i.e. Rs. 5,00,000 + Rs. 3,00,000 - Rs. 50,000) at 10 per cent.	75,000
(b) Sinking Fund Payment at 10 percent required to provide Rs.4,60,000 (i. e.5,00,000 -Rs.40,000) at the end of 35 years - (0.0037 x 4,60,000)	1,702
Total	76,702

Note.-There are many assets on the track having varying normal lives. For the purpose of this calculation, a life of 35 years has been taken as a fair average for all the assets involved.

iv) Hence it may be seen that realignment is not justified since, it will involve an excess of Rs.1,702 p.a.

*****

ANNEXURE-H

(See Paragraph 242)

The examples given below are intended to illustrate the principle set out in paragraph 241 The dataassumed are hypothetical and the results arrived at in these examples are purely illustrative.

1. If, in the case of an asset where the average annual cost of service is the basis on which the secondhand value has to be fixed.-

the normal life is	N years.
the first cost is	Rs. C
the scrap value is	Rs. S
life as second-hand asset is	n years.
the annual cost of operation and maintenance, repairs, etc. of the asset while new is.	Rs. 0
the annual cost of operation and maintenance, repairs, etc. in the second-handcondition r is the annual rate of interest.	Rs. 01

dN is the sinking fund Payment required to be paid annually so that at the end of N years, the sinking fund provides Re. 1.

dn is the sinking fund Payment required to be paid annually so that at the end of n years the sinking fund provides Re. 1.

then, 'X', the second-hand value of the asset is such that the average annual cost of the second hand asset is equal to the average annual cost of the new asset, or Xr + (X-S) dn+01 = Cr + (C-S) dN+O. Simplifying the equation, we have .-

$$Xr+X\,dn-Sdn+01$$
$$=Cr+(C-S)\,dN+0.$$
$$X\,(r+dn)=Cr+(C-S)\,dN+0+Sdn-01.$$
$$X=\frac{Cr+(C-S)\,dN+0+Sdn-01}{r+dn}$$

Illustration. - If Rs. 10,000 be the first cost of an asset with 60 years of normal life and a scrap value of Rs.2,500, the rate of interest is 3 percent or .03 per rupee and the average maintenance and repair cost for the first 20 years is Rs.250 and for the next 40 years Rs.35O, then applying the above formula, the second-hand value at the end of 20 years will be.

$$\text{Rs. } \frac{10{,}000 \times 0.1 + (10{,}000 - 2{,}500)\,0.0003 + 250 + 2{,}500 \times 0.0023 - 350}{0.1 + 0.0023}$$

Or $\frac{908}{0.1023}$ i.e., Rs.8876

2. In the case of an asset the second-hand value of which is to be determined on the basis of 'the average cost per unit of service; if the same notation as in Example (1) were used and.-

if u is the average number of annual units of service rendered by the asset while new, and u1 the average number of units of service rendered by the asset while second-hand, then, X the second-hand value of the asset is such that-

$$\frac{Xr+(X-S)\,dn+01}{U1} = \frac{Cr+(C-S)\,dN+0}{u}$$

$$\text{There fore, } X = \frac{u1/u\,[\,Cr+(C-S)\,dN+0]-01\,Sdn}{r+dn}$$

Illustration.- If Rs. 1,00,000 be the cost of an asset with a normal life of 35 years and a scrap value of Rs.10,000; if the rate of interest is assumed to be 3 percent or .03, the average operation, maintenance and repairs costs while new, Rs. 1,20,000 per annum and the average operation, maintenance and repairs costs in the second-hand condition Rs. 1,03,000 per annum; and if, the average serviceability of the asset while new be 1,20,000 units per annum and 1,00,000 units in the second-hand condition, then applying the formula above, the second-hand value of the asset at the end of 20 years will be.-

$$\frac{1,00,000/1,20,000\ [\ 1,00,000 \times 0.10 + (\ 1,00,000 - 10,000\ )\ 0.0037 + 1,20,0000\ ] - 1,03,000 + 10,000 \times 0.0315}{0.10 + 0.0315}$$

i.e. Rs.45063.37

ANNEXURE – I

Railway Project Economic Appraisal Framework Note

1. Comprehensive Economic IRR approach factoring Network effect

Project economic analysis aims at ensuring efficient allocation of scarce resources and raising the welfare of its citizens, so that it benefits the country as a whole. All resource investments have an opportunity cost because, if the resource is not allocated to the project, it will create value elsewhere in the economy.

The Philosophy of economic valuation of railway investments is indicated in the Annexure "F" of Chapter II, Indian Railway Financial Code (Vol-1). Some of the fundamental principles on which economic evaluation of Railway investments should be carried out are as follows:

- Economic benefits attributable to a particular investment can, for a number of reasons, exceed the revenues directly accruing to the Railways in the form of fare and freight receipts.
- Rail transportation can make a substantial indirect contribution as well to general wellbeing by facilitating economic expansion. A new line, in a backward region not well endowed with alternative modes of transportation, stimulates the growth of output and employment by widening the market for local products as well as by creating a market for some hitherto unexploited natural resource. The quantification of such indirect benefits can at best be approximative.
- Great care should be taken in estimating social benefits for the purpose of economic appraisal of railway investments. Such benefits should, to the extent possible, be quantified with a reasonable degree of accuracy. Thorough investigations at the traffic survey stage would help in identifying the "developmental effects" and in estimating broadly the magnitude the complementary investments that may be required.
- The expenditure flows associated with Railway projects can, to varying extents, diverge from the cost to the economy of acquiring resources needed for their implementation and operation. The prices at which certain inputs and resources are made available to the Railways, for instance, may understate or exaggerate their real cost to the economy.

It is, however, noticed that different methods are being used for the economic valuation of railway investments. With a view to standardise the procedure, and bring clarity, a comprehensive approach for economic IRR analysis of Indian Railway Line Projects is indicated below.

It is pertinent to highlight that as prescribed in above code viz. "*Thorough investigations at the traffic survey stage would help in identifying the "developmental effects*", it is critical that traffic studies are based on required primary and secondary data. A brief guidance on traffic demand assessment based on various primary and secondary data is appended as 'D'.

It is clarified that this note is applicable only for mainline projects viz. new line or multi-tracking projects.

1.1. Basis adopted for EIRR Analysis

For the appraisal of a Railway project proposal, the economic IRR analysis should be done based on various parameters such as the project's economic benefits, economic costs, and sensitivity analysis (against variation in key project parameters) to assess economic rationale and economic viability on the basis of project life cycle costs. The approach, prescribed herein, takes into account a number of direct and indirect benefits to be accounted for in the economic cost benefit analysis, in line with national and global relevant best practices (MoUHA, MoRTH and ADB). The proposed approach also considers the recommendations from the report prepared by Multi- disciplinary Committee of Additional Members on Comprehensive Project Appraisal System for sanctioning new projects by factoring in the "Network Effect". The framework takes certain assumptions from the MoUHA guidelines, and these guidelines are taken as a base as it is updated from time to time and accepted across national infrastructure projects. This note aims at providing a comprehensive approach to analyse economic IRR of Indian Railway Line Projects.

1.2. Proposed Economic IRR analysis framework

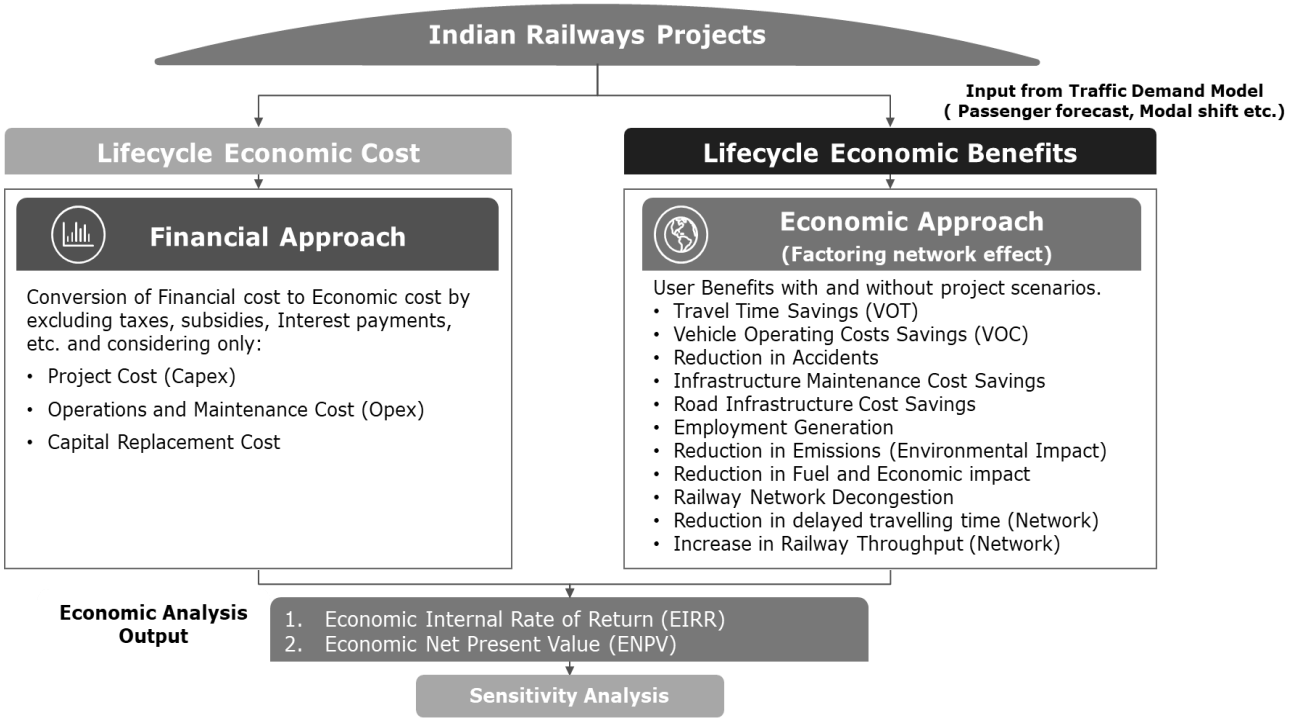


Figure 1 Proposed Economic IRR analysis framework

Railway projects provide larger economic and social benefits to the society in terms of reduction in cost and time of travel, a substantial reduction in emissions reducing chronic diseases, reduction in road accidents, etc. A railway project improves mobility of people and efficiency of commodity flow by providing seamless connectivity with the rest of network. In

addition, new railway projects can also influence the existing rail network and create benefits outside the local area of the project depending upon the scale and size of the project. This can be referred to as "Network effects".
The proposed economic IRR analysis framework incorporates Direct and Indirect benefits of the project, factoring network effects. The methodology and source list for the proposed economic analysis framework is summarized and given below (**A,B,C,D**).

A) Steps for Calculating Economic IRR factoring Network effect

The steps in economic analysis are as described below:

Step 1: Define Project Horizon

The project horizon comprises of construction and operation period of the Railway project. During the project horizon, the cost and benefits associated with the project should be estimated. The horizon period for the purpose of economic analysis may be taken as 30 years in line with codal life of track assets as per para 219, Chapter 2, Volume 1 of Indian Railway Finance Code.

Step 2: Develop Alternative Scenarios

This step involves development of alternative project scenarios to which a comparison with the project case that is undertaken is to be made. For example, economic cost and benefits of undertaking a Railway project ("With Project") are to be compared with the base case i.e. "Without Project" or "Do Nothing" scenario or any other alternative project in order to arrive at incremental costs and benefits.

Step 3: Determine Economic Cost of the Project

The steps involved in determining the Economic Cost of the project are specified below:

Table 1 Steps for estimating Economic Cost of Project

Steps	Methodology
Project Cost[1,2]	The Project cost covers both the implementation period of major investments and operating years, known as the project operating life. Costs are measured in constant prices of a base year. The Project Cost includes: 1. Capital Cost 2. Operations and Maintenance Cost

[1] Capital replacement cost has not been assumed in the project cost during the Economic IRR calculation. In case it is assumed, the project horizon period needs to be extended accordingly to account for benefits over replaced asset's life horizon. Accordingly, it is recommended that the project horizon should be equal to the prescribed life of asset as per the applicable IR code.
[2] Rolling stock cost is not assumed in the project cost during the Economic IRR calculation, given that the rolling stock is not dedicated to the project.

Project Economic Cost	The economic costs of the capital works and annual operation and maintenance costs are calculated from the financial cost estimates using economic conversion factors given in table 1 to exclude the impact of: 1. Price contingencies/price escalations 2. Import duties and taxes 3. Sunk costs 4. Interest payment, principal payment and interest during the construction period.

Source: MoHUA Appraisal Guidelines for Metro Rail Project Proposals

Step 4: Estimation of Economic Benefits of the Project

Year wise project benefits should be estimated during the project operation period. The "With project" scenario should be compared with the option of "Without project" scenario to determine the incremental economic benefits. The economic benefits of the projects should capture the economic and social network impact on any railway project.

The following quantifiable benefits are accrued to the society owing to implementation of the Railway project.

Direct and Indirect Benefits	Network Benefits
Travel Time Savings (VOT)	Reduction in Emissions (Environmental impact)
Vehicle Operating Costs Savings (VOC)	Reduction in Fuel and Economic impact
Reduction in Accidents	Railway Network Decongestion
Infrastructure Maintenance Cost Savings	Reduction in delayed travelling time (Network)
Road Infrastructure Cost Savings	Increase in Railway Throughput (Network)
Employment Generation	

a) Direct and Indirect benefits

The railway investments provide substantial direct and indirect benefits to the economy. The components and steps involved in determining the direct and indirect economic benefits are:

i) Travel Time Savings (VOT)

Railway projects significantly contribute to modal shift owing to higher speeds and comfort to passengers. This leads to travel time savings for passengers travelling on rail system over the existing transport modes because of faster speed of Railway.
The formula for calculation of travel time savings is presented below.

Travel Time Savings (VOT)	=	Passenger Time Savings (Hour)	X	Value of Passenger time (INR per Hour)
Source		(Traffic demand studies/surveys)		(Estimate based on per capita income of the region on new railway line corridor; concerned State Economic Survey documents, take weighted average based on OD patterns of traffic and passenger profile (basis traffic surveys) in case of multiple states involved)

The formula for calculation of Freight time savings is presented below.

Freight Time Savings	=	Difference in the freight time savings between rail and the next dominant mode (hour)	X	Volume of Freight that derives benefit over next predominant mode (ton)[3]	X	Value of Freight time (INR per ton hour)[4]
Source		(Estimate based on freight demand studies/surveys)		(Freight demand studies/surveys)		$\frac{(Weighted\ Average\ commodity\ price \times MIBOR\ Rate\ per\ annum \times Economic\ price\ Conversion\ factor\ (0.85))}{365 \times 24}$

ii) Vehicle Operating Cost Savings (VOC)

Vehicle operating costs (VOCs) are the cost to the owner of operating a motor vehicle. Savings in vehicle operating costs of different modes arise due to a decrease in the number of vehicle trips on the roads. The VOC cost varies based on vehicle type (2-wheelers, 3-wheelers, cars, buses or any other prevalent mode) and is calculated using the equations and guidelines given in the "Manual on Economic Evaluation of Highway Projects in India, 2019" by the Indian Road Congress (IRC).
The formula for calculation of travel time savings is presented below.

Vehicle Operating Cost (VOC)	=	No of trips (Difference between with & without scenario)	X	Average Lead (Km)	X	Vehicle Operating Cost (INR per Km)
Source		(Traffic demand studies/surveys)		(Estimate based on Traffic demand studies/surveys)		Manual on Economic Evaluation of Highway Projects in India, 2019[5]

iii) Reduction in Accidents

The reduction in traffic volumes on roads due to the modal shift to rail is expected to reduce road accidents on the project corridor. Reduction in accidents will lead to saving of lives, reduction in damages to vehicles and savings towards medical, insurance expenses, administrative expenses on police and the intangible psychosomatic cost of pain to people involved in the accidents and their families.
The economic benefits due to the reduction in accidents are calculated as follows:

Accident Costs	=	Vehicle Km (Difference between with & without scenario)	X	Accident rate (per vehicle Km)	X Accident Cost (INR)
Source		(Traffic demand		Collection of past accident data along	Toolkit on Finance and

[3] In case the next pre-dominant mode is Railway itself, for eg.in case of coal lines, then entire projected freight on new line shall benefit from improved speed and hence included. In case road is the pre-dominant mode for a commodity, then only the incremental traffic shifted from road to rail shall benefit and accordingly taken as much.
[4] Inputs in different currency shall be converted in INR.
[5] https://www.scribd.com/document/522057946/IRC-SP-30-2019-Manual-on-Economic-Evaluation-of-Highways-in-India

	studies/surveys)	the project corridor; MoRTH report on Road accidents in India[6]	Financial Analysis, 2013 by MoUHA[7]

iv) Infrastructure Maintenance Cost Savings

Infrastructure Maintenance Cost Savings will arise due to reduced need for maintenance of the existing road infrastructure owing to reduced traffic on account of modal shift. The benefits can be calculated using the reduction in vehicle kilometres due to modal shift and the road infrastructure maintenance cost per km.

Infrastructure Maintenance Cost Savings	=	Reduction in vehicle km due to modal transfer (km)	X	Infrastructure maintenance cost (INR/Vehicle km)
Source		(Estimate based on traffic demand studies/surveys)		(MoRTH Annual Report[8]; Estimate based on published values on annual expenditure on roads and traffic and annual vehicle km)

v) Road Infrastructure Cost Savings

Additional road infrastructure or upgrading the existing road infrastructure will be required to solve the congestion problem and accommodate growth in traffic in case the railway line is not introduced. The new railway line will bring savings in investment in road infrastructure due to shifting of passengers to Rail and withdrawal of vehicles in the project corridor. The road infrastructure savings will be calculated using the below formula.

Road Infrastructure savings	=	Additional express highway lanes required in without Project situation (km)	X	Cost of road construction (INR per km)
Source		(Estimate based on traffic demand (Number of PCU trips saved /road PCU capacity, ideally 1600 Passenger Car Unit (PCU) per hour))		(Normative Cost Norms for the National Highways by MoRTH)

vi) Employment Generation

During the period of construction, manpower will be needed for various project activities. In post-construction phase, manpower will be employed for the operation and maintenance of the system. Thus, the project would provide substantial direct employment. In addition to these, more people would be indirectly employed in allied activities.

Employment benefits	=	Capex (INR)	X	Employment cost as a % of Project Cost (INR)	X	Share of Skilled vs Unskilled employment	X	Direct/Indirect employment multiplier

[6] https://morth.nic.in/sites/default/files/RA_2020.pdf
[7] https://smartnet.niua.org/sites/default/files/resources/finance_and_financial_assessment_toolkit.pdf
[8] https://morth.nic.in/annual-report

Source	(Project DPR Cost chapter)	(Project DPR Cost chapter)	(20:80 ratio assumption; To be adjusted based on project requirement)	ADB guidelines for the economic analysis of projects[9]

b) Network Benefits

Railway investments can influence the entire railway network and generates Network benefits in terms of reduction in environmental impact due to a decrease in emissions, reduction in railway network congestion and improvement in travel time reliability etc. The components and steps involved in determining the economic benefits factoring network effects are:

i) Reduction in Emissions

Railway projects significantly contribute to pollution reduction, and these should be considered in economic analysis. The significant environmental savings come from decrease in air pollution associated with existing non-railway traffic due to the modal shift from the existing modes of transport to rail.

The reduction in emissions will be calculated based on the decrease in vehicle kilometres, volume of pollutants emitted from different modes and the cost of treatment per ton.

Emission Costs	=	Vehicle Km (Difference between with & without scenario)	X	Volume of Pollutant released per Km (grams per km)	X	Treatment cost/ton (INR)
Source		(Traffic demand studies/surveys)		(Source Profiling for vehicular Emissions Report by CPCB[10])		(MoHUA Appraisal Guidelines for Metro Rail Project Proposals[11])

ii) Reduction in Fuel and economic impact

Reduction in the number of vehicles on the roads and decongestion effect with the construction of new railway line gives benefits to the economy in terms of reduction in fuel consumption. A decrease in fuel consumption will result in a reduction in the import of crude oil.

Fuel and economic savings impact	=	Vehicle Km (Difference between with & without scenario)	X	Fuel economy (Average mileage of each mode)	X	Avg fuel cost (INR per liter)
Source		(Traffic demand studies/surveys)		Bureau of Energy Efficiency[12]		Petroleum Planning & Analysis Cell[13]

iii) Railway Network Decongestion

Construction of a new railway line will reduce congestion on the existing line or section of the rail network and will help in improving line capacity of the section. This will also reduce the lead time of trains moving via new railway line instead of moving via existing rail route. The savings due to the railway network decongestion can be calculated using the below

[9] https://www.adb.org/sites/default/files/institutional-document/32256/economic-analysis-projects.pdf
[10] https://cpcb.nic.in/displaypdf.php?id=U291cmNlX1Byb2ZpbGVfVmVoaWNsZXMucGRm
[11] https://mohua.gov.in/upload/whatsnew/59c21852a4874Appraisal%20Framework%20Sept%202017.pdf
[12] https://beeindia.gov.in/content/fuel-efficiency
[13] https://www.ppac.gov.in/content/149_1_PricesPetroleum.aspx

formula.

Railway Network Decongestion	=	Increase in average speed on the section or adjacent network	X	Average Lead on network (Km)	X	Value of Passenger Time	-	Value of Time Travel Savings estimated in #i)
Source		(To be estimated by Project Team using Rail network data)		(To be estimated by Project Team)		(Estimate based on per capita income on railway network)		Travel Time Savings on proposed rail corridor

iv) Reduction in delayed travelling time (Travel Time Reliability)

Travel time reliability refers to reaching the destination in a consistent journey time. Construction of a new railway line will result in an improvement in travel time reliability due to the reduction in rail congestion and predictability of travel time. The value of travel time reliability is estimated from the reduced travel time variability and associated buffer time that passengers have allowed before making trips. The savings due to the travel time reliability or reduction in delayed travel time will be calculated using the below formula.

Improvements in Travel Time Reliability	=	No of Trips (Difference between with & without scenario)	X	Reduction in Buffer time per trip	X	Reliability Ratio	X	Value of Passenger time (INR per Hour)
Source		(Traffic demand studies/surveys)		(Traffic demand studies/surveys)		(80%; Project team assumptions)		Estimate based on per capita income on railway network)

v) Increase in Railway Throughput

Construction of a new railway line will result in additional passenger traffic on the rail network due to a reduction in travel time and an increase in the number of choices for a passenger. The economic benefit due to the increase in the railway throughout can be calculated using increase in passenger traffic and average revenue generated per passenger.

Increase in Railway Throughput	=	Increase in passenger and Freight traffic due to modal shift	X	Average revenue per passenger and Freight Ton km (INR)
Source		(Traffic demand studies/surveys)		Indian Railways Annual Report

Step 5: Economic conversion factors

The financial cost and benefits of the railway project are converted to economic cost and benefits using economic conversion factor. Economic conversion factors are used to adjust for taxes, subsidies, inefficient land or wage markets, and other transfer payments, before performing the economic analysis. The conversion factors for different categories are given in Table 1.

Table 2 Economic Conversion Factor

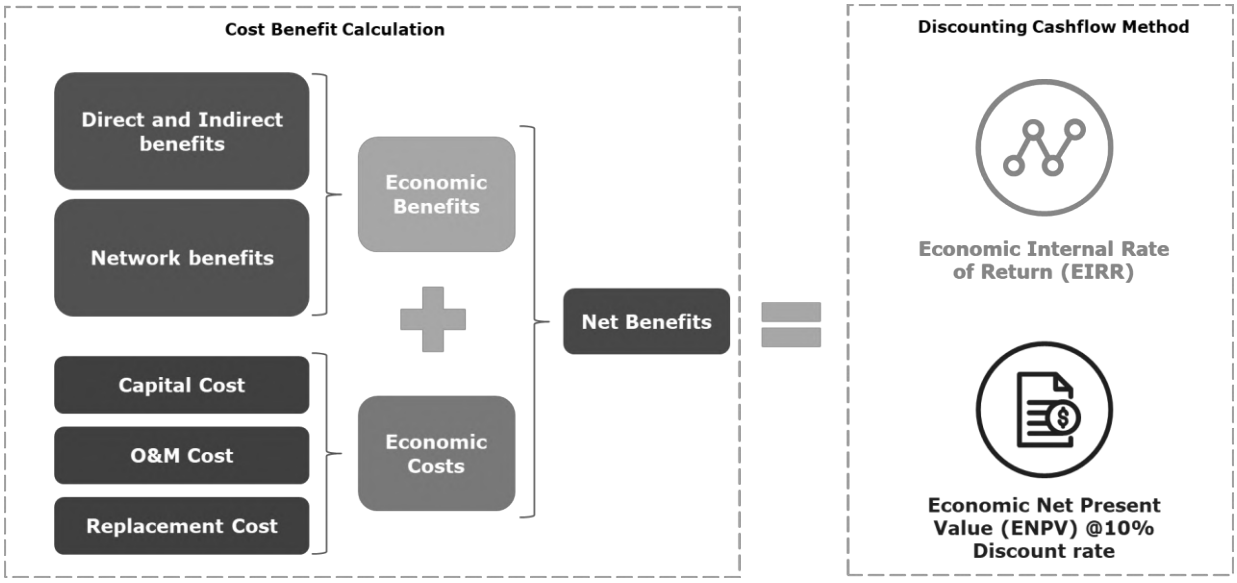
Type	Components	Economic factor
Economic Cost	Capital Cost	0.83
	Operations and Maintenance Cost	0.87
	Capital Replacement Costs	0.87
Economic Benefits (factoring network effect)	Travel Time Savings (VOT)	1.00
	Economic Price conversion coefficient	0.85
	Vehicle Operating Costs Savings (VOC)	0.90
	Accident Costs	0.90
	Infrastructure Maintenance Cost Savings	0.87
	Road Infrastructure Cost Savings	0.80
	Employment Generation	1.00
	Emission Costs	1.00
	Reduction in Fuel and Economic impact	0.80
	Railway Network Decongestion	1.00
	Reduction in delayed travelling time (Travel Time Reliability)	1.00
	Increase in Railway Throughput	1.00

Source: MoHUA Appraisal Guidelines for Metro Rail Project Proposals

<u>Step 6: Economic Analysis Output</u>

The outputs of economic analysis are calculated using two parameters.

1. Economic Net Present Value (ENPV)– ENPV is the sum of differences between the discounted benefits and cost flows.
2. Economic Internal Rate of Return (EIRR)– EIRR is the discount rate at which the ENPV becomes zero.



Step 7: Sensitivity Analysis

The range of sensitivity can be carried out to see the impact of change in critical parameters in the range of 5% to 20% on EIRR. The critical factors such as

1. Cost overruns due to delay or other factors
2. Increase in Operations and Maintenance Cost
3. Reduction in passenger traffic
4. Reduction in economic benefits
5. Combination of reduction in benefits and increase in cost.

B) List of Data sources

Parameter	Items	Source
Economic Costs		
Capital Cost		Project DPR
Operations and Maintenance Costs		Project DPR
Capital Replacement Costs		Project DPR
Economic Benefits		
Travel Time Savings (VOT)	Passenger Time Savings	Traffic demand studies/surveys
	Value of Passenger time	To be estimated based on per capita income on new railway line corridor; State Economic Survey document. Weighted average based on OD patterns of traffic and passenger profile (basis traffic surveys) to be adopted in case of multiple states involved
Freight Time Savings	Difference in the freight time between rail and the next fastest mode (hour)	To be estimated by Project Team based on freight demand studies/surveys
	Volume of Freight (ton)	Freight demand studies/surveys
	Value of Freight time (INR per ton hour)	$= \frac{(Weighted\ \text{Average commodity price (basis stakeholder consultation and traffic study)} \times \text{MIBOR Rate per annum} \times \text{Economic price Conversion factor (0.85)})}{365 \times 24}$ • Weighted Average Commodity Price: Σ(share of commodity in total volu • For eg. If total traffic volumes is 10 tonn comprising Coal (20%, average value INR 4000 per ton), Steel (70%, average value INR 35000 per ton) and Cement (10%, average value INR 7000 per ton), then weighted average commodity price is = (0.2×4000)+ (0.7×35000)+0.1×7000 = INR 26000 • Average 3 month Mibor Rate or short term interest rate for the year,

		sourced from Financial Benchmarks of India Ltd[14]
Vehicle Operating Cost (VOC)	No of trips	Traffic demand studies/surveys
	Average Lead (Km)	Traffic demand studies/surveys
	Vehicle Operating Cost	Manual on Economic Evaluation of Highway Project[15]
Reduction in Accidents	Vehicle Km	Traffic demand studies/surveys
	Accident rate	Road Accidents in India, MoRTH[16]; Collection of past accident data along the project corridor
	Accident Cost	Toolkit on Finance and Financial Analysis, 2013 by MoHUA[17]
Infrastructure Maintenance Cost Savings	Vehicle Km	Traffic demand studies/surveys
	Infrastructure maintenance cost	Ministry of Road Transport and Highways[18]
Road Infrastructure Cost savings	Length of Road	To be estimated based on Demand estimation (Number of PCU trips saved /road PCU capacity, ideally 1600 PCU per hour)
	Road construction cost	Ministry of Road Transport and Highways[19]
Employment benefits	Capex	Project DPR (Cost Chapter)
	Employment cost as a % of Project Cost	Project DPR (Cost Chapter)
	Share of Skilled vs Unskilled employment	20:80
	Direct employment multiplier	ADB guidelines[20]
Reduction in Emissions	Vehicle Km	Traffic demand studies/surveys
	Volume of Pollutant	CPCB Source Profiling for vehicular Emissions Report[21]
	Treatment cost/ton	MoHUA Appraisal Guidelines for Metro Rail Project Proposals[22]
Fuel and	Vehicle Km	Traffic demand studies/surveys

[14] https://www.fimmda.org/modules/securitiesApproval/securitiesApproval.aspx?op=mibor
[15] https://www.scribd.com/document/522057946/IRC-SP-30-2019-Manual-on-Economic-Evaluation-of-Highways-in-India
[16] https://morth.nic.in/sites/default/files/RA_2020.pdf
[17] https://smartnet.niua.org/sites/default/files/resources/finance_and_financial_assessment_toolkit.pdf
[18] https://morth.nic.in/annual-report
[19] https://morth.nic.in/sites/default/files/circulars_document/Revision_of_Normative_Cost_Norms_for_National_Highways.pdf
[20] https://www.adb.org/sites/default/files/institutional-document/32256/economic-analysis-projects.pdf
[21] https://cpcb.nic.in/displaypdf.php?id=U291cmNlX1Byb2ZpbGVfVmVoaWNsZXMucGRm
[22] https://mohua.gov.in/upload/whatsnew/59c21852a4874Appraisal%20Framework%20Sept%202017.pdf

economic Savings impact	Fuel economy	Bureau of Energy Efficiency[23]
	Fuel Price	Petroleum Planning & Analysis Cell[24]
Decongestion of Railway Network	Increase in average speed on the section or adjacent network	To be estimated by Project Team using Rail network data
	Average Lead (Km)	To be estimated by Project Team using Rail network data
	Passenger throughout on Network	To be estimated based on per capita income on railway network
	Value of Passenger time	Traffic demand studies/surveys
Improvements in Reduction in delayed travelling time (Travel Time Reliability)	No of trips	Traffic demand studies/surveys
	Buffer time	80%;
	Reliability Ratio	To be estimated based on per capita income on rail network
	Value of Trave time	Traffic demand studies/surveys
Increase in Railway Throughput	Passenger traffic	To be estimated by Project Team using Rail network data
	Average revenue per passenger	Indian Railways Annual Report and Accounts[25]
	Freight Traffic	Traffic demand studies/surveys
	Average revenue per Freight ton	Indian Railways Freight Tariff schedule X length of line
Economic conversion factors		MoHUA Appraisal Guidelines[26]; Assumptions

[23] https://beeindia.gov.in/content/fuel-efficiency
[24] https://www.ppac.gov.in/content/149_1_PricesPetroleum.aspx
[25] https://indianrailways.gov.in/railwayboard/uploads/directorate/stat_econ/Annual-Reports-2020-2021/Annual-Report-English.pdf
[26] https://mohua.gov.in/upload/whatsnew/59c21852a4874Appraisal%20Framework%20Sept%202017.pdf

C) Data to be filled by Project team to calculate Financial and Economic IRR of Railway Projects

DATA FOR FIRR, EIRR, NETWORK EFFECT & COMMON USER FACILITY					
Name of Project (NL/DL/GC):					
SN	**Item**		**Description**		
1	**FIRR:**				
a	Data for calculation of FIRR and FIRR values				
	As per existing Financial Code				
b	FIRR of the project				
2	**EIRR:**				
a	Field data for calculation of EIRR, including network effect				
Sr No	**Parameter**	**Items**	**Description***		
			Passenger	**Freight**	**Whether filled or not#**
1	Travel Time Savings (VOT)	Passenger Time Savings by each mode			
		Value of Passenger time			
		Value of freight time savings			
2	Freight Time Savings	Difference in the freight time between rail and the next fastest mode (hour)			
		Volume of Freight (ton)			
		Value of Freight time (INR per ton hour)			
3	Vehicle Operating Cost (VOC)	No of trips (Difference between with & without scenario) by each mode			
		Average Lead (Km)			
		Vehicle Operating Cost by each mode			
4	Reduction in Accidents	Vehicle Km (Difference between with & without scenario)			
		Road accident rate			
		Accident Cost (Fatal vs non-fatal accident)			
5	Infrastructure Maintenance Cost Savings	Vehicle Km (Difference between with & without scenario)			
		Infrastructure maintenance cost per km			

6	Road Infrastructure Cost savings	Additional express highway lanes required in without Project situation			
		Road construction cost per km			
7	Employment benefits	Project Capex			
		Employment cost as a % of Project Cost			
		Share of Skilled vs Unskilled employment			
8	Reduction in Emissions	Vehicle Km (Difference between with & without scenario)			
		Volume of Pollutant-CO2 by each mode			
		Volume of Pollutant Others by each mode			
		Treatment cost/ton - CO2			
		Treatment cost/ton- Others			
9	Fuel and economic Savings impact	Vehicle Km (Difference between with & without scenario)			
		Fuel economy by each mode			
		Fuel Price			
10	Decongestion of Railway Network	No of trips			
		Average Lead (Km)			
		Value of Passenger time			
11	Improvements in Reduction in delayed travelling time (Travel Time Reliability)	No of Trips (Difference between with & without scenario)			
		Reduction in Buffer time (Difference between with & without scenario) per trip			
		Reliability Ratio			
		Value of Passenger time			
12	Increase in Railway Throughput	Increase in passenger and Freight traffic (Difference between with & without scenario)			
		Average revenue per passenger and per Ton-km for freight			
3	**Network effect of the Project (paragraph)**				
4	**The work is a common user facility essentially required to improve mobility movement of passengers and goods for improving loading to achieve mission 3,000 MT**				

Dy.COM/GS or CTPM or PCOM

If the data is not filled, please provide the appropriate explanation and approval from designated

authority.
**Inputs in different currency shall be converted in INR assuming the exchange rate on the day of analysis.*

D) Demand assessment methodology

Demand assessment for Railway traffic requires a combination of activities such as hinterland demarcation, extensive field surveys, primary interactions with the stakeholders and other required research towards developing a base year demand matrix and undertaking demand projections. The methodology for the demand assessment is given below:

Task 1: Delineation of project influence area/ hinterland

The first task would be to identify influence areas/hinterland for the planned railway line, as well as accompanying port and industrial clusters. The influence zone within all states through which the proposed corridor would pass needs to be evaluated for the purpose of identifying the hinterland.

Based on extensive review of assessing passenger and freight movement on rail corridors, the hinterland/catchment area of rail corridors can typically be categorized into:

a) Primary hinterland: which includes end to end network of the proposed corridor including originating point, terminating point, all key regions falling along the corridor, or within a 150 km range from the corridor

b) Secondary hinterland: which includes regions from which cargo is either originating or terminating on the corridor, and

c) Tertiary hinterland: which includes region from which cargo is neither originating nor terminating on the proposed corridor but passing through the significant part of the corridor. It may be noted that only such regions will be considered under tertiary hinterland, wherein significant amount of cargo is currently moving from/to.

While identifying the hinterland, the study team should also consider main feeder lines connecting to the proposed corridor alignment. Further, in case, proposed corridor is expected to connect to ports, hinterland of identified ports should also be considered.

Task 2: Assessment of Base year demand

The next task would be to assess the base year traffic in the project hinterland. For this, traffic moving across different modes (road, railways and IWT) needs to be assessed. A robust data collection strategy combining primary and secondary surveys should by used to carve out the base year demand.

Traffic Surveys

a) Primary surveys

Name of Survey	Purpose	Method/ location	Duration of survey

Road Side Origin and Destination (OD) survey (sample survey)	To capture key flow attributes including: • vehicle origin, destination, • commodity (for freight), number of passengers (for passenger vehicles) • trip distance, • Travel time, and cost • frequency, • vehicle type (car, bus container, axles etc.)	Interview with drivers/ passengers at survey points on NHs and SHs. Toll locations are preferable.	At least 3 days (2 weekdays and 1 weekend) 16-24 hrs
Classified Volume count survey for roads #	To expand the Road O-D volumes for arriving at 24-hour traffic volume.	Traffic counts at the OD locations.	At least 7 days. 24 hrs.
Passenger Survey at Intercity Bus Terminal	To assess the demand for long distance passenger demand in the catchment. The following data should be captured during the survey: • Passenger boarding and alighting • Passenger OD • Frequency of travel • Fare • Travel time	Interview with passengers at the bus terminal and Ticket data from the operator (if available).	8-16 hours (depending upon the timetables)
Operator/industry survey (for freight)	To capture the time/ cost in each segment of supply chain. To understand various issues that an operator faces during transport movement.	Interview with Vehicle operators, Drivers, transport agencies.	
Stated preference survey for passengers and major cargo players	To capture the potential shift of passenger, cargo from other modes to Railways based on: • time and cost savings across ODs • Special value added services etc.	Interview with shippers, industries etc.	

This survey is undertaken by NHAI and same can be sourced from the regional offices of NHAI wherever available.

b) <u>Secondary data collection:</u>

Data points	Purpose	Source

Railway ODs for passenger and freight	To capture the existing railway traffic (if any) in the primary, secondary and tertiary catchment.	Indian Railways FOIS data and PRS data
Petrol sales data	To assess the periodicity of road transport demand. Also, the data is a key input in expanding daily traffic to average annual daily traffic (AADT).	Petrol Pump operators
Reports/ studies/ guidelines published by IWAI, NHAI and any other government and multilateral agencies for assessing financial and economic costs.		

Transport demand projections

Demand for transport is a derived demand, and therefore, it depends on how the transport-requiring industry grows over time. A top-down assessment needs to be undertaken for projecting transport demand. It will start with a compilation of existing transport demand, which will be informed by section 1.2. The transport demand must be projected based on appropriate macroeconomic indicators, past trends and econometric models to arrive at projected transport demand for a period upto 20-30 years from the baseline year. Along with this there needs to be a holistic review of industry plans, upcoming SEZs and other proposed traffic intensive activities in the catchment. All such inputs must factor in during transport projections.

Rail transport demand is a subset of the transport demand projections. Hence, rail modal share for future years can be estimated based on mode choice models (based on time and cost analysis) and outputs from stated preference surveys in section 1.2.1.

ANNEXURE – J

Proforma for submission of Detailed Project Report

DETAILED PROJECT REPORT: VOLUME I	
CHAPTER -1 : EXECUTIVE SUMMARY	
1.1	**Introduction**
1.2	**Project Overview and justification**
1.3	**Methodology of preparation of DPR / Feasibility Report**
1.4	**Criteria for alignment finalization for New Lines** (Traffic survey, obligatory points, **BISAG verification**, site constraints, techno economic factors, Protected monuments, wildlife sanctuaries, interaction with various stake holders etc.)
1.5	**Traffic survey and Traffic forecast (including existing and projected line capacity utilization, anticipated additional Goods traffic etc). Anticipated additional Goods traffic (both incoming & outgoing), expected passenger traffic. Names of Seaports, SEZ, Logistic Parks, and Industrial corridors, Airports, Tourists place & pilgrimage centre to be connected.**
1.6	**Alignment of proposed New Line / Doubling etc. along with station names and key plan** (**Colour**) showing surrounding Railway Network also
1.7	**Alignment parameters** (Horizontal Curves, Vertical Curves, Ruling Gradient etc., turnouts etc.)
1.8	**Brief description about alignment and Terrain characteristics** (Length, states/districts covered giving brief reference to **Aspirational districts** covered , stations / tunnels (if any) / major rivers / canals / nallahs / important bridges / major bridges / crossing of National Highway / State Highway / major District Roads / Towns / ROBs / Power Crossings / Climate characteristics etc.)
1.9	**Topographical survey and soil investigation**
1.10	**Design standards** (speed potential / formation / track structure / tunnel cross section / bridge loading standard / interlocking standards / electrification / Telecom / building standards etc.)
1.11	**Land requirement** (brief details of Private, Government & Forest Land) and brief methodology for calculation of the same.
1.12	**Permanent way (Route** length/total track length/No of loop lines/ Turnout details/Ballasted deck/Ballastless track/LWR / Loop speed etc.)
1.13	**Major civil Engineering features** (Brief details of bridges, spans of Major & important bridges, Tunnels, RoBs, RuBs/LHS, Level crossings, RoRs etc)
1.14	**Railway stations & yards (** list of stations and brief details of facilities being proposed in each station e.g. station building area, no & length of loop lines, Platforms, FoBs, CoPs, etc**)**
1.14	**Offices and Other service buildings (** Panel building**,** workshops, sheds etc**)**
1.15	**Residential Buildings (** staff quarters, Rest houses, Running rooms etc**)**

1.16	**Shifting of Utilities (** LT/HT lines, Telecom, Sewers, cables etc**)**
1.17	**Electrical (General) (** brief details being proposed in every station, buildings etc, source of Power supply, etc**)**
1.18	**Electrical (Traction) (** Type, source, TSS etc**)**
1.19	**Signaling** (Brief of Signaling system at each station, Type of Block working, Standards of Interlocking, Telecom facilities etc)
1.20	**Telecomm** (Control communication, PA system, coach guidance, display boards etc)
1.21	**Statutory clearances required (** From NMA, wildlife , FCA etc)
1.22	**Environment and Social Impact Assessment**
1.23	**Salient Features of Project**
1.24	**Summary of Cost estimate**
1.25	**Traffic projection and Earnings**
1.26	**Non Fare revenue**
1.27	**Source of Funding, Financial Rate of Return and Economic Rate of Return**
1.28	**Phasing and Construction time lines**
1.29	**Annual Fund requirement**
1.30	**Conclusion & Recommendations**
CHAPTER-2 : Traffic Survey	
	It should include objective of Traffic Survey, Analysis of existing capacity and line capacity utilization , Analysis of alternatives, Origin – Destination survey, stations Traffic characteristics and composition, Travel / transport pattern, Regional distribution, Passenger traffic estimation and forecast, Facilitation provided by this project to passengers of nearby Airport, Tourist hub, Pilgrimage centre, Goods traffic projection , Facilitation to freight traffic by its connection with any existing or upcoming Seaport, SEZ, Logistic Park, Industrial hub, Airport. Anticipated passenger & freight traffic shift from other modes of transport (roadways, airways, inland & coastal shipping) to railways, Expected decongestion of roads, Goods and coaching earnings, Assessment of working expenses, Goods traffic projection, Goods and coaching earnings, Assessment of working expenses etc. (All data sources and methodology to be followed in accordance with extant policy guidelines and codal provisions. Confirmation to same shall be part of traffic checklist).
CHAPTER -3 : Engineering Survey	
3.1	Methodology of Topographical Survey (Survey of India Maps, DGPS Survey, permanent and temporary bench marks, Arial Photogrammetry by Drones, LIDAR Survey, Total Stations etc.). List of bench marks along with their coordinates.
3.2	Alternative alignments and route selection. Verification / validation of alignment in consultation with BISAG
3.3	Description of alignment. Station location and criteria for choosing them.
3.4	Geometric design of alignment (Chainage wise list of Horizontal Curves, Vertical Curves, Gradients). List of longitudinal section and plan of the alignment

3.5	Details of soil investigation and type of strata along the alignment
Chapter-4: Land requirement	
4.1	Criteria for requirement of land for track, stations, bridges etc.
4.2	Break up of land requirement state-wise and district wise for Private land, Government land and Forest land
4.3	Details of land requirement in the following format:

SN.	Chainage (M)		Length (Cum)	Width of land (M)	Area of land (Sqm)	Private/ Govt/ Forest	Purpose for which land required
	From	To					

Chapter-5: Permanent Way	
5.1	Details of total track length including loop line etc.
5.2	Design speed for Main line and Loop Line
5.3	Cant excess and deficiency
5.4	Track structure (Rail, Sleepers, Fittings, Ballast cushion etc.) for Main line and Loop Line
5.5	Turnouts, SEJs, Glued joint etc.
Chapter-6:Formation, Tunnels & Bridges	
6.1	List of important, major and minor bridges incorporating liner waterway in metre, chainage of bridge, span arrangement, river name, type of bridge etc. in the following format:

SN.	Bridge Nos	Chainage (M))	Waterway (M)	Span arrangement	Type of Bridge	River name

6.2	Details and list of road crossing works such as ROBs, RUBs / LHS and Level Crossings.
6.3	List of Rail Over Rail Flyovers, if any.
6.4	Tunnel details and type of strata. Typical Cross Section of Tunnel. List of Tunnels in the following format:

SN.	Tunnel No	Length (RM)	Chainage (From)	Chainage (To)	Cross section area of Tunnel (Sqm)	Maximum over burden over Tunnel (M)

6.5	Earth work in embankment and cutting. List of embankment in the following format:

SN.	Length (M)	Height of embankment (M)	Chainage (From)	Chainage (To)	Quantity of earth work (Cum)

List of cutting in the following format:

	SN.	Length (M)	Depth of cutting (M)	Chainage (From)	Chainage (To)	Quantity of earth work (Cum)
Chapter-7: Stations & Yards						
7.1	Stations and their Demographic details, MSL, Climate etc.					
7.2	Facilities proposed at each station (station building area, FOB details, platform details, platform shelter details, circulating area. Standard of construction for station buildings					
7.3	No. of loop lines and their length at each station, Turnout details at each station					
7.4	Conceptual Yard Plan of each station					
Chapter-8: Service buildings (including offices, workshops, shed etc.						
8.1	List of all service building station-wise along with plinth area and justification					
8.2	Standard of construction for the service buildings					
Chapter-9: Residential buildings (staff quarters, running rooms, rest houses, RPF barracks etc.)						
9.1	Details of type wise and station wise residential quarters proposed and the basis of same					
9.2	Details of station wise running rooms / rest houses / RPF barracks etc. if proposed along with justification					
9.3	Standard of construction					
Chapter-10: Shifting of utilities						
10.1	Transmission Line Modification payment to SEBs Voltage Level-wise (LT/11KV/33KV/110KV/220KV/400KV/765KV) including numbers, unit cost and total cost of each voltage level line requiring modification					
10.1	Details of Telecom Lines required to be shifted					
10.2	Details of civil utilities (sewer line / water pipe line / drains etc.) required to be shifted.					
Chapter-11: Electrical Traction & General						
11.1 Electrical Traction						
a.	Type of OHE system & design speed					
b.	Pegging plan					
c.	Traction power supply system (TSS,SP,SSP location & spacings)					
d.	Modifications in existing OHE system					
e.	Requirement of communication channel for SCADA					
f.	Details of feasibility of EHV power supply at nearest GSS for feeding to proposed TSS. Alignment & expected ROW.					
g.	Provision of fire suppression system in transformer					

11.2Electric General	
a)	Details of 11kv & 33 kv power supply points
b)	Electrification of Tunnels/service building etc.details
c)	Ventilation of tunnels details
Chapter-12: Signal & Telecommunication	
12.1	Details of Signaling Arrangement (type of signaling, block working, standard of interlocking etc)
12.2	Details of survey regarding type of soil for cable laying, cable route, track crossing, approach/location of S&T installations, infringements, RSSI etc
12.3	Requirements of S&T service building along with electrical requirements including power budget etc.
12.4	Utility/ cable shifting for S&T works.
12.5	Alterations in existing Signaling systems.
12.6	Specifications and testing procedure of S&T equipments.
12.7	Provision of EI, ABS, ATP, CTC, LTE etc as per extant guidelines
12.8	Details of Telecommunication arrangement for operations and passenger amenities.
12.9	Standard Checklist and Performa for Signaling & Telecomm items
12.10	Mandatory clearances required (ISA, WPC, RDSO approvals etc)
12.11	Testing and training required before commissioning.
CHAPTER-13: Environmental Assessment and Social Impact Assessment (if applicable)	
13.1	Introduction
13.2	Existing Scenario, water bodies, noise level, land environment, biological environment, socio economic survey, archaeological sites etc
13.3	Environmental Policy Framework
13.4	Detailed Environmental Impact assessment due to project location, design and construction including the impact of operation and maintenance facilities.
13.6	Environment Management Plan
13.7	Environmental Monitoring Plan including for Pre Construction, construction phase, Operations Phase, Implementation of environmental Management Plan and setting up an Environment management System.
13.8	Social Impact Assessment including resettlement/rehabilitation alternatives, public consultation, resettlement assistance plan, cost monitoring and evaluation.
13.9	Analysis of Alternatives
13.10	Summary of Costs
Chapter-14: Statutory clearances	
	List of Forest/Wildlife sanctuaries through which proposed project is passing. Details of clearances required such as ASI/NMA, Wild Life, Forests

	under FCA act, Tree cutting permission etc.
Chapter-15: Cost Estimates	
15.1	Basis of rates for working out, cost of land, civil engineering structures, P-way, Electrical, S&T, Utility shifting etc.
15.2	Summary of the cost estimates (detailed estimate to be attached as Vol-II of DPR)
Chapter-16: Traffic earning projections	
16.1	Details of anticipated goods traffic (both incoming &outgoing)and goods earning
16.2	Details of passenger traffic projection and earnings
16.3	Savings due to avoidance of detention of trains
Chapter-17: Non fare revenue	
17.1	Various existing & anticipated sources of NFR, Details of projected non-fare earnings
CHAPTER 18 : FINANCIAL ANALYSIS	
18.1	Estimation and Phasing of Investment
18.2	Estimation of operations and maintenance cost, overheads
18.3	Earning potential of the Project : Fare Revenue as well as non fare revenue
18.4	Terminal Value Estimation
18.5	**Calculation of Project IRR**
18.6	Sensitivity Analysis with respect to Expected Traffic (range of +/- 20%), Cost Escalation (+/- 20%) and Time Overrun (+/-20%)
18.7	Assumptions with respect to both cash inflows and outflows
18.8	Analysis and Results
CHAPTER 19: ECONOMIC ANALYSIS	
19.1	Basic Approach of Economic Analysis
19.2	Demand Assessment Methodology.
19.3	Quantification of Economic Costs and Economic Benefits.
19.4	Checklist for Economic Cash flows. (refer Annexure III of Railway Project Economic Appraisal Framework Note for checklist, circulated vide letter no.2022/ Gati Shakti/EU/49 dated19/08/2022.)
19.5	Cash flows of Economic Internal Rate of Return (EIRR)
19.6	Sensitivity Analysis for critical factors in the range of 5% to 20% on EIRR: a. Cost overruns due to delay or other factors b. Increase in Operations and Maintenance Cost c. Reduction in passenger traffic d. Reduction in economic benefits e. Combination of reduction in benefits and increase in cost.
19.7	Details of Network effect alongwith map.
19.8	Model Input data used along with sources. (refer Annexure II of Railway Project Economic Appraisal Framework Note for list of data sources, circulated vide letter No.2022/ Gati Shakti/EU/49 dated 19/08/2022.)

CHAPTER 20 : RISK ANALYSIS	
20.1	Cost Risk
20.2	Schedule Risk
20.3	Operational Risk
20.4	Market Risk
20.5	Risk Mitigation Measures

Salient Features of Project		
Name of Project (NL/DL/GC):		
SN	**Item**	**Details**
1	**Route length (Km)**	
(i)	State-wise and District wise breakup of route length	
2	**Current Estimated cost (In crores of Rs.)**	
2(i)	**Estimated Completion cost (In crores of Rs.) (taking into account 5% escalation every year)**	
3	**Completion period (years)**	
4	**RoR : (i) FIRR**	
	(ii) EIRR (As per guidelines issued by Board and including network effect)	
5	**Land requirement (Ha) (Statewise and Districtwise)**	
(i)	Private	
(ii)	Government	
(iii)	Forest	
6	**Total Track Km (incl loops/siding etc.) (Km)**	
7	**Maximum permissible speed (Kmph)**	
8	**Maximum Degree of Curvature**	
8(i)	Curve Track (% of total length)	
9	**Ruling Gradient**	
9(i)	**% length on Ruling Gradient**	
10	**No. of PSRs**	
11	**Earthwork in embankment (Cum)**	
11(i)	Maximum Bank Height (m)	
12	**Earthwork in Cutting (Cum)**	
(i)	**Maximum Cutting Depth (m)**	
13	**Total no. Tunnels (nos.)**	
(i)	**Total Tunneling length (Km)**	
(ii)	**Longest Tunnel (m)**	
14	**Total Adits/Shafts and their length**	
15	**Total Linear waterway (m)**	

(i)	**Important bridges (nos.)**	
(ii)	**Major bridges (nos.)**	
(iii)	**Minor bridges (nos.)**	
16	**Loading standards**	
17	**Total stations (including Originating and Destination stations, junction stns, crossing staions, halts) (nos.) (statewise)**	
(i)	**Junction stations (nos.) (including Originating and Destination stations if they are junctions) (nos.) (statewise)**	
(ii)	**Crossing stations (nos.)(including junction stations, Originating and Destination stations if they are crossing stations)**	
(iii)	**Halts (nos.)**	
18	**Total loop lines (nos.)**	
(i)	**loop line length (CSR) (m)**	
19	**RoBs (nos.)**	
(i)	**RuBs/LHs (nos.)**	
(ii)	**Level crossings (nos.)**	
20	**Rail over Rail flyover (RoRs)**	
21	**Track structure (Both for Main lines and Loop lines separately)**	
22	**Track centre (m)**	
23	**Signalling system (MACLS std. II/III etc.)**	
24	**Traction**	
25	**Projected Passenger traffic (Lakh passengers/annum)**	
25 (i)	**Projected Coaching trains in case of NL (pairs of trains per day)**	
26	**Projected Freight traffic/Additional freight traffic (MTPA)**	
26 (i)	**Projected goods train/additional goods train per day**	
27	**Existing line capacity utilisation incase of Doubling etc. without maintenance Block and with maintenance Block at current year level**	
28	**Projected gross earning and net earning per annum (In Crs of rs)**	
	CPM/GS or CAO or CE/Construction	

Summary of Main items of DPR/ Detailed Estimate for New Projects						
Name of Project (NL/DL/GC):						
SN	**Item**	**Unit**	**Quantity**	**Unit cost (Rs in Crores/ lakhs)**	**Amount (Rs in crores)**	**Remarks**
1	**Route length**	Km		Total estimated cost/ Route length		
(i)	Total Track Km (incl loops/siding etc)	Km		Total estimated cost/ Total track length		
Civil Engg Items						
2	**Preliminary expenses**					
3	**Total Land requirement**	Ha				
(i)	Pvt land	Ha				
(ii)	Govt land	Ha				
(iii)	Forest land	Ha				
4	**Earthwork in Embankment**	Cum				
(i)	Upto 5 m high	Km				
(ii)	5-10 m high	Km				
(iii)	More than 10 m high	Km				
(iv)	Maximum Bank height	m				
4(a)	**Blanketing quantity**	**Cum**				
5	**Earthwork in cutting**	Cum				
(i)	Upto 5 m depth	Km				
(ii)	5-10 m depth	Km				
(iii)	More than 10 m depth	Km				
(iv)	Maximum Cutting depth	m				
6	**Main Tunnels(cross sectional area of tunnel)**	**nos**				
(i)	Total Main Tunnel length	Km				
(ii)	Maximum length of	Km				

	Tunnel					
(iii)	Tunnels more than 2 Km long	Nos				
7	**Adit/ shafts/cross passages length and cross sectional area of Adit/cross passage etc)**	Km				
8	**Walling length**	Km				
9	**Drain length**	Km				
10	**Rails and fastenings**	Km				
11	**Sleepers and fastenings**	Km				
12	**Ballast**	Km				
13	**Points and crossings**	Nos				
(i)	1 in 16	nos				
(ii)	1 in 12	Nos				
(iii)	1in 8.5	Nos				
(iii)	Others (DS etc.)	Nos				
14	**Ballastless Track (wherever required)**	**Km**				
15	**Fencing (stations/LC etc.)**	**m**				
16	**RoBs**	**Nos**				
17	**RUB/LHS (new/extension)**	**Nos**				
18	**Level crossings (new/extension)**	**Nos**				
19	**Rail over rail flyovers (RoRs)**	**Nos**				
20	**Linear waterway**	**m**				
(i)	Important bridge	Nos				
(ii)	Major bridge	Nos				
(iii)	Minor bridge	Nos				
21	**Total no. of stations (incl originating and destination station)**	**Nos**				

(i)	No. of junction stations	Nos				
(ii)	No. of Crossing stations (excluding junction station)	Nos				
(iii)	No. of Halts	Nos				
22	**Total no. of loop lines/sidings**	**Nos**				
(i)	Total length of loop lines/sidings	Km				
23	**Station buildings**	**Sqm**				
24	Office buildings	Sqm				
25	Workshops and sheds	Sqm				
26	Other service buildings	Sqm				
27	**Total H/L Platform length**	**m**				
(i)	H/L Platform area	Sqm				
28	**Cover over Platforms**	**Sqm**				
29	**Residential quarters**	**Nos**				
(i)	Type II	Nos				
(ii)	Type III	Nos				
(iii)	Type IV	Nos				
(iv)	Type V	Nos				
30	**FoBs**	**Nos**				
(i)	**FoBs length**	**m**				
31	**officers/Subordinate rest house**	**Sqm**				
32	**Plants & Equipments**					
Electrical						
33	**OHE**	**Km**				
34	**TSS**	**Nos**				
35	**SSP**	**Nos**				
36	**General Services**					
37	**Shifting/Modification of electrical crossings**	**nos**				
(i)	400 kv	**nos**				
(ii)	200 kv	**nos**				
(iii)	132 kv	**nos**				
(iv)	33 kv	**nos**				
(v)	11 kv	**nos**				

Signalling & Telecom						
38	**Signalling System**					
(i)	No. of stations upto 100 routes	**nos**				
(ii)	100 to 200 routes	**nos**				
(iii)	200 to 500 routes	**nos**				
(iv)	More than 500 routes	**nos**				
(v)	Interlocked LC gates	**nos**				
39	**Telecom**					
Mechanical						
40	**Mechanical cost**					
(i)	Maintenance facilities					
(ii)	Watering facilities					
(iii)	Disaster management facility					
(iv)	Wayside detection equipments					
41	**Environmental charges**					
						CPM/GS or CAO or CE/Construction

Cash Out Flows:

A. Construction Cost

1. Whether cost of land acquisition has been incorporated?
2. Whether state's share of project cost has been excluded?
3. Whether construction cost of each department has been incorporated?
4. Whether the cost of construction has been projected year-wise as per the schedule of Construction?
5. Whether CRRM is incorporated as per Para 233 of IRFC Vol 1?

B. Working Expenses:

6. Whether maintenance cost of each department has been incorporated as per extant maintenance schedules?
7. Whether the repair cost of each department has been considered?

8. Whether the cost of replacement of assets as per the latest available policy instructions has been factored in?
9. Whether it is verified that depreciation and interest has not been considered as per Para 215 of IRFC Vol 1?
10. Whether operational expense is considered based on the latest traffic costing/Statistical data?

Cash Inflows:

A. Traffic earnings:

11. Whether both outward and inward traffic data is considered?
12. Whether savings in engine days or wagon days or both is worked out as per Para 202 of IRFC Vol 1?
13. Whether reduction in revenue of other lines/ railways due to diversion has been considered?
14. Whether any non-fare revenue is considered?
15. Whether the latest available Statistical data has been used?

B. Residual value:

16. Whether Residual value of assets at the end of project period is considered as per Para 233 of IRFC Vol 1?
17. Whether Land has been factored in as per Book Value?
18. Whether Second hand value of assets has been calculated as per Para 241, IRFC Vol 1?

Checklist for Detailed Financial Cash Flow in DPR for Estimating FIRR		
Name of Project (NL/DL/GC):		**Railway:**
SN	**Item**	**Description**
1	Total capital cost (states's share to be excluded, if any)	
2	Total land to be acquired and cost	
3	Total capital cost of the project, with department wise (Civil, mechanical, electrical and S&T) phasing of costs for each year of construction	
4	Cost of rolling stock in year zero, and additional rolling stock cost in subsequent years, if applicable	
5	Renewal & replacement cost	
6	Gross coaching working expenses for 1st/6th/11th year of the project (Cr.)	
7	Gross coaching earnings for 1st/6th/11th year of the project (Cr.)	
8	Gross goods earning for 1st/6th//11th year of the project (Cr.)	
9	Gross goods working expenses for 1st/6th/11th year of the project (Cr.)	
10	(i) Have savings due to avoidance of detention to rolling stock (both, one time capital and recurring operational), wherever applicable, been duly accepted/vetted by the associated finance. (ii) Passenger and goods savings to be stated separately. In case of doubling, tripling, etc. project only goods savings to be taken into account.	
11	CRRM if accounted for gauge conversion/doubling etc., project to be indicated.	
12	Rate of return (use excel formula).	
13	FIRR of the project	
	Encl. : FIRR calculation sheet	
	Note: Excel Sheet to be shared by Zonal railway.	
Dy CPM/GS/Traffic or CTPM/PCOM, Zonal Railway		

SALIENT FEATURES OF ELECTRICAL ESTIMATE

Electrical TRD:

1. **Name of Section:**
2. **RKM:**
3. **TKM:**

SN	Name of item	Unit	Qty	Unit Rate	Cost
1	OHE	TKM			
2	TSS	Nos.			
3	PQCE/Shunt Capacitor	Nos.			
4	SP	Nos.			
5	SSP	Nos.			
6 (a)	SCADA: RCC cost	Nos.			
6 (b)	SCADA: RTU cost	Nos.			
7	Bay charges to SEBs				
8	Transmission line (SEB)	km			
9	Cables (Size)	km			
10	Construction of siding if any	km			
11	M&P	Nos.			
12	OHE depot	Nos.			
13	PSI depot	Nos.			
14	Contingencies	@1%			
15	D&G charges as per Bd's letter no. 2017/E&R/3(2)/2 dt 20.02.2019	@9.964%			

Electrical General:

SN	Name of item	Unit	Qty	Unit Rate	Cost
1	Modification in power line crossings payment to SEBs (LT/11KV/33KV/110KV/220KV/400KV/765KV)	Nos.			
2	Tunnels:,				
	a. Cost of lighting (Wattage-wise and Nos. of lighting fixtures of each wattage)	No.			
	b. Ventilation (Spec. of Fans & No.of each specification)	No.			
	c. Power supply (No. of transformers, panels, ckt breakers, isolators, size of cables & their qty)	No.			
	d. Fire fighting system (Major items)	No.			
	e. SCADA	No.			
3	Electrification of staff qtrs (Type wise)	No.			
4	Electrification of service buildings (Stn bldg, platform,	No.			

	offices etc separately)				
11	Gysers (no. of each rating)	Nos.			
12	Air conditioners with spec. (window, split)	Nos.			
13	Air conditioner centralised with spec.	Tonnage			
14	DG set with spec.	Nos.			
15	Lifts/escalators	Nos.			
16	Contingencies				
17	D&G charges as per Bd's letter no. 2017/E&R/3(2)/2 dt 20.02.2019	@9.964%			

Checklist for Signaling Sub-estimates submitted with DPRs

SN	Items	Policy/Guidelines	Yes/No
1	Provision of PI/EI/RRI	As per Railway Board's policy, provision of EI should be made in all estimates. Railway Board's letter No. 2003//Sig/G/5 dated 28.04.2016 (SN-33 to 34). Centralized/Distributed EI up to 100 routes based on physical layout of yard, complexity involved, maintainability aspect etc. (letter No. 2021/Sig/25-Conf/5/SSC dated 26.02.21 (SN-31 to 32) of Special SSC)	
2	Point Machine	Non-Trailable Electric Point Machines 143-mm throw with internal locking and non-trailable electric point machines 220 mm. (IRS - S 24-2002)	
3	LED Signal	Procurement of Main Signals and subsidiary signals should be as per RDSO specification i.e. RDSO/SPN/199/2010 Rev 1.0 and of RDSO/SPN/153/2011 ver. 4.1 respectively.	
4	Cable	Usage of cable as per policy (85th SSC) (a) 6 core X 1.5 sq. mm. Copper conductor cable. (b) 12 core X 1.5 sq. mm. Copper conductor cable. (c) 24 core X 1.5 sq. mm. Copper conductor cable. (d) 2 core X 2.5 sq. mm. Copper conductor cable. (e) 2 core X 25 sq. mm. Aluminum conductor power cable. (f) 2 core X 70 sq mm power cable. (g) 6 Quad cable. (h) OFC.	
5	Power Supply (IPS)	There should be provision of IPS.	

6	BPAC	Dual detection should be there. JPO issued by Board (ML & MT) vide letter No. 2015/Sig/PLN/Pt. dated 02.11.2005 (SN-28 to 30)	
7	MSDAC	Dual detection should be there depending on local conditions. MSDAC type complete equipment with minimum 5DP and 4 track section	
8	HASSDAC	As per RDSO specification No. RDSO/SPN/177/2012 (Ver 3.0) or latest	
9	Provision of Automatic signaling.	To be provided as per policy issued vide L No ABS No 2021/Sig/WP/Action Plan dated 14.06.2022.	
10	Double line Block instrument	Double line Block instrument complete with block bell equipment, HMT set with induction coil & condenser, 3-position polarised relay, filter unit etc for working in RE area as per RDSO specification.	
11	Datalogger	Data Logger for Relay Hut, Front end processor, RTU (64DI & 16 DI), station monitoring panels, High end data base server.	
12	Double Distant	As per Railway Board's latest policy dated 29.08.2017 (SN-27), provision of double distant shall be made on Doubling/Tripling works on A & B routes	
13	Fire alarm and smoke detector system	To protect from fire the panel interlocking equipment, indication cum operating panel, S&T equipments in Panel room, Relay room, power supply room, battery room, diagnostic panel room and OFC room.	
14	Automatic Fire Detection & Suppression system	As per Rly. Board's policy letter no. 2013/Sig/Specifications dated 22.06.2015, firefighting equipment shall be kept in the power supply equipment room. Automatic fire suppression system along with Automatic fire detection & alarm system may be provided at stations with more than 400 routes. (Sub-Para 21.18.2 Correction Slip No. 10)	
15	Interlocking of LC Gates	There should not be provision of LC Gate on GQ & GD Routes. Instead of LC Gate, provision of RUB/ROB be made in the estimate. Provision of Emergency Sliding Boom should be made in the estimate.	
16	Standard of Interlocking	As per Rly Board's letter No.2020/Sig/35-Policy/4/Interlocking dated 20.10.2020 (SN-9 to 25), all new stations being opened under gauge conversion/new lines shall be provided with Standard-II(R) Interlocking and Colour Light Signalling.	

17	Cable laying & Trunking	Laying of cable should be with trunking and there should be path protection of cable. Provision of Horizontal Directional Drilling (HDD) for cable laying work may be done as per site feasibility	
18	D&G Charges	As per Rly. Board's latest policy dated 04.03.2020 (a) 16.33% for projects requiring Traffic Blocks (b) 12.19% for projects not requiring Traffic Blocks	

To Be Signed By Concerned CSTE/C or CSTE/Project.

Checklist for Telecom Sub-estimates submitted with DPRs

SN	Items	Policy/Guidelines	Yes/No
1	IP-MPLS, IP-Exchange and Data Network for PRS, UTS, FOIS and SCADA	To be followed Railway Board's policy vide letter no. 2011/Tele/9(2)/1 dated 25.02.2020 as Telecom Circular no.4/2020 and Technical Advisory Note issued by RDSO vide letter No RDSO-TELE0LKO(TECH)/8/2020-Telecom Directorate/ RDSO dtd 16.12.2020	-
1a	Provision of IP-MPLS System at stations	All future works/replacement of SDH/PDH works, including works where tender is yet to be floated shall be with IP-MPLS standards.	
1b	Provision of IP Exchange	All future exchange works/replacement shall be done with IP exchanges. All exchanges can be integrated into one at the Divisional level, where feasible, with provision of suitable bandwidth and ring connectivity/protection. In addition to that, for IP-Exchange, telecom Circular 04/2022 should be followed.	
1c	Provision of Data network	The telecom backbone of all future works/ replacement of Data networks such as PRS/UTS/ FOIS/SCADA shall be with IP-MPLS equipment by providing separate VPN network, if required	
2	Provision of VOIP based TCCS at station	As Para 5.4 of Telecom manual, VoIP Based TCCS among the various control communication systems to be used in Indian Railways as per RDSO specification.	

3	LC gate communication	Phone communication to all manned level crossing gates controlled from the station preferably with voice logging facility.	
4	25 W VHF set and 5W VHF sets	25W VHF sets with proper standby power supply at each station and 5 W warlike-Talkie set as per requirement.	
5	Provision of LTE in section where Kavach is provided	Vide Board Letter No 2020/Tele Dev/Umbrella works dtd 21.10.2021, Provision of LTE in section where Kavach is provided/being provided.	
6	Cable	Usage of cable as per Telecom manual 6 Quad cable (Quad Cable 0.9 or 1.4 mm conductor dia. as per IRS specification No. IRS:TC 30/05. 1.4 mm conductor dia cable is used for longer block sections longer than 12 kms.) Multi pair (from 10 pairs to 200) Multi Dia (0.5mm/0.63mm/0.9mm) PIJF (Polythene insulated Jelly Filled) Cable as per IRS specification No.IRS:TC 41/97 used for exchange subscriber lines or branch cables branching off from the main Quad cable Twisted Pair Switch Board Cable of sizes 0.5 mm /0.6mm copper conductor dia. as per IRS/TEC specification used for indoor applications such as distribution to various telephone subscribers in a building, MDF to exchange wiring etc OFC (24/48 Fibres Optical Fibre Cable as per latest RDSO specification) to be laid in HDPE pipe.	
7	Power Supply (IPS)	All Telecom Equipments shall be provided with a reliable Power Supply	
8	IP based Video Surveillance System	**CCTV system at stations** - As per RDSO spec (Spec no RDSO/SPN/TC/65 /2021 Rev 6.0 issued by Tele Dte/RDSO or latest). **CCTV at non critical locations**- To be procured either RDSO spec or Rly's own specifications with approval of GM as per RB letter No 2017/Tele/3(8)/1 dtd 28.11.2017. **CCTV system in Divisional & Zonal Hospitals-** Type of system and its specifications to be	

		decided by Zonal Rlys as per RB Letter No 2018/Trans Cell/Health/MR Review dtd 14.09.2018. **CCTV at Railway offices**- Type of system and its specifications to be decided by Zonal Rlys as per RB letter No 2018/Tele/6(4)/1 dtd 16.01.2020 **CCTV system in relay rooms**- an extension of the existing/proposed CCTV system at stations as RB Letter No 2017/Tele/3(8)/1 Pt-1 dtd 20.04.2020 **CCTV at RPF Thana/Posts**- an extension of the existing/proposed CCTV system at stations as RB Letter No 2020/Sec(CCB)/210/CCTV dtd 23.11.2021.	
9	Passenger Information System at station	Followed Comprehensive instructions for provision of Passenger Amenities and user facilities at Stations issued vide Lt.No.2018/LM(PA)/03/06 Dtd. 09.04.2018	
10	Fire Alarm system at Telecom Installations	As per Rly Board's policy letter no 2019/Tele Dev/ Fire Alarm dtd 27.07.2019, Automatic Fire Detection & Alarm System is to be provided as per RDSO specification No. RDSO/SPN/217/2018 ver 2.0 or latest at Telecom installations like major Exchanges, Test Room/Telecom Control Room, Data Centre locations, CCTV Control & Equipment Rooms, Main Switching Centre (MSC) & Base Station Controller (BSC) of MTRC, main QFC centres /Quad repeater stations, Satellite Hubs, etc	
11	Tunnel communication	In Section where Tunnel exist, Tunnel communication is to be provided as per RDSO spec (Spec no RDSO/SPN/TC/109 /2019 Rev 0.0 issued by Tele Dte/RDSO or latest).	
12	Utility shifting of Telecom assets	Like in doubling, Gauge conversion project, existing utility pertaining to telecom cables and other accessories have to be shifted, Hence, its shifting provisions should be ensured	
13	Remote diagnostic & predictive maintenance tool for Telecom assets.	To ensure uninterrupted communication services, 24x 7 working of Telecom assets has to be ensured. Hence, Provision of Remote diagnostic & predictive maintenance tool for Telecom assets should be ensured.	

14	D&G Charges	As per Rly. Board's latest policy dated 04.03.2020 16.33% for projects requiring Traffic Blocks. 12.19% for projects not requiring Traffic Blocks.	

Signature of SAG officer In-charge

*****

CHAPTER-III
Budget

Para No.	Particulars
	Section I-General
301	Budget - A Constitutional and Management Document
302	Voted and Charged Expenditure
303	Charged Expenditure
304	Budget, and an instrument of Parliamentary financial control and expenditure control
305 – 307	Demands for Grants
308	Glossary of terms used
	Section II -Preparation of Budgets by Railway Administrations
309 – 312	Responsibility for framing the Estimates
313	Gross Receipts
314	Coaching Earnings
315	Goods Earnings
316	Sundry Other Earnings
317	Receipts of Worked Lines
318	Refunds of Revenue
319 - 322	Explanation of variations in receipts
323	Review of Traffic outlook
324 - 325	Ordinary Working Expenses
326 - 328	Explanation of Variations
329 – 330	Estimate of Cost of Establishments
331	Suspense Heads
332	Repairs and Maintenance Expenditure of Rolling Stock
333	Cost of fuel
334	Miscellaneous Expenditure
335	List of Credits of Recoveries
336	Summary of Ordinary Working Expenses
337	Summary of Revenue Receipts and Expenditure
338 – 343	Appropriations to and Expenditure to be met out of Railway Funds
344 - 345	Payments to General Revenues
346 – 347	Works Machinery and Rolling Stock Budget
348	Inventories
349 – 353	Civil Demands

t Railway (Railway Board)

	Section III **Compilation And Scrutiny Of Budget In The Railway Board**
354 - 356	Compilation And Scrutiny Of Budget In The Railway Board
357 - 358	Submission to the Minister
359	Presentation to the Parliament (Deleted)
360	Appropriation Bill
	Section IV-Administering the Budget
361 - 364	Distribution of funds by the Railway Board
365 - 368	Distribution of funds by General Managers to Lower Authorities
369 - 370	Responsibility of the Railway Board to avoid Excess over Grants or Expenditure on a New Service
371 - 372	Responsibility of Railway Administrations in case of excesses or lapses
373 - 374	Powers of Railway Administrations in regard to emergent and inevitable expenditure
375	Re appropriations
376	Powers of the Railway Board
377 - 381	Powers of Railway Administrations
382	Unforeseen Expenditure operation of the Contingency Fund of India
383 - 384	Review of Expenditure
385 - 389	Final Modification Statement
390 - 391	Supplementary and Excess Grants
	Annexures
Annexure-I	Heads of Demands & Authorities Responsible for Control over Expenditure
Annexure-II	List of Budget forms and Connected statements
Annexure-III	Statement of Income-tax, Interest on Advances by Central Government and Interest on Debt and other obligations.
Annexure- IV	Statement of Debt transactions-I-Small Savings, Provident Fund, etc. J-Reserve Funds, K- Deposit and Advances
Annexure-V	Statement of Debt Transactions-K-Deposits and Advances L-Suspense and Miscellaneous- under Public Account and F-Loans and Advances under Consolidated Fund.
Annexure-VI	Statement of Remittance Transactions

CHAPTER III
Budget

Section I-General

301. **Budget - A Constitutional and Management Document** -Article 112(1) of the Constitution of India prescribes that 'the President shall in respect of every financial year cause to be laid before both the Houses of Parliament a statement of the estimated receipts and expenditure of the Government of India for that year' referred to as the "annual financial statement" and popularly called the "Annual Budget". Though the constitutional requirement is only that the 'financial statement' shall contain a statement of the estimated receipts and expenditure for the coming financial year, as a matter of practice, every budget contains three elements-

a) a review of the preceding year, including the actual receipts and expenditure in that year;
b) an estimate of the receipts and expenditure of the coming year; and
c) proposals, if any, for meeting the requirements of the coming year.

Though the Constitution does not provide for the presentation of the annual financial statement or Budget in parts, the Rules of Procedure of Parliament have provided that 'nothing shall be deemed to prevent the presentation of the Budget to the House in two or more parts and when such presentation takes place, each part shall be dealt with in accordance with the rules as if it were the Budget'. This provision had enabled the Separation of the Railway Budget from the General Budget and the passing of separate Appropriate Acts for each of these Budgets in keeping with the Separation Convention (1924). With effect from 2017-18, Railway Budget has been merged with the General Budget and hence the Demand for Grant and the Statement of Budget Estimates of Ministry of Railways has become an integral part of the General Budget presented by the Finance Ministry.

302. **Voted and Charged Expenditure** -Article 112(2) of the Constitution prescribes that the estimates of expenditure embodied in the annual financial statement shall show separately-

a) the sums required to meet expenditure charged upon the Consolidated Fund of India ; and
b) the sums required to meet other expenditure proposed to be made from the Consolidated Fund of India.

The expenditure proposed in the Budget may, therefore, be either (i) Voted. or (ii) Charged. Article 113(1) of the Constitution provides that 'the estimates of expenditure charged upon the Consolidated Fund of India shall not be submitted to the vote of Parliament'. There is, however, no restriction on either House of Parliament discussing any of these estimates, where after funds are sanctioned by the President.

Article 113(2) requires that estimates of voted expenditure "shall be submitted in the form of demands for grants to the House of the People (Lok Sabha) and the House of the People shall have power to assent, or to refuse to assent, to any demand, or to assent to any demand subject to a reduction of the amount specified therein".

Article 113(3) enjoins that no demand for a grant shall be made except on the recommendation of the President.

303. **Charged Expenditure** -In respect of Railways, the following expenditure is "charged" on the Consolidated Fund of India-

i) The salary, allowances and pension payable to or in respect of the Comptroller and Auditor General of India;
ii) Any sums required to satisfy any judgement, decree or award of any Court or awards by Arbitrators where made into rule of court; and
iii) Any other expenditure declared by the Constitution or by Parliament by law to be so charged.

304. Apart from its significance as an instrument of Parliamentary financial control, the Budget is an important management tool. Broadly the financial forecast in the Budget is related to the performance targets set for Railway Administrations, and it is the responsibility of the Railway Managements to ensure the achievement of these associated targets.

305. **Demands For Grants**

The proposals of Government in respect of sums required to meet expenditure from the Consolidated Fund of India are to be submitted in the form of "Demands for Grants" to the Lok Sabha. The Demands shall be for gross expenditure; the credits or recoveries (vid paragraph 335) being shown in the form of footnotes to Demands.

306. Pursuant to the recommendations of Railway Convention Committee 1971, a Task Force was constituted by the Government in July 1973 to examine certain aspects

of budgetary, accounting and management practices on the Railways. In their First Report the Task Force made recommendations for the restructuring of the Formats and Contents of Demands for Grants and the manner in which the Railway Budget should be prepared. The recommendations made by the Task Force alongwith Government's decisions thereon have been considered by the Estimates Committee (1978-79) (Sixth lok Sabha); and the Formats and Contents of Restructured Demands for Grants effective from 1st April, 1979 and as further modified with effect from FY 2017-18 after merger of Railway budget with Union Budget are given in Annexure I.
There is a single Demand for Ministry of Railways after merger of Rail Budget with Union Budget with effect from FY 2017-18.

The salient features of restructured Demands for Grants are as under :-

i) The single Demand for Grant is classified into Revenue and Capital Segments. The Grant is divided into various Major Heads and in case of Revenue Segment Major Heads are further divided into various Sub Major Heads (SMH).

ii) Expenses are broadly grouped by activities as an aid to developing budgets and analysing actual expenses against budgetted expenses.

iii) Each Major Head/Sub Major Head has two-way classification by activity and by Primary units of expenditure. The activity classification identifies 'why' an expense item is incurred. The behavior of costs in relation to changes in traffic volumes at each activity location thus provides a data base for revising the budget in response to changing volumes of output. The primary unit (object) of expenditure on the other hand, identifies 'what' the expense item denotes, i. e., by way of labour, materials etc. Such a breakdown facilitates concurrent cost and budgetary control for it pin points the types of expenses on which the organisational unit should concentrate to improve its performance. The primary units also indicate the categories of expenses that would be used by any organisational unit to prepare its budget and monitor the variances from the norms set up by it.

iv) The Budget classifications have been completely aligned with the Accounting classifications.

The system is simple in structure and is intended to exploit fully the capabilities of IT Applications such as IPAS etc. to analyse revenue expenses by activities for management /parliamentary reporting and by primary units for expenditure control at the responsibility cost centres where the expenditure is incurred. For Works Expenditure, the classification provides a direct link-up with the Plan heads.

The functional orientation of both the Budgetary Demands for Grants and the

accounting classification ensures a complete concordance between the sub-heads of the Demand for Grants and minor heads of accounting classification on the one hand and the detailed activity classification of the Demands for Grants with the Sub heads of Accounting Classification on the other.

v) Ministry of Railways is required to lay the Detailed Demands for Grants in Lok Sabha after the General Budget is presented to Parliament.

Major Head wise details of Zonal Railway-wise/Spending Unit is circulated among Railways for their working.

The Detailed Demand for Grants and the Zonal wise break-up of Detailed Demand of Grants will have the following sub divisions:

a) Minor Heads of the Sub Major Heads representing major functions/activities.

b) Sub heads representing a further break-up of the activity of classification i.e. identifying 'why' of the expenditure in greater detail.

c) Primary Units (Objects of Expenditure) identifying 'what' the expenditure denotes i.e.—

Salary
Wages,
Allowances
Materials
Contractual Payments, etc.

vi) The activity classification combined with the accounting by primary units of expenditure provides a built-in mechanism for isolating fixed costs like general administration and permanent sanctioned labour from variable and semi-variable costs like cost of materials, cost of temporary labour, travel expenses, incentive, running allowances etc. The scheme is however, by no means such as to correlate expenditure directly with units of performance.

307. The authorities responsible for control over expenditure against budget provision in each Major Head/Sub major Head are given in Annexure I.

For the laying of the Detailed Demands for Grants (preparation of the Budget) by the Ministry of Railways (Railway Board), the Railway Administrations and other authorities empowered to incur expenditure are required to submit to the Railway Board their revised estimates for the current year and budget estimates for the following year.

Since the Railway Budget is finalized by the Ministry of Finance (MoF), the Budget

calendar being followed by Railways has to be in line with the schedule notified by the MoF. For finalizing the Revised Estimates /Budget Estimates, MoF hold discussions with various Ministries/Departments from middle of October to first week of November.

In view of the above, Revised Estimates for the current year and Budget Estimates for the next year need to be finalized by the Board by mid of October itself. Accordingly, the Revised Estimates/Budget Estimates are required to be submitted to the Board as per the due dates and procedure:

Revenue Section (Major Head 3001, 3002 & 3003) (Sub Major Head 1 to 11)	20th September
Estimates for Traffic Plan and Revenue Receipts (Major Head 1001, 1002 & 1003)	20th September
Civil Estimates/Demands	20th September
Capital Section (Major Head 5001 & 5002)	25th September

Note -Timeline given above is subject to change as per the instructions issued by Railway board every Year.

The revised estimates are required in respect of the current year and Budget Estimates for the following year. The forms in which the estimates should be prepared are furnished each year by the Railway Board to the authorities concerned and the instructions for the filling up of the forms are printed on the back thereof. A list of the Budget Forms is at Annexure II.

308. **Glossary of terms used**-The following is a glossary of the terms which the Railway Administrations should use in their estimates and other connected documents. The terminology given in the glossary should be followed uniformly by all Railway Administrations and no departure should be made therefrom in any circumstances:

Glossary Of Terms

i)	Coaching Revenue (less refunds)
ii)	Goods Revenue (less refunds)
iii)	Traffic Revenue = (i)+(ii)
iv)	Sundry Revenue (less refunds)=Other than Traffic Revenue
v)	Gross Revenue = (iii)+(iv) = true or accrued Revenue in an accounting period whether or not actually realised.

vi)	Traffic Suspense.
vii)	Gross Receipts = (v)+(vi) = Revenue actually realised during an accounting period.
viii)	Miscellaneous Receipts = Guarantee recoverable from State Governments + Other Miscellaneous Receipts, such as Government share of surplus profits, sale of land of subsidized companies, receipts from surcharge on Passenger fares, etc.
ix)	Total Revenue Receipts = (vii)+(viii).
x)	Ordinary Working Expenses = Expenses booked under final heads, excluding appropriation to Depreciation Reserve Fund, and Pension Fund. (Payments on account of accident compensation and Pensionary Payments should also be excluded).
xi)	Appropriation to Depreciation Reserve Fund.
xii)	Appropriation to Pension Fund.
xiii)	Gross Working Expenses = (x)+(xi)+ (xii) = True expenses in an accounting period whether or not actually disbursed.
xiv)	Suspense.
xv)	Gross Expenditure = (xiii) + (xiv) = Working Expenses actually disbursed during an accounting period.
xvi)	Miscellaneous expenditure = Surveys + Land for subsidized companies; subsidy + other Miscellaneous Railway expenditure, Appropriations to Pension Fund relating to Railway Board and Miscellaneous establishments booked under Major Hear 3001 and payments to worked lines.
xvii)	Total Revenue Expenditure = (xv)+(xvi).
xviii)	Net Revenue = (v) - (xiii).
xix)	Net Receipts = (ix) - (xvii).
xx)	Payments to General Revenues (Deleted)
xxi)	Surplus/Shortfall= (xix)-(xx).
Note.	The "Surplus or Shortfall" shown in item (xxi) differs from the "gain or loss" given in Account No. 110 of the Finance and Revenue Accounts of the Government of India, as, the former takes into account all the Miscellaneous Receipts (viii) and Expenditure. (xvi) attributable to a Railway, whereas the latter does not.

Section II -Preparation Of Budgets By Railway Administrations.

309. **Responsibility for framing the Estimates** - Preparation of the Revised and Budget Estimates should commence at the 'grass root level ', i.e., Division, Workshop, Stores Depot etc., as the case may be. The entire responsibility for framing the estimates devolves upon the spending/earning authorities concerned, though the actual

work of compilation and scrutiny would rest with the Financial Advisor & Chief Accounts Officer who would also draw the attention of the General Manager to matters of purely financial import.

310. The estimates should be as accurate as possible and, to achieve this object, care should be taken to see that the data on which the forecast is based is adequate and reliable and that the conclusions arrived at from the data can be sustained by past experience and future expectations of likely events.

311. No stereotyped method of estimating will be helpful in forecasting accurately, unless the data on which the forecast is based is selected with due care and all the useful knowledge is brought to bear on the conclusions to be derived from the data. The manner in which the data required for the preparation of the estimate should be collected is, therefore, left to the General Managers, but the general principles on the basis of which the various estimates should be framed are described, wherever necessary, in the following paragraphs.

312. The Revised and Budget Estimates should be framed by the various concerned authorities in keeping with the instructions given below separately for-

i) Gross Receipts ;
ii) Ordinary Working Expenses;
iii) Payments to Worked Lines ;
iv) Appropriation to and expenditure to be met out of Railway Funds ;
v) Works Expenditure ; and
vi) Civil Estimates

Gross Receipts

313. The estimates of Gross Receipts are required in the format given in the form (item (1) of Annexure II) and should be submitted after compilation in the Budget Module in IPAS or accounting software, the various figures being given in thousands of rupees. Information should be furnished in accordance with the instructions printed on the reverse of the form (item (1) of Annexure II). Two sets of the estimates of Revenue should be prepared, one on the basis of originating Revenue and the other with reference to apportioned Revenue. The two sets of figures should be sent to the Railway Board both for the Revised Estimates for the current year and the Budget Estimates for the following year.

314. Coaching Revenue: Revenue from each class of passenger traffic viz., Air conditioned , First and Second, should be estimated on the basis of passenger kilometres and the average fare per passenger kilometre for each class separately. The Revenue from parcels traffic should be estimated in the same way as for goods traffic, and from military traffic should be assessed on the basis of the previous actuals and the influence of changing conditions in the future. The Revenue from coaching traffic, other than passenger, parcel and military traffic, may be estimated on the basis of a ratio of the Revenue from passenger traffic to be determined with reference to the previous actuals.

315. Goods Revenue- Estimate for the commodities which, yield the bulk of the Railway's revenue, should be based on the anticipated net tonne kilometres (NTKM) to be carried, and the average yield per NTKM, for each commodity. The Revenue from the rest of the commodities should be assessed in lump sum, based on the trend of events in the immediate past, the experience of the past years and, so far as it is possible to ascertain, the influence of changing conditions in the future.

316. Sundry Revenue -The miscellaneous Revenue of a railway is derived mainly from the following sources:-

i) Operating loss of strategic lines as reimbursed by Ministry of Finance
ii) Rent and tolls ;
iii) Commercial Publicity;
iv) Land Lease, Land Monetization/Property Development;
v) Right of way for OFC laid by/for Rail Tel & Right of way /way leave facility for others;
vi) Receipts from car/scooter/cycle parking at stations/Railway premises;
vii) Advertisement fees & Non-Fare Revenue activities;
viii) Catering;
ix) Sale proceeds of grass and trees, damaged goods and unserviceable revenue scrap; and
x) Interest and maintenance charges on account of assisted sidings, saloons, postal vehicles, etc.
xi) Other Misc. Sundry Revenue

The Revenue from these sources is comparatively small and should be estimated on the basis of previous actuals and any other circumstances that may be known or foreseen at the time.

317. Receipts of Worked Lines –The receipts of worked lines should be included in the

receipts of the main lines under the several sub-heads and also the total should be shown separately in the estimates.

318. Refunds of Revenue –The figures of refunds of revenue should be deducted from the estimated receipts under each sub-head and the figures for gross receipts should be given net (after deduction of refunds).

319. **Explanation of variations in receipts** - The estimates should be accompanied by a brief narrative explanation of the figures of actual Revenue for the first seven months of the current year, especially if they show any pronounced change from those for the corresponding period of the preceding year. For example, if the Revenue from second class traffic have risen or fallen markedly, the narrative explanation should state what, in the General Manager's opinion, is the reason for so large a change in the number of passengers carried or the average distance travelled by them; if goods traffic in certain commodities has been exceptionally brisk or dull, the commodities affected should be specified, and so on. Similar explanations should be given of the figures adopted by the General Manager for the revised estimate for the remaining period of the current year, and for the budget estimates for the ensuing year.

320. The estimates of Revenue under each category should be shown separately for "local" and "interchanged" traffic and an analysis furnished indicating the trend of realisation in the current year as compared to the previous year. It must be ensured that figures for interchanged traffic take into account the latest position of both "outward" and "inward" transactions and the period upto which the revenue has been realised should, also be indicated. The Railway-wise details of the realisations/ anticipated realisations, indicating also the period upto which these relate, should be furnished. Judicious and purposeful use should be made of the periodic statement of approximate Revenue on originating basis as well as of the monthly digest of current trends in economic conditions of Railway Transport circulated to the Railway Administrations by the Director, Statistics and Economics, Railway Board.

321. The estimates of originating goods traffic (in tonnes) based on the actuals of the first five months and expectations for the last seven months of the current year should be given separately for (i) traffic moved to and from the steel plants by principal categories (other than coal) such as raw materials, finished products like steel manufactures, pig iron and alloy steel, (ii) Coal for Steel Plants, Washeries, and other users, (iii) Cement, (iv) Export ore, (v) Fertilisers, (vi) POL products, (vii) Food grains, and *(viii)* General Goods. The increase/decrease anticipated in the originating tonnage

during the current year over that of the preceding year under each of the categories of goods traffic mentioned above should also be given specifically in a statement annexed to the Revenue estimates. The annexure to the Revenue Estimates (item (2) of Annexure II) indicating certain selected commercial and operating statistical data for the purpose of establishing a better link between the estimates of revenue and working expenses, should be completed in all respects and sent with the estimates of revenue. Additionally, the approximate amount of increase in Revenue due to the opening of new lines, as well as the consequent increase on existing lines, should be stated, as far as possible, separately for the information of the Railway Board.

322. Variations under Passenger, Goods and Other Coaching Revenue on account of the effect of increase/adjustments, if any, in fares and freights as compared to the increases provided in the Budget Estimates for the year should be separately explained. The revised estimates of Revenue should, therefore, have a proper correlation to the latest traffic anticipations as revealed from the originating, cross and received traffic figures.

323. **Review of Traffic Outlook** - These explanations are required not only to enable the Railway Board to judge whether the estimates are reasonable, but also to assist them in explaining them to the Parliament. What in fact is wanted from the General Manager is a very brief review of the traffic outlook for the current and ensuing years which can be used for assessing the total traffic prospects of the Railways. The actual form in which this brief review should be rendered each year is left entirely to the discretion of the General Manager; the Railway are particularly desirous that it should not be stereotyped.

Ordinary Working Expenses

324. The estimates of Working expenses required from Railway Administrations are so arranged that Minor Heads of Sub major Heads 01 to 13 of Major Heads 3002,3003 as detailed in Annexure I, are in alignment with minor heads of Railway Accounting Code Classification as shown below:-

Union Budget Classification		Railway Numerical Accounting Code
SMH No.	Description of SMH	
01	General Superintendence &	03- General Superintendence &

	Services.	Services.
02	Repairs & Maintenance, Way & Works	04- Repairs & Maintenance, Way & Works
03	Repairs & Maintenance of Motive Power.	05- Repairs & Maintenance of Motive Power.
04	Repairs & Maintenance of Carriages & Wagons	06- Repairs & Maintenance of Carriages & Wagons
05	Repairs & maintenance of Plant & Equipments	07- Repairs & maintenance of Plant & Equipments
06	Operating Expenses-Rolling Stock & Equipment	08- Operating Expenses-Rolling Stock & Equipment
07	Operating Expenses-Traffic	09- Operating Expenses-Traffic
08	Operating Expenses-Fuel.	10- Operating Expenses-Fuel.
09	Staff Welfare & Amenities	11- Staff Welfare & Amenities
10	Misc. Working Expenses	12 K- Misc. Working Expenses
11	Provident Fund and other Retirement Benefits	13- Provident Fund and other Retirement Benefits
12	Appropriation to Funds	14- Appropriation to Funds
10	Suspense	12 N- Suspense(Demands payable, Credits or recoveries)

An example of mapping of Civil Account Head with Railway Classification of Expenditure is given below:-

Civil Account Accounting Code				Railway Account Accounting Code	
Major Head	Sub Major Head	Minor Head	Description	Demand No.	Minor Head
3002- Indian Railways- Commerci	01		General Superintendence & Services	03	
	01	108	General Management	03	100

al lines-working expenses	01	109	Financial Management	03	200
	01	110	Personnel Management	03	300
	01	111	Material Management	03	400
	01	112	Way and Works	03	500
	01	113	Rolling Stock Management	03	600
	01	114	Electrical Management	03	700
	01	115	Signalling & Telecommunication Management	03	800
	01	116	Traffic Management	03	900
	02		Repair & Maintenance of Permanent Way and Works	04	
	02	117	Establishment in offices	04	100
	02	118	Maintenance of P. Way	04	200
	02	119	Maintenance of Bridges & Tunnels	04	300
	02	120	Maintenance of Service Buildings (Other than Staff quarters and Welfare Buildings)	04	400
	02	121	Water Supply , Sanitation and Roads(Other than Staff quarters, colonies and Welfare Buildings)	04	500
	02	122	Other Repairs and maintenance	04	600
	02	123	Service Repairs pertaining to Breaches, Accidents etc. including Special revenue	04	700

			Works		
	02	129	Credit or Recoveries	04	900

A separate estimate is required in respect of each Sub Major Head under the Minor Heads and Sub heads shown in Annexure. I in the relevant forms listed in Annexure II conforming generally to the following proforma:-

Actuals(past three years)			Expenditure Position (previous/current years)				
			Description	First 5 Months (actual)	Last 7 Months (anticipated)	First 5 Months (actual)	Last 7 Months (anticipated)
2019-20	2020-21	2021-22		2021-22	2021-22	2022-23	2022-23
1	2	3	4	5	6	7	8

Estimates			Variations between		Remarks
Budget Estimate 2022-23	Revised Estimate 2022-23	Budget Estimate 2023-24	Revised & Budget Estimates 2022-23	Budget Estimates 2023-24 and Revised Estimates2022-23	
9	10	11	12	13	14

Note -The years have been given for the purpose of Illustration only. Also after implementation of Budget Module on IPAS or any other accounting software, only the projections pertaining to RE and BE is being submitted to Railway Board through IPAS Budget Module or accounting software.

325. The estimates of expenditure in respect of each Sub Major Head should, be submitted after compilation in the Budget Module in IPAS, the, figures being given in thousands of rupees. In preparing their estimates the Railway Administrations should ensure that the figures of actual expenditure for the preceding year shown in the estimate agree with those reported to the Railway Board. The figures of actual expenditure for the current year should represent the latest data.

326. **Explanation of variations** -A brief narrative explanation should be given of the causes (with amounts involved in each case) of substantial differences between the figures adopted for the revised estimate of the current year and (i) the actuals of the previous year, and (ii) budget allotment for the current year. Similar explanation should be given for differences between the figures of the budget estimate of the ensuing year and the revised estimate of the current year. Large variations which compensate each other should also be indicated.

327. The revised estimate for the current year and the budget-estimate for the next year should be fixed after taking into account the expenditure of the previous year and comparing the expenditure during the first five months of the year with the corresponding period of the previous year. A full explanation of special features and any exceptional and abnormal adjustments (with amounts involved) included in each period of the previous and current year as also in the next year, should be given in the explanatory note accompanying the estimates. The financial effect of variations on account of specific reasons should be clearly brought out under each Sub Major Head as shown in the statements (Items 58 to 64) of Annexure II.

328. When the expenditure anticipated in the last seven months of the year is disproportionate as compared with (i) the first five months of the year or (ii) the corresponding period of the previous year, reasons for the disproportionate expenditure should be given in the revised estimate. Special and non-recurring items of expenditure in a year should show a corresponding saving in the following year. Likewise, when transfers are made from one Sub Major Head to another due to changes in classification, the saving shown under one Sub Major Head should agree with the excess shown under the other Sub Major Head.

329. **Estimate of Cost of Establishments**- In working out the cost of establishments, the Railway Administrations should not make any meticulous calculations of the emoluments to which individuals will be entitled if they continue to hold the posts during the year. The estimates of the cost of establishment should be based on past experience of their actual cost, with due allowance for any changes either in the number or rates of pay of each individual establishment in the year in which, or for which the estimate is being made.

330. In the explanatory note accompanying the estimate, information should be given as to what part of the proposed expenditure represents expenditure on the permanent staff already sanctioned, how much of the proposed increase in the next year is due to

INDUSTRIAL BANKS VS LIBRARY BOARD

ordinary increments, how much is new expenditure and how much for temporary establishment. Reasons should be given for additional staff when provision is made in the estimates for such increase in expenditure. The estimates of ordinary working expenses should be accompanied by 'Staff Statements' under each Sub Major Head in the proforma given in items, 14, 16, 18, 21, 23, 25, 27, 29, 41 and 43 of Annexure II. Explanations for substantial variations in the numbers should be furnished as between current year's budget and, revised estimates and budget estimates for the following year.

331. **Suspense Heads** -The estimates in respect of revenue suspense heads (viz., Demands Payable and Misc. Advances-Revenue) should be prepared by the Financial Advisor & Chief Accounts Officer on the basis of past actuals and current trends. Budget for Demands payable is for the net increase or decrease in the balance at the end of the year, while for Misc. Advances the budget requirement would be on a 'gross' basis.

332. **Repairs and Maintenance Expenditure of Rolling Stock** -The budget and revised estimates of expenditure on repair and maintenance of Rolling Stock separately by locomotives (steam, diesel and electric), carriages, wagons and other coaching vehicles included in Sub Major Head (SMH) 03 and 04 should be supported by separate statements (see item 19 in Annexure II)showing in detail the estimated number of Rolling Stock proposed for repairs in the current year's budget and revised estimates and the budget of the ensuing year with corresponding unit cost.

333. **Cost of Fuel** -Two statements, one showing the quantity and cost of coal, diesel oil and electricity (items 30 to 32 in Annexure II) and another showing the quantity and freight of coal carried by sea (item 33 in Annexure II) should be submitted along with the revised and budget estimates for Sub Major Head (SMH) 08- Operating Expenses - Fuel. Care should be taken to furnish complete information as required in the 'Correlation Statements' (items 34 to 36 in Annexure II) accompanying the revised and budget estimates for Sub Major Head (SMH) 08.

334. Miscellaneous Expenditure -This includes expenditure budgeted under (Major Head 3001, SMH 12 of 3001, 3002 & 3003 and Major Head 3006).

For transactions with Company Railways under Major Head 3001 separate estimates should be prepared for payment of subsidy/rebate and /or share of earnings to worked lines in keeping with the terms of Contract with each Railway.

335. List of Credits or Recoveries –

a) The following items of credits or recoveries shall be excluded from the scope of the demands presented for vote of Parliament:-

i) Commission on account of internal check of military warrants and credit notes in connection with the military traffic.

ii) Hire and haulage charges of rolling stock from Port Trust Railways or other non-budget lines.

iii) Service contributions on account of staff on deputation to organizations whose expenditure is not met from consolidated fund of India.

iv) Credits for released material relating to renewal and replacement works and also those released from repair and maintenance works.

v) Credits for electrical energy supplied to outsiders, other Railways, Government Departments and consumed for purposes other than traction.

vi) Sale proceeds in Canteens, state Government grants to schools, fees from students, etc.

vii) Credits under "Suspense" heads.-

a) Issue from Stores Suspense.

b) Issue under Manufacture Suspense.

c) Credits under "Miscellaneous Advances".

viii) Credits on account of unconnected loco coal wagons;

ix) Credit for freight charges on railway materials including fuel;

x) Deficit in the net earnings pertaining to worked lines recoverable from State Governments etc;

xi) Write back of cost of military sidings initially charged to capital;

xii) Cost of cinders and coal ashes sold and utilised for departmental purposes;

xiii) Credits on account of Inspection charges on coal;

xiv) Share of cost of works chargeable partly to Railway Estimate recoverable from other departments of Central Government or a State Government if the portion of expenditure on such works debitable to Departments concerned cannot be segregated and booked as such, and

xv) "Miscellaneous receipt" under classification of works Expenditure;

The Railway Board should be furnished with a list of such credit or recoveries accompanying the revised and budget estimates under each Sub major Head in the following form:-

Form No. F. 335

Serial No.	Brief Description	Actuals 2021-22	Budget Estimates 2022-23	Revised Estimates 2022-23	Budget Estimates 2023-24

b) The following items of credits or recoveries shall be taken in reduction of Budget Estimates and only net figures (minus or plus) shall be shown under the respective Sub heads of the Sub Major heads:-

i) Credits on account of accounting adjustments such as-
   a) Credits realized from surplus stock, found in stock verification, etc.
   b) Credits on account of surplus stock transferred from one work to another Chargeable to same or another grant or to stock.
   c) Credits to Capital or Depreciation Reserve Fund or other heads on account of Write-back adjustments, etc.
   d) Credits for overcharges and undercharges under repairs.

ii) Credits on account of the rebate for purchases made through Supply and Disposals Department.

iii) Credits under "Demands Payable" and "Unpaid Wages".

336. **Summary of Ordinary Working Expenses** -The Railway Board should be furnished with a summary of the ordinary working expenses (in the form at item 46 of Annexure II) comparing, under each Sub Major Head the actuals during each of the preceding three years, with the budget estimates and revised estimates for the current year and budget estimates for the following year. The figures of actuals should agree with those appearing in the final accounts intimated to the Railway Board and the differences, if any, should be suitably explained in the remarks column.

337. **Summary of Revenue Receipts and Expenditure**- In order to represent the financial position of a railway correctly, the estimates of its receipts should be correlated with the estimates of its expenditure. For this purpose the Railway Board should be furnished, along with the estimates for gross receipts, with a statement summarising the estimates for gross receipts and expenditure chargeable to revenue. These should contain the figures for the previous year, the budget and revised estimates of the current year and the budget estimates for the following year.

Appropriations To And Expenditure To Be Met Out Of Railway Funds

338. The Major Heads under which transactions of Railways pertaining to various Funds is budgeted, whether for appropriations to or expenditure from the Funds, and the source of finance for each, are given in the table below :-

Name of the Fund & Allocation(Head)	Major Head under which appropriation to the Fund is budgeted.	Source of financing the Fund	Major Head under which expenditure from the Fund is budgetted.
1	2	3	4
1) Depreciation Reserve Fund(DRF). (8115)	3002& 3003 (SMH 12)	Revenue, i.e., appropriation to DRF is a charge on Railway Working Expenses. In the case of Production Units. Viz., Chittaranjan Locomotive Works, Chittaranjan, Banaras Locomotive Works, Varanasi and Integral Coach Factory, Perambur, Rail Wheel Factory, Yalahanka, Rail Coach Factory, Kapurthala, Patiala Locomotive Works, Patiala, Modern Coach Factory, Raebarelie and Rail Wheel Plant, Bela, the contribution to the Depreciation Reserve Fund is adjusted by debit to Capital Account-'Manufacture Operations'.	5002 & 5003
2) Development Fund (Railways) (8117)	3006	Appropriation from Excess(Surplus)	5002 & 5003
3) Pension Fund (8121)	3001, 3002& 3003 (SMH 12)	Revenue, except in the case of Production Units, viz.. Chittaranjan Locomotive works, Chittaranjan, Banaras Locomotive Works, Varanasi, Integral Coach Factory, Perambur, Rail Wheel Factory, Yalahanka, Rail Coach Factory, Kapurthala, Patiala Locomotive Works, Patiala, Modern Coach Factory, Raebarelie and Rail Wheel Plant, Bela,, the contribution is adjusted by debit to Capital Account-'Manufacture Operations'.	SMH 11 of Major head 3002 & 3003

4) Capital Fund(Railways) (8118)	3006 (SMH 12)	Appropriation from Excess(Surplus) after appropriation to Development Fund	5002 & 5003
5) Railway Safety Fund (8231)	3006 (SMH 12)	Appropriation from Excess(Surplus) after appropriation to Development Fund and from Central Road and Infrastructure Fund	5002 & 5003
6) Rashtriya Rail Sanraksha Kosh (8230)	3006 (SMH 12)	Appropriation from Excess(Surplus) after appropriation to Development Fund and from General Revenues.	5002 & 5003
7) Railway Debt Service Fund (8116)	3006 (SMH 12)	Appropriation from Excess(Surplus) after appropriation to Development Fund	3002 & 3003

As may be seen from, column 3 of the foregoing Table, the Funds are financed from internal resources of the Railways.

339. Except in the case of Pension Fund for which the Revised and Budget Estimates are prepared by, and appear in the Budget Statements of the individual Railway Administrations, the responsibility for framing the revised and budget estimates for the other railway funds with the Ministry of Railways (Railway Board) (see para 305). The estimate amount of appropriation to the Pension Fund is based on actuarial calculations to provide for the liability arising from pensionable service rendered by Railway employees for varying periods. Where such actuarial calculations are not completed, the appropriation is made on an adhoc basis to be suitably re- assessed in due course.

340. The Budget estimate for appropriation to the Depreciation Reserve Fund (DRF) is based on the replacement programme including arrears of depreciation, if any, to be made good during the following year. Such an estimate is really not an isolated exercise only for the purpose of the annual budget but is a part of the overall resources planning of the Railways.

341. Similar position obtains, by and large, in respect of the Development Fund. However, the Railway's Revenue surplus envisage in the Plan, out of which these funds

are financed, may undergo considerable change due to various factors affecting Railway operations. A fresh assessment of the surplus if any, to be appropriated to this fund has, therefore, to be made in the Revised and Budget Estimates.

342. Even though the estimate of appropriation to the Depreciation Reserve Fund is prepared by the Railway Board, the amount finally fixed is distributed over the Railways on the basis of the Capital Outlay of each railway at the end of the previous year as shown in the Finance and Revenue Accounts of the Government of India. The estimate shows separately the amount actually contributed to the Depreciation Reserve Fund in the accounts of the previous year, the figures of budget and revised estimates for the current year, and the budget estimates for the following year.

343. As regards the estimate of expenditure to be met out of the Railway Funds, the table in para 338 shows that so far as DRF and DF are concerned, the expenditure under Capital Segment is budgeted as part of the Railway's Works Machinery and Rolling Stock Programme (see paras 346 et seq.). The budget/revised estimates for Sub Major Head 11-Pensionary charges- Pension Fund are prepared by the individual Railway Administrations taking into account the pensionary charges payable during the year to pensionable Railway Employees. The estimates relating to safety and Customer Amenities Works are prepared by the individual Railway Administrations on the basis of the funds requirement of Safety and Customer Amenities Works specified in this behalf.

344. Deleted

345. After merger of Railway Budget with Union Budget, no payment is to be made to General Revenues from 2017-18 onwards. Transfers to Funds, such as National Investment Fund, Central Road and Infrastructure Fund and Rashtriya Rail Sanraksha Kosh are controlled by Ministry of Finance.

346. Works, Machinery and Rolling Stock Budget -The revised and budget estimates for expenditure on construction, acquisition, and replacement of assets (briefly known as the Works Budget), are prepared in the form of the Works, Machinery and Rolling Stock Programmes. Detailed instructions for the preparation and submission of the Rolling Stock Programmes and the Machinery and Plant Programme are contained in Chapter X of Indian Railway Rolling Stock Code. The Works Programme is required to be prepared in accordance with the instructions embodied in Chapter VI of the Indian Railway Code for the Engineering Department.

347. Capital Expenditure for Works is classified under Major Head 5002 - Capital Outlay on Indian Railways-Commercial Lines ,5003- Capital Outlay on Indian Railways-

Strategic Lines (erstwhile Demand no. 16), irrespective of whether expenditure is charged to the Capital , the 'Depreciation Reserve Fund', the 'Development Fund', the 'Railway Safety Fund', the 'Rashtriya Rail Sanraksha Kosh' or 'Extra Budgetary Resources'. Works Demand provides for booking of expenditure by various Plan heads and for the purpose of link with the accounts of Central Government, the Plan heads form the Minor Heads of Railway Works/Capital Expenditure, under the Major Heads 5002 & 5003. Minor heads of classification also refer to Plan head code. The list of Plan Heads is as follows :-

Code number of Plan Head	**Description of Plan Head**
11	New Lines
14	Gauge conversion.
15	Doubling.
16	Traffic facilities-Yard remodelling and others.
17	Computerisation
18	Railway Research
21	Rolling Stock.
22	Leased Assets-Payment of Capital portion of lease charges to IRFC etc.
29	Road Safety Works – Level Crossings
30	Road Safety Works – ROB/RUB
31	Track renewals.
32	Bridge works, tunnel works and approaches
33	Signalling and Tele-communication works.
35	Electrification projects.
36	Other Electrical works including TRD works
41	Machinery and Plant.
42	Workshops including production Units.
51	Staff Welfare
53	Customer Amenities
61	Investment in PSU/JV/SPV and others etc. (Government & Non-Government)
64	Other specified works.
65	Training/HRD
71	Stores suspense.
72	Manufacturing suspense.
73	Miscellaneous Advances.
81	Metropolitan Transport Projects
82	Transfer to Special Railway Safety Fund (RRSK)

The source of financing is indicated by the following numeric codes while booking of works expenditure under the Revised Classification:-

20-Capital

21- DRF

23- DF I, 33-DF II, 43–DF III, 53-DF IV

26 – Railway Safety Fund

29- Rashtriya Rail Sanraksha Kosh

83- EBR(IF)

'Works Expenditure' of the Railways is thus financed from~~,~~ Railway Funds (DRF, DF), Railway Safety Fund, Rashtriya Rail Sanraksha Kosh and Capital provided by the General Revenues. The upper limit on the 'Works Budget' of the Railways is, therefore, determined by the resources allocation under various well-defined Plan heads, such as New lines construction, Rolling stock, Electrification Projects, Traffic Facilities, Investment in Road Service and Commercial Undertakings, Metropolitan Transport Projects and Inventories, etc Within this allocation of resources, the Railway Administrations are required to make out their programmes, duly vetted by the Financial Adviser and Chief Accounts officer for submission to the Railway Board by a specified date. The programmes are examined by the Railway Board and discussed, where necessary, with the General Managers before finalising the revised and budget estimates in respect of the Works, Machinery and Rolling Stock programmes.

348. **Inventories** -The revised and budget estimates for inventories viz. store in stock, works-in-process in workshops and production units, other stores transaction such as purchase, sales and Miscellaneous Advances (Capital) are all part of Capital Outlay on Indian Railways-Commercial Lines/Strategic Lines

(Major Head 5002&5003. -Assets Acquisition, Construction and Replacement) The value of the inventory under these heads is held as part of the Railways' Capital Investment. The revised and Budget Estimates for the inventories depend on various factors. Even though budgeted under Capital Segment, the operation of the inventories in Zonal Railways depends almost entirely on the revenue operations as budgeted under the various Sub Major Heads for Ordinary Working Expenses. In Production Units, however, the inventory budget has to be closely linked with the manufacturing operations budget which, in turn, will be dove-tailed with the Rolling Stock Programme. Detailed instructions for the Preparation of the budgets for stores transactions and manufacture operations are contained in Chapter XXXI of the Indian Railway Code for the Stores Department and Chapter X of Indian Railway Rolling Stock Code respectively.

349. **Civil Demands**-To enable the Ministry of Finance to incorporate the requirement of and /or information relating to the Ministry of Railways regarding staff

advances and other transactions which form part of the General Budget, the Railway Board has to obtain from- the Railway Administrations for transmission to the Ministry of Finance a number of statements. These are dealt with below.

350. Income tax, Interest on Advances by Central Government and Interest on Debt and other Obligations -The estimates of income-tax and interest should be submitted in the form at Annexure III.

351. Debt Heads and K-Deposits and Advances -These estimates are required by the Railway Board in the form at Annexure IV.

352. K-Deposits and Advances and F-Loans and Advances, by the Central Government-The revised and budget estimates of advances should he submitted to the Railway Board in the form at Annexure V.

353. **Remittance Transactions** -The estimates of remittance transactions should be submitted to the Railway Board in the detail shown in form at Annexure VI .The estimates should be framed, as far as possible, in conformity with those of the other party to the transaction, and wherever there are any important differences which it is not possible to reconcile the differences should be specifically mentioned in the explanatory notes to the estimates.

Section III-Compilation And Scrutiny Of Budget In The Railway Board

354. The estimates of working expenses submitted by individual railways are subjected to a critical examination by the Railway Board and, after taking all the relevant factors into consideration, the Railway Board frame their own estimate of the expenditure likely to be incurred during the year.

355. The procedure adopted by the Railway Board in fixing the allotment for each railway is as follows: The Revised Estimate for the current year is first fixed under each Major Head for each railway, after taking into account the expenditure for the preceding year and comparing the expenditure during the first seven months of the current year with the corresponding period of the previous year, full consideration being paid to the special feature of both years. Having thus fixed the revised estimate for the current year, the budget estimate for the next year is prepared on a consideration of the special circumstances so far as known, of both years. The amounts provided for individual railway administration are restricted as nearly as the Railway

Board can assess to their actual need, consistent with the exercise of the most rigid economy.

356. The estimates of expenditure on rolling stock, plant and machinery, structural and other engineering works (i.e., programmes of rolling stock plant and machinery and works) submitted by the railways, after having been carefully examined by the Railway Board as to the necessity and justification of the works included therein, are discussed with the railway administration and the work to be undertaken during the Budget year decided upon. The programmes as finally settled after discussion form the budget estimates of railways for expenditure to be incurred during the following year on new constructions and open line works chargeable to Capital, Capital Fund, Depreciation Reserve Fund, Development Fund., Rashtriya Rail Sanraksha Kosh, Railway Safety Fund and Extra Budgetary Resources.

357. **Submission to the Minister** -The estimated amount required for Capital expenditure during the next year is intimated to Ministry of Finance for necessary provision being made in the "Way and Means" budget of the Government of India and after it has been ascertained from Finance Ministry that funds will be available to meet the estimated expenditure, the programmes are submitted to the Minister for approval.

358. The rolling stock and plant and machinery programmes, as approved by the Minister, are subject to further modifications which may subsequently necessary due to one or other of the following causes: -

i) If any item of rolling stock and plant and machinery ordered for delivery in the current year is not delivered before the end of the year and remains unpaid, it becomes necessary to provide money in the programme for the next year for such items as will be delivered in that year.

ii) Later information may suggest alterations in the estimated prices at which the stock can be purchased.

iii) When, owing to the early date on which the programmes are prepared, other modifications may be found necessary during the course of the year.

Of the proposed modifications, the important ones, if any, are, however, specifically brought to the notice of the Minister before the presentation of the Budget to the Parliament. The estimates of working expenses as fixed by the Railway Board each railway and those of expenditure on works, plant and machinery and rolling Stock as finally settled, are consolidated under the respective Major Heads/Sub Major Heads detailed in paragraph 306 and

submitted to the Minister before submission to the Ministry of Finance.

359. Deleted.

360. **Appropriation Bill** - Pursuant to Article 114 (1) of the Constitution, after the Demands for Grants have been voted by the Lok Sabha, there shall be introduced a Bill to provide for the Appropriation out of the Consolidated Fund of India of all moneys required to meet the grants so made by the Lok Sabha and the expenditure, If any, charged on the Consolidated Fund of India, but not exceeding in any case the amount shown in the Statement previously laid before the Parliament. The Appropriation Bill as passed by the Parliament and assented to by the President forms the basis for budgetary allocation to the different Ministries including Railways.

Section IV - Administering The Budget

361. Distribution of Funds by the Railway Board-The Grants as voted by the Parliament and the appropriation for the charged expenditure as sanctioned by the President are distributed by the Railway Board among the railway administrations and other authorities subordinate to them, as soon as possible, after the Budget is sanctioned. The sums so distributed are called "Allotments" and the orders by means of which the allotments are made are called "Budget Orders". The allotments made out of funds voted by the Parliament are shown as "Voted" and those fixed by President are shown as "Charged".

362. Along with the Budget Orders "Detailed Demand for Grants, Major Head wise details of Zonal Railways/Spending Units and Works, Machinery and Rolling Stock Programmes (Pink Book) is made available" to the railway administrations for working expenses and Capital expenditure. The Budget allotment made to a railway administration is intended to cover all charges, including the liabilities for past years, to be paid during the year or to be adjusted in the accounts for it. It shall be operative until the close of the financial year. Under the 'doctrine of lapse', any unspent balance shall lapse and shall not be available for utilization in the following year.

363. In the event of the Budget Orders from the Railway Board not being received before the commencement of the financial year, the railway administrations are empowered to incur expenditure, pending the receipt of the Budget Order, on works which were in progress at the end of the previous financial year. All expenditure incurred under this rule must be treated as a charge against the allotments eventually made for such works.

364. When the Budget Orders issued by the Railway Board show any reduction in the estimates originally submitted to them, prompt measures should be taken by the railway administrations to limit the expenditure to the amounts allotted and distributed by the Railway Board.

365. **Distribution of Funds by General Managers to Lower-Authorities** - Subject to the other provisions of this chapter, or of any general or specific orders issued by the Railway Board, a General Manager is expected to take steps immediately to distribute the funds, placed at his disposal, to authorities subordinate to him in such manner as he may consider most suitable, provided that the total of the sums so allocated does not exceed the total of the grant placed at his disposal. In making this initial distribution, he may, at his discretion keep a sum unallotted as a reserve for emergencies that may arise in future. He may also vary the initial distribution as necessity arises during the course of the year. In regard to "Carry Over" works, the latest information as to the necessity and extent of funds required for such works should be obtained from the authorities concerned and taken into consideration in making the initial distribution.

366. With respect to expenditure on works, the allotment made by the General Manager to lower authorities shall, as for as possible, follow the lines of the Works, Machinery and Rolling Stock Programmes issued by the Railway Board that is-

i) a specific sum shall be allotted by him for each item of rolling stock and for each individual work estimated to cost over one lakh of' rupees. The General Manager may also allot specific sums for other works for which he considers desirable to keep separate accounts, i.e., above a certain minimum to be prescribed by him,

ii) a lump sum shall be allotted by him for all work which are individually estimated to cost less than the minimum limit prescribed by him.

iii) the conditions under which and the extent up to which authorities under him may sanction re-appropriations between the sums allotted for individual works shall be specified by him in making the allotment, and

iv) any reappropriation in excess of that admissible under clause (iii)from the sum allotted for an individual work or any reappropriation from and to the lump sum allotted under clause (ii) above shall require the prior sanction of the General Manager.

The authorities to whom funds are distributed by the General Manager may, subject to any general or special instructions issued by him, redistribute the fund placed at their disposal to the authorities under them.

367. No expenditure shall be incurred by an authority without the allotment of necessary funds. The authority to whom the funds are allotted, shall be responsible to report at once to the next higher authorities the probability of any lapses or excesses over the sums placed at their disposal. In exceptional cases where expenditure is authorized in anticipation of the allotment of funds, or in excess of the existing provision, the authorization should be followed, as soon as possible, by a formal allotment of funds to the extent required.

368. The expenditure on each work shall be limited to the sum allotted for it. If for exceptional reasons, expenditure in excess of Budget allotment has to be incurred and if the authority incurring the expenditure is either not in a position to find funds by reappropriation or is not empowered to sanction a reappropriation therefore, application for additional funds shall be made to the next higher authority stating how the expenditure is proposed to be met. In doing so it should invariably be explained why the need for the expenditure was not foreseen in time for inclusion in the budget and why the outlay cannot be postponed to the next financial year. In each case a copy of the order making the allotment or sanctioning a reappropriation shall be sent to the Accounts Officer concerned by the authority issuing the order or sanctioning the reappropriation.

369. Responsibility of the Railway Board to avoid Excess over Grants or Expenditure on a New Service/New Instrument of Service- It is the responsibility of the Railway Board to ensure that the total expenditure against a grant voted by the Parliament or appropriation sanctioned by the President does not exceed the amount of the grant (including supplementary grants) or of the appropriations (Including supplementary appropriations). They are also required to watch that the money voted by the Parliament is spent on the purposes set out in the detailed Demand for Grants presented to the Parliament and is not utilized for expenditure on New Service/New Instrument of Service not voted by Parliament (see paragraph 382).

370. In pursuance of the recommendations of the Public Accounts Committee, presently New Works estimated to cost Rs. 250 lakhs or more each are treated as "New Service/New instrument of Service'. The term 'New Service' has been held as referring to expenditure arising out of a new policy decision, not brought to the notice of Parliament earlier, including a new activity or a new form of investment. Likewise, relatively large expenditure arising out of important expansion of an existing activity is treated as 'New Instrument of Service', which is a slight variant of the term 'New Service'.

371. **Responsibility of Railway Administrations in case of Excesses or Lapses** -The railway administrations shall be responsible to ensure that no expenditure is incurred in excess of the Budget allotments made to them. Should it become apparent at any time that the grant for the year is likely to be exceeded from any cause whatsoever, the General Manager should report the position to the Railway Board and apply for additional funds. No liability may be incurred in one year against anticipated grants of a succeeding year except that advance commitments for procurement of stores for works may be made as provided in para 812-S to the extent authorised by the Railway Board from time to time.

372. It shall also be the duty of the administrations to see that the allotments made to them are fully expended, in so far as is consistent with economy and the prevention of large expenditure in the last months of the year for the sole purpose of avoiding lapses. They shall be responsible for ensuring that money which is not likely to be needed during the year is promptly surrendered so as to allow of its appropriation for other purposes.

373. Powers of Railway Administrations in regard to emergent and inevitable expenditure -Notwithstanding the provisions of paragraph 371 above, the commencement of works urgently necessary to safeguard life or property or to repair damage to the line caused by flood, accident, earthquake or other unforeseen contingency, so as to restore or maintain through communication may be authorized by the Executive Engineer; but he should at once submit a report through the usual channel to the authority competent to give administrative approval to the work and to allot the required funds.

374. Expenditure to meet a sudden increase in traffic or for ensuring the safe operation of traffic may be incurred with the personal sanction of the General Manager in anticipation of the allotment of necessary funds by the Railway Board provided that the Financial Advisor & Chief Accounts Officer concurs. This power cannot be delegated and can be exercised by the General Manager only where the expenditure is within his powers of sanction. In all cases where this requires an allotment of additional funds, a report showing the expenditure involved and the additional funds required should be submitted to the Railway Board, as soon as possible.

375. **Re-appropriations/Redistributions** -The transfer of funds, originally assigned for expenditure on a specific object to supplement the funds sanctioned for another object is called "Reappropriation" or "Redistribution".

376. **Restrictions on Re-appropriations** -Within the amount of a grant as voted by the Parliament, the Railway Board have full power of transferring the provision from one Sub Major Head/Sub-Head to another by a formal order of reappropriation. However, Redistributions are not permissible between:

a) One Segment of the Grant (viz. Revenue and Capital) and another
b) Voted and Charged allotment
c) One Major Head to another
d) One Source of Fund to another (i.e. between Capital, Railway funds, Railway Safety Funds, Rashtriya Rail Sanraksha Kosh, EBR(IF) , EBR(IRFC-Bonds) etc.)
e) One Railway Fund and another

377. **Powers of Railway Administrations (i.e., Zonal Railways/PUs)-**

i) Capital Segment
   a) Full powers to redistribute among itemized Pink book works within same plan-head and same source of fund, subject to original outlay (BE) not getting reduced to less than Rs. 1 thousand.
   b) Full powers to redistribute within "LAW Book items" sanctioned under Pink Book item of "works costing below Rs. 2.5 crores each" (Lumpsum works)

   c) Prior Approval of Railway Board is required in following cases:

      1) Inter Plan head Redistribution
      2) Redistributions from/to and among plan head 21 Rolling Stock(Bulk Order) items
      3) To/from and among works being executed by Rail Vikas Nigam Limited (RVNL)
      4) On portion of work constituting 'Material Modification' which are above Rs. 2.5 crores, if material modification pertains to current year
      5) For any redistribution under allocation Extra Budgetary Resources (EBR), except EBR(IF)
      6) To/from and among items declared as 'National Projects' or 'Projects of National Importance'

ii) Revenue Segment

a) Full powers to redistribute within same Primary Unit under same Sub Major Head
b) All other proposals of reappropriation to be sent to Railway Board for consideration.

Above mentioned Delegated Powers of Railway Administration for redistribution may be modified by Railway Board through the guidelines issued from time to time.

378. The amount allotted to the railway administrations under the Civil Grant for "Interest on debt and other obligations and reduction or avoidance of debt" is distributed under the following units of re-appropriations, viz :-

i) State Provident Funds,
ii) Railway Staff Benefit Fund,
iii) Eastern Group Sleeper Control Provident Fund,
iv) Depreciation Reserve Fund Railways,
v) Railway Development Fund,
vi) Pension Fund.

No reappropriation is permissible from one unit to another.

379. Other re-appropriations may be sanctioned by the, railway administrations but no re-appropriations are permissible after the close of the financial year, i.e., 31st March. The re-appropriations by railway administrations should not be, made haphazardly on the basis of individual items of expenditure where the original provision is exceeded, not should they be postponed to be made only towards the end of the year. The railway Administrations should review the position as a whole at intervals and carry out the necessary re-appropriations. When funds have to be provided for new expenditure under one of the sub-heads and the administrations are definitely in a position to transfer the grant from another sub-head for this purpose, the appropriations should be made promptly. The whole object is to ensure that, as far as possible, funds which are not required are withdrawn from disbursing officers as soon as it is definitely known that they are not required, and incidentally to provide that any really unavoidable expenditure is met from such savings as far as possible.

380. All proposals for reappropriation of funds which are beyond the General Manager's powers shall be submitted to the Railway Board sufficiently early for necessary action to be taken before the close of the financial year.

381. When orders are issued by the Railway Board authorising the railway administrations to incur expenditure to a certain extent over and above the allotment sanctioned for them, they should be taken as "expenditure orders" as distinct from "Budget orders". No cognizance of these orders should be taken while sanctioning re-appropriations or in distributing the sanctioned allotment over the various sub-heads.

Unforeseen Expenditure-Operation Of The Contingency Fund Of India

382. Unforeseen expenditure which cannot be met by reappropriation from the existing grant and expenditure on a "New Service /New Instrument of Service " not contemplated in the budget, shall be met from out of the balance in the Contingency Fund of India placed at the disposal of the Ministry of Finance.

383. **Review of Expenditure**- Finance Heads of all Railway Units should review their expenditure booked on monthly basis.

For Revenue Segment comparison may be made Sub Major Head (SMH) wise and Primary Unit (PU) wise with respect to Budget Grant, Proportionate Budget Grant, Actual expenditure figures for Corresponding Period for Previous year or any other metric deemed informative.

For Capital Segment, comparison may be made Plan Head wise, Source of funding wise and individual work wise with respect to Budget Grant, Actual expenditure figures for previous year or any other metric deemed informative.

384. Monthly Expenditure Review as done above should be shared with the heads of all executive departments of that Railway Unit for their information and necessary action. The review may also include the measures suggested that might be taken for effective Budget Management.

385. Final -Modification Statement-The Railway Board should be furnished, for each Major Head/Sub Major Head separately, so as to reach, Railway Board within the prescribed date with statements showing the additional allotments required (both voted and charged) or surrenders to be made, during the current financial year under each head, as prescribed in the budget orders, and requiring the sanction of the President. The variations between the final modified allotments required and the revised estimates as fixed by the Board should in all cases be supported by adequate explanations of the reasons for the demand or surrender.

386. The railways should, however, continue to review the budgetary position further on submission of the Final Modification statements and any modification that may be considered necessary as a result of new factors visualized and the further review of budgetary position should be advised to the Board at the earliest.

387. Deleted

388. Deleted

389. The figures of supplementary grants required or surrenders made in respect of "Interest on other obligations and reduction or avoidance of debt" and "Loans and Advances bearing interest" should be submitted to the Railway Board so as to reach them not later than the 15th February each year. These figures should be final, as no change in the allotment of these grants can be made later.

390. **Supplementary and Excess Grants**- Notwithstanding the provisions in paragraph 382, when the amount of a grant/appropriation in the budget is found to be insufficient for the purpose of the current year, an estimate for supplementary grant /appropriation, is submitted by the Railway Board to the Ministry of Finance for the vote of the Parliament/sanction of the President in the same way as the original "demand for Grant/Appropriation" except that the recommendation of the President has to be obtained for supplementary Demand not only under Article 113 (3) but also under Article 115 (1) (a) and 115(2) of the Constitution.

391. Unlike Budget Grant and Supplementary Grant which are obtained from Parliament in respect of expenditure to be incurred during the year, Excess Grant relate to expenditure already incurred, for reasons to be fully explained, in excess of the money voted by Parliament to meet the expenditure during a year. The Demand for an excess grant is based on the recommendations of the Public Accounts Committee as a result of their scrutiny of the Appropriation Accounts of the Railways and the Audit Report of the Comptroller and Auditor General (see, Chapter IV). Consequent upon merger of Railway Budget with Union Budget in 2017-18 the Demand for Excess Grant in respect to Ministry of Railway is now presented by the Ministry of Finance.

*****

ANNEXURE - I

(Refer Para 307)

Heads of Demands & Authorities Responsible for Control over Expenditure.

Major Head	**Particulars of Demand**	**Authority responsible for watching the progress of expenditure in each Demand**
3001	Railway Board	Secretary, Railway Board
3001	Miscellaneous expenditure (General)	Heads of Railway Administrations to whom grants are made for Surveys, payment to worked lines and subsidised companies. Director-General, Research, Designs and Standards Organisation for his office establishment, ADAI (Railways) for cost of statutory Audit, Railway Board for miscellaneous establishment and miscellaneous charges, President Railway Rates Tribunal for his office establishment and Heads of Other Establishments and Units
3002 & 3003	General Superintendence and Services Repairs & Maintenance of Way & Works Repairs & Maintenance of Motive Power Repairs and Maintenance of Carriage & Wagons. Repairs and Maintenance of Plant and Equipment. Operating Expenses-Rolling Stock and Equipment. Operating Expenses-Traffic Operating Expenses-Fuel Staff Welfare and Amenities Miscellaneous Working Expenses Provident Fund, Pension and other	Heads of Railway Administrations for expenditure against the funds allotted to them.

	Retirement Benefits.	
5002 & 5003	Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines.	Heads of Railway Administrations, General Managers of Production units and Ministry of Railways (Railway board) for Bulk Order item

Note **-**(1) Sub-head of Demands No. 1, 2 and 15 are given below seriatim :-

a) Railway board-

i) Pay of officers
ii) Pay of establishment.
iii) Other charges.

b) Miscellaneous Expenditure (General)-
a) Surveys
b) Research Design and Standards Organisation.
c) Expenditure on Miscellaneous establishment.
d) Cost of Statutory Audit..
e) Payments to worked Lines and subsidized companies.
f) Miscellaneous charges.

(15) Dividend to General Revenues etc.-
a) Dividend to General Revenues:-
(i) Payment from Revenue.
(ii) Payment by withdrawal from Revenue Reserve Fund.
b) Contribution to General Revenues for Grants to States in lieu of Passenger Fare Tax.
c) Contribution to General Revenues for assisting the States for financing Safety Works.
Total
d) Repayment of loans for Development Fund taken from General Revenues and Interest thereon :-
(i) repayment of loans
(ii) Interest on loans.
Total
e) Repayment of loans for Revenue Reserve Fund taken from General Revenues and Interest thereon :-
(i) Repayment of loans.
(ii) Interest on loans.
Total
f) Payment towards amortization of over-capitalisation.
Total (a) to (f)

Credits or Recoveries.
(i) Amount recouped from Revenue Reserve Fund for Payment of dividend.

(ii) Amount recouped from Revenue Reserve Fund for repayment of loans and interest.
(iii) Amount recouped from Railway Development Fund.

Note -(2) Minor heads and sub-heads of Classification of Revenue Expenditure under Sub-Major Head 1 to 14 shown in Appendix I (Financial Code Vol II) represent sub-heads and Detailed heads of these Demands. Minor heads of classification of Capital Outlay on Indian Railways – Commercial Lines & Strategic Line shown in Appendix II (Financial Code Vol. II) represent sub-heads of this Demand.

*****

ANNEXURE- II

(Refer Para 307)

List of Budget forms and Connected statements-

S. No.	
1 2.	Gross Receipts. Annexure to Gross Receipts showing selected Commercial and operating Statistics.
3. 4.	Revised Estimate/Budget Estimate of Miscellaneous receipts. Revised Estimate/Budget Estimate of Demand Nos. 1 & 2 (Miscellaneous Establishments).
5.	Annexure 'A' to revised Estimate/Budget Estimate of Demand Nos. 1 & 2 (Miscellaneous Establishments).
6	Annexure 'B' to revised Estimate/Budget Estimate of Demand Nos. 1 & 2 (Miscellaneous Establishments)-showing the details of Contingencies.
7.	Annexure 'C' to revised Estimate/Budget Estimate of Demand Nos. 1 & 2(Miscellaneous Establishments)-showing the details of Payments in England.
8. 9.	Statement showing Primary Units (object) of expenditure under different Grants. Revised Estimate and Budget Estimate of Demand No. 2 Railways (Surveys).
10.	Revised Estimate and Budget Estimate of Demand No. 2-Railways (Cost of Statutory Audit).
11.	Revised Estimate and Budget Estimate of Demand No. 2-Railways- Net Earnings and Rebate.
12	Revised Estimate and Budget Estimate of Demand No. 2-Railways-Subsidy.
13.	Revised Estimate and Budget Estimate of Sub-Major Head 1-General Superintendence and Service.
14.	Annexure to Revised Estimate and Budget Estimate-Sub-Major Head 1-showing the No. of staff as on 31st October each year.
15.	Revised Estimate and Budget Estimate of Sub-Major Head 2-Repairs and Maintenance of Permanent - Way and Works.
16.	Annexure to Revised Estimate and Budget Estimate-Sub-Major Head 2-showing the No. of staff as on 3tst October each year.
17.	Revised Estimate and Budget Estimate of Sub-Major Head 3-Repairs and Maintenance of Motive Power.
18.	Annexure to Revised Estimate and Budget Estimate-Sub-Major Head 3-showing the No. of staff as on 31st October each year.
19.	Annexure of Revised Estimate and Budget Estimate-Sub-Major Head 3 and 4-showing the details of repairs to rolling stock.
20.	Revised Estimate and Budget Estimate of Sub-Major Head 4-Repairs and Maintenance of Carriage and Wagons.
21.	Annexure to Revised Estimate and Budget Estimate-Sub-Major Head 4-showing the NO.-of staff as on 31st October each year.
22.	Revised Estimate and Budget Estimate of Sub-Major Head 5-Repairs and Maintenance of Plant and Equipment.
23.	Annexure to Revised Estimate and Budget Estimate Sub-Major Head 5-showing No. of staff as on 31st October each year.
24.	Revised Estimate and Budget Estimate of Sub-Major Head 6-Operating Expenses-Rolling Stock and Equipment.
25	Annexure to Revised Estimate and Budget Estimate of Sub-Major Head 6-showing the No. of staff as on 31st October each year.
26.	Revised Estimate and Budget Estimate of Sub-Major Head 7-Operating Expenses-Traffic.

27	Annexure to Revised Estimate and Budget Estimate of Sub-Major Head 7-showing No. of staff as on 31st October each year.
28.	Revised Estimate/Budget Estimate of Sub-Major Head 8-Operating Expenses.-Fuel.
29.	Annexure I to Revised Estimate and Budget Estimate of Sub-Major Head 8-showing the No. of staff as on 31st October each year.
30	Annexure II to Revised Estimate and Budget Estimate of Sub-Major Head 8-showing the quantity of Coal.
31.	Annexure III to Revised Estimate and Budget Estimate of Sub-Major Head 8-showing the quantity of Diesel Oil.
32.	Annexure IV to Revised Estimate and Budget Estimate of Sub-Major Head 8-showing the quantity of Electricity.
33.	Annexure V to Revised Estimate and Budget Estimate of Sub-Major Head 8-showing the quantity and freight of coal carried by sea.
34.	Annexure-VIII to Revised Estimate and Budget Estimate of Sub-Major Head 8-Correlation Statement (Steam Service).
35.	Annexure VIII to Revised Estimate and Budget Estimate of Sub-Major Head 8-Correlation Statement (Diesel Service).
36.	Annexure VIII to Revised Estimate and Budget Estimate of Sub-Major Head 8-Correlation Statement (Electric Service).
37.	Annexure 'A' to Revised Estimate and Budget Estimate of Sub-Major Head 8-Railways-Correlation statement (Traction Service).
38.	Annexure 'B' to Revised Estimate and Budget Estimate showing fuel consumption (on territorial basis).
39.	Annexure 'C' to Revised Estimate and Budget Estimate showing the Engine Kilometres.
40.	Revised Estimate/Budget Estimate of Sub-Major Head 9-staff welfare and amenities.
41.	Annexure to Revised Estimate and Budget Estimate of Sub-Major Head 9-showing the No. of staff as on 31st October each year.
42.	Revised Estimate and Budget Estimate of Sub-Major Head 10-Misectianeous Working Expenses.
43.	Annexure to Revised Estimate and Budget Estimate of Sub-Major Head 10-showing the No. of staff as on 31st October each year.
44.	Annexure to Revised Estimate and Budget Estimate of Sub-Major Head 10-showing the Profit and Loss Account of the Catering Department.
45.	Revised Estimate and Budget Estimate of Sub-Major Head 11-Provident Fund, Pension and other Retirement benefits.
46.	Annexure I to Sub-Major Heads 1 to 11.
47.	Annexure to Sub-Major Heads 2 to 8 showing the details of freight charges on departmental stores and coal included under various Sub-Major Heads.
48.	Revised Estimate and Budget Estimate of Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines.
49.	Revised Estimate and Budget Estimate of Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines.-stores Transactions.

50.	Revised Estimate and Budget Estimate of Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines..
51.	Analysis of balance stores in stock.
52.	Statement showing the Stocks at the commencement of the year, receipts and issues during the year and balance at the end of the year in respect of the various classes of stores.
53.	Annexure to Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines.-showing the break up of the amount for purchases of stores for Works and General Purposes excluding Coal, Coke and Fuel oil and Grain shops supplied by various Agencies of Purchases.
54.	Annexure to Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines.-showing the amounts expected to be adjusted by debit to Depreciation Reserve Fund and Credit to Capital on account of assets to be scrapped without replacement.
55.	Statement showing the works expenditure by important categories of works relating to Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines.
56.	Annexure showing the Credits or Recoveries adjustable in the accounts in reduction of Expenditure but which are excluded from the demand.
57.	Budget Estimates-Demand No. 14-Appropriation to Depreciation Reserve Fund, Appropriation to Pension Fund, Appropriation to Development Fund, Appropriation to Revenue Reserve Fund and Appropriation to Accident Compensation, Safety, and Passenger Amenities Fund.
58.	Revised Estimate and Budget Estimate of Sub-Major Head 1 to 11-Separate variation statement.
59.	Revised Estimate and Budget Estimate of Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines.-Vartation Statement.(Rolling Stock).
60.	Revised Estimate and Budget Estimate of Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines.-Variation Statement (Machinery and Plant).
61.	Revised Estimate and Budget Estimate of Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines.-Vartation Statement (Works).
62.	Revised Estimate and Budget Estimate of Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines.-Variation Statement (Stores Transaction).
63.	Revised Estimate and Budget Estimate of Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines.-Variation Statement (Manufacture Operations-Debits).
64.	Revised Estimate and Budget Estimate of Capital Outlay on Indian Railways – Commercial Lines & Strategic Lines. -Variation Statement (Miscellaneous Advances - Debits).
65.	Statement regarding Demand No. 14(b)-Appropriation to Pension Fund showing (i) number of pensioners and (ii) estimate of the quantum of Government contribution, if any and interest there on reverting to Pension fund Consequent upon pre-1957 staff opting for Pension scheme.

*****

ANNEXURE -III

F. 350

Statement of Income-tax, Interest on Advances by Central Government and Interest on Debt and other obligations.

(Figures in thousands of Rs.)

		Revised estimates current year			Budget estimates next year			
				Total				
Head of Account	Actual last year	First seven months	last five months	As proposed	As accepted by Railway Board	As proposed	As accepted by Railway Board	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) 021-Taxes on incomes other than Corporation Tax.								
A. Taxes on income excluding union Surcharge-								
(i) Income tax-								
Ordinary collections								
Other collections								
(ii) Deductions by-								
(a) Government from salaries and pensions, taxes in respect of Union emolument.								
(b) Deduct-Refunds.								
(iii) Collection from Dividend on Government Securities under Section 194-A.								
(iv) Collection from contractors under Section 194 C.								
B. Union surcharge in taxes on Income-								
(I) Income tax.-								
(i) Ordinary collections								
Other collections								
(ii) Deduction by-								
(a) Government from salaries etc.								
(iii) Collection from Dividend on Government Securities under Section 194-A.								
(iv) Collection from contractors under Section 194-C.								
(2) 049-Interest-Receipt-								
A. Interest on advances to Government servants-								
(i) House Building Advances...								
(ii) Motor-car Advances...								
(iii) Other Conveyances...								
(iv) Passage Advances...								

(Railway Board)

ANNEXURE –III (CONCLD.)

(Figures in thousands of Rs.)

		Revised estimates current year			Budget estimates next year			
				Total				
Head of Account	Actual last year	First seven months	last five months	As proposed	As accepted by Railway Board	As proposed	As accepted by Railway Board	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

(3) 249-interest Payments on debt and other obligations.-

A. 3(2) (I)-General Provident Fund.

A. 3 (2) (2)-State Railway Provi-dent Fund-

(a) Contributory

(b) Non- Contributory

A. 3 (2) (3)-other State Provident Fund.-

(a) Contributory.

(b) Non- Contributory.

(i) Transferred Rail-way Personnel Pro vident Fund.

(ii) Contributory Pro-vident Fund.

(iii) Other Miscellaneous Provident Funds.

A. 3(2) (4)-Incentive Bonus.

A. 3(2) (5)-Indian Railway confer-ence Association Employee' Provident Fund.-

(a) Contributory

(b) Noti-contributory

A. 4(1) (1)-Depreciation Reserve Fund-Railways.

A. 4(2) (1)-Railway Revenue Re-serve Fund.

A. 4 (3)-Railway Development Fund.

A. 4 (5) (1)-Railway Pension Fund.

A. 4 (5) (2)-General & Other Re-serve Funds-Railway Staff Benefit Fund.

A. 4 (5) (3)-General and Other Reserve Funds-Railway Accident Compensation Safety and passenger Amenities Fund.

Note -The number of the above Head of Account may be changed according to the numbers given in the Budget order relating to Civil Appropriation-interest on Debt and other obligations and reduction or avoidance of debt.

*****

ANNEXURE -IV

F. 351

Statement of Debt transactions-I-Small Savings, Provident Fund, etc. J-Reserve Funds, K-Deposit and Advances.

(Figures in thousands of Rs.)

Head of Account	Actual year		Revised Estimates Current year				Total		Budget Estimates next year		Remarks
			First 7 months		Last 5 months						
	Receipts	Withdrawals	Receipts	Withdrawals	Receipts	Withdrawals	Receipts	Withdrawals	Receipts	Withdrawals	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

I-Small Savings, Provident Funds etc.

805-State Provident funds-
(i) General Provident fund.
(ii) State Railway Provident Fund.
(iii) Transferred Railway Personnel Provident Fund.
(iv) Other Miscellaneous Provident Fund.

J-Reserve Funds- (Reserve Funds bearing interest).

816- Revenue Reserve Funds-Payments.-
(A) Revenue Reserve Funds – Transfers to Revenue/Loss on sale of securities.
(B) Revenue Reserve Fund Investment- Accounts.
(C) Loans to Branch lines companies.

821-General and other Reserve Funds.-Staff Benefit Fund Railways.

K- Deposits and Advances (Deposits bearing interest).

837- Deposits of Railways.-
(i) IRCA Employees provident Fund.
(ii) IRCA Employees Provident Fund investment-Account.

K- Deposits and Advances (Deposits not bearing interest).

845- Railway Deposits.-
(i) Indian Railway Deposits.
(ii) Deposits of Branch Line Companies.
(iii) Unclaimed Provident Fund Deposits.
(iv) Trust interest Account
(v) Other Deposits.

*****

Ministry of Railways (Railway Board)

ANNEXURE-V

F. 352

Statement of Debt Transactions-K-Deposits and Advances L-Suspense and Miscellaneous-under Public Account and F-Loans and Advances under Consolidated Fund.

(Figures In thousands of Rs.)

			Revised Estimates current year								
Head of Account	Actual last year		First seven months		Last five months		Total		Budget estimates next year		
	Recoveries	Payments	Recoveries	Payments	Recoveries	Payments	Recoveries	Payments	Recoveries	Payments	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

K--Deposits and Advances (Advances)

852-Railway Advances.

(i) Departmental Advances

L- Suspense and Miscellaneous.

858 Suspense Account-

(i) Suspense Account (Rail ways).
- (a) Reserve Bank Sus. pense.
- (b) P. A. O. Suspense.
- (c) Remittance into Banks.
- (d) Cheques and Bills.
- (e) Other transactions.
- (f) World Bank Loan for the Railway Pro- jects.
- (g) Loans from Inter- national Develop- ment Association.

(ii) Transactions on behalf of the Reserve Bank.

(iii) Transactions relating. to Bangla Desh.

(iv) Adjustment in Debt. Settlement with Pakistan

(v) Loss or gain on conversion to decimal coinnage.

(vi) Additional D.A . Deposit Account.

(vii) Payment on behalf of Central Claims Organisation - Pension and Provident Fund

(viii) Additional (Wagons) Deposits Suspense Account.

Civil Grant 42-Loans and Advances by the Central Government

F-Loans and Advances.

ANNEXURE-V - (Concld.)

			Revised Estimates current year								
Head of Account	Actual last year		First seven months		Last five months		Total		Budget estimates next year		
	Recoveries	Payments	Recoveries	Payments	Recoveries	Payments	Recoveries	Payments	Recoveries	Payments	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

698-Loans to Railwaymen Consumer Co-operatives.

766-Loans to Government Servants. -

(i) House Building Advances.
(ii) Advances for the Purchase of Motor Car.
(iii) Advances for other Motor Conveyances.
(iv) Advances for purchase of other conveyances.
(v) Festival Advances.
(vi) Other Advances (including Advance for natural calamities, etc.).

767-Miscellaneous Loans.

Ministry (Railway Board)

*****

ANNEXURE -VI

F. 353

Statement of Remittance Transactions.-

(Figures In thousands of Rs.)

			Revised Estimates current year								
Head of Account	Actual last year		First seven months		Last five months		Total		Budget estimates next year		
	Credits	Debits	Credits	Debits	Credits	Debits	Credits	Debits	Credits	Debits	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

L-Suspense and Miscellaneous-
Other Accounts

Reserve Bank Deposits-
875-Reserve Bank Deposits
Railways-
M-Remittances inter
Government Adjustment
Accounts.

888- Posts and Telegraphs.

889-Defence Department.

890-Account with States, etc.

897-Transfer Railways.

Ministry Railways (Board)

*****

CHAPTER-IV

Parliamentary Financial Control Appropriation Accounts

401 - 402	General
403 - 407	Form of Accounts and Dates of submission by the Railways
408	Figures to be exhibited in the Accounts
409 - 415	Explanations of variations
416	Re- appropriation
417	Savings due to postponement of Expenditure or Abandonment of Schemes
418	Exhibition of Recoveries or Credits
419	Unadjusted Assets and Liabilities of Special Schemes or Projects
420	Offices closed or transferred to another Department/Ministry or Governments
421	Purchase or Disposal of Immovable Property
422	Stores and Manufacture Suspense
423	Consultation with the Executive
424 - 425	Losses
426	Ex-gratia payments
427	Block Accounts (including Capital Statement comprising the Loan Account), Balance Sheet and Profit Loss Account, of Railways,
428 - 431	Block Account
432	Accounts of Production Units
433	Other Accounts and. Subsidiary Statements
434	Percentage of Working Expenses to Earnings
435	Review of Works Programme
436	Statement of Credits to Capital for Retired Assets
437	Stores Account
438	Statement of Stores Transactions
439	Stock Verification and Revaluation
440	Summary of Accounts
441	Reconciliation Statement of Annual Expenditure
442 - 446	Certificate of Sanctioned Expenditure and Statement of Unsanctioned Expenditure
447 - 448	Estimates provisionally accepted by Accounts or Audit
449 - 451	Appropriation Accounts of Civil Grants
452 - 454	Explanations of Variations in Civil Grants

Ministry of Railways (Railway Board)

455 - 456	Consolidated Appropriation Accounts of Railways
457 - 458	Main contents
459	Reconciliation with the combined Finance and Revenue Accounts
460 - 461	Submission to Audit
462 - 463	Consolidated Accounts of Civil Grants
464	Review of Appropriation Accounts
465 - 466	Examination by Public Accounts Committee

*****

ANNEXURES

Formulae for working out the cost of replacementby like asset in respect of various types of Assets	Annexure-I
Capital Statement (Pt. I and II)	Annexure-II
Balance Sheet	Annexure-III
Profit and Loss Account	Annexure-IV
Chittaranjan Locomotive Works Manufacturing Account	Annexure-V
Chittaranjan Locomotive Works Statement of Out-turn	Annexure-VI
Depreciation Reserve fund	Annexure-VII
Development fund Account	Annexure-VIII
Pension Fund Account	Annexure-IX
Accident Compensation Safety and Passenger Amenities Fund (Deleted)	Annexure-X
Appropriation Accounts (Stores Account)	Annexure-XI
Results of Stock Verification and Revaluation of Stores	Annexure-XII
Grain Shops Profit and Loss Accounts (Deleted)	Annexure XIII
Railway Catering Profit and Loss Account	Annexure-XIV
Balance Outstanding under Suspense	Annexure -XV
Statement of expenditure held under objection	Annexure-XVI
Under charges detected by Accounts or Audit	Annexure-XVII
Statement showing Remission and Abandonment of claims to Revenue	Annexure-XVIII
Review of expenditure on important Open line Works and New Construction	Annexure XIX
Working Expenses and other revenue charges relating to Strategic Lines	Annexure XX
Statement of estimated and actual credits or recoveries for the year 2020-21	Annexure XXI
Statement of Losses etc.	Annexure-XXII
Irregular reappropriations	Annexure-XXIII
Important misclassification and other mistakes detected	Annexure-XXIV
Consolidated Block account (Commercial)	Annexure-XXV

*****

CHAPTER –IV

Parliamentary Financial Control Appropriation Accounts

401. General -Budget is an instrument of Parliamentary Financial Control and at the same time, an important management tool. Parliamentary Financial Control is secured not only by the fact that all 'voted' expenditure must receive Parliament's prior approval, but also by the system of reporting back to it, through the Public Accounts Committee, the actual expenditure incurred against the Grants voted by Parliament and Appropriations sanctioned by the President.

402. The statements which are prepared for presentation to the Public Accounts Committee, comparing the amount of actual expenditure with the amount of Grants voted by Parliament and, Appropriations sanctioned by the President, are called the "Appropriation Accounts". The Appropriation Accounts are signed both by the Chairman & Chief Executive Officer, Railway Board, as Principal Secretary to the Government of India, Ministry of Railways, and by the Member Finance, Railway Board, as Secretary to the Government of India, Ministry of Railways, in financial matters and transmitted to the Director of Railway Audit who has been entrusted by the Comptroller and Auditor General of India with the duty of reporting on these accounts.

403. Form of Accounts and dates of submission by the Railways -The General Manager of each railway should send to the Railway Board, the Appropriation Accounts for his railway for the previous financial year in Form No. F. 403 given below, furnishing his Audit Officer simultaneously with a copy thereof for check and certification.-

---------- RAILWAY **F. 403**

MH 3001

Railway Board (Voted)

(Covers expenditure of the Office of Railway Board)

(in thousands of Rupees)

Major head and sub-head	Final Grant or Appropriati	Actual Expenditure	Excess (+) Savings (-)

	on		
(1)	(2)	(3)	(4)
MH 3001 (01) .Indian Railways-Policy Formulation, Direction Research and Miscellaneous organizations-office of the Railway Board-			
Pay of officers- O..... 32,94 R..... -2,35	30,59	30,23	-36
Pay of Establishment- O... 38,50 S... 3 R.. - 2,69	35,84	35,84	....
Other Charges-- O... 96,64 R... 2,10	98,74	98,61	-13
Surrenders or withdrawals within grant- R... 2,94	2,94	....	-2,94
Total- O... 16,808 S... 3	1,68,11	1,64,68	-3,43

Ministry of Railways (Railway Board)

Credits or recoveries.-Budget Estimate. .....; Revised Estimate.....;Actuals.....More(+/Less(-) .....

Note -If 'charged' expenditure is provided for and incurred, it should be shown separately from the 'voted' under the relevant sub-head and the total of the grant.

GRANT NO. –MH 3001-02-

MISCELLANEOUS EXPENDITURE

(GENERAL)

Major Head or Sub Head	Original Grant	Final Grant	Actual Expenditure	Variation

				Excess (+)/Savings (-)
Annexure –'A' Surveys				
O				
S				
R				
Reasons of Variation				
Major Head or Sub Head	Original Grant	Final Grant	Actual Expenditure	Variation Excess (+)/Savings (-)
Annexure –'B' RDSO				
O				
S				
R				
Reasons of Variation				
Major Head or Sub Head	Original Grant	Final Grant	Actual Expenditure	Variation Excess (+)/Savings (-)
Annexure –'C-I' Railway Recruitment Board				
O				
S				
R				
Reasons of Variation				
Major Head or Sub Head	Original Grant	Final Grant	Actual Expenditure	Variation Excess (+)/Savings (-)
Annexure –'CII' Centralized Training Facilities				
O				

S				
R				
Reasons of Variation				

Major Head or Sub Head	Original Grant	Final Grant	Actual Expenditure	Variation Excess (+)/Savings (-)
Annexure –'CIII' Other Misc. Establishments				
O				
S				
R				
Reasons of Variation				
Major Head or Sub Head	Original Grant	Final Grant	Actual Expenditure	Variation Excess (+)/Savings (-)
Annexure –'D' Other Misc. Establishments (Both for Voted and Charged separately)				
O				
S				
R				
Reasons of Variation				
Grand Total (Both for Voted and Charged separately)				
Annexure –'D' Other Misc. Establishments (Both for Voted and Charged separately)				
O				
S				
R				

Reasons of Variation				
Certificate :- The Actual Expenditure has been reconciled with the figures of Account Current to end of March _____.				

Revenue (Major Head - 3002 & 3003)

Sub Major Head (SMH)- 01 **F. 403**

(Voted)

(in thousands of Rupees)

Major head(Sub Major Head) and Minor Head	Final Grant or Appropriation	Actual Expenditure	Excess (+) Savings (-)
(1)	(2)	(3)	(4)
3002 & 3003 (01) General Suprintendence and Services O……. 88550 S…….. R…… -100	88450	78450	
Under these heads Net Savings of Rs. " 110 lakhs " against sanctioned provision of Rs. Rs. 885 lakhs occurred under following minor heads:			
(100) General Management - O..... 32,94 R..... -2,35	30,59	30,23	-36

Under these heads Net Savings was mainly due to incurrence of less staff cost, less office equipment expenditure charges etc. as indicated below: (in lakhs of Rs)

Sub Head	Nomenclature	Saving	Excess
110	Establishment of General manager		
120	Establishment of DRMs		
130	GM Services		
	Total	-3.81	1.1
	Net Variation	2.71	

(200) Financial Management - O... 38,50 S... 3 R.. - 2,69	35,84	35,84	....
(300) Personnel Management - O... 96,64 R... 2,10	98,74	98,61	-13

Credits or recoveries-Budget Estimate.....;
Revised Estimate.....;Actuals.....More(+/Less(-)
.....

Note -If 'charged' expenditure is provided for and incurred, it should be shown separately from the 'voted' under each Sub Major Head.

"The Appropriation Accounts will be signed by the General Manager, Chief Administrative Officer of the Railways/Production Units and the Financial Advisor personally. This cannot be delegated to any other authority. In case where the 'advance' Appropriation Accounts are not personally signed by either/both of them due to unavoidable circumstances, these should subsequently be got approved by him/them as early as possible and an intimation to this effect be sent to the Board indicating the unavoidable circumstances."

(Authority Railway Board's letter no. 92 App/6-1/91-92 dated 09.12.1992)

A detailed programme giving the dates for submission of advance and audited copies of the Appropriation Accounts and connected statements is circulated every year by the Railway Board after consultation with the Additional Deputy Comptroller & Auditor General, Railways for compliance by the Railway Administration and the Statutory Audit Officers. Any information required by Audit in connection with the accounts, etc, should be promptly furnished to the Audit Officers so that there may be no delay on their part in returning the accounts duly audited and certified by the due dates. References made by the Railway Board in respect of corrections and obscure or unintelligible explanations should be promptly replied to, and changes if any made in the Appropriation Accounts as a result of comments of the Railway Board, should be simultaneously furnished to the Statutory Audit Office. Similarly, any revisions made and advised to the Statutory Audit Office, in consequence of the observations of the ADAI (Railways) on the Appropriation Accounts should at the same time be reported to the Railway Board. Amendments to the Appropriation Accounts and correction in the Annexure should be advised as soon as they are

known but not later than the schedule communicated by Railway Board for various statements, annexures and grant Account**.**

404. The entries made in Form No. F. 403 above are sample entries illustrative of the manner in which the form should be filled. The instructions/guidelines which are issued by Railway Board through the detailed annual programme for submission of Appropriation Accounts should be followed. The abbreviations used in the form are explained below :-

O -Original Grant or Appropriation.

S -Supplementary Grant in case of voted expenditure and supplementary appropriation in case of charged expenditure.

R -Residual modification sanctioned by competent authorities other than the Parliament(i.e., re-appropriations, withdrawals or surrenders).

405. The letter 'O' should not appear in column I when the figure against it is 'nil' or when the Original Grants or Appropriations without any modifications are direct into column 2. The letter 'O' should, therefore, appear in column I only when a figure is shown against it. In column 1 the sign plus (+) need not be inserted against plus figures which even without a sign will stand for such figures.

406. The Minor Head 'surrenders or withdrawals within Major Head' is an adjusting Minor Head and is intended for voted Grants only. It has been provided to record the amounts withdrawn or surrendered within the Major Heads. The entry against this Minor Head neutralizes the effect of reductions made under other Minor Head due to withdrawal or surrender of authorized provision; and the total in column 2 represents the provision sanctioned by the Parliament under the Major Head concerned.

407. The Appropriation Account of each Major head/Sub major Head should be prepared in detail for each sub- head of Major Head/Sub Major Head (see para 305-F). The expenditure charged to Capital, Development Fund, Capital Fund, Depreciation Reserve Fund, Railway Safety Fund, and Rashtriya Rail Sanraksha Kosh (according to any other such Fund created, deleted, replaced in future) whenever occurring in one and the same plan head of Major Head 5002-03, should be shown separately. The amount of reserve kept by the General Manager or other sanctioning authority should be shown against the sub-head "surrenders or withdrawals within Grant". In addition, credits or recoveries outside the Grant should be shown separately. This is illustrated below with reference to (Major Head 3002,3003 : Sub Major Head 01) :

(Major Head 3002,3003 : SMH 01) -Revenue-General Superintendence and Services-

i) General Management including General Management Services.
ii) Financial Management.
iii) Personnel Management.
iv) Materials Management.
v) Way and Works Management.
vi) Rolling Stock Management.
vii) Electrical Management.
viii) Signal & Tele-communication Management.
ix) Traffic Management.
x) Surrenders or withdrawals within Grant.
xi) Total Credits or Recoveries.

Note -Any additions or alterations in the minor heads which the Railway Board may make in book of 'Demands for Grants' for a year should be suitably embodied in the Appropriation Account of the relevant Grants for that year.

408. Figures to be exhibited in the Accounts-

1) The figures of Original Grant or Appropriation to be exhibited in the Appropriation Accounts should be those shown against the Railway in the Book of Demands for Grant as Voted by the Parliament in the case of 'Voted' grants and sanctioned by the President in the case of 'Charged' expenditure. In those cases where no special figures appear against the Railway in that book, the figures communicated by the Railway Board through Budget Orders should be shown. The figures of Final Grant or Appropriation should be those as finally sanctioned by the Railway Board before the close of the financial year. The figures of actual expenditure appearing in the Appropriation Accounts should agree with those shown in the Annual Accounts of the railway. In exhibiting actual expenditure in the Appropriation Accounts, it should be borne in mind that the expenditure as actually recorded in the accounts should be shown against the appropriate detailed head of the Major head/Sub Major Head, irrespective of the detailed head of the Major Head/Sub Major Head under which provision for such expenditure was made in the budget. In the Appropriation Accounts of Capital Segment (Major Head 5002,5003)-Assets-Acquisition, Construction and Replacements, separate figures of Capital, Depreciation Reserve Fund, Railway Safety Fund, Rashtriya Rail Sanraksha Kosh and Development Fund expenditure as the case may be, should be shown under the various Minor heads.

2) The figures of Supplementary Grants in the case of Voted expenditure to

be shown in column I of the Appropriation Accounts, should be those which are voted by the Parliament for each Minor Head of Major Heads/Sub major Heads of Demand for Grant. These figures are specifically mentioned in the letters sanctioning modified allotment and should be exhibited as such in the Appropriation Accounts against the Minor Heads concerned. The subsequent modifications of the allotment, if any, are made by re-appropriation and should not affect the figures of Supplementary Grants for exhibition in the Appropriation Accounts.

3) If there is any expenditure met from the "Contingency Fund' but not recouped to the Fund during the course of the year, it should be shown in column 3 of Form No F.403 duly analysed under the various Minor Head of the Sub Major Heads concerned and separately against the head 'Met from Contingency Fund', which should be introduced under those Minor Heads. It should also be shown separately under the grand total for the Major Head/Sub Major Head as a whole.

Notes On The Accounts

409. **Explanations of Variations** -Under the Minor Heads of the Appropriation Account of each Major Head/Sub Major Head, explanations should be furnished for the variation between the Original Grant or Appropriation and the actual expenditure of the year. Separate explanations should be given in the form of notes under each Minor Head for variations between the Original Grant or Appropriation and the actual expenditure except in cases in which the differences in column 1 or column 4 or both have been left unexplained under the operation of the limits in paragraph 410 below. In the accounts of Capital Segment (Major Head 5002,5003),the variations under Capital, Depreciation Reserve Fund, Development Fund, Capital Fund, Railway Safety Fund and Rashtriya Rail Sanraksha Kosh (according to any other such Fund created, deleted, replaced in future), as the case may be, should be explained separately. Amounts, relating to several causes should also be mentioned separately. However the variations even if these are minor, may be explained by Zonal Railways/ PUs since such minor variation may be necessitated to explain as a whole when considered cumulatively for Indian Railways. Detailed reasons/explanations must be furnished for variations beyond the limit prescribed as per extant guidelines of Railway Board.

410. As per PAC's recommendation (17th Lok Sabha, First Report), the following variations should be explained with Appropriation Accounts:

For Revenue Segment:

i) All cases excesses/Savings exceeding Rs. 500 lakhs.

ii) All cases where excess/saving exceeds 10% of sanctioned provision or Rs.250 lakhs, whichever is higher.

iii) All saving exceeding Rs.500 Lakh.

iv) All cases, where the savings exceeds 10% of the sanctioned provision or Rs.250 Lakh whichever is higher.

v) In case there is supplementary, all cases where saving exceeds 10% of the supplementary or Rs. 100 lakhs, whichever is higher.

vi) Further where grant allotted as a whole exceed then involving of Rs. 25 lakhs shall be explained.

For Capital Segment:

i) Specific works under which entire supplementary grant remained unutilized

ii) Specific works/projects under which entire provision(original plus supplementary) remained unutilized.

iii) Specific works/projects under which saving of 10% of supplementary grants or Rs. 100 Lakhs whichever is higher for incurring additional expenditure on existing works remained unutilized.

iv) Specific works/projects under which the variation (Excess/saving) exceeded Rs. 500 Lakh irrespective of the percentage which the variation bears to the sanctioned provision (Original plus supplementary).

v) Specific works/projects in which saving/excess exceeded Rs. 250 lakh or 10% of the sanctioned provision (Original plus Supplementary), whichever is higher but did not exceed Rs. 500 lakh.

Note - It is to be ensured that explanations for variations are clear, complete, descriptive and precise. The reasons should be sequenced according to their significance. Vague explanations like 'due to over estimates', 'covered by re-appropriation' etc. should be avoided.*(Monetary limits as revised from time to time).*

411. When an excess or saving is due to expenditure having been booked under a Minor Head of a Major Head/Sub Major Head other than that under which provision was sanctioned, suitable explanation should be given under both the Minor Heads of the Major Heads/Sub Major Heads affected. In other words, the effect of following the correct classification in accounts corresponding to Budget heads different from those under which provision was made in the budget, should invariably be brought out in the explanations for variations under the Major Heads/Sub Major Heads concerned.

412. Whenever any variation of a large magnitude (viz., Rupees one lakh and above) between the final Grant or Appropriation and the actual expenditure is explained under any minor head of a Major Head/Sub Major Head as due to adjustments of wrong debits or bad accounting, the reasons for such wrong adjustments and why they could not be rectified before the close of the accounts for the year, should invariably be furnished in the form of foot-notes to the Appropriation Account concerned. In the case of variations and lapses over the Final Grant due to non-receipt of debits ,the name of the Accounts Officer from whom the debits were awaited and steps taken by the Railway Accounts Officers to call for these debits before the close of the year, should also be noted in the foot- notes to the account concerned.

413. If variations in a number of Appropriation Accounts are due to the same cause or causes, the total effect of the cause, or causes should be stated in a comprehensive note in one place, and reference to this should be given in the explanation under the several Grants.

414. Brief explanations of variations under each Major Head/Sub Major head as a whole, showing the principal causes for the excess or the saving with the amount involved under each case, should be furnished in a separate note at the end of the Account.

415. When a variation under a Minor Head cannot be explained in a note of reasonable brevity, the explanation should be included in an Appendix, a reference to this being made in the note below the Minor Head. In all cases, definite reasons for the excess or saving should be given, bringing out clearly why the particular event leading to the variation could not be foreseen at the time of the preparation of the budget and revised estimates and what special circumstances arose subsequently leading to the unexpected variation. In the case of an excess, it should also be mentioned why the expenditure could not be postponed.

416. **Re-appropriations -**If there were savings under certain Minor Heads of a Major Head/Sub Major Head which could be re-appropriated to other Minor Heads sub-heads to cover excess there under, and an order of re-appropriation was not passed by the competent authority, reasons for the failure to do so should be explained. Similarly, if any Re-appropriations have been unnecessarily made, or have been made under a Minor Head under which there is no saving or insufficient saving, the circumstances in which such Re-appropriations were made, should be explained.

417. Savings due to Postponement of Expenditure or Abandonment of Schemes - Any savings due to the postponement of expenditure or the discharge of a liability should be distinguished from those due to abandonment of schemes, economy in expenditure, retrenchment or other similar causes. If a service or work, for which provision was made in the budget, is deliberately abandoned, in order to make funds available for expenditure for which no provision was made, the fact should be mentioned.

418. Exhibition of Recoveries or Credits –The figures of "Credits or recoveries" having been excluded from the scope of Demands (vide paragraph 335) should be shown against a separate head "Credits, or Recoveries" at the end of the Appropriation Account of each Major Head/Sub Major Head duly analysed under the various Minor Heads of Major Head/Sub Major Head. Nature of important items of credits under each Minor Head should also be indicated briefly, whereas explanations for variations between the anticipated and actual credits need not be furnished. Recoveries under 'Charged' items, if any, should be shown separately from those under 'Voted' items.

419. Unadjusted Assets and Liabilities of Special Schemes or Projects - On the completion of a special scheme or other temporary object of expenditure, which is of appreciable importance, suitable remarks regarding its unadjusted assets and liabilities should be made in the note below the relevant Minor Heads If any stores or other property were acquired by charge to the grant for the scheme, the actual or intended disposal of such property should be explained and any deficiencies noted or losses incurred should be mentioned.

420. Offices closed or transferred to another Department/Ministry or Government -When an institution or a department has been closed or transferred to another Department/Ministry or Government, the effect of the closure or transfer upon the Accounts should be indicated.

421. **Purchase or Disposal of Immovable Property -**When any important immovable property is purchased, relinquished or exchanged for other property, such details of the transactions as may be known should be incorporated in the note below the relevant Minor Head. Thus, in the case of a sale, particulars of original cost may, if available, be given and compared with the sale proceeds and with any estimate which may have been included in a project estimate.

422. Stores and Manufacture Suspense -The variations under the capital suspense heads, "Stores" and "Manufacture" on account of the revision of

programmes, delay in the supply of material, etc., which affect the final heads under "Rolling Stock" and "Works'", etc., should, wherever, possible be reflected in the explanations for variations under the final heads concerned.

423. Consultation with the Executive -All explanations of variations, of inability to make timely Re-appropriations, and of wrong and unnecessary Re-appropriations should be drafted in close consultation with the controlling authorities and should be precise and informative. Vaguely worded explanations, such as 'saving is due to over-estimation' or 'excess is due to under-estimation' should be avoided. Endeavour should be made to anticipate and meet comments which the reporting officer may be expected to offer.

424. Losses -All items of losses (excepting those relating to Stores Accounts), which are booked in the accounts as losses, and of write-off of over payments. etc., which are treated as losses, should be exhibited in the notes to the Appropriation Accounts of each Major Head/Sub Major Head with the amount in units of rupees. Items costing Rs. 1 Lakh each or more should be listed individually and those below Rs. 1 Lakh each should be shown in one lump sum. Losses of Rs.1 Lakh and above due to flood damages, earthquakes and accidents. etc., should be lumped together and shown as such in the foot- note to the Major Head/Sub Major Head concerned instead of listing out each item of such losses separately. Losses on account of revaluation of stores and stock verification, etc., should generally be shown in the notes to Stores Account in terms of paragraph 439. Such items as are not mentioned therein, being below the limit upto which they are required to be mentioned, should, however, be included in the notes to the Appropriation Accounts.

Note -The items of losses which are reflected in the explanations of variations under the different Minor Heads of the Grant should be co-related with the foot-notes whether of the same or of some previous years' Appropriation Accounts. If, however, the write-off of loss has not been sanctioned during the year under review and as such the item is not exhibited in the foot-notes, the fact should be brought out in the explanation. In cases where the items mentioned in the foot-notes are not reflected in the explanations, it should be stated why they are not so reflected.

425. In cases of losses and writes-off and remissions or abandonment of claims to revenue except in the case of items of warfare and demurrage, complete information giving full particulars of all cases amounting to Rs. 1 Lakh each or more, which are individually listed, and a brief statement of the circumstances

which led to the loss, etc., should be furnished. Similar information should also be supplied in respect of items of losses shown in the foot-notes to the Stores Account, such as physical losses of stores due to thefts, pilferage, etc., and losses on auction sales, etc., which may not be regarded as due to the normal wastage unavoidable in the working of Railways. Similarly, information regarding individual items of warfare and demurrages, amounting to Rs.5 lakh each and over should be furnished giving full particulars of each of these items and the brief statement of circumstances, leading to their remission/ write- off.

426. Ex-gratia payments- A statement embodying particulars of the items of ex-gratia payments (i.e., payments made as acts of grace) exceeding Rs.5 lakh each and the Sub Major Head to which it relates, should be sent in support of the Appropriation Accounts for exhibition in the notes to the consolidated. Appropriation Accounts of each Grant. For collecting this information, each Accounts Office should maintain a manuscript register for recording therein the particulars of the ex- gratia payments, reference to sanction, Sub Major Head affected, amount paid, month of payment, etc.

Subsidiary Statements And Accounts

427. **Block Accounts (Part I for Assets created from Capital and Part II for Assets created from all funds including part I) Balance Sheet and Profit and Loss Account of Railways -** The Appropriation Accounts should be supported by a Block Account, Capital statement, a Balance Sheet and a Profit and Loss Account of the railway. These statements should be prepared separately for Commercial and Strategic lines.

428. Block Account -The Block Account represents all the physical assets of the undertaking whether financed from loan capital or the Railways' own generation of funds.

429. Block wise account under all Planheads is prepared for commercial and strategic separately and then funds wise bifurcation of it is made separately. The illustration of consolidated Block Account (commercial) is given in Annexure XXV.

430. The cost of improvement for the purpose of paragraph 429 (iii) will be the excess over the cost of replacement, at current prices, of an asset by a like asset or its original cost, estimated if not known, whichever is greater. In Annexure I are given the formulae for working out the cost of replacement by like asset in respect of various types of assets. The estimated"cost of replacement, at current prices, of an asset by a like asset" should in no circumstances be less than the cost of replacement calculated in the manner laid down in this Annexure.

431. The Capital Statement (Part I & II), the Balance Sheet and the Profit & Loss Accounts should be prepared as shown in the specimen entries in Annexure II to IV (based on the 2020-21 printed Appropriation Accounts).

432. **Accounts of Production Units -**In respect of Chittaranjan Loco Works, Banaras Locomotive Works, Rail Coach Factory, Integral Coach Factory and other Production Units, in addition to the Block Account, the Capital Statement and the Balance Sheet to be submitted vide para 431, a Manufacturing Account with a statement of out turn should also be submitted, as in the specimen entries given in Annexure V & VI (based on 2020-21 printed Appropriation Accounts).

433. Other Accounts & Subsidiary Statements-

Other Mandatory Accounts, Annexures and Statements which should accompany the Appropriation Accounts of Individual Railways and Production Units are given below**:**

S.No	Particulars
	Annexures
1	'A'- Statements of Unsanctioned Expenditure (Annexure XVI)
2	'B' – Statement of Undercharges detected by Audit and Accounts (Annexure XVII)
3	'C' Statement showing Remission and Abandonment of claims to Revenue (Annexure XVIII)
4	'D' – Statement of Expenditure on important open line works & New constructions (Annexure XIX)
5	'E' – Statement showing Expenditure relating to Strategic Lines (Annexure XX)
6	'F' – Statement of Estimated and actual credits or Recoveries (Annexure XXI)
7	'H' – Statement of losses et . and ex gratia payments above Rs. 5 lakhs (Annexure XXII)
8	'I' – Statement showing Irregular Re-appropriation (Annexure XXIII)
9	'J' – Statement showing Important Misclassifications etc. (Annexure XXIV)
10	Statement of defects in Budgeting

	Statements
1	Statement showing Distributable Expenditure and Receipts
2	Statement showing changes in Forms & Classifications
3	Statement showing Percentage of Working Expenses to Earnings
4	Statement showing Credits to Capital for Retired Assets
5	Statement of Annual Voted and Charges Expenditure
6	Statement showing Depreciation Reserve Fund Account (Annexure VII)
7	Statement of Development Fund Account (For Railway Board Only) (Annexure VIII)
8	Statement of Capital Fund Account (For Railway Board Only)
9	Statement of Railway Safety Fund Account and Debt Service Fund **Statements of RRSK (**(For Railway Board Only)
10	Statement showing Pension Fund Account (Annexure IX)
11	Statement of Suspense Balances (Annexure – XV)
12	Statement showing Stores Account (Annexure –XI)
13	Statement Showing Stock Adjustment Account
14	Profit and Loss Account of Catering (Annexure – XIV)
15	Statement of Plan head wise, source wise work expenditure; showing voted and charged and Gross, Credit, Net expenditure in unit of Rs.
	Final Accounts
1	Capital Statement Part I&II/Block Account- Commercial & Strategic Lines
2	Profit and Loss Account/Manufacturing Account- Commercial Lines & Strategic Lines
3	Balance Sheet- Commercial Lines & Strategic Lines

434. Percentage of Working Expenses to Earnings - Operating Ratio -A statement showing percentage of working expenses to earnings in respect of the entire system (i. e., including Worked Lines) should also be submitted with the Appropriation Accounts (S.No. 3 of Head 'STATEMENTS' of para 433). This statement should contain brief notes explaining the variation in the percentage for the year as compared with that for the previous year. The percentage should be worked out on the following basis -

Total Gross Revenue 1) as defined in item (v) of para 308.

Total Gross Working Expenses 2) as defined in item (xiii) of para 308

Percentage = (2)x100/(1)

435. **Compilation of Capital Segment of Appropriation Accounts -**Major Head 5002 & 5003 – (Assets-Acquisition, Construction and Replacement) may be compiled in four Segments i.e. Part I- Capital, Part-II- Railway Funds(DRF,DF and Capital Fund), Part III – Railway Safety Fund and Part IV- Rashtriya Rail Sanraksha Kosh.

The reasons for variations with reference to total sanctioned provision should be explained work-wise for all the works under Minor Heads(Plan Head) – New Lines(1100), Gauge Conversion (1400), Doubling (1500) and Railway Electrification Projects(3500); and for works costing above Rs. 20 crores under Minor Heads(Plan Head) – Track Renewals (3100), Bridge Works(3200) and Signalling & Telecommunications (3300)

436. Statement of Credits to Capital for Retired Assets -A statement should also be attached showing the total amount under each Minor Head of Capital Segment (Major Head 5002,5003) which has been credited to Capital by debit to Depreciation Reserve Fund (or Replacements and Renewals, etc.) as a result of writing off the cost of retired assets.

437. Stores Account -The Appropriation Accounts should also be supported by Stores Account comprising the following information.-

i) Statement of Stores Transactions.

ii) The result of stock verification and of revaluation of stores, if any.

438. Statement of Stores Transactions –

1) The Statement of Stores Transactions should be prepared in the form given at Annexure XI and should include the entire stores transactions relating to both open lines (Additions and Replacements) and construction of new lines, figures relating to commercial and strategic sections being given separately. Under column 13 should be shown items which are generally credited to "Stock Adjustment Account" by debit to "Stores". In case the amounts relating to depreciation, shortage, etc., to be shown under column 16 are over Rupees one lakh or one per cent of the balance, whichever is less, explanations in support thereof should be

furnished. In a foot-note to the statement, reasons for the variations between the opening and closing balances of stores should be briefly stated.

2) The figures to be shown under the columns "Receipts" and' "Issues" of the Stores should represent actual receipts and issues of stores, which have been adjusted through the sub- head "Stores". In other words, the figures under "Receipts" and "Issues' should not include the figures of stores purchased and issued direct to works.

3) All Items of depreciation, shortage, etc., of stores should be shown on the issue side and figures on this account should be shown on the receipt side under the head "Unaccounted for increases, etc". The figures shown under the column "Depreciation, shortage, etc". on the issue side of the Stores Account, should include all items of losses of stores in stock, whether adjusted to final heads direct or through Stock Adjustment Account. Any items of losses on stores purchased and issued direct to works should only be exhibited in the foot-notes to the Appropriation Accounts of the grants concerned. Differences in the rates of articles manufactured for stock purposes should not, however, be treated as losses to be shown under the column "Depreciation, shortage. etc."

4) On the issue side of the Stores Account the column "other credits" corresponds to that of "other debits" on the receipt side. This column should show such items of credits as cannot be exhibited under any one of the other columns. It should include credits of miscellaneous nature which can neither be treated as issues nor depreciation of stores, etc., such as deficiencies in the rates of manufactured articles. Excess in the rate of articles manufactured for stock purposes should be exhibited on the receipt side of the Stores Account under the column "Other debits".

5) In the regular accounts the adjustment in clearance of items from the Stock Adjustment Account should be made by minus entries instead of plus ones, i. e., the resultant debits and credits to the Stock Adjustment Account should be adjusted as minus credits and minus debits.

6) a) The figures shown under "Total Debits" and "Total Credits" in the Stores Account, should be reconciled with the figures of debits and credits for the year in the General Books under the head "Stores" and

the difference arising out of the proforma inclusion in the Stores Account of the figures of losses due to depreciation, shortage, etc., actually adjusted in the books as minus receipts but shown on the issue side of the account in accordance with the instructions in sub-paragraph (3) above, should be explained in foot-notes.

b) Similar foot-notes may be given to reconcile the figures of losses shown under the column "Depreciation, shortage, etc." in the Stores Account with those shown under the column "Deficiencies" in the Stock Adjustment Account.

439. Stock Verification and Revaluation -The statement showing the results of stock verification and of revaluation of stores referred to in paragraph 437 above, should be preparedin the form given at Annexure XII.

440. **Summary of Accounts -**A Summary of the Appropriation Accounts should be complied by the Railways in the following form. This need not, however, be sent to the Railway Board. The figures in the summary should be exhibited in the same manner as in Form No. 403.

Form No. F. 440

Grand Summary of Appropriation Accounts by **Major Heads/Sub Major Heads** and Appropriations—			(Figures in units of Rupees)	
			Expenditure compared with	
Major Head/Sub Major Head	Final Grant or Appropriation.	Actual expenditure	Original Grant or Appropriation Excess (+) saving (-)	Final Grant or Appropriation Excess (+) saving (-)
1	2	3	4	5

Actual credits or recoveries against all Major Heads:-

Charged.....

Voted .....

441. Statement of Annual Expenditure showing the reconciliation of figures in the Account Current with those in the Appropriation Accounts for the year should be prepared in the following form and submitted on the dates given in the programme

referred to in para403. The figures of "Voted" expenditure should be shown as distinct from 'Charged' expenditure-

Form 441

Sub Major Head	Figures as appearing in Account Current		Grant Appropriation	Figures as per Appropriation Account		Remarks
	Gross	Credit		Gross Expenditure	Credits or Recoveries	
1	2	3	4	5	6	7

442. **Certificate of Sanctioned Expenditure and Statement of Unsanctioned Expenditure -**A certificate should be furnished to the Railway Board by the date laid down as per the programme referred to in para403 to the effect that all expenditure included in the Appropriation Accounts has been sanctioned by competent authority with the exception of items detailed in the Statement of Unsanctioned Expenditure (Annexure XVI) which should accompany the certificate.

443. In preparing the Statement of Unsanctioned Expenditure referred to above, the following instructions should be borne in mind. viz.-

a) An item of objection should be classified as amounting to Rs. 1,00,000/- or more and less than Rs. 1,00,000/- according to the total amount of expenditure placed under objection to the end of the year.

b) The amount to be exhibited against each of the three divisions, viz.,-

i) relating to earlier than previous year,

ii) relating to the previous year, and

iii) relating to the year concerned, is the amount of the outstanding objectionable expenditure which was incurred during the periods concerned.

c) In the foot-note showing statistics of expenditure under objection and its percentage to total expenditure audited, the expenditure to be shown as held under objection should be the total expenditure placed under objection during the year under review and still under objection on the 1st July of the year following. This figure should agree with the total of the figures shown in the columns for expenditure during the current year. The

amount of total expenditure audited during the year, for the purpose of the percentage given in the foot- note, should be the total expenditure as shown in the summary of the appropriation accounts.

d) For the purpose of working out figures to be exhibited in this statement the minus expenditure resulting from certain credit adjustment should be taken as plus, but the amounts of expenditure should be correctly shown in Annexure A(i) (cf paragraph 445) as minus figures.

444. The Statement of Unsanctioned Expenditure should be accompanied by following subsidiary statements, showing detailed information in respect of items remaining unsanctioned upto the 1st October, the items of objectionable expenditure regularized between the 1st October and 15th February being intimated separately.-

i) Statement showing amount of expenditure held under objection relating to earlier than previous year, previous year and the year under review [Annexure A(i) Form No. F. 445. Annexure XVI (i)].

ii) Statement showing the number of items of works-the estimates of which have been passed provisionally by Accounts or Audit. [Annexure A(ii), Form No. F. 447, Annexure XVI (ii)].

445. The Statement of Unsanctioned Expenditure (vide paragraph 444, (i) should beprepared in the detail shown in the form given below —

ANNEXURE A (i)

Form No. F. 445

Name of Railway	Particulars	Month in which un-sanctioned expenditure was first incurred	Expenditure up to end of earlier than previous year	Expenditure in previous year	Expenditure in year under review	Total Expenditure under objection	Remarks. (The delay in regularising the item with proper sanction to be explained in detail).
	Items relating to works. Want of Estimate - Items of objections amounting to Rs. 1,00,000 each or more						

	(Here give the name of the work, etc).						
	Items of objections amounting to less than Rs.1,00,000 each. No..... Amount						

Notes -

i) The details regarding items relating to works.....” Excess over Estimates" and "Miscellaneous irregularities" should also be given in the same manner.

ii) The amounts should be exhibited in units of rupees.

iii) The details given in Annexure A(i) should agree with the figures exhibited against the relevant lines of the Form in Annexure XVI taking the items representing minus expenditure resulting from certain credits adjustments as plus.

446. In the remarks column of Form No. F. 445, the delay in regularizing the items with proper sanction should be explained in each case, giving out clearly the reasons why the items could not be cleared.

447. Estimates provisionally accepted by Accounts or Audit - The statement of works (vide paragraph 444 (ii) the estimates for which have been passed provisionally by Accounts or Statutory Audit Office should be prepared in the following form.-

ANNEXURE A (ii)

Form No. F. 447

Name of Railway	Number of Estimates	Remarks
	Relating to earlier than previous year Relating to previous year	
	Relating to the year concerned.	

The expenditure on works, the estimates of which have been sanctioned subject to determination of correct allocation, remains technically under objection until the allocation is finally settled and should, therefore, be included in the objectionable

items register and in Annexure A (ii) to the Appropriation Accounts. But such expenditure cannot be regarded as unsanctioned expenditure and would not require to be exhibited in Annexure A and A (i) to the Appropriation Accounts.

448. In Form No. F. 447 the number of works, the estimates for which have been passed provisionally by Accounts or Statutory Audit Office, should only be stated, with brief reasons in the remarks column for the delay in passing the estimates finally.

449. Appropriation Accounts of Civil Grants - Every General Manger should also furnish to the Railway Board so as to reach them by the appointed dates, advance copy of the Appropriation Accounts of the following Civil Grants in Form No. F.403 followed by the accounts duly accepted in Audit:-

i) Loans and Advances bearing interest.
ii) Interest on debt, and other obligations and reduction or avoidance of debt charged.
iii) Pre-partition payments.

The figures of actual expenditure as well as those of Grants/Appropriations should be in units of rupees.

Ministry of Railways (Railway Board)

450. The Appropriation Accounts relating to the Civil Grants or Appropriations should be prepared under the sub heads as shown in the relevant Budget Orders of the year.

451. The Appropriation Accounts of the Civil Grants for "Loans and Advances bearing interest" should be accompanied by a statement showing book keeping adjustments made during the year on account of transfers of balances under these heads with the various accounting officers. The statement should contain the following information, viz:

i) Nature of Advances; and
ii) Amount adjusted (in units of rupees).

452. Explanation of Variations in Civil Grants -In addition to the explanations of variations between the final Grant and actual expenditure as required by the form in which the accounts are to be prepared, important modifications in Grants or Appropriations should also be explained.

453. Under each account special mention should be made of cases in which

additional funds provided by re-appropriation or otherwise are found to be unnecessary or excessive, as also of cases where reductions by re-appropriation or surrender are ultimately found to be not justified.

454. The figures of surrenders proposed to the Railway Board but not accepted by them and the amount kept in reserve should be shown under the sub head "Surrenders or Withdrawals within Grant". The reasons for not utilizing the amount should also be given.

Consolidated Appropriation Accounts Of Railways

455. The Appropriation Accounts of individual railways and offices, should, after scrutiny, be consolidated by the Railway Board into the "Appropriation Accounts of the Railways in India" for transmission to the ADAI (Railways) and presentation to the Public Accounts Committee.

456. The Consolidated Appropriation Accounts should be prepared by Minor Heads wise underwhich the demands for Grants were presented to the Parliament and the figures of original Grant or Appropriation to be exhibited in these accounts should be the same as those entered in the Book of Demands for Grants.

457. **Main Contents -** The consolidated Appropriation Accounts will consist of the following, viz:

i) A Grand Summary of the Appropriation Accounts by Grants and Appropriations Form No. F.440

ii) An Appropriation Account for each Major Head in Form No. F.403, together with brief notes giving under each Minor Head explanations of variations between final Grants or Appropriations and actual expenditure, provided such variations are as per the limits mentioned in paragraph 410. If, however, the net excess or saving falls within the aforesaid limits but is made up of plus and minus variations exceeding those limits, the causes of such variations should be mentioned.

iii) The accounts of the Deprecation Reserve Fund, Development Fund, , Pension Fund(Railway wise also), Capital Fund, Railway Safety Fund, Debt Service Fund and Rashtriya Rail Sanraksha Kosh showing *(in thousands of rupees*) for 10 years ending with the year under review.

1) Opening balance on 1st April.

Ministry of Railways (Railway Board)

2) Contribution/Appropriation during the year.
3) Loans, if any, from General Revenue.
4) Interest on the Fund.
5) Expenditure from the Fund during the year.
6) Re payment of loans obtained from General Revenues.
7) Interest paid on loans from General Revenues.
8) Balances on 31st March.

Note -Figures of strategic lines should be shown separately. Item (3), (6) and (7) will be given only where applicable.

iv) A Stores Accounts showing the stores transactions and Stock adjustment Account showing the results of stock verification and revaluation of stores, by Railways in Forms at Annexure XI & Annexure XII respectively and a review of the store transaction all Railways collectively in a narrative form.

v) Deleted
(Authority Railway Board's case no.93/App/3-7/92-93 dated 23.11.1993)

vi) A consolidated Profit and Loss Account of Railway Catering (Form at Annexure XIV).

vii) A consolidated Statement of Balances outstanding under Suspense (Form atAnnexure XV).

viii) A consolidated Statement of Unsanctioned Expenditure (to form Annexure A, A(i) and A(ii) to the consolidated Appropriation Accounts), vide paras 442 to 448.{Forms at Annexure XVI, XVI(i) and XVI(ii)}

ix) A statement of under charges deducted by Accounts or Audit and recovered (to form Annexure B to the consolidated Appropriation Accounts) by railways, vide Form at Annexure XVII.

(Ministry of Railways (Railway Board))

x) A statement showing Remissions and Abandonment of Claims to Revenue (to form Annexure C to the consolidated Appropriation Accounts) by Railways vide form at Annexure XVIII.

xi) A consolidated statement vide form at Annexure XIX in respect of

open line works provided in the budget the estimated cost of each of which in not less than Rs.2.5 Crores and in respect of works not provided in the budget the estimated cost each of which is Rs.2.5 Crores and above (to Form Annexure D to the consolidated Appropriation Accounts).

xii) Two statements relating to Strategic lines one showing working expenses and other revenue charges and the other showing expenditure on Open Line Works and New Constructions met from Capital, Depreciation Reserve Fund, Development Fund, Open line works Revenue or Accident Compensation, Safety & Passenger Amenities Fund. These should be prepared in the detail indicated in Annexure XX (to form Annexure E to the consolidated Appropriation Accounts).

xiii) Annexure 'F' in the form F.441 (corresponding to Annexure XXI to this Chapter).

xiv) A Block Account, a Capital Statement, a Balance Sheet and a Profit and Loss Account of all railways in Form Nos. F.429 and Annexure II to V and in addition the Manufacturing Account and Outturn Statements of Railway Production Units in forms vide Annexure V & VI (to form Annexure 'G' to the consolidated Appropriation Accounts.)

xv) A statement of Losses, called Annexure 'H' (corresponding to Annexure XXII).

xvi) A Statement showing Irregular Re-appropriations made by Railways in the detail indicated in the form vide Annexure XXIII (to form Annexure 'I' to the consolidated Appropriation Accounts).

xvii) A consolidated statement of Misclassifications and other important mistakes detected during the course of the year vide Annexure XXIV Information for each Railway should be exhibited separately (to from Annexure 'J' to the consolidated Appropriation Accounts). Separate statement should be prepared for commercial and strategic lines.

Note -The compilation referred to at item (xiv) should be printed separately, to be treated as addenda to the Appropriation Accounts of Railways in India.

458. The consolidated Appropriation Accounts should be accompanied by a statement bringing out (in thousands of rupees) the financial results which accrued to Government and the appropriation to the Reserve Fund, as compared with

budget and revised estimates of the year.

459. Reconciliation with the Combined Finance and Revenue Accounts- The figures of actual expenditure shown in the Appropriation Accounts when finally consolidated, should be agreed with the Combined Finance and Revenue Accounts of the Central and State Governments in India. The consolidated accounts will be titled as "Appropriation Accounts of Railways in India, Part-II- Detailed Appropriation Accounts".

460. Submission to Audit- An advance copy of these accounts should be sent to the ADAI (Railway) by the specified date. A certificate in the following form should be recorded by the Member Finance, Railway Board and the Chairman & Chief Executive Officer, Railway Board as Secretaries to the Government of India, below the Grand Summary of the Appropriation Accounts:-

"Certified to the best of my knowledge and belief that all expenditure included in the Appropriation Accounts of Railways in India for …… has been sanctioned by competent authority with the exception of the items detailed in the Statement of Unsanctioned expenditure (Annexure A)" .

461. After the ADAI (Railways) has examined the accounts and certified to their correctness, the Appropriation Accounts should be printed. The printed accounts should reach the Comptroller and Auditor General not later than the 15th March of the second following year.

Note **-**Four proof copies of the Appropriation Accounts in their final form should, however, reach the Comptroller and Auditor General one month earlier than the date mentioned above.

462. Consolidated Accounts of Civil Grants- In addition to the Appropriation Accounts of the railways, the Railway Board will prepare in Form No. F.403 consolidated Appropriation Accounts of the following civil grants, as far as they relate to the railways and submit them to the Accountant General, Central Revenues, on the dates fixed by him:

i) Loans and advances bearing interest.

ii) Interest on debt and other obligations and reduction or avoidance of debt charged.

iii) Pre partition payments.

463. The instructions contained in paragraphs 449 to 454 supra for the preparation of the Appropriation Accounts of these Grants by individual Railways apply to the consolidated Appropriation Accounts also.

464. Review Of Appropriation Accounts

The "Appropriation Accounts of Railways in India - Part II - Detailed Appropriation Accounts" will be accompanied by a review by the Railway Board to be titled "Appropriation Accounts of Railways in India - Part I - Review". This review will generally deal with the following topics:-

i) Financial results of the year. (Financial results, Capital at Charge and position of reserve funds)

ii) Final Accounts (Profit and Loss Account,Block Account & Balance Sheet)

iii) Changes in the procedure, form and classification of accounts during the year.

iv) Detailed review of the receipts and expenditure of the year, the figures of the different Grants being considered in suitable groups as well as individually.

v) Results of Appropriation Audit showing excesses over Grants, irregular Re- Appropriations, etc. requiring a report to or ratification by the Parliament.

vi) Miscellaneous subjects, such as Stores balance, Railway Catering and of Claims to Revenue.

465. Examination By Public Accounts Committee-

The examination of the Appropriation Accounts and of the Audit Report thereon, on behalf of Parliaments, is conducted by their Committee on Public Accounts. According to the "Rules of Procedure and Conduct of Business in the Lok Sabha" the Committee is to satisfy itself-

a) that the moneys shown in the Accounts as having been disbursed were legally available for and applicable to the service or purpose to which they have been applied or charged;
b) that the expenditure conforms to the authority which governs it; and
c) that every Re-appropriation has been made in accordance with the provisions made in this behalf under rules framed by competent authority.

If any money has been spent on any service during a financial year in excess of the amount granted by the Parliament for that purpose, the Committee shall examine with reference to the facts of each case the circumstances leading to such an excess and make such recommendation as it may deem fit.

466. The Committee's findings are recorded in a report presented to Parliament. Even though the Committee is not an executive body and its opinions and findings are only recommendatory and not mandatory, Government examine each of its recommendations with a view to implementing them and report to it on the action taken when the next year's Accounts come up for examination. In the exceptional cases in which Government are not in a position to implement a recommendation, they place their views before the Committee to enable it to present a further report to Parliament.

*****

ANNEXURE I

Renewals of Rails, Cranes, Weighing machines and Weigh bridges

1. When:

R is the cost of replacement by a like asset;

N is the cost of the new rail or crane or weighing machine or weigh bridge;

W_1 is the weight of the old rail, or the lifting capacity of the old crane, or the maximum weight capacity of the old weighing machine or weigh bride;

W_2 is the weight of the new rail or the lifting capacity of the new crane, or the maximum weight capacity of the new weighing machine or weigh bridge;

the cost of replacement by like asset:

$$R \text{ will be } \frac{N \times W_1}{W_2}$$

Note -(1) The above formula will apply to cranes, weighing machines and weigh bridges, only when the replacing crane, weighing machine or weigh bridge is in the same category as the replaced one.

(2) 'N' in the formula in this paragraph represents the cost of material only and does not include the labour and handling charges newly incurred which are added to the total cost of replacement.

2. Where track is renewed by a different weight of rail and different type of sleepers, the amount to be included in the Block Account shall be the difference between the replacement cost of the new material and the estimated original cost of the material in the track or the cost at present- day prices of similar material, whichever is greater.

Note: The 'cost' referred to in this paragraph represents the cost of material only and does not include the labour charges, etc.

3. Where the existing rails, whether they were new or second-hand when originally put in the line, are replaced by second- hand rails, the market value or the book value of the second- hand rails, whichever is less, will be taken into account instead of the cost of the new rails in the formula:

$$R = \frac{N \times W_1}{W_2}$$

4. When rails, which were second- hand when originally put in the line, are

replaced by new ones, improvement element for the purpose of the Block Account will be the difference between the first hand and second- hand price of the replaced rails at the time they were originally put in the line and the excess over the cost of replacement by a like asset, provided that the sum of these two amounts shall not exceed the excess of the cost of the replacing rails over the original cost or the present cost of replaced rails whichever is greater.

Renewals of girders

5. 1) The cost of replacement of a girder will be determined by the formula

R = W-K(I-S)W,

where

R is the cost of replacement by a like asset;
W is the cost of a girder of the same span having the Revised B.G. standard or the M.G.M.L. standard strength;
S is the strength of the existing girder expressed as fraction of the same standard, and
K has the value given in the following table:

	Broad Gauge	Meter Gauge
Through type spans up to 50 metres clear	.48	.38
All other spans up to 75 metres clear	.60	.50
All spans over 75 metres clear	.64	.56

Note -When the strength of the new girder is not the Revised B.G. standard or the M.G.M.L. standard, the values of the W may be determined by the following formula:

$$W = \frac{W'}{I-K\,(I-S')}$$

Where—

W ' = the cost of the new girder, and
S' = the strength of the new girder expressed as a fraction of the Revised B.G. standard or the M.G.M.L.Standard.

2) When girders are duplicated or strengthened by adding materials, instead of replacing them by new ones of the necessary strength, the amount to be included in the Block Account shall not exceed what it would have been according to the above formula, if the girders had been replaced by new ones of necessary strength.

3) The cost of additional earthwork carried out in raising the road bed in the approaches of railway bridges on account of replacement of girders by others of greater depth, will be included in the Block Account, provided the deeper girders give stronger bridges.

6. When locomotives, tug(s) or passenger steamer(s) are replaced, the cost of replacement is obtained by applying the formula:

$$R = \frac{N \times T_1}{T_2}$$

Where:--

R is the cost of replacement by a like asset;
N is the cost of the new locomotive;
T I is the tractive/Horse Power force of the old locomotive
T2 is the tractive/Horse Power of the new locomotive.

Note: In the case of Passenger Steamers however, floor area should also be taken into account as these also carry passengers besides moving on their own powers.

7. The tractive force of two-cylinder simple locomotives should be worked out by applying the formula:

$$T = \frac{D_2 \times P \times A}{W_2}$$

Where -

D is the diameter of cylinder in millimeters;
P is the mean steam pressure in cylinders in kilograms per sq. millimeters taken at 85 per cent of the maximum boiler pressure for superheated engine and 75 percent of the maximum boiler pressure for saturated engine;
A is the length of stroke in millimeters;
W is the diameter of driving wheel in millimeters;
T is the tractive force at rails in kilograms.

8. In the case of four cylinder simple locomotive , the tractive force , for the purpose of the formula prescribed in the paragraph 6 above, shall be equal to

twice the tractive force calculated according to paragraph 7 above.

Renewals of Tenders

9. The cost replacement of tenders should be obtained by using the formula-

$$R \Big| = \frac{NxC1}{C_2}$$

Where:

R is the cost of replacement by a like asset;
N is the cost of new tender;
C_1 is the capacity of old tender;
C_2 is the capacity of new tender.

The capacity of a tender is equal to its maximum fuel capacity in kilograms, plus its maximum water capacity in kilograms calculated at 1 kilogram a litre

10. Whenever the cost of the tender is not known separately from the cost of engine, or whenever a tender engine and tender are substituted for a tank wagon or vice versa the engine and tender may be treated as a whole, the formula for locomotives being applied to the combined engine and tender.

Renewals of Boilers

11. When spare boilers are replaced by boilers of increased capacity, their cost of replacement at current prices should be estimated on the basis of tractive effort of the most powerful class of engines to which the boilers (both replacing and replaced) could be fitted.

12. When a saturated boiler is replaced by a new super heater boiler without involving any increase in tractive effort, the amount to be included in the Block Account shall not be more than 10 percent of the cost of the new super heater boiler. When a saturated boiler is replaced by a new super heater boiler of higher capacity, the amount for this purpose shall be worked out in accordance with the formula laid down in paragraph 11 above.

13. When an existing boiler is converted to superheat by the use of additional fittings, the cost of the additional fittings, i.e. super heater, header, flues and elements shall be carried to the Block Account.

Renewals of Carriages and Passengers Flats

14. In the case of the replacement of carriages and passengers flats, one bogie should be taken as replacing two 4 - wheelers and the following formula should be used:

$$R = \frac{A_1 \times N}{A2}$$

Where -

R is the cost of replacement by a like asset;

N is the cost of the new carriage excluding the cost of improved appliances which did not exists in the replaced stock and constitute a substantial improvement.

A_1 is the seating capacity/floor area of the old carriage; and

A2 is the seating capacity/floor area of the new carriage.

Note 1) Only gas and electric lighting, electric fans, air-conditioning equipment, vacuum brakes and intercommunication apparatus are admitted as improved appliances.

Note 2) In the case of replacement of vehicles other than passenger carriage, such as brake vans, parcel vans hoses boxes, etc. the improvement cost should be determined on the basis of floor area and/or carrying capacity as the case may be.

15. When new stock is built on old under frames, only the depreciated value of the under frames should be included in the cost of new stock in applying the formula prescribed in paragraph 14 above.

Renewals of Wagon, Barges, Pontoons etc.

16 (i) The formula that should be used for ascertaining the cost of replacement of wagons one bogie being taken as equivalent to two 4, wheelers is as follows:

$$R = \frac{C_1 \times N}{C2}$$

Ministry of Railways (Railway Board)

Where:--

R is the cost of replacement by a like asset,

N is the cost of new wagon excluding the cost of

improved appliances;

C_1 is the carrying capacity of the old wagon;

C_2 is the carrying capacity of the new wagon;

(ii) The formula that should be used for ascertaining the cost of replacement of wagon barges, pontoons, etc, is as follows:

$$R = \frac{N \times D_1}{D_2}$$

Where:-

R is the cost of replacement by a like asset;

N is the new cost of new asset;

D_1 is the dock area of the old asset;

D_2 is the dock area of the new asset.

Renewals of Rolling Stock Parts

17. In the case of renewals of complete wheels and axles of carriages and wagons the amount to be included in the Block Account will be calculated on weight basis according to the formula prescribed for rails in paragraph 1 above.

18. When locomotives are converted to superheated steam, 10 percent of the cost of new cylinders shall be included in the Block Account.

Renewal of Machinery

19. In the case of replacement of machinery involving improvement, the excess over the present day replacement cost of a like asset should be taken as the improvement cost for the purpose of the Block Account. If the present day cost of a like asset is not available, the same should be worked out by increasing the original cost of the replaced asset by 75 per cent for this purpose.

*****

Ministry of Railways (Railway Board)

ANNEXURE II (i)

F.431 (See Para 431)

Part I. Capital Statement Of Indian Government Railways Comprising Loan Account

भाग I—भारत की सरकारी रेलों का पूंजी विवरण-(वाणिज्यिक/ सामरिक) 2020-2021
PART I–CAPITAL STATEMENT OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL/ Strategic)
2020-2021

		देयताएं Liabilities			
		31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
	विवरण Particulars	ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
1.	जुटायी गयी पूंजी– Capital Raised—				
	(क) विशिष्ट ऋण	...	...	...	...
	(a) Specific Debt				
	विशिष्ट ऋण रुपये में Rupees Specific Debt	...	82,98,62,897	...	82,98,62,897
	(ख) अविशिष्ट ऋण	...	39,29,26,64,59,601	...	42,28,36,22,32,385
	(b) Non-Specific Debt				
2.	जिला बोर्ड आदि द्वारा लगायी गयी पूंजी Capital Contributed by District Board etc.	...	3,00,496	...	3,00,496
	जोड़ Total	...	@39,30,09,66,22,994	...	$42,29,19,23,95,778

($) इसमें महानगर परिवहन परियोजनाओं और परिक्रमा रेलवे (पूर्व रेलवे, दक्षिण मध्य एवं पश्चिम रेलवे) से संबंधित क्रमशः 1,68,86,33,76,957/- ₹ और 19,11,09,92,140/- ₹ शामिल हैं।
Includes ₹ 1,68,86,33,76,957/- and ₹ 19,11,09,92,140/- pertaining to M.T.P and Circular Railway (Eastern, South Central & Western Railways) respectively.

(@) इसमें महानगर परिवहन परियोजनाओं और परिक्रमा रेलवे (पूर्व रेलवे, दक्षिण मध्य एवं पश्चिम रेलवे) से संबंधित क्रमशः 1,66,36,14,36,058/- ₹ और 18,98,78,45,936/- ₹ शामिल हैं।
Includes ₹1,66,36,14,36,058/- and ₹ 18,98,78,45,936/- pertaining to M.T.P. and Circular Railway (Eastern, South Central & Western Railways) respectively.

भाग I—भारत की सरकारी रेलों का पूंजी विवरण-(वाणिज्यिक / सामरिक) 2020-2021
PART I–CAPITAL STATEMENT OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL / Strategic) 2020-2021

		परिसम्पत्तियां Assets			
		31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
	विवरण Particulars	ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
1.	क्रय मूल्य– Purchase Price—				
	(क) मुख्य लाइनें (a) Main Lines	...	1,73,14,56,515	...	1,73,14,56,515
	(ख) शाखा लाइनें (b) Branch Lines	...	5,72,76,288	...	5,72,76,288
2.	क्रय के बाद पूंजीगत व्यय Capital Expenditure after Purchase		36,30,15,78,36,036	(क) (A)	38,98,71,77,72,420
3.	चल परिसम्पत्तियां– Floating Assets.—				
	(क) भंडार (a) Stores	...	1,12,27,66,69,001$$	...	1,33,74,93,00,038$
	(ख) निर्माण लेखे में शेष (b) Balance in Manufacture Account	...	38,76,41,38,516	...	45,49,86,88,419
	(ग) विविध अग्रिम (c) Miscellaneous Advance	...	1,47,10,92,46,638	...	1,49,43,79,02,098
	जोड़ **Total**	...	**39,30,09,66,22,994****	...	**42,29,19,23,95,778***

(*) इसमें महानगर परिवहन परियोजनाओं और परिक्रमा रेलवे (पूर्व रेलवे, दक्षिण मध्य एवं पश्चिम रेलवे) से संबंधित क्रमशः ₹ **1,68,86,33,76,957/-** और ₹ **19,11,09,92,140** शामिल हैं।
Includes ₹ 1,68,86,33,76,957/- and ₹. 19,11,09,92,140 pertaining to M.T.P. and Circular Railway (Eastern, South Central & Western Railways) respectively.

(**) इसमें महानगर परिवहन परियोजनाओं और परिक्रमा रेलवे (पूर्व रेलवे, दक्षिण मध्य एवं पश्चिम रेलवे) से संबंधित क्रमशः ₹ **1,66,36,14,36,058** और ₹ **18,98,78,45,936** शामिल हैं।
Includes ₹. 1,66,36,14,36,058 and ₹. 18,98,78,45,936/- pertaining to M.T.P. and Circular Railway (Eastern, South Central & Western Railways) respectively.

($) इसमें मेट्रो रेलवे के **3,15,59,272** ₹ शामिल हैं।
Includes ₹. 3,15,59,272/- pertaining to Metro Railway

($$) इसमें मेट्रो रेलवे के **5,23,44,974/-** ₹ शामिल हैं।
Includes ₹. **5,23,44,974**/- pertaining to Metro Railway

ब्याज देय पूंजी का विवरण अमूर्त परिसम्पत्तियों में दिखाया गया हैं :-
Particulars of Capital-at-charge representing intangible assets.

(1) भारतीय रेल पूंजी संरचना 1978-79 से संबंधित विशेषज्ञ दल की सिफारिशों के अनुसरण में वित्तीय वर्ष 1978-79 में वित्तीय समायोजन के बिना (टी. डब्ल्यू. एफ.ए.) 1,19,45,63,377 ₹ की राशि बट्टे खाते में डाल दी गई. इस राशि को रेल वित्त एवं राजस्व लेखा 1978-79 में दर्शाया गया है।
In the financial Year 1978-79 a sum of ₹.1,19,45,63,377 has been written off without financial adjustment (T.W.F.A.) in pursuance of the recommendations of expert Group on the Capital Structure of Indian Railways in 1978. The same has been exihibited in the Railways Finance & Revenue Accounts 1978-79.

(क) इसमें ऋणपत्रों के संबंध में प्रीमियम, छूट और विनिमय के **2,21,42,719** ₹ शामिल नहीं हैं।
(A) Excludes ₹. 2,21,42,719/- representing premium,discount and exchange on account of debentures discharged.

ANNEXURE II (ii)

F.431 (See Para 431)

Part II. Capital Statement Of Indian GovernmentRailways Comprising Loan Account

(COMMERCIAL LINES)

भाग II—भारत की सरकारी रेलों के ब्लाक लेखों का विवरण-(सामरिक / वाणिज्यिक) 2020-2021
PART II–STATEMENT OF BLOCK ACCOUNT OF INDIAN GOVERNMENT RAILWAYS
(COMMERCIAL / Strategic) 2020-2021

		देयताएं Liabilities			
		31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
	विवरण Particulars	ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
1.	भाग i– पूंजी विवरण के अनुसार पूंजी निवेश Capital invested as in Part-I Capital Statement	...	39,30,09,66,22,994	...	42,29,19,23,95,778
2.	मूल्यह्रास आरक्षित निधि Depreciation Reserve Fund	...	6,52,11,31,08,075	...	6,57,25,28,21,282
3.	विकास निधि Development Fund	...	3,89,99,43,79,429	...	4,00,74,55,29,417

भाग II—भारत की सरकारी रेलों के ब्लाक लेखों का विवरण-(वाणिज्यिक/सामरिक) 2020-2021
PART II–STATEMENT OF BLOCK ACCOUNT OF INDIAN GOVERNMENT RAILWAYS
(COMMERCIAL/Strategic) 2020-2021

विवरण Particulars		परिसम्पत्तियां Assets			
		31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
		ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
1.	परिसम्पत्तियां, जिनकी लागत पूंजी से ली गयी:- Assets financed from Capital :-				
(i)	प्रारम्भिक खर्च Preliminary Expenses	1,35,87,24,52,533	...	1,51,06,57,62,443	...
(ii)	भूमि Land	3,01,28,30,68,376	...	3,20,42,29,99,038	...
(iii)	संरचना इंजीनियरी के कार्य Structural Engineering Works	14,05,08,27,42,674	...	1409800218777	...
(iv)	उपस्कर Equipment	3,47,50,46,91,728	...	3,47,74,04,74,675	...
(v)	चल स्टाक Rolling Stock	7,22,10,96,25,857	...	8,19,85,82,51,347	...
(vi)	सामान्य प्रभार General Charges	1,44,99,34,86,229	...	1,45,12,25,46,403	...
(vii)	सरकारी वाणिज्यिक उपक्रमों में निवेश-सड़क सेवाएं Investment in Govt. Comml. undertaking- Road Service	7,03,13,08,86,747	...	8,59,42,73,86,747	...
(viii)	नई लाइन की खरीद Purchase of New Lines	8,57,96,679	...	8,57,96,679	...
(ix)	उचंत Suspense	2,91,66,51,00,908	...	3,22,20,09,37,308	...
	(घटाइए–विविध प्राप्तियां) (Deduct–Misc. Receipts)	1,21,63,12,28,737	...	1,46,53,19,77,639	...
जोड़ 1 (देखिए–दूसरी ओर मद 1 में किया गया इंदराज) Total 1 (item 1 per contra)		...	39,30,09,66,22,994		42,29,19,23,95,778
2.	परिसम्पत्तियां, जिनकी लागत मूल्यह्रास आरक्षित निधि से ली गयी:- Assets financed from Depreciation Reserve Fund :-				
(i)	प्रारम्भिक खर्च Preliminary Expenses	17,90,41,157	...	23,34,52,863	...
(ii)	भूमि Land	97,09,62,449	...	1,05,38,45,130	...
(iii)	संरचना इंजीनियरी के कार्य Structural Engineering Works	4,87,87,53,92,489	...	4,90,58,57,84,483	...
(iv)	उपस्कर Equipment	88,54,36,70,356	...	91,30,53,72,594	...
(v)	चल स्टाक Rolling Stock	1,71,32,42,41,209	...	1,71,68,72,45,158	...
(vi)	सामान्य प्रभार General Charges	5,11,62,27,116	...	5,17,96,45,364	...
(vii)	सरकारी वाणिज्यिक उपक्रमों में निवेश-सड़क सेवाएं Investment in Govt. Comml. undertaking- Road Service	(-)1	...	-1	...
(viii)	नई लाइन की खरीद Purchase of New Lines	(-)75,19,523	...	-75,19,523	...
	(घटाइए–विविध प्राप्तियां) (Deduct–Misc. Receipts)	1,01,88,89,07,177	...	1,02,78,50,04,786	...
जोड़ 2 (देखिए–दूसरी ओर मद 2 में किया गया इंदराज) Total 2 (item 2 per contra)		...	6,52,11,31,08,075	...	6,57,25,28,21,282
3.	परिसम्पत्तियां, जिनकी लागत विकास निधि से ली गयी:- Assets created out of Development Fund :-				
(i)	प्रारम्भिक खर्च Preliminary Expenses	5,34,43,00,577	...	5,52,16,70,361	...
(ii)	भूमि Land	1,92,51,41,918	...	1,93,14,64,517	...
(iii)	संरचना इंजीनियरी के कार्य Structural Engineering Works	2,60,06,81,77,582	...	2,66,31,07,29,029	...
(iv)	उपस्कर Equipment	1,04,33,50,00,530	...	1,08,54,34,38,340	...
(v)	चल स्टाक Rolling Stock	1,14,15,53,270	...	1,17,25,80,967	...
(vi)	सामान्य प्रभार General Charges	17,51,18,64,957	...	17,60,18,42,681	...
(vii)	नई लाइन की खरीद Purchase of New Lines	3,15,000	...	3,15,000	...
(viii)	सरकारी वाणिज्यिक उपक्रमों में निवेश-सड़क सेवाएं Investment in Govt. Comml. undertaking- Road Service	4,20,501	...	4,20,501	...
	(घटाइए–विविध प्राप्तियां) (Deduct–Misc. Receipts)	33,23,94,906	...	33,69,31,979	...
जोड़ 3 (देखिए–दूसरी ओर मद 3 में किया गया इंदराज) Total 3 (item 3 per contra)		...	3,89,99,43,79,429	...	4,00,74,55,29,417

भाग II—भारत की सरकारी रेलों के ब्लाक लेखों का विवरण-(वाणिज्यिक/सामरिक) 2020-2021

PART II–STATEMENT OF BLOCK ACCOUNT OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL/Strategic) 2020-2021

		देयताएं Liabilities			
		31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
	विवरण Particulars	ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
4.	पूंजी निधि Capital Fund	...	5,34,49,91,37,485	...	5,34,49,91,37,485
5.	रेलवे संरक्षा निधि Railway Safety Fund	...	3,60,49,33,42,166	...	3,60,46,43,57,546
6.	विशेष रेलवे संरक्षा निधि Special Railway Safety Fund	...	1,57,06,99,06,835	...	1,57,06,99,06,835

भाग II—भारत की सरकारी रेलों के ब्लाक लेखों का विवरण-(वाणिज्यिक / सामरिक) 2020-2021
PART II–STATEMENT OF BLOCK ACCOUNT OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL / Strategic) 2020-2021

विवरण Particulars		परिसम्पत्तियां Assets			
		31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
		ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
4.	परिसम्पत्तियां, जिनकी लागत पूंजी निधि से ली गयी:- **Assets Created out of Capital Fund :-**				
(i)	प्रारम्भिक खर्च Preliminary Expenses	30,41,80,59,873	...	30,41,80,59,873	...
(ii)	भूमि Land	4,98,36,14,900	...	4,98,36,14,900	...
(iii)	संरचना इंजीनियरी के कार्य Structural Engineering Works	1,49,88,95,72,335	...	1,49,88,95,72,335	...
(iv)	उपस्कर Equipment	49,88,24,21,708	...	49,88,24,21,708	...
(v)	चल स्टाक Rolling Stock	2,22,62,28,66,553	...	2,22,62,28,66,553	...
(vi)	सामान्य प्रभार General Charges	36,93,43,07,282	...	36,93,43,07,282	...
(vii)	सरकारी वाणिज्यिक उपक्रमों :- सार्वजनिक उपक्रम में निवेश Investment in Govt. undertaking-Public Undertaking	25,40,58,33,563	...	25,40,58,33,563	...
(viii)	गैर सरकारी वाणिज्यिक उपक्रमों में निवेश जे.वी.एस./एस.पी.वी.एस. Investment in non-Govt. undertaking including JVS/SPVS	14,37,32,77,167	...	14,37,32,77,167	...
(xiv)	सड़क सेवा Road Service	1,07,81,00,000	...	1,07,81,00,000	...
(xiv)	विविध अग्रिम Mis.Advance	20,53,38,943	...	20,53,38,943	...
	(घटाइए–विविध प्राप्तियां) (Deduct–Misc. Receipts)	1,29,42,54,839	...	1,29,42,54,839	...
जोड़ 4 (देखिए–दूसरी ओर मद 4 में किया गया इंदराज) Total 4 (item 4 per contra)		...	5,34,49,91,37,485	...	5,34,49,91,37,485
5.	परिसम्पत्तियां, जिनकी लागत रेलवे संरक्षा निधि से ली गयी:- **Assets Created out of Railway Safety Fund**				
(i)	प्रारम्भिक खर्च Preliminary Expenses	2,75,28,18,892	...	2,75,28,58,218	...
(ii)	भूमि Land	5,58,43,60,106	...	5,58,43,60,106	...
(iii)	संरचना इंजीनियरी के कार्य Structural Engineering Works	3,09,42,41,60,414	...	3,09,43,29,83,652	...
(iv)	उपस्कर Equipment	24,64,58,96,219	...	24,63,94,65,585	...
(v)	चल स्टाक Rolling Stock	...	...	...	...
(vi)	सामान्य प्रभार General Charges	19,98,49,13,919	...	19,98,53,36,509	...
(vii)	सरकारी वाणिज्यिक उपक्रमों:- सार्वजनिक उपक्रम में निवेश Investment in Govt. undertaking-Public Undertaking	...	...	...	...
(viii)	Suspense	...		...	...
	(घटाइए–विविध प्राप्तियां) (Deduct–Misc. Receipts)	1,89,88,07,384	...	1,93,06,46,524	...
जोड़ 5 (देखिए–दूसरी ओर मद 5 में किया गया इंदराज) Total 5 (item 5 per contra)		...	3,60,49,33,42,166	...	3,60,46,43,57,546
6.	परिसम्पत्तियां, जिनकी लागत विशेष रेलवे संरक्षा निधि से ली गयी:- **Assets Created out of Special Railway Saftety Fund :-**				
(i)	प्रारम्भिक खर्च Preliminary Expenses	1,24,06,42,028	...	1,24,06,42,028	...
(ii)	भूमि Land	2,57,76,309	...	2,57,76,309	...
(iii)	संरचना इंजीनियरी के कार्य Structural Engineering Works	1,07,99,91,25,402	...	1,07,99,91,25,402	...
(iv)	उपस्कर Equipment	25,38,51,08,645	...	25,38,51,08,645	...
(v)	चल स्टाक Rolling Stock	26,65,93,59,209	...	26,65,93,59,209	...
(vi)	सामान्य प्रभार General Charges	4,01,01,33,227		4,01,01,33,227	...
(vii)	सरकारी वाणिज्यिक उपक्रमों:- सार्वजनिक उपक्रम में निवेश Investment in Govt. undertaking-Public Undertaking	...	...	...	...
(viii)	Suspense	...	...	...	...
	(घटाइए–विविध प्राप्तियां) (Deduct–Misc. Receipts)	8,25,02,37,985	...	8,25,02,37,985	...
जोड़ 6 (देखिए–दूसरी ओर मद 6 में किया गया इंदराज) Total 6 (item 6 per contra)		...	1,57,06,99,06,835	...	1,57,06,99,06,835

भाग II—भारत की सरकारी रेलों के ब्लाक लेखों का विवरण-(वाणिज्यिक / सामरिक) 2020-2021
PART II–STATEMENT OF BLOCK ACCOUNT OF INDIAN GOVERNMENT RAILWAYS
(COMMERCIAL / Strategic) 2020-2021

	विवरण Particulars	देयताएं Liabilities			
		31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
		ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
7.	चालू लाइन निर्माण (राजस्व) Assets created out of Revenue.	...	12,49,72,00,208	...	12,49,72,00,208
8.	राष्ट्रीय रेल संरक्षा कोष Rashtrya Rail Sanrksha Kosh	...	4,90,70,89,39,340	...	4,93,84,12,68,556
9	विविध Miscellaneous	...	...	...	...
(i)	लेखे से बाहर अमरीका से प्राप्त मुफ्त मशीनी औजार U.S excess machine tools received free of Charge out side the account.	...	4,30,55,344	...	4,30,55,344
(ii)	यह रकम लेखे से बाहर मुफ्त ली गई फरीदाबाद विकास बोर्ड साइडिंग की लागत की घोतक हैं Cost of Faridabad Dev Board Siding taken over	...	6,23,816	...	6,23,816
(iii)	अन्य मशीनी औजार Other machine tools.	...	3,000	...	3,000
(iv)	महाराष्ट्र सरकार का अंशदान (सिडको) Contribution by Maharastra Govt (CIDCO)	...	19,91,55,77,051	...	19,91,55,77,051
	जोड़ Total	...	65,47,43,18,95,743	...	68,65,52,18,76,318

ANNEXURE – III

F.431 (See Para 431)

भारत की सरकारी रेलों का तुलन-पत्र (वाणिज्यिक / सामरिक)
BALANCE SHEET OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL / Strategic)

विवरण Particulars	देयताएं Liabilities			
	31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
	ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
1. ब्लाक लेखा विवरण के अनुसार कुल निवेश Total Investment as in the Block Account Statement	...	65,47,43,18,95,743	...	68,65,52,18,76,318
2. फुटकर लेनदार का Sundry Creditors :-				
(क) भविष्य निधि और अन्य निधियां:–				
(a) Provident Fund and other Funds				
(i) सामान्य भविष्य निधि General Provident Fund	1,87,67,07,996	...	2,07,98,15,126	...
(ii) राजकीय रेलवे भविष्य निधि–अंशदायी State Rly. Provident Fund (Contributory)	19,46,55,107	...	19,46,55,107	...
(iii) राजकीय रेलवे भविष्य निधि–अंनशदायी State Rly. Provident Fund (Non-Contributory)	3,88,72,54,12,927	...	3,97,80,54,89,983	...
(iv) भारतीय रेल सम्मेलन कर्मचारी भविष्य निधि Indian Railways Conference Association	...	...	...	...
Employees Provident Fund :-				
अंशदायी Contributory	92,14,931	...	92,14,931	...
अंनशदायी Non-Contributory	3,29,96,018	...	-1,07,97,724	...
(v) अंशदायी (स्थानांतरित रेलवे कार्मिक) भविष्य निधि Contributory (Transferred Railway Personnel) Provident Fund	43,399	...	43,399	...
(vi) अनंशदायी (स्थानांतरित रेलवे कार्मिक) भविष्य निधि Non-Contributory (Transferred Railway Personnel) Provident Fund	-537	...	-537	...
(vii) बचत भविष्य निधि रेलवे Saving Provident Fund Rly.	...	...		
(viii) कर्मचारी हित निधि Staff Benefit Fund	2,57,34,10,405	...	2,83,84,61,423	...
(ix) विविध भविष्य निधि–अनंशदायी Misc. Provident Fund - Contributory	-4,700	...	-4,700	...
(x) विविध भविष्य निधि–अनंशदायी Misc. Provident Fund - Non Contributory	-1,89,610	...	-1,89,610	...
कुल **Total**	...	**3,93,41,22,45,936**	...	**4,02,91,66,87,398**
(ख) विविध निक्षेप				
(b) Miscellaneous Deposits				
(i) अधीनस्थ कर्मचारियों के लिये प्रतिभूति निक्षेप Security Deposits of Subordinates	1,23,61,47,579	...	1,20,10,85,050	...
(ii) ठेकेदारों और अन्य लोगों के प्रतिभूति निक्षेप Security Deposits of Contractors & others	79,59,57,27,104	...	95,39,35,25,074	...
(iii) निजी व्यक्तियों और सार्वजनिक निकायों के लिए किये गये काम का अंशदान Contribution for works done for private persons and public bodies.	47,34,10,05,274	...	29,20,11,00,756	...
(iv) भुगतान न की गई मजदूरी Unpaid Wages	5,19,22,970	...	8,98,38,231	...
(v) ठेकेदारों को देय रकम Sums due to Contractors	3,15,99,44,067	...	3,11,34,71,843	...
(vi) चालित लाइनों की शुद्ध आमदनी Net earnings of worked lines	41,503	...	41,503	...
(vii) निजी कम्पनियां Private Companies	19,87,63,944	...	19,88,86,160	...
(viii) विविध (इसमें अन्य निक्षेप शामिल हैं) Miscellaneous (Including other Deposits)	1,42,27,94,11,557	...	66,06,61,96,674	...
(ix) शाखा लाइन कम्पनियों द्वारा जमा पूंजी Capital Deposited by Branch Lines Companies	...	...	...	...
(x) सार्वजनिक क्षेत्र के बैंक Public Sector Banks	-1,34,51,78,24,988	...	-26,40,11,61,885	...

भारत की सरकारी रेलों का तुलन-पत्र (वाणिज्यिक / सामरिक)
BALANCE SHEET OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL/ Strategic)

	विवरण Particulars	परिसम्पत्तियां Assets			
		31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
		ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
1.	ब्लाक लेखा विवरण के अनुसार अचल और चल परिसम्पत्तियां Fixed and Floating Assets as in the Block Account Statement	...	65,47,43,18,95,743	...	68,65,52,18,76,318
2.	हस्ते रोकड़ Cash in hand	...	6,04,77,50,852	...	7,03,97,50,615
3.	फुटकर देनदार Sundry Debtors :-				
	(क) (i) (a) एफ–रेल कर्मचारियों को ऋण और अग्रिम F–Loans and Advances to Railway Employees	44,10,99,816	...	43,63,98,064	...
	(ii) अन्य विभागीय अग्रिम Other Departmental Advances	12,36,37,679	...	10,00,29,050	...
	(iii) पत्तन और सीमा शुल्क प्राधिकारियों को अग्रिम Advances to Port & Customs Authorities	1,39,00,718	...	1,65,48,634	...
	(iv) रेल कर्मचारियों उपभोक्ता सहकारी समितियों को अग्रिम Advances to Railwaymen's Consumer Co-operative Societies	1,01,434	...	1,01,434	...
	(v) सेवा में मृत कर्मचारियों के परिवार को अग्रिम Advances to the Family of the deceased who died in service.	1,92,88,861	...	1,55,21,706	...
	(ख) (i) (b) यातायात लेखा और अन्य रेलवे Traffic Account and Other Railways	16,59,05,72,370	...	15,69,68,21,599	...
	(ii) वसूलनीय मांग Demands Recoverable	3,56,44,15,318	...	3,90,95,96,342	...
	(ग) विविध अग्रिम (राजस्व) (c) Miscellaneous Advance (Revenue)	17,35,59,15,172	...	18,19,68,90,180	...
	(घ) केन्द्रीय सरकार के पास फुटकार निक्षेप (देखिए दूसरी ओर मद 2(ख) में किया गया इंदराज) (d) Sundry Deposits with Central Government (Vide item 2 (b) per contra)	2,97,62,66,32,864	...	2,19,74,80,84,007	...
		...	3,35,73,55,64,232	...	2,58,11,99,91,016
4.	निवेश Investment				
	(क) (a) भारतीय रेल सम्मेलन कर्मचारी भविष्य निधि Indian Railways Conference Association Employees Provident Fund	...	-14,95,88,506	...	-19,25,88,973
	(ख) कर्मचारी हित निधि (b) Staff Benefit Fund.	...	1,00,000	...	1,00,000
5.	सरकार के पास बचत बैंक लेखा (देखिए दूसरी ओर मद 2 (क) 3 और 4 का मद (i) से (vi) मद (v) छोड़कर में किया इंदराज उपर्युक्त मद 4 घटाकर) Savings Bank Account with Government. (Vide item 2 (a) 3 (i) to (vi) except item (v) per contra) minus item 4 above	...	53,94,73,05,503	...	3,90,26,16,62,169
6.	विकास निधि निवेश लेखा (देखिए दूसरी ओर मद 3 मद (v) में किया गया इंदराज) Development Fund Investment Account (Vide item 3 (v) per contra)	...	22,75,947	...	22,75,947
7.	(क) राज्यों के साथ हिसाब-किताब (a) Account with States	...	...	...	...
	(ख) केन्द्र के साथ हिसाब-किताब (सिविल) (b) Account with Civil	...	10,70,97,437	...	10,70,97,437

भारत की सरकारी रेलों का तुलन-पत्र (वाणिज्यिक / सामरिक)
BALANCE SHEET OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL/Strategic)

विवरण Particulars	देयताएं Liabilities			
	31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
	ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
(xi) ट्रस्ट ब्याज लेखा Trust interest Account	-19,69,83,545	...	-19,69,83,545	...
(xii) रिजर्व बैंक के साथ हिसाब-किताब Account with Reserve Bank	1,53,91,277	...	3,73,95,477	
(xiii) बैंक में प्रेषण Remittance into Banks	-20,19,23,75,873	...	-23,41,32,081	
(xiv) चैक और बिल Cheques and Bills	1,78,02,96,71,451	...	50,08,09,42,805	
(xv) डी.एच. रेलवे के संबंध में बकाया देयताएं Other deposit and companies Outstanding liabilities of D.H. Rlys.	8,44,745	...	8,44,745	...
(xvi) वेतन एवं लेखा कार्यालय उचन्त P.A.O. Suspense	-1,93,54,45,063	...	-1,12,87,28,538	
(xvii) जुर्माना व जब्ती लेखा Fine Forfeiture Account	-7,248	...	-7,248	...
(xviii) अन्य लेन देन Other Transaction	-2,71,12,59,089	...	-2,85,78,07,970	
(xix) अतिरिक्त मजदूरी और मंहगाई भत्ता निक्षेप उचन्त लेखा Addl. D.A. Deposit Suspense Account	3,694	...	3,694	...
(xx) नई पेंशन योजना New Pension Scheme	3,24,95,362	...	2,42,60,713	
(xxi) भविष्य निधि, जिसका दावा नहीं किया गया Unclaimed Provident Fund Deposits	7,08,52,358	...	10,90,12,024	
(xxii) ए.जी. उचंत लेखा A.G. Suspense Account	-1,52,69,36,452	...	-1,64,49,41,712	
(xxiii) सरकारी कंपनियों के निक्षेप/भा.रे.वि.नि. Deposits of Govt. Companies/IRFC	6,69,52,42,237	...	6,69,52,42,237	...
2.(ख) जोड़ (विविध निक्षेप) **(b) Total (Misc. Deposits)**	...	2,97,62,66,32,864	...	2,19,74,80,84,007
2.(ग) देय मांगे (c) Demands Payable	...	52,52,66,92,024	...	57,00,54,55,346
3. (i) मूल्यह्रास आरक्षित निधि Depreciation Reserve Fund	...	-24,31,41,00,630	...	-28,02,83,23,960
(ii) पेंशन निधि Pension Fund	...	-3,33,64,29,43,421	...	-15,23,00,04,284
(iii) विकास निधि Development Fund	...	5,19,27,41,064	...	10,16,53,05,652
(iv) पूंजी निधि Capital Fund	...	4,00,35,26,686	...	4,13,96,46,593
(v) विकास निधि-निवेश Development Fund-Investment	...	22,75,947	...	22,75,947
(vi) ऋण सेवा निधि Debt Service Fund	...	2,14,72,30,913	...	2,22,02,36,764
(vii) रेलवे संरक्षा निधि Railway Safety Fund	...	5,05,25,01,188	...	5,12,08,96,240
(vii) राष्ट्रीय रेल संरक्षा कोष Rashtriya Rail Sanraksha Kosh	...	1,94,66,15,261	...	8,76,47,28,793

भारत की सरकारी रेलों का तुलन-पत्र (वाणिज्यिक / सामरिक)
BALANCE SHEET OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL / Strategic)

विवरण Particulars		परिसम्पत्तियां Assets			
		31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
		ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
8.	पाकिस्तान सरकार की रेलों के साथ हिसाब-किताब – (रेलवे) Account with the Government of Pakistan (Railways)	...	4,85,83,073	...	4,39,30,073
9.	पाकिस्तान सरकार के साथ हिसाब-किताब – (सिविल) Account with the Government of Pakistan (Civil)	...	51,991	...	51,991
10.	डाक-तार विभाग के साथ लेखा समायोजन Adjusting Account with Post and Telegraph Department	...	52,25,62,637	...	58,26,47,777
11.	रक्षा विभाग के साथ लेखा समायोजन Adjusting Account with Defence	...	88,18,08,622	...	79,89,23,465

भारत की सरकारी रेलों का तुलन-पत्र (वाणिज्यिक / सामरिक)
BALANCE SHEET OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL / Strategic)

विवरण Particulars			देयताएं Liabilities			
			31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
			ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
4.	(i)	रेल कर्मचारियों आदि को दिये गये ऋण और अग्रिम के संबंध में केन्द्रीय सरकार को देय शेष रकम (देखिए दूसरी ओर मद 3 (क) (i) में किया गया इंदराज) Balance due to Central Government for Loans & Advances to Railway Employees etc. (Vide item 3 (a) (i) per contra)	...	44,10,99,816	...	43,63,98,064
	(ii)	अन्य विभागीय अग्रिम (देखिए दूसरी ओर मद 3 (क) (ii) में किया गया इंदराज) Other Departmental Advances (Vide item 3 (a) (ii) per contra)	...	12,36,37,679	...	10,00,29,050
	(iii)	पत्तन और सीमा शुल्क प्राधिकारियों को अग्रिम (देखिए दूसरी ओर मद 3 (क) (iii) में किया गया इंदराज) Advances to Port & Customs (Vide item 3 (a) (iii) per contra)	...	1,39,00,718	...	1,65,48,634
	(iv)	रेल कर्मचारी उपभोक्ता सहकारी समितियों को अग्रिम (देखिए दूसरी ओर मद 3 (क) (iv) में किया गया इंदराज) Advance to Railway men's Consumer Co-operative Socities (Vide item 3 (a) (iv) per contra)	...	1,01,434	...	1,01,434
	(v)	सेवा अवधि में मृत कर्मचारियों के परिवारों को अग्रिम (देखिए दूसरी ओर मद 3 (क) (v) में किया गया इंदराज) Advance to the family of the Deceased who died in Service (Vide item 3 (a) (v) per contra)	...	1,92,88,861	...	1,55,21,706
5.		अन्तरण में शेष Balance in Transfer	...	...	...	...
6.		सरकार आदि के पास लेखे में शेष रकम Balance of amount in account with Government etc.	...	...	...	...
		जोड़ Total	**...**	**69,51,98,33,42,083**	**...**	**75,32,91,54,63,702***

टिप्पणी : उपरोक्त मदों में शेष को संघ सरकार के वित्त खातों की संख्या 13की विवरणी के साथ मिलान किया जा रहा है।
Note : Balances under above head are being reconciled with Statement No. 13 of Union Government Finance Accounts.

- भारतीय रेलवे राजस्व और पूंजी के लेखांकन के लिए नकद आधारित सरकारी लेखांकन सिद्धांतों का पालन करता है। पूंजीगत व्यय के अधीन कार्य में प्रगति को संबंधित लघुशीर्ष के अंतर्गत शामिल किया जाता है।

  Indian Railway follows the cash based government accounting principles for accounting of revenue and capital. Works in progress is included in the respective minor head of account under capital expenditure.

- मूल्यह्रास प्रावधान भारतीय रेलवे की समग्र वित्तीय स्थिति के अधीन आयु/संपत्ति की स्थिति के आधार पर मूल्यह्रास आरक्षित निधि के तहत किया जाता है। परिसंपत्तियों का नवीनीकरण और प्रतिस्थापन किया जाता है और इसके अलावा अन्य निधियों से सरकार द्वारा विशेष रूप से बनाई गई।

  Depreciation provision is made under Depreciation reserve fund based on age/condition of assets subject to overall financial position of IR. The renewal and replacement of assets is done from said fund apart from other funds especially created by Government.

- भारतीय रेलों पर समग्र रूप से आगामी वर्षों में होने वाले पेंशन व्यय के आधार पर पेंशन निधि का प्रावधान है। इससे पेंशन का व्यय किया जाता है।

  Pension provision is made based on the pension expenditure in ensuing years and the overall financial position of IR. The pension expenditure is met from the said fund.

* वर्ष 2020-21 के दौरान इसमें भा.रे.वि.नि. से पट्टे पर ली गई परिसम्पत्तियों की 29110.39 करोड़ रु. की राशि और मार्च, 2021 के अंत तक 258475.08 करोड़ रू. की राशि शामिल नहीं है, और वर्ष 2020-21 के दौरान भा.रे.वि.नि. को देय पट्टे प्रभारों के पूंजी घटक की 11948.24 करोड़ रु. की राशि शामिल है। मार्च 2021 के अंत तक पट्टे प्रभार की संचयी, पूंजी घटक 82272.04 करोड़ रु. है

Excludes the assets taken on lease from IRFC amounting to Rs.29110.39 crore during the year 2020-21 and Rs. 258475.08 crores to end of March, 2021, and includes Capital Component of the lease charges paid to IRFC amounting to Rs.11948.24 crores during the year 2020-21 as per revised accounting treatment. The cumulative Capital Component of lease charges to end of March'2021 comes to Rs.82272.04 crores

* ₹27635.47 करोड़ और ₹50575.29 करोड़ ईबीआर-आईएफ और एस वर्ष के दौरान 2020-21 और ₹124337.74 करोड़ और ₹ 50575.29 करोड़ वर्ष के अंत तक शामिल नहीं है।

Excludes value of project undertaken under EBR-IF&S amounting to ₹ 27635.47 Cr, ₹ 50575.29 cr. during the year 2020-21 and ₹ 124337.74 Cr, ₹ 50575.29 Cr to end of March, 2021 respectively.

भारत की सरकारी रेलों का तुलन-पत्र (वाणिज्यिक / सामरिक)
BALANCE SHEET OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL / Strategic)

	परिसम्पत्तियां Assets			
	31 मार्च, 2020 को As on 31st March, 2020		31 मार्च, 2021 को As on 31st March, 2021	
विवरण Particulars	ब्यौरा Details ₹	रकम Amount ₹	ब्यौरा Details ₹	रकम Amount ₹
12. बाँग्लादेश सरकार के साथ हिसाब-किताब Account with Government of Bangladesh	...	2,44,37,90,813	...	2,67,92,34,063
13. अन्तरण में शेष Balance in Transfer	...	...	...	...
14. सरकार आदि के पास लेखे में शेष रकम Balance of amount in account with Government etc.	...	4,96,41,43,739	...	7,95,05,11,804
जोड़ Total	**...**	**69,51,98,33,42,083**	**...**	**75,32,91,54,63,702***

नरेश सालेचा NARESH SALECHA
सदस्य वित्त, रेलवे बोर्ड, पदेन सचिव, भारत सरकार
(रेल मंत्रालय)
Member Finance, Railway Board
Ex-Officio Secretary to Government of India
(Ministry of Railways)

विनय कुमार त्रिपाठी VINAY KUMAR TRIPATHI
अध्यक्ष एवं मुख्य कार्यकारी अधिकारी, रेलवे बोर्ड,
पदेन प्रमुख सचिव, भारत सरकार
(रेल मंत्रालय)
Chairman & Chief Executive Officer, Railway Board
Ex-Officio Principal Secretary, Government of India
(Ministry of Railways)

लेखा परीक्षा प्रमाण पत्र AUDIT CERTIFICATE

यह प्रमाणित किया जाता है कि पूर्ववर्ती लेखों एवं तुलन-पत्र की जाँच मेरे निर्देशन में की गई है। भारतीय रेल के इन लेखों का दायित्व सदस्य वित्त, रेलवे बोर्ड, पदेन सचिव, भारत सरकार (रेल मंत्रालय) तथा अध्यक्ष एवं मुख्य कार्यकारी अधिकारी, रेलवे बोर्ड, पदेन प्रमुख सचिव, भारत सरकार (रेल मंत्रालय) का है। हमारा दायित्व लेखा परीक्षा के आधार पर इन लेखों पर मत व्यक्त करना है।

It is certified that the foregoing Accounts and Balance Sheet have been examined under my direction. These accounts of Indian Railways are the responsibility of the Member Finance, Railway Board, Ex-Officio Secretary to Government of India (Ministry of Railways) and Chairman & Chief Executive Officer, Railway Board, Ex-officio Principal Secretary, Government of India (Ministry of Railways). Our responsibility is to express an opinion on these accounts based on our audit.

हमने अपनी लेखा परीक्षा भारत में सामान्य रूप से स्वीकार्य लेखा परीक्षा मानकों के अनुसार की है। उन मानकों में यह अपेक्षित है कि हम अपनी लेखा परीक्षा की आयोजना और निष्पादन इस प्रकार करें ताकि हमें समुचित आश्वासन प्राप्त हो जाए कि लेखों में कोई वस्तुपरक गलत विवरण नहीं है। लेखा परीक्षा में, नमूना-जाँच के आधार पर, राशियों के समर्थन में साक्ष्य और लेखों में प्रकटन की जाँच करना शामिल है। लेखा परीक्षा में प्रयुक्त लेखांकन सिद्धान्तों तथा महत्वपूर्ण प्राक्कलनों के आकलन के साथ-साथ लेखों की समग्र प्रस्तुति का मूल्यांकन भी शामिल है। हमें विश्वास है कि हमारी लेखा परीक्षा हमारे मत के लिए तर्कसंगत आधार प्रस्तुत करती है।

We conducted our audit in accordance with the auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the accounts are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the accounts. An audit also includes assessing the accounting principles used and significant estimates made, as well as evaluating the overall presentation of accounts. We believe that our audit provides a reasonable basis for our opinion.

मेरे अधिकारियों द्वारा मांगी गई और प्राप्त की गई सूचना तथा स्पष्टीकरण के आधार पर और लेखों की नमूना-जाँच के परिणामस्वरूप अपनी सर्वोत्तम जानकारी के अनुसार, 31 मार्च 2021 को समाप्त हुए वर्ष के लिए भारत के नियंत्रक-महालेखापरीक्षक द्वारा संघ सरकार - संघ सरकार के लेखे (वित्तिय लेखापरीक्षा) पर प्रतिवेदन में किये गये अभिमतों के अधीन रहते हुए, मैं प्रमाणित करता हूँ कि यह लेखे और तुलन पत्र भारतीय रेल के कार्यों की स्थिति का सही एवं उचित चित्रण प्रस्तुत करते हैं।

On the basis of the information and explanations that my officers required and have obtained, and according to the best of my information as a result of test audit of the accounts, I certify that the accounts and Balance Sheet exhibit a true and fair view of the state of affairs of Indian Railways subject to the observations in the Report of the Comptroller & Auditor General of India on Union Government - Accounts of the Union Government (Financial Audit) for the year ended 31 March 2021.

सुनील दाढे SUNIL DADHE
उप नियंत्रक एवं महालेखा परीक्षक (रेलवे)
Deputy Comptroller and Auditor General (Railways)

ANNEXURE IV

F. 431 B (See Para 431)

Profit And Loss Account Of Indian Government Railways (Commercial Lines)

भारत की सरकारी रेलों का लाभ-हानि लेखा (वाणिज्यिक / सामरिक)
PROFIT AND LOSS ACCOUNTS OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL / Strategic)

नामे (DEBIT)

	विवरण Particulars	2019-2020 ब्यौरा Details ₹	2019-2020 रकम Amount ₹	2020-2021 ब्यौरा Details ₹	2020-2021 रकम Amount ₹
1.	संचालन व्यय Working Expenses	...	16,98,71,84,01,308	...	13,55,91,15,22,332
2.	चालित लाइनों का भुगतान Payment to Worked Lines	...	86,600	...	...
3.	छूट और आर्थिक सहायता Rebate and Subsidy	...	...	...	...
4.	सर्वेक्षण Survey	...	21,32,33,577	...	63,78,72,994
5.	सांविधिक लेखा परीक्षा Statutory Audit	...	3,04,22,02,593	...	2,97,88,73,324
6.	सरकारी निरीक्षण Government Inspection	...	...	...	...
7.	विविध स्थापनाएं Miscellaneous Establishments	...	47,62,92,949	...	45,78,22,701
8.	विविध प्रभार Miscellaneous Charges	...	...	...	...
9.	रेलवे बोर्ड का खर्च Cost of Railway Board.	...	14,08,81,26,900	(क) (A)	12,56,63,77,306
10.	चालू लाइन निर्माण–राजस्व Open Line Works–Revenue	...	...	...	...
11.	एम.यू.टी.पी. का विनियोग Appropriation to MUTP	...	...	...	...
12.	एम.यू.टी.पी. को भुगतान Payment Towards MUTP	...	... ...	...	...
13.	सामान्य राजस्व का देय लाभांश Dividend Paid to General Revenues	....	...	...	...
14.	लाभ Profit	...	10,09,07,78,363	...	11,66,94,66,669
	जोड़ Total	...	17,26,62,91,22,290	...	13,84,22,19,35,326

नोट- 1. कुल लाभ (वाणिज्यिक और सामरिक) के आंकड़े भारत की केन्द्रीय और राज्य सरकारों से संयुक्त वित्त और राजस्व लेखे में दिये गये समतुल्य आंकड़ो से भिन्न है। इसका कारण यह है कि लाभ और हानि लेखे में लाभ के आंकड़े वर्ष 2020-21 की आमदनी और संचालन व्यय के आधार पर निकाले गये है जबकि भारत की केन्द्रीय और राज्य सरकारों के संयुक्त वित्त और राजस्व के आंकड़े प्राप्ति और खर्च (रोकड़) के आधार पर निकाले गये है।

Note - The figures of total profit (Commercial and Strategic) differ from the similar figures appearing in the Combined Finance and Revenue Accounts of the Central & State Government in India due to profit and loss Accounts having been worked out on the gross earnings and working expenses pertaining to the year 2020-2021 while those in the combined Finance and Revenues Accounts of the Central and State Government in India have been worked out on Receipt and Expenditure (Cash) basis.

वाणिज्यिक लाइनों पर लाभ Profit on Commercial Lines	₹ 11,66,94,66,669
सामरिक लाइनों पर लाभ Profit on Strategic Lines	₹ 9,61,77,48,826
लाभ Profit	₹ 21,28,72,15,495

वर्ष 2020-21 के लिए उचन्त लेन-देन, देय मांगे, विविध अग्रिम राजस्व और यातायात लेखा
Suspense Transaction for the year 2020-21 Demand Payable, Miscellaneous Advance Revenue and Traffic Account :-

	वाणिज्यिक लाइनें Commercial Lines	सामरिक लाइनें Strategic Lines	जोड़ Total
(नामे) Debit	-3,63,90,39,159	...	-3,63,90,39,159
(जमा) Credit	54,85,69,747	...	54,85,69,747
शुद्ध Net	-4,18,76,08,906	...	-4,18,76,08,906

भारत के केन्द्रीय और राज्य सरकारों के संयुक्त वित्त एवं राजस्व लेखों में भारतीय रेलों के शुद्ध लाभ के आंकड़े **25,47,48,24,401**
Net Profit figures of Indian Railways in the Combined Finance and Revenue Accounts of the Central and State Government

(क) रेलवे बोर्ड की लागत के द्योतक प्रोफार्मा आकड़ो में रेलवे बोर्ड की लागत ₹ 4,54,99,59,871 एवं आर.डी.एस.ओ. ₹ 3,14,66,11,212/- विविध स्थापनाएं ₹ 2,75,17,55,976/- विविध प्रभार ₹ 2,08,46,05,445/- और सांविधिक लेखा परीक्षा ₹ 3,34,44,802/- सम्मिलित है।

(A) Proforma figures representing Cost of Railway Board Comprises of Railway Board- ₹ 4,54,99,59,871 & R.D.S.O. ₹ 3,14,66,11,212/-, Misc Establishment ₹ 2,75,17,55,976/- Misc. charges ₹ 2,08,46,05,445/- and Statutory Audit ₹ 3,34,44,802/-.

भारत की सरकारी रेलों का लाभ-हानि लेखा (वाणिज्यिक / सामरिक)
PROFIT AND LOSS ACCOUNTS OF INDIAN GOVERNMENT RAILWAYS (COMMERCIAL / Strategic)

जमा (CREDIT)

	विवरण Particulars	2019-2020 ब्यौरा Details ₹	2019-2020 रकम Amount ₹	2020-2021 ब्यौरा Details ₹	2020-2021 रकम Amount ₹
1.	कुल आमदनी Gross Earning	...	17,23,24,81,97,383	...	13,82,09,16,28,000
2.	अधिशेष लाभ में सरकार का हिस्सा Government share of Surplus Profits	...	1,43,791	...	-2,52,912
3.	विविध प्राप्तियां Miscellaneous Receipts	...	2,26,72,71,458	...	1,59,22,23,825
4.	लाभांश राहतों और अन्य रियायतों के लिए सामान्य राजस्व से आर्थिक सहायता Subsidy received from General Revenues towards Dividend Reliefs and other concessions.	...	...	...	...
5.	रेलवे भर्ती बोर्ड Railway Recruitment Board.	...	1,11,35,09,658	...	53,83,36,413
	जोड़ Total	...	**17,26,62,91,22,290**	...	**13,84,22,19,35,326**

1. वाणिज्यिक लाइनों के लाभ और हानि लेखे - मद सं. 1 'संचालन व्यय' (नामे की ओर) जिसमें मूल्यह्रास आरक्षित निधि और पेंशन निधि में क्रमशः ₹ 1,87,96,71,250/- और ₹ 5,21,24,35,196/- विनियोजन के कारण शामिल हैं (उत्पादन ईकाईयों का अशं छोड़कर)। मद सं. 5,7 और 9 जिसमें पेंशन निधि में ₹ 1,00,00,00,000/- विनियोजन के कारण शामिल (उत्पादन ईकाईयों का अशं छोड़कर) हैं।
   Commercial Lines: The working Expenses shown at Item No. 1 on Debit side includes appropriation to Depreciation Reserve Fund ₹ 1,87,96,71,250/- (excluding Production Units) and appropriation to Pension Fund to ₹ 5,21,24,35,196/- (excluding Production Units) Items Nos. 5,7 & 9 on Debit side also include appropriation to Pension Fund amounting to ₹ 1,00,00,00,000/-

ANNEXURE V

F. 432 (See Para 432)

Chittaranjan Locomotive Works Manufacturing Account

382

चितरंजन रेल इंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS
निर्माण लेखा-(रेल इंजनों का) वर्ष 2020-2021
MANUFACTURING ACCOUNT OF - (Loco Works for the Year 2020-2021)

नामे DEBIT
(आंकड़े रुपयें में Figures in Unit of Rs.)

	विवरण Particulers	2019 – 2020 ब्यौरा Details	2019 – 2020 रकम Amount	2020– 2021 ब्यौरा Details	2020– 2021 रकम Amount
1.	अधशेष To Opening Balance :-				
	(क) चालू काम Works in progress	...	-4,08,99,20,422	...	94,97,95,882
	(ख) विकास उचन्त लेखा Development Suspense Account	...	...	...	...
2.	मजदूरी To Labour :-				
	(क) कारखाना प्रत्यक्ष Workshop Direct	...	2,46,58,75,941	...	1,80,97,69,444
	(ख) कारखाना अप्रत्यक्ष Workshop Indirect	...	1,37,96,09,267	...	2,68,01,39,342
	(ग) प्रशासनिक और सेवा विभाग Administrative and Service Department	...	38,72,58,20,444	...	3,76,66,75,441
	(घ) लेवर खर्चा Labour cost transferred from Zonal Railways	...	...	...	...
3.	भण्डार To Stores :-				
	(i) भण्डार से निकासी Issues from stock	...	...	...	...
	(क) कारखाना प्रत्यक्ष Workshop Direct	...	41,65,63,19,614	...	34,63,13,35,429
	(ख) आन्तरिक जमा कर Input Tax Credit		-3,79,00,00,000	...	-3,38,55,19,147
	(ग) कारखाना अप्रत्यक्ष Workshop Indirect	...	24,04,09,815	...	17,58,28,364
	(घ) कारखानों के अलावा अन्य विभाग Department other than workshop	....	45,40,21,702	...	3,28,84,011
	(ii) विविध समायोजन Miscellaneous Adjustments :-				
	(क) कारखाना प्रत्यक्ष Workshop Direct	...	...	...	...
	(ख) कारखाना अप्रत्यक्ष Workshop Indirect	...	23,80,99,096	...	16,21,49,146
	(ग) कारखानों के अलावा अन्य विभाग Department other than workshop	...	13,31,20,279	...	27,70,86,005
4.	अप्रत्यक्ष To Indirect Changes :-				
	(क) मूल्यह्रास आरक्षित निधि में विनियोग Appropriation to Depreciation Reserve Fund	...	40,50,00,000	...	40,50,00,000
	(ख) भविष्यि निधि, बोनस, सेवा निवृति उपदान तथा भविष्य निधि में विशेष अंशदान Superannuation Gratuity etc.	...	...	...	...
	(ग) पेंशन योजना Pension Scheme	...	22,54,92,698	...	22,26,36,814
	(घ) भाड़ा और आनुंषगिक प्रभार Freight and Incidental Charges	...	47,28,107	...	75,75,849
	(ड़) पेंशन फंड Appropriation to Pension Fund	...	1,32,30,00,000	...	1,32,30,00,000
5.	अन्य प्रभार To Other Charges :-				
	(क) बिजली ऊर्जा की थोक खरीद Bulk Purchase of Electric Energy	...	17,48,69,747	...	15,61,47,079
	(ख) जिएसटी GST	...	6,21,28,520	...	7,24,53,655
	(ग) तकनीकी सहायता आदि सहित विविध प्रभार Miscellaneous Charges including SBF, TOT	...	1,00,86,768	...	21,17,26,858
	(घ) ..... Amortisation of WIP Balance of SF	...	98,07,84,800	...	...
	(ड.) नये निमार्ण कार्य-परिवर्धन और बदलाव-ऊपरी खर्च में प्रभारित New Works–Additions and Replacements Chargeable to overheads.	...	...	...	...
	(च) चिकित्सा व्यय कोविड व्यय सहित Medical Expenditure including Covid Exp.		...	...	18,07,73,122
6.	मकान किराया, बिजली प्रभारों आदि के संबंध में कम प्राप्ति Less receipts on account of house rent, electric charges etc.	...	-29,60,37,543	...	-28,21,40,836
7.	एस.एफए (xvi) से वसूल-ए.ओ.एच.और टी.ओ.एच के हिस्से Shares of AOH & TOH realised from SF (xvi)	...	...	...	-1,62,99,998
8.	विकास कार्य Development Works	...	...	...	...
9.	भण्डार समायोजन खाते से निपटान To Clearance from Stock Adj. Account	...	-22,84,53,279	...	-183866255
	जोड़ Total	...	**45,22,17,15,554**	...	**43,19,71,50,205**

चितरंजन रेल इंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS

निर्माण लेखा-(रेल इंजनों का) वर्ष 2020-2021

MANUFACTURING ACCOUNT OF - (Loco Works for the Year 2020-2021)

नामे CREDIT

(आंकड़े रुपयें में Figures in Unit of Rs.)

	विवरण Particulers	2019– 2020 ब्यौरा Details	2019– 2020 रकम Amount	2020– 2021 ब्यौरा Details	2020– 2021 रकम Amount
1.	रेलों के लिए किए गये काम :- By work done for Railways :-				
	(क) बोर्ड के चल स्टाक कार्यक्रम मदों के लिए रेलों को (A) Supply of Locomotives to Railways against Board's RSP item	...	39,38,81,80,000	...	38,26,22,61,000
	(ख) सार्वजनिक क्षेत्र उपक्रम को रेल इंजनों की सप्लाई (B) Supply of Locomotives to Public Sector Undertakings	...	...	...	...
	(ग) अतिरिक्त बायलरों की सप्लाई (C) Supply of spare Boilers	...	...	...	...
	(घ) विविध सप्लाई (D) Miscellaneous Supplies	...	...	...	...
2.	पूंजी भंडार उचन्त By Capital Stores Suspense :-				
	(क) निर्मित सामग्री (A) Manufactured Materials	...	4,77,98,42,072	...	4,05,29,41,438
	(ख) वापस किया गया भण्डार (B) Returned Stores	...	...	...	...
3.	पूंजी निर्माण कार्य By Capital Works :-				
	(क) संयंत्र और मशीनरी (A) Plant and Machinery	...	...	...	...
	(ख) अन्य निर्माण कार्य (B) Other Works	...	...	...	...
4.	मूल्यह्रास आरक्षित निधि से किये गये निर्माण कार्य By Depreciation Reserve Fund Works	...	...	...	...
5.	रेल इंजनों (निजी पार्टी/सार्वजनिक उपक्रम) का लेखे के अन्तर्गत किया गया काम Work done on Deposit Account other than loco (private party/PSU)	...	...	...	...
6.	भंडार वापसी:- By Returned Stores :-				
	(क) प्रत्यक्ष (xv क) Direct (xva)	...	...	...	...
	(ख) अप्रत्यक्ष (xv ख) In Direct (xvb)	...	10,38,97,601	...	13,14,83,829
	(ग) नये कार्य (xv ग) परिवर्धन एवं परिवर्तन (c) New works (xvc) additional & Replacement	...	...	...	...
7.	इतिशेष By Closing Balance :-				
	(क) चालू काम (A) Works in progress	...	94,97,95,881	...	75,04,63,938
	(ख) विकास उचन्त लेखा (B) Development Suspense Account	...	...	...	...
	जोड़ Total	**...**	**45,22,17,15,554**	**...**	**43,19,71,50,205**

चितरंजन रेल इंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS

निर्माण लेखा-(इस्पात ढलाई कारखाना) वर्ष 2020-2021 के लिए

MANUFACTURING ACCOUNT OF (STEEL FOUNDRY) FOR THE YEAR 2020-2021

नामे DEBIT

(आंकड़े रुपयें में Figures in Unit of Rs.)

	विवरण Particulers	2019–2020 ब्यौरा Details	2019–2020 रकम Amount	2020–2021 ब्यौरा Details	2020–2021 रकम Amount
1.	अधशेष To Opening Balance :-				
	(क) चालू काम Works in progress	...	3,48,02,42,233	...	1,81,49,51,075
	(ख) बिक्री पर लाभ और हानि (b) Profit & loss on sale	...	...	...	...
	(ग) विकास उचन्त लेखा (c) Development Suspense Account	...	...	...	...
2.	मजदूरी To Labour :-				
	(क) कारखाना प्रत्यक्ष (a) Workshop Direct	...	9,48,26,839	...	4,49,06,776
	(ख) कारखाना अप्रत्यक्ष (b) Workshop Indirect	...	24,47,29,982	...	25,91,61,803
	(ग) प्रशासनिक और सेवा विभाग (c) Administrative and Service Department	...	6,25,34,502	...	5,88,42,833
3.	भण्डार To Stores :-				
	(i) भण्डार से निकासी Issues from stock	...			
	(क) कारखाना प्रत्यक्ष (a) Workshop Direct	...	8,56,83,727	...	6,14,75,783
	(ख) कारखाना अप्रत्यक्ष (b) Workshop Indirect	...	11,52,58,399	...	8,83,08,812
	(ग) कारखानों के अलावा अन्य विभाग (c) Department other than workshop	...	16,28,915	...	13,58,980
	(ii) विविध समायोजन Miscellaneous Adjustments :-				
	(क) कारखाना प्रत्यक्ष (a) Workshop Direct	...	27,06,615	...	6,49,496
	(ख) कारखाना अप्रत्यक्ष (b) Workshop Indirect	...	...		18,15,107
	(ग) कारखानों के अलावा अन्य विभाग Department other than workshop	...	...		19,49,030
4.	अप्रत्यक्ष प्रभार To Indirect Charges :-				
	(क) मूल्यह्रास आरक्षित निधि में विनियोग (a) Appropriation to Depreciation Reserve Fund	...	4,50,00,000	...	4,50,00,000
	(ख) भविष्यि निधि, बोनस, सेवा निवृति उपदान तथा भविष्य निधि में विशेष अंशदान (b) Provident Fund, Bonus, Gratuity and Special Contribution to Provident Fund.	...	...	...	...
	(ग) भाड़ा और आंनुषगिक प्रभार (c) Freight and Incidental Charges	...	...	...	85,936
	(घ) एन पी एस (d) Cont to New Pension Scheme	...	...	...	98,28,507
	(ड.) पेंशन प्रभार (e) Pensionary Charges	...	...	...	...
	(छ) पेंशन योजना (f) Appropriation to Pension Fund	...	14,70,00,000	...	14,70,00,000
5.	अन्य प्रभार To Other Charges :-				
	(क) बिजली ऊर्जा की थोक खरीद (a) Bulk Purchase of Electric Energy	...	3,75,85,790	...	3,02,61,000
	(ख) उत्पाद शुल्क / जीएसटी (b) Excise Duty / GST	...	...	...	22,74,039
	(ग) तकनीकी सहायता आदि सहित विविध प्रभार (c) Miscellaneous Charges including Technical Aid etc.	...	...	...	...
	(घ) नये निमार्ण कार्य-परिवर्धन और बदलाव-ऊपरी खर्च में प्रभारित (d) New Works–Additions and Replacements Chargeable to overheads.	...	...	...	...
	(ड.) लोको वर्क्स के लिए डब्ल्यू आई पी शेष का परिशोधन (e) Amortisation of WIP Balance to Loco Works		-98,07,84,800	...	...
6.	मकान किराया, बिजली प्रभारों आदि के संबंध में कम प्राप्ति Less receipts on account of house rent, electric charges etc.	...	-1,87,02,015	...	-61,42,535
7.	लोको कारखाने से अन्तरित ए.ओ.एच. और टी.ओ.एच. के हिस्से Shares of AOH & TOH transfered from Loco Shops	...	...	...	1,62,99,998
	जोड़ Total	...	**3,31,77,10,187**	...	**2,57,80,26,640**

चितरंजन रेल इंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS

निर्माण लेखा-(इस्पात ढलाई कारखाना) वर्ष 2020-2021 के लिए

MANUFACTURING ACCOUNT OF (STEEL FOUNDRY) FOR THE YEAR 2020-2021

जमा CREDIT

(आंकड़े रुपयें में Figures in Unit of Rs.)

	विवरण Particulers	2019–2020 ब्यौरा Details	2019–2020 रकम Amount	2020–2021 ब्यौरा Details	2020–2021 रकम Amount
1.	रेलों के लिए किए गये काम By work done for Railways :-				
	(क) लोकोमोटिवस (पूर्जो सहित) की सप्लाई (a) Supply of Locomotives incdg TOT supply of spares	...	62,24,63,810	...	20,42,58,751
	(ख) रेल इंजनों कारखानों को विविध सप्लाई (b) Miscellaneous Supplies to Loco Work	...	...	...	...
2.	पूंजी भंडार उचन्त द्वारा By Capital Stores Suspense :-				
	(क) निर्मित सामग्री (a) Manufactured Materials	...	85,90,28,282	...	83,49,85,261
	(ख) वापस किया गया भण्डार (b) Returned Stores	...	...	...	...
	प्रत्यक्ष Direct	...	...	...	...
	अप्रत्यक्ष Indirect	...	2,12,67,020	...	42,461,195
	(ग) प्रशासनिक और सेवा विभाग Administrative & Service Deptt.	...	...	...	...
	प्रत्यक्ष Direct	...	...	...	...
	अप्रत्यक्ष Indirect	...	...	...	...
	नये लघु कार्य New Minor Works	...	...	...	...
3.	पूंजी निर्माण कार्य द्वारा By Capital Works :-				
	(क) संयत्र और मशीनरी (a) Plant and Machinery	...	...	...	...
	(ख) अन्य निर्माण कार्य / लोको के लिए (b) Other Works / for Loco	...	...	...	...
4.	रेल इंजन कारखाना के लिए किये गये काम By work done for Government Department	...	...	...	...
5.	सरकारी विभागों के लिए किये गए काम Work done on Deposit Account	...	...	...	...
6.	इतिशेष By Closing Balance	...	...	...	...
	(क) चालू काम (a) Works in Progress	...	1,81,49,51,075	...	1,49,63,21,433
	(ख) विकास उचन्त लेखा (b) Development Suspense Account	...	...	...	...
	जोड़ Total	...	3,31,77,10,187	...	2,57,80,26,640

ANNEXURE VI

F. 432 A (See Para 432)

Chittaranjan Locomotive Works Statement Of Out-Turn

386

चितरंजन रेल इंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS
2020-2021 का उत्पादन विवरण (रेल इंजनों का उत्पादन)
STATEMENT OF OUTURN 2020-2021 (Loco Production)

(हजार रुपयें में in thousands Rs.)

क्रम सं. Sr.No.	विवरण Particulers	वर्ष में तैयार किए गये रेल इंजनों की संख्या No.of units turned out during the year	कुल लागत Total Cost (Provisional)	कुल बिक्रय मूल्य Total Sale Value	औसत विक्रय मूल्य प्रति इकाई Average Sale Value per Unit (Without GST)
1	2	3	4	5	6
1.	वर्ष 2018-19 की मद सं. 12 के विरूद्ध 735 डब्ल्यू.ए.पी.-7 के लिए बिजली इंजन 735 WAP-7 Elec. Loco ag. Item no 12 of 2018-19	6	63,07,26	63,07,26	10,51,21
2.	वर्ष 2018-19 की मद सं. 12 के विरूद्ध 735 डब्ल्यू.ए.पी.-5 के लिए बिजली इंजन 735 WAP-5 Elec. Loco ag. Item no 12 of 2018-19	4	44,66,92	44,66,92	11,16,73
3.	वर्ष 2018-19 की मद सं. 1158 के विरूद्ध 866 डब्ल्यू.ए.जी.-9 के लिए बिजली इंजन 866 WAG-9 Elec. Loco ag. Item no 1158 of 2018-19	26	250,71,28	250,71,28	9,64,28
4.	वर्ष 2018-19 की मद सं. 1158 के विरूद्ध 866 डब्ल्यू.ए.जी.-9 (एचएच) के लिए बिजली इंजन 866 WAG-9 (HH) Elec. Loco ag. Item no 1158 of 2018-19	1	16,00,00	16,00,00	16,00,00
5.	वर्ष 2018-19 की मद सं. 1158 के विरूद्ध 866 डब्ल्यू.ए.पी.-5 के लिए बिजली इंजन 866 WAP-5 Elec. Loco ag. Item no 1158 of 2018-19	4	44,66,92	44,66,92	10,51,21
6.	वर्ष 2018-19 की मद सं. 1168 के विरूद्ध 998 डब्ल्यू.ए.जी.-9 के लिए बिजली इंजन 998 WAG-9 Elec. Loco ag. Item no 1168 of 2018-19	310	2989,26,80	2989,26,80	9,64,28
7.	वर्ष 2018-19 की मद सं. 1168 के विरूद्ध 998 डब्ल्यू.ए.पी.-7 के लिए बिजली इंजन 998 WAP-7 Elec. Loco ag. Item no 1168 of 2018-19	27	283,82,67	283,82,67	10,51,21
8.	वर्ष 2018-19 की मद सं. 1168 के विरूद्ध 216 डब्ल्यू.ए.पी.-5 के लिए बिजली इंजन 216 WAP-5 Elec. Loco ag. Item no 1168 of 2018-19	12	134,00,76	134,00,76	10,51,21
	जोड़ Total	390	3826,22,61	3826,22,61	...

वर्ष 2020-21 के दौरान इंजनों का आउटटर्न दर्शाने वाला विवरण
Showing outern of locomotives during the year 2020-21

नोट *Note*:- (1) उपर्युक्त उल्लिखित आउटटर्न के आंकड़े वर्ष 2020-21 के दौरान तैयार किए गए इंजनों से ही संबंधित है।
The fingures of outtum given above is relates only to locomotive tumed out during 2020-2021

(2) कालम-3 में दर्शाए गए आंकड़े 100 प्रतिशत अनंतिम हैं। इसमें जीएसटी शामिल नहीं हैं
The figures, as Shown in column 3 are 100%. Provisional and (excluding GST)

(3) कालम 4 में दर्शाए गए आंकड़े बिक्री मूल्य (जीएसटी शामिल) दर्शाते हैं
The figure in column 4 represents sale value (Including GST)

चितरंजन रेल इंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS

2020-2021 का उत्पादन विवरण (रेल इंजनों का उत्पादन)

STATEMENT OF OUTURN 2020-2021 (Loco Production)

(4) रेल इंजन की औसत लागत (अनंतिम) जिसमें रेलवे बोर्ड और लेखा परीक्षा के कार्यालय के खर्च का हिस्सा शामिल है, नीचे दिया गया है :-
The average cost (Provisional) of Loco inclusive Share of Expenditure to Rly Board and audit has been furnished below :-

(हजार ₹ में In thousand of ₹.)

क्रम सं. Sr.No.	विवरण Particulers	डब्ल्यूएजी-9 WAG-9	डब्ल्यू.ए.जी.-9(एचएच) WAG-9 (HH)	डब्ल्यू.ए.पी.-7 WAP-7/With HLC	डब्ल्यू.ए.पी.-5 WAP-5
1	2	3	4	5	6
(1)	उत्पादन की लागत Cost of Production	9,64,28	16,00,00	10,51,21	11,16,73
(2)	रेलवे बोर्ड लेख परीक्षा आदि के खर्च का हिस्सा Share of expenditure of Railway Board's and audit	5,25	5,25	4,18	4,72
	जोड़ **Total**	**9,69,53**	**16,05,25**	**10,55,39**	**11,21,45**

ANNEXURE VII

(See Para 433)

90

2011-2012 से मूल्यह्रास आरक्षित निधि लेखे का वर्षवार विवरण
STATEMENT SHOWING POSITION OF THE DEPRECIATION RESERVE FUND ACCOUNT YEAR BY YEAR SINCE 2011-2012

(हज़ार ₹ में)
(In thousands of ₹)

वर्ष Year	अथशेष Opening Balance	निधि में विनियोग Appropriation to the fund	निधि पर ब्याज Interest on the fund	निधि में नामे डाला गया नवीकरण तथा बदलाव का खर्च-निकासी Expenditure on renewals & replacement debit to the fund-withdrawals	वर्ष के दौरान निधि में शुद्ध वृद्धि (कालम 3+4-5) Net accretion to the fund during the year (Col 3+4-5)	इतिशेष (कालम) (2+6) Closing Balance (Col 2+6)
1	2	3	4	5	6	7
2011-2012 (क)	(-)33,54,11	67,20,00,00	(-)69,50	66,80,71,91	38,58,59	5,04,48
2012-2013 (ख)	4,98,20	70,50,00,00	28,99	70,45,46,79	4,82,20	9,80,40
2013-2014 (ग)	15,98,51	81,00,00,00	25,30,15	71,19,91,02	10,05,39,13	10,21,37,64
2014-2015 (घ)	10,20,80,52	79,75,00,00	68,24,20	72,86,92,88	7,56,31,32	17,77,11,84
2015-2016 (ङ)	17,86,06,47	58,00,00,00	35,66,36	75,88,95,22	(-)17,53,28,86	32,77,61
2016-2017 (च)	32,50,75	54,00,00,00	0	49,82,01,12	4,17,98,88	4,50,49,63
2017-2018 (छ)	4,65,23,13	17,40,00,00	32,67,39	15,25,81,52	2,46,85,87	7,12,09,00
2018-2019	7,12,09,00	5,00,00,00	39,96,69	5,34,02,85	5,93,84	7,18,02,84
2019-2020 (ज)	7,18,03,42	6,00,00,00	39,31,90	5,23,80,34	1,15,51,56	8,33,54,98
2020-2021	8,33,54,98	4,00,00,00	23,71,81	6,71,92,17	-2,48,20,36	5,85,34,62

टिप्पणी : इस मद में शेष वक्तव्य संघ सरकार के वित्त खातों की संख्या 13 के साथ मिलान किया जा रहा है।
Note : Balances under this head are being reconciled with Statement No. 13 of Union Government Finance Accounts.

(क) अथशेष (2011-12) में पूंजी से मूल्यह्रास आरक्षित निधि में परिसंपत्तियों के स्थानांतरण के कारण बिना वित्तीय समायोजन से ₹ (-)52,43,90 हजार भी शामिल हैं।
Opening Balance (2011-2012). includes ₹ (-) 52,43,90 thousand transferred without financial adjustment due to transfer of asset from Capital to DRF.

(ख) अथशेष (2012-13) में पूंजी से मूल्यह्रास आरक्षित निधि में परिसंपत्तियों के स्थानांतरण के कारण बिना वित्तीय समायोजन से ₹ (-)6,28 हजार भी शामिल हैं।
Opening Balance (2012-2013). includes ₹ (-) 6,28 thousand transferred without financial adjustment due to transfer of asset from Capital to DRF.

(ग) अथशेष (2013-14) में पूंजी से मूल्यह्रास आरक्षित निधि में परिसंपत्तियों के स्थानांतरण के कारण बिना वित्तीय समायोजन से ₹ 6,18,11 हजार भी शामिल हैं।
Opening Balance (2013-2014). includes ₹ 6,18,11 thousand transferred without financial adjustment due to transfer of asset from Capital to DRF.

(घ) अथशेष (2014-15) में पूंजी से मूल्यह्रास आरक्षित निधि में परिसंपत्तियों के स्थानांतरण के कारण बिना वित्तीय समायोजन से ₹ (-)57,12 हजार भी शामिल हैं।
Opening Balance (2014-2015). includes ₹ -57,12 thousand transferred without financial adjustment due to transfer of asset from Capital to DRF.

(ङ) अथशेष (2015-16) में पूंजी से मूल्यह्रास आरक्षित निधि में परिसंपत्तियों के स्थानांतरण के कारण बिना वित्तीय समायोजन से ₹ 8,94,63 हजार भी शामिल हैं।
Opening Balance (2015-2016). includes ₹ 8,94,63 thousand transferred without financial adjustment due to transfer of asset from Capital to DRF.

(च) अथशेष (2016-17) में पूंजी से मूल्यह्रास आरक्षित निधि में परिसंपत्तियों के स्थानांतरण के कारण बिना वित्तीय समायोजन से ₹ (-)26,86 हजार भी शामिल हैं।
Opening Balance (2016-2017). includes ₹ -26,86 thousand transferred without financial adjustment due to transfer of asset from Capital to DR.

(छ) अथशेष (2017-18) में पूंजी से मूल्यह्रास आरक्षित निधि में परिसंपत्तियों के स्थानांतरण के कारण बिना वित्तीय समायोजन से ₹ 62,68 हजार एवं वित्त वर्ष 2016-17 का ₹ 22 लाख बकाया ब्याज भी शामिल हैं।
Opening Balance (2017-2018). includes ₹ 62,68 thousand transferred without financial adjustment due to transfer of asset from Capital to DRF and interest arrears of FY 2016-17 of ₹ 22 Lakh.

(ज) अथशेष (2019-20) में पूंजी से मूल्यह्रास आरक्षित निधि में परिसंपत्तियों के स्थानांतरण के कारण बिना वित्तीय समायोजन से ₹ 58 हजार भी शामिल हैं।
Opening Balance (2019-2020). includes ₹ 58 thousand transferred without financial adjustment due to transfer of asset from Capital to DRF.

ANNEXURE VIII

(See Para 433)

2010-2011 से विकास निधि लेखे का वर्षवार विवरण
STATEMENT SHOWING DEVELOPMENT FUND ACCOUNT YEAR BY YEAR SINCE 2010-2011

(हज़ार ₹ में)
(In thousand of ₹)

वर्ष Year	अथशेष Opening Balance	वर्ष के दौरान निधि में अंशदान Contribution to the fund during the year	सामान्य राजस्व से ऋण Loans from General Revenue	निधि पर ब्याज Interest on the fund	जोड़ (कालम 3 से 5) Total (Col 3to 5)	वर्ष में निधि से खर्च Expenditure from the fund during the year	सामान्य राजस्व से लिए गए ऋण की अदायगी Repayment of loans from General Revenue	सामान्य राजस्व से लिए गए ऋण पर ब्याज का भुगतान Interest paid on loans from General Revenue	इतिशेष (कालम 2+6-7, 8 एवं 9) Closing Balance (Col.2+6-7, 8 & 9)
1	2	3	4	5	6	7	8	9	10
2011-2012	(-)12,13,34,37	6,10,00,00	30,00,00,00	(-)41,12,01	35,68,87,99	22,22,56,05	–	1,28,25,00	4,72,57
2012-2013 (क)	4,49,07	78,15,00,00	–	88,49,79	79,03,49,79	24,57,82,05	30,00,00,00	1,17,56,00	23,32,60,81
2013-2014	23,32,60,81	30,75,00,00	–	2,06,84,11	32,81,84,11	25,61,42,78	–	–	30,53,02,14
2014-2015	30,53,02,14	13,74,93,68	–	1,96,23,88	15,71,17,56	26,11,07,47	–	–	20,13,12,23
2015-2016 (ख)	20,08,37,00	12,19,74,28	–	93,90,47	13,13,64,75	29,31,61,81	–	–	3,90,39,94
2016-2017 (ग)	3,85,46,50	25,15,00,00	–	–	25,15,00,00	24,97,83,17	–	–	4,02,63,34
2017-2018 (घ)	4,07,05,72	15,05,60,92	–	50,93,62	15,56,54,54	13,80,50,99	–	–	5,83,09,27
2018-2019 (ङ)	5,83,13,68	7,50,00,00	–	23,22,47	7,73,22,47	11,08,00,19	–	–	2,48,35,96
2019-2020 (च)	2,48,39,33	13,88,85,50	–	19,44,24	14,08,29,74	11,37,39,90	–	–	5,19,29,17
2020-2021	5,19,29,17	15,47,48,24	–	25,66,53	15,73,14,77	10,75,89,06	–	–	10,16,54,88

टिप्पणी : इस मद में शेष वक्तव्य संघ सरकार के वित्त खातों की संख्या 13 के साथ मिलान किया जा रहा है।
Note : Balances under this head are being reconciled with Statement No. 13 of Union Government Finance Accounts.

(क) इसमें बिना वित्तीय समायोजन के पूंजी निधि से अंतरित ₹ (-)23,50 हजार विकास निधि में शामिल हैं।
Includes ₹ (-)23,50 thousands transferred without financial adjustment Development Fund to Capital

(ख) इसमें बिना वित्तीय समायोजन के पूंजी में अंतरित ₹ (-)4,75,23 हजार विकास निधि में शामिल हैं।
Includes ₹ (-)4,75,23 thousands transferred without financial adjustment from Development Fund to Capital.

(ग) इसमें बिना वित्तीय समायोजन के रे.सु. निधि से अंतरित ₹ (-)4,93,44 हजार विकास निधि में शामिल हैं।
Includes ₹ (-)4,93,44 thousands transferred without financial adjustment from Development Fund to RSF.

(घ) इसमें बिना वित्तीय समायोजन के पूंजी निधि से अंतरित ₹ 4,42,38 हजार विकास निधि में शामिल हैं एवं इस वित्तिय वर्ष में दिखाए गए 'निधि पर ब्याज' में विगत वर्ष का ₹ 22.64 करोड़ का बकाया ब्याज भी शामिल है।
Includes ₹ 4,42,38 thousands transferred without financial adjustment to Development Fund from Capital. "Interest on fund" includes Rs. 22.64 crore of interest arrears of previous financial year.

(ङ) इसमें बिना वित्तीय समायोजन के पूंजी निधि से अंतरित ₹ 4,41 हजार विकास निधि में शामिल हैं।
Includes ₹ 4,41 thousands transferred without financial adjustment to Development Fund from Capital.

(च) इसमें बिना वित्तीय समायोजन के पूंजी निधि से अंतरित ₹ 3,37 हजार विकास निधि में शामिल हैं।
Includes Rs. 3,37 thousands transferred without financial adjustment to Development Fund from Capital.

ANNEXURE IX

2020-2021 का पेंशन निधि लेखा
PENSION FUND ACCOUNT FOR YEAR 2020-2021

(हज़ार ₹ में)
(In thousand of ₹)

क्र. स. S. No	रेलवे ईकाई Railways/ Units	31-3-2020 को इतिशेष Closing Balance as on 31.3.2020	बिना वित्तीय समा-योजन के अतंरित T.W.F.A	हिन्दी Arrear Adjust for	1-4-2020 को अथशेष Opening Balance as on 1.4.2020	निधि में विनियोग Appropriation to the Fund	कोविड हेतु विशेष ऋण Spl Loans for COVID Minor Head-205	2019-20 के प्रतिकूल शेष की समाप्ति के लिए ऋण Loans towards liquidating Adv bal occurred 19-20 MH800	भविष्य निधि में अंशदान से अंतरण Transfer From contri. to PF	निधि शेष पर ब्याज Interest on Fund Balance	शुद्ध जोड़ (कालम (7 to 11) Accretion to Fund (7 to 11)	निकासी Withdrawal	31-3-2021 को इतिशेष (6+12-13) Closing Balance as on 31.3.2021 (6+12-13)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	मध्य Central	-13359,52,76	-		-13359,52,76	49,91,47	5448,00,00	1417,00,00	-	-423,24,68	6491,66,79	5092,73,32	-11960,59,29
2	पूर्व Eastern	-26186,14,45	-		-26186,14,45	54,84,52	5858,00,00	1524,00,00	-	-869,28,69	6567,55,83	6199,08,18	-25817,66,80
3	पूर्व मध्य E.C.	156,15,15	-		156,15,15	35,00,00	4252,00,00	1106,00,00	-	47,49,45	5440,49,45	2911,50,63	2685,13,97
4	पूर्व तटीय E.Coast	8833,57,44	-		8833,57,44	20,00,00	2528,00,00	658,00,00	-	338,02,04	3544,02,04	989,59,19	11388,00,29
5	उत्तर Northern	9852,84,59	-		9852,84,59	100,91,05	7137,00,00	1862,00,00	-	420,85,60	9520,76,65	4049,36,36	15324,24,88
6	उत्तर मध्य N.C.	-36245,16,97	-		-36245,16,97	29,00,00	3432,00,00	893,00,00	-	-1267,47,78	3086,52,22	6421,18,10	-39579,82,85
7	पूर्वोत्तर N.E	6376,16,60	-		6376,16,60	26,64,38	2647,00,00	689,00,00	-	262,27,73	3624,92,11	686,89,95	9314,18,76
8	पूर्वोत्तर सीमा N.F	5981,52,56	-		5981,52,56	22,79,15	3235,00,00	841,00,00	-	250,87,02	4349,66,17	1304,77,17	- 9026,41,56
9	उत्तर पश्चिम N.W.	-3376,56,91	-		-3376,56,91	19,20,00	2468,00,00	642,00,00	-	-104,15,17	3025,04,83	2502,63,09	-2854,15,17
10	दक्षिण Southern	-18084,35,84	-		-18084,35,84	44,13,75	4624,00,00	1203,00,00	-	-595,07,54	5276,06,21	4706,85,39	-17515,15,02
11	दक्षिण मध्य S.C	-10463,00,56	-		-10463,00,56	49,86,37	4297,00,00	1119,00,00	-	-328,10,48	5137,75,89	3840,13,50	-9165,38,17
12	दक्षिण पूर्व S.E	17163,29,16	-		17163,29,16	42,08,75	4485,00,00	1167,00,00	-	648,22,45	6342,31,20	1889,81,67	21615,78,69
13	दक्षिण पूर्व मध्य S.E.C.	9794,48,49	-		9794,48,49	21,00,00	247,00,000	643,00,00	-	372,18,00	3506,18,00	830,02,59	12470,63,90
14	दक्षिण पश्चिम S.W.	-261,25,90	-		-261,25,90	16,00,00	1947,00,00	506,00,00	-	10,44,20	2479,44,20	1332,24,68	885,93,62
15	पश्चिम Western	11710,02,83	-		11710,02,83	49,69,58	5063,00,00	1319,00,00	-	463,12,32	6894,81,90	2609,21,18	15995,63,55
16	पश्चिम मध्य W.C.	-435,13,82	-		-435,13,82	24,00,00	2887,00,00	751,00,00	-	10,36,67	3672,36,67	2181,92,01	1055,30,84
17	चि.रे.का CLW	1098,13,99	-		1098,13,99	147,00,00			-	37,38,11	184,38,11	144,39,62	1138,12,48
18	डि.रे.का DLW	279,90,58	-		279,90,58	65,50,00			-	9,88,27	75,38,27	43,97,58	311,31,27
19	डी.आ.का. DMW	399,82,01	-		399,82,01	41,00,00			-	13,01,50	54,01,50	75,05,16	378,78,35
20	स.डि.का. ICF	1326,87,08	-		1326,87,08	141,50,00			-	46,02,26	187,52,26	88,03,31	1426,36,03
21	रे.प.का. RWF	205,29,57	-		205,29,57	25,50,00			-	6,55,80	32,05,80	50,32,66	187,02,71
22	रे.डि.का./कपूरथला RCF/KHX	733,33,89	-		733,33,89	73,50,00			-	24,97,95	98,47,95	70,79,61	761,02,23
23	आ.डि.का./रायबरेली MCF/RBL	23,33	-		23,33	6,00,00				-9,55	5,90,45	12,08,59	-5,94,81
24	मेट्रो Metro	1135,20,48	-		1135,20,48	2,00,00	222,00,00	58,00,00		42,57,51	324,57,51	47,99,06	1411,78,93
	जोड़ TOTAL	-33364,29,46	-	-	-33364,29,46	1107,09,02	63000,00,00	16398,00,00	-	-583,17,01	79921,92,01	48080,62,60	-1523,00,05
	Strategic सामरिक												
1	उत्तर Northern	25,29,39	-		25,29,39	685,50			-	85,99	7,71,49	6,85,50	26,15,38
2	पूर्वोत्तर सीमा N.F	4448,41,65	-		4448,41,65	810,00			-	145,75,55	153,85,55	331,08,26	4271,18,94
3	उत्तर पश्चिम N.W	492,11,74	-		492,11,74	80,00			-	16,46,68	17,26,68	16,39,87	492,98,55
4	पश्चिम Western	-	-	-	-	15,48				26	15,74		15,74
	जोड़ TOTAL	4965,82,78	-	-	4965,82,78	15,90,98	-	-	-	163,08,48	178,99,46	354,33,63	4790,48,61
	कुल जोड़ G.TOTAL	-28398,46,68	-	-	-28398,46,68	1123,00,00	63000,00,00	16398,00,00	-	-420,08,53	80100,91,47	48434,96,23	3267,48,56

2010-2011 से पेंशन निधि लेखे का वर्षवार विवरण
STATEMENT SHOWING PENSION FUND ACCOUNT YEAR BY YEAR SINCE 2010-2011

(हज़ार ₹ में)
(In thousands of ₹)

वर्ष Year	अथेशेष Balance as on1st April	निधि में विनियोग Appropria-tion to fund	कोविड हेतु विशेष ऋण Spl Loans for COVID related MH 205	2019-20 के प्रतिकूल शेष की समाप्ति के लिए ऋण Loans towards liqd adv bal 19-20 MH800	अंशदायी भविष्य निधि से अंतरण Transfer from contribution to Provident Fund	निधि शेष पर ब्याज Interest on fund Balance	जोड़ (कालम 3 से 5) Total Col (3 to 5)	निकासी Withdrawal	इतिशेष (कालम 2+8-9) Closing Balance at the end of the year Col (2+8-9)
1	2	3			4	5	6	7	8
2011-2012	53279	179200000			0	2890	179202890	179190978	65191
2012-2013	65191	210200000			0	2341	210202341	210213328	54204
2013-2014	54204	251650000			0	103526	251753526	247617358	4190372
2014-2015	4190372	295400000			0	433997	295833997	286420797	13603572
2015-2016	13603572	348600000			0	1376012	349976012	307006626	56572958
2016-2017	56572955	354000000			0	0	354000000	404625353	5947602
2017-2018 (क)	7745067	463977100			0	768026	464745126	452753255	19736938
2018-2019	19736938	448800000			0	606383	449406383	467182258	1961063
2019-2020	1961063	213080000			0	-7146799	205933201	491878931	-283984669
2020-2021(ख)	-283984669	11230000	630000000	163980000	0	-4200853	801009147	484349623	32674855

टिप्पणी : इस मद में शेष वक्तव्य संघ सरकार के वित्त खातों की संख्या 13 के साथ मिलान किया जा रहा है।
Note : Balances under this head are being reconciled with Statement No. 13 of Union Government Finance Accounts.

(क) इसमें वित्तिय वर्ष 2016-17 का बकाया ब्याज भी शामिल है।
Includes interest arrears of financial year 2016-17

(ख) इसमें साधारण संचालन व्यय (5230000), विविध व्यय (1000000) एवं निर्माण उचंत से (5000000) रुपये का विनियोग भी शामिल हैं।
Includes appropriation from Ordinary Working Expenses (5230000), Miscellaneous Expenditure (1000000) and Manufacturing Suspense (5000000).

ANNEXURE X

Deleted

ANNEXURE XI

F. 433 (5)

भंडार लेखा 2020-2021 STORES ACCOUNTS 2020-2021

(हजार ₹ में)
(In thousand of ₹)

क्र. सं. S. No.	रेलवे/उत्पादन Rlys/Units	अथशेष Opening Balance						प्राप्तियां Receipts						निकासियां Issues						इतिशेष Closing Balance						
		सामान्य भंडार Ordinary Stores	विशेष निर्माण कार्यों के लिए भंडार Stores for Special Works	अधिक्य भंडार Surplus Stores		रद्दी भंडार Scrap Stores		जोड़ TOTAL	अमदानित भंडार Imported Stores	देशी भंडार Indigenous Stores	स्थिर भंडार से भंडार में प्राप्ति Receipts from Manufacturing into Stores	रेल द्वारा निर्मित भंडार तथा सामग्री Materials manufactured by Rly. and received from works	अन्य खातों को प्राप्ति Other Credits	जोड़ TOTAL	वर्ष में निकासी Issue during the year	भूल हानि/कमी आदि Depreciation / Shortages etc.	अन्य खातों को अन्तरण Other Credits	कुल जमा खाते TOTAL Credits	सामान्य भंडार Ordinary Stores	विशेष निर्माण के लिए भंडार Stores for Special Works	अधिक भंडार Surplus Stores		रद्दी भंडार Scrap Stores		जोड़ TOTAL
																						चल Movable	अचल Dead	सामान्य Ordinary	अधिक्य Surplus	
1	2	3	4	5a	5b	6a	6b	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21a	21b	22a	22b	23
1.	मध्य Central	727025	141	62	484	4251	532699	1264662	107507	8813626	19150	1649803	-72555	1304457	10647988	10384131	-14698	-14698	10354735	1096663	141	62	427	2707	457915	1557915
2.	पूर्व Eastern.	4061599	29920	38672	0	33975	0	4164166	538257	7274282	28356	702214	26212	1023017	9594338	10156421	5431	121539	10283391	3363050	61687	22673	0	27703	0	3475113
3.	पूर्व मध्य E.C.	1797702	0	0	0	0	0	1797702	0	2018122	0	0	0	2018122	3209629	3209629	0	0	3209629	696195	0	0	0	0	0	696195
4.	पूर्व तटीय E.Co.	1276350	0	0	0	0	0	1276350	16135	4179733	76	1823292	0	6211236	6643429	60103	0	0	6703612	785526	0	1177	0	10311	0	797014
5.	उत्तर N.R.	1285102	0	75802	1400	47588	0	1409892	65975	1955015	435012	361058	-484300	1053475	2998379	17296758	301865	0	17698623	4631348	0	1085	39258	20957	0	4692648
6.	उत्तर (सामरिक) N.R.(Stg)	321	0	19	0	12	0	352	16	4889	109	99	-121	264	5247	4350	76	0	4426	1158	0	0	10	5	0	1173
7.	उत्तर मध्य N.C.	1465963	0	36	21	9453	0	1475473	0	4005229	0	805556	-335558	-530379	4421548	4308801	3226	60301	4372228	1015183	0	36	21	0	9453	1024693
8.	पूर्वोत्तर सीमांत N.F	2611806	14883	0	0	0	0	2626513	0	3675035	913	838594	153966	2245	4644663	4206002	2184	0	4208186	3046216	14883	0	0	1448	88790	3121990
9.	पूर्वोत्तर सीमांत (सामरिक) N.F(Stg)	2921106	7735	66	0	1438	85257	3016602	78156	6046419	0	0	5296	142693	6272564	6460700	2468	27496	6490664	2699463	7735	66	0	1448	88790	2797502
10.	पूर्वोत्तर सीमांत (सामरिक) N.F(Stg)	-50122	0	0	0	0	0	-50122	0	143119	0	0	0	0	143119	17872	0	0	17872	75125	0	0	0	0	0	75125
11.	उत्तर पश्चिम N.W	482028	0	39	3	29065	80222	591357	8374	10416017	1159	494737	-132618	143726	10931395	11026703	111032	320342	11460077	-38925	0	3	0	32170	61227	54675
12.	उत्तर पश्चिम (सामरिक) N.W.(Stg)				0			0						0	0				0							0
13.	दक्षिण S.R.	1832482	7893	0	0	15252	0	1855627	51831	4402113	617396	2880451	2225419	0	10177110	9744650	0	0	9744650	2276145	3070	0	0	16402	0	2291687
14.	दक्षिण मध्य S.C.	1425336	0	0	0	52243	0	1477579	0	8213459	0	1028859	0	0	9242309	9453867	0	0	9453867	1208565	0	0	0	57456	0	1266021
15.	दक्षिण पूर्व S.E.	2231189	0	45	0	0	0	2231234	0	4537703	0	543660	-68846	-23544	5009973	6059679	62056	0	6121735	1119427	0	45	0	0	0	1119472
16.	दक्षिण पूर्व मध्य S.E.C.	823316	0	0	0	58091	0	881407	0	3955645	0	1017421	76050	0	4869116	3983176	23952	0	4007128	919871	0	0	0	16224	0	936095
17.	दक्षिण पश्चिम S.W.	675170	292	-9	0	418	0	675871	851	6613209	8513	1049711	1093459	0	8765743	7984136	0	0	7984136	1456777	292	-9	0	418	0	1457478
18.	पश्चिम W.R.	894829	5483	3	13010	132740	2437	1048492	22035	7551980	4252	821217	-107255	572352	8861581	8376418	334117	209808	8920343	864548	34917	-513	15953	40457	37268	992730
19.	पश्चिम (सामरिक) W.(Stg.)							0						0	0	0			0							0
20.	पश्चिम मध्य W.C.	1574741	0	1803	0	0	580134	2076678	0	5603629	4257	1088801	287054	42749	7026490	5974721	379867	442143	6796731	1952230	0	1449	0	0	0	2306437
21.	रि.वे.का. C.L.W.	5675090	2988	0	17	36434	0	5714549	937079	29743079	4887927	1733945	78921	58455	35879006	37035322	37730	-162792	36910260	4659059	2178	0	17	22041	0	4683395
22.	चे.रे.का. B.L.W.	6713043	0	0	0	52900	0	6766023	627286	26203816	1576535	82638	284970	0	30775345	30969026	0	0	30969026	5976946	0	332578	164089	1059674	0	6372342
23.	चे.डि.का. I.C.F.	11230915	0	0	3499	153006	0	11397420	915455	46099475	116595	158658	7335601	3114525	42937209	36226013	1910307	-583998	37586322	16616716	0	0	6131	123460	0	16746307
24.	रे.प.का. R.W.F.	894973	0	44	0	70242	965259	2933557	5718589	0	0	996971	4395	0	7607512	7399615	0	0	7399615	448806	0	0	0	0	124350	573156
25.	रेल कोच फैक्टरी R.C.F.	6129129	0	12200	119700	48887	0	6309916	660502	24643711	825434	5326099	-389766	0	26272580	26709576	0	0	26709576	5490958	0	161048	174798	45126	0	5871930
26.	डी.ओ.का. DMW	2921867	0	81700	0	29000	0	3032567	97712	11660077	5482102	4648864	22327	0	17612902	12958402	0	5195675	18154137	2318312	0	167400	880	900	0	2487412
27.	मेट्रो Metro	84256	0	0	0	0	0	84256	0	114272	0	0	0	0	114272	92419	0	0	92419	106109	0	0	0	0	0	106109
28.	आ.को.फैक्टरी M.C.F	2584885	0	0	0	0	0	2584885	0	120853	0	0	0	0	120853	959053	0	0	959053	1755685	0	0	0	0	0	1755685
	जोड़ TOTAL	62784101	69335	210482	137134	668934	1354510	64716510	4411328	247653271	14007886	17446149	3344551	3435635	289756420	278269929	3219796	5615614	287105541	64444716	124903	680300	491494	5329914	1192252	67369589

क्र. सं. S. No.	रेलवे/उत्पादन Rlys Units	कमी Deficiency			
		स्टाक सत्यापन के कारण Due to Stock Verification	भंडार का पुनर्मूल्यांकन Revaluation of Stores	विविध Miscellaneous	
1.	मध्य Central	-20025	0	-171973	
2.	पूर्व Eastern.	471	0	0	
3.	पूर्व मध्य E.C.	0	0	0	
4.	पूर्व तटीय E.Co.	4489	0	65709	
5.	उत्तर N.R.	4924	0	797917	
6.	उत्तर (सामरिक) N.R.(Stg)	0	0	0	
7.	उत्तर मध्य N.C.	670	0	7756	
8.	पूर्वोत्तर N.E	12	62	2110	
9.	पूर्वोत्तर सीमांत N.F	0	0	2508	
10.	पूर्वोत्तर सीमांत (सामरिक) N.F(Stg)	0	0	0	
11.	उत्तर पश्चिम N.W	32	1	110999	
12.	उत्तर पश्चिम (सामरिक) N.W.(Stg)	0	0	0	
13.	दक्षिण S.R.	1536	430305	179573	
14.	दक्षिण मध्य S.C.	931	-78	-1654	
	जोड़ Total	11040	430290	773458	

क्र. सं. S. No.	रेलवे/उत्पादन Rlys/Units	कमी Deficiency		
		स्टाक सत्यापन के कारण Due to Stock Verification	भंडार का पुनर्मूल्यांकन Revaluation of Stores	विविध Miscellaneous
15.	दक्षिण पूर्व S.E.	85671	5210	109530
16.	दक्षिण पूर्व मध्य S.E.C.	0	0	4657
17.	दक्षिण पश्चिम S.W.	198	25934	119
18.	पश्चिम W.R.	823	3444	329850
19.	पश्चिम (सामरिक) W.(Stg.)	0	0	0
20.	पश्चिम मध्य W.C.	4366	0	375501
21.	रि.वे.का. C.L.W.	9302	0	88607
22.	चे.रे.का. B.L.W.	2838	0	658
23.	चे.डि.का. I.C.F.	1856540	22651	31116
24.	रे.प.का. R.W.F.*	0	0	113
25.	रेल कोच फैक्टरी R.C.F	2561	6304	691736
26.	डी.ओ.का. DMW	-87733	0	0
27.	मेट्रो Metro	0	0	0
28.	आ.को.फैक्टरी M.C.F	4894	0	4894
	जोड़ Total	1879460	63543	1616781

2020-2021 में स्टॉक सत्यापन और स्टॉक के पुनर्मूल्यांकन के परिणाम का विवरण
STATEMENT SHOWING RESULT OF STOCK VERIFICATION AND REVALUATION OF STOCK DURING 2020-2021

(हजार ₹ में)
(*In thousand of ₹*)

		स्टॉक सत्यापन के परिणाम Results of Stock Verification							पुनर्मूल्यांकन के परिणाम Results of Revaluation							विविध Miscellaneous					
क्र. सं. S. No.	रेलवे/यूनिट Rlys/Units	अथशेष Opening Balance	आधिक्य Surplus (+)	कमी Deficiency (-)	शुद्ध आधिक्य (+) कमी (-) Net Surplus (+) Deficiency (-)	वर्ष के दौरान समायोजित रकम Amount adjusted during the year	इतिशेष Closing Balance unadjusted amount at the end of the year	वर्ष के दौरान शुद्ध आधिक्य/ कमी का कुल निकासी से प्रतिशत % age of Net Surplus/ Deficiency to total issues during the year	अथशेष Opening Balance	आधिक्य Surplus (+)	कमी Deficiency (-)	शुद्ध आधिक्य (+) कमी (-) Net Surplus (+) Deficiency (-)	वर्ष के दौरान समायोजित रकम Amount adjusted during the year	इतिशेष Closing Balance unadjusted amount at the end of the year	वर्ष के दौरान शुद्ध अधिशेष/ कमी का कुल निकासी से प्रतिशत % age of Net Surplus / Deficiency to total issues during the year	अथशेष Opening Balance	आधिक्य Surplus (+)	कमी Deficiency (-)	शुद्ध आधिक्य (+) कमी (-) Net Surplus (+) Deficiency (-)	वर्ष के दौरान समायोजित रकम Amount adjusted during the year	इतिशेष Closing Balance unadjusted amount at the end of the year
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1.	मध्य Central	-30036	-293	-2025	1732	0	-28304	0.02	0	0	0	0	0	0	0.00	-1153053	130750	-12673	143423	0	-1009630
2.	पूर्व Eastern	0	450	471	-21	-21	0	0.00	0	0	0	0	0	0	0.00	15936	1142920	127453	1015467	1032038	-635
3.	पूर्व मध्य East Central	1043	0	0	0	0	1043	0.00	5902	0	0	0	0	5902	0.00	3	0	0	0	0	3
4.	पूर्व तटीय East Coast	152	4475	4489	-14	124	14	0.00	0	0	0	0	0	0	0.00	10766	86601	65609	20992	10766	20992
5.	उत्तर Northern	0	171	4924	-4753	-4753	0	-0.03	0	0	0	0	0	0	0.00	502963	1053739	297017	756722	573759	685926
6.	उत्तर (सामरिक) Northern (Stg)	0			0		0	0.00	0			0		0	0.00	0			0		0
7.	उत्तर मध्य North Central	15920	29844	670	29174	29174	15920	0.60	0	0	0	0	0	0	0.00	19289	-23391	2556	-25947	59569	-66227
8.	पूर्वोत्तर North Eastern	1552	-662	12	-674	-1138	2016	-0.02	-4[illegible]5	26	62	-36	-442	-50	0.00	10820	58225	2110	56115	62716	4219
9.	पूर्वोत्तर सीमा Northeast Frontier	0	0	0	0	0	0	0.00	0	0	0	0	0	0	0.00	403934	142693	2468	140225	0	544159
10.	पू. सी. (सामरिक) Northeast Frontier (Stg)	0	0	0	0	0	0	0.00	0	0	0	0	0	0	0.00	0	0	0	0	0	0
11.	उत्तर पश्चिम North Western	0	-948	32	-980	-980	0	-0.01	0	1844	1	1843	1843	0	0.02	9380	142830	110999	31831	27275	13936
12.	उ. प. (सामरिक) North Western(Stg)	0			0		0	0.00	0			0		0	0.00	0			0		0
13.	दक्षिण Southern	24074	-17296	1536	-18832	0	5242	-0.19	13624	433127	430305	2822	3119	13327	0.03	39708	122937	179573	-56636	-3177	-13751
14.	दक्षिण-मध्य South-Central	13335	487	931	-444	-888	13779	0.00	-36321	-259	-78	-181	-362	-36140	0.00	-39140	-38424	-1654	-36770	-73540	-2370
15.	दक्षिण-पूर्व South Eastern	0	569	85671	-85102	-85102	0	-1.39	0	13	5210	-5197	-5197	0	-0.08	45099	299772	109530	190242	187698	47643
16.	दक्षिण-पूर्व मध्य S. E. Central	0	0	0	0	0	0	0.00	0	0	0	0	0	0	0.00	45687	62308	4657	57651	57651	45687
17.	दक्षिण पश्चिम South Western	-190993	2432	198	2234	0	-188759	0.03	-602	0	25934	-25934	0	-26536	-0.32	361412	4706	119	4587	0	365999
18.	पश्चिम Western	-53	4375	823	3552	2989	510	0.04	11097	31947	3444	28503	23359	16241	0.32	119967	536030	329850	206180	275770	50377
19.	पश्चिम (सामरिक) Western(Stg)	0			0		0	0.00	0			0		0	0.00	0			0		0
20.	पश्चिम मध्य West Central	-64354	105	4366	-4261	-4230	-64385	-0.06	33580	0	0	0	0	33580	0.00	-668818	42644	375501	-332857	-347956	-653719
21.	सि.रे.का C.L.W	0	17367	9302	8065	8065	0	0.02	0	0	0	0	0	0	0.00	-664940	-162792	88607	-251399	-483040	-433299
22.	बे.रे.का. B.L.W.	199604	646	2838	-2192	0	197412	-0.01	0	0	0	0	0	0	0.00	-133229	207117	658	206459	0	73230
23.	आ.इ.का I.C.F.	0	19461	1856540	-1837079	10321	-1847400	-4.89	0	80574	22651	57923	71478	-13555	0.15	-966212	291964	31116	260848	-1075170	369806
24.	रे. प. का. R.W.F.	-1856	-45	0	-45	0	-1901	0.00	0	0	0	0	0	0	0.00	-6607	122233	113	122120	113160	2353
25.	रे.इ.का R.C.F	-16947	1227	2561	-1334	-13285	-4996	0.00	967	0	6304	-6304	-6304	967	-0.02	-54469	580977	691736	-110759	-87860	-77368
26.	डी.आ.का. D.M.W	3323	-92662	-87733	-4929	0	-1606	-0.03	0	0	0	0	0	0	0.00	0	0	0	0	0	0
27.	रे.प.स./बेला R.W.P./Bela	0	0	0	0	0	0	0.00	0	0	0	0	0	0	0.00	0	0	0	0	0	0
28.	म.इ.का. MCF	0	0	4894	-4894	0	-4894	0.00	0	0	0	0	0	0	0.00	0	0	4894	-4894	0	-4894
	जोड़ TOTAL	-45236	-30297	1890500	-1920797	-59724	-1906309	-	27791	547272	493833	53439	87494	-6264	-	-2101504	4803839	2410239	2393600	329659	-37563

टिप्पणी, 1. विभिन रेलों पर स्टॉक सत्यापन, भंडार और विविध मदों के पुनर्मूल्यांकन के शुद्ध परिणाम में ₹ 526242 हजार का आधिक्य हुआ, जिसमें ₹5320814 हजार का आधिक्य और 4794572 हजार की कमी शामिल है।

Note The net result of stock verification, revaluation of Stores and Miscellaneous items on different Railways was net surplus of Rs. 526242 thousand made up of surplus of Rs. 5320814 thou.and deficiency of Rs. 4794572 thousand.

2. स्टॉक सत्यापन का काम भंडार और अन्य विभागों के कर्मचारियों तथा लेखा विभाग के अधीन काम करने वाले स्टॉक सत्यापन कर्मचारियों ने किया था।
The work of stock verification was conducted by the staff of stores and other departments and by stock verification staff working under the Accounts Department

3. भंडार के पुनर्मूल्यांकन का काम लेखा विभाग के कर्मचारियों ने महाप्रबंधक द्वारा अनुमोदित मूल्य सूची से मूल्य खाता दरों की तुलना करके किया था।
The work of revaluation of stores was done by the Accounts staff by comparing the Priced ledgers rate with the price list approved by the General Manager

ANNEXURE XIII
Deleted

F.433(5)

(Authority : RLY Bd's case No. 93 App/3-7/92-93 dated 23-11-93)

*****

Ministry of Railways (Railway Board)

ANNEXURE XIV

F.433 (5) C (See Para 433)

Railway Catering Profit and Loss Account

रेलवे खानपान RAILWAY CATERING

2020-2021 का लाभ और हानि लेखा PROFIT AND LOSS ACCOUNT FOR THE YEAR 2020-2021

(हजार ₹ में)
(In thousands of ₹)

विवरण Particulars	2019-2020	2020-2021		विवरण Particulars	2019-2020	2020-2021
1. प्रारंभिक स्टाक To Opening Stock	3,61,34	3,65,07	1.	(क) बिक्री द्वारा (a) By Sales	42,88,72	6,06,80
2. भोजन अथवा खाने की अन्य वस्तुएं तैयार करने के लिए वर्ष में कच्चे माल और रसद खाद्य सामग्री तथा विभागीय खान-पान के स्थानों में बेचे जाने वाले तैयार सामान जैसे सोडा वाटर, बेकरी उत्पाद, टीनबन्द सामान आदि की खरीद। To purchase during the year of raw material & ingredients for conversion into food stuff or edible mfd. articles sold in Deptt. Catering estt. e.g. aerated water, bakery products, tinned articles etc.	35,55,46	4,40,67		(ख) बिक्री कर द्वारा (b) By Sales Tax	2,18,20	23,05
			2.	अन्य फुटकर प्राप्तियां द्वारा By Sundry other receipts	21,60,30	10,92,95#
			*3.	अंतिम स्टाक द्वारा By closing stock	3,65,07	1,74,11
			4.	हानि द्वारा By loss	23,64,22	24,07,05
				जोड़ Total	93,96,51	43,03,96
3. (i) बदलावों, टूट-फूट से हानि और अप्रचलित मदों के संबंध में किया गया खर्च विकास निधि (1) को प्रभारित किया गया। To expenditure in respect of replacements, loss breakage & obsole of items charged to Development Fund (1)	16	15				
(ii) स्टाक अथवा कच्चे माल और रसद आदि के स्टाक का मूल्य जो बट्टे खाते में डाला गया। To value of stock or raw material & provision etc. written off.	18,59	7,83				
4. (क) भाड़ा, सम्हलाई, ढुलाई और अन्य निकासी प्रभार जैसे नगर-शुल्क, सीमा-शुल्क, चुंगी, उत्पादन-कर आदि। (a) To freight, handling, cartage & other clearing charges such as Town Duty, Custom Duty, Octroi, Excise etc.	37,36	15,73				
(ख) बिक्री कर (b) To Sales Tax	2,17,81	23,05				
5. कमीशन और दलाली का खर्च To Commission & Brokerage Charges	68,32	16,86				

टिप्पणी- उपभोज्य/टूटने - फूटने वाली कुछ टिकाऊ किस्मों की मदों की कीमत अर्थात् भंडार, कच्चे सामान, रसद आदि और तैयार सामान को छोड़कर जिनका खर्च विकास निधि (1) यात्री और अन्य रेलवे उपयोगकर्ताओं के लिए सुविधाओं को प्रभारित किया गया।

Note -1 Value of items of consumable/breakable of some what lasting nature i.e. other than stores, raw materials provision etc. and manufactured articles chargeable to Development Fund (1) Passenger & other Railway User's Amenities.

प्रारंभिक स्टाक Opening Stock	वर्ष के दौरान खरीद Purchases during the year	अंतिम स्टाक Closing Stock	हानि/टूट-फूट और अप्रचलित होने के कारण अन्तर Difference due to loss/breakage and obsolescence
1	2	3	4
52520	0	51731	789

इसमें रियायत से संबंधित ₹ 10,79,04,431/- जो कि उत्तर रेलवे द्वारा प्राप्त किए जाने हैं, शामिल हैं।
This includes an amount of ₹ 10,79,04,431/- by way of subsidy, yet to be realised by the Northern Railway.

रेलवे खानपान RAILWAY CATERING

2020-2021 का लाभ और हानि लेखा PROFIT AND LOSS ACCOUNT FOR THE YEAR 2020-2021

(हजार ₹ में)
(In thousands of ₹)

विवरण Particulars	2019-2020	2020-2021
**6. वेतन (जिसमें छुट्टी वेतन भत्ते जैसे महंगाई भत्ता, मकान किराया और दूसरे प्रतिपूरक भत्ते शामिल हैं)। To Salaries (including leave salary allowances such as dearness allowance, house rent & other compensation allowance).		
(क) रेस्तरां, जलपान गृह, भोजन रेस्तरां, बूफे कार आदि में नियुक्त कर्मचारी। (a) Staff employed in Restaurants, Refreshment Rooms, Dinning Restaurants, Buffet cars etc.	47,53,94	32,47,51
(ख) खान-पान विभाग के राजपत्रित, पर्यवेक्षक और अन्य अराजपत्रित कर्मचारी। (b) Gazetted, Supervisory & other non-gazetted staff employed on Catering.	35,92	36,23
7. निम्नलिखित कर्मचारियों का यात्रा भत्ता To travelling allowance of : -		
(क) रेस्तरां आदि में नियुक्त कर्मचारी (a) Staff employed in Restaurants etc.	12,85	3,21
(ख) राजपत्रित, पर्यवेक्षक और अन्य अराजपत्रित कर्मचारी (b) Gazetted, Supervisory & other non-gazetted Staff.	0	86
8. (क) छपाई, लेखन सामग्री और अन्य प्रासंगिक खर्च जैसे टेलीफोन, डाक टिकट, कन्टेनरों की लागत और अन्य विविध प्रभार (a) To Printing & Stationery & other contingency such as telephone, postage, cost of containers & other miscellaneous charges.	7,77	1,17
(ख) पानी और बिजली (b) To Water & electric current	51,28	14,91
9. ईंधन की लागत To cost of Fuel	88,29	4,96
10. ऊपर मद 6 में दिखाए गए कर्मचारियों की भविष्य निधि, उपदान, पेंशन आदि के कारण प्रभार। To charges on account of Provident Fund, Gratuity Pension etc. in respect of staff in item 6 above.	1,55,83	1,25,63
11. स्थान का किराया To rent a accommodation	3,159	10
12. लाभ To profit	0	0
जोड़ Total	93,96,51	43,03,96

(क) भविष्य निधि, उपदान, पेंशन संबंधी प्रभार केवल ऐसे कर्मचारियों के संबंध में शामिल किए गए हैं जो वास्तव में भविष्य निधि में अंशदान देते हैं और उपदान/पेंशन के हकदार हैं।

(A) The charges on account of Provident Fund, Gratuity/Pension includes only in respect of such staff who actually contribute to Provident Fund and entitled to Gratuity/Pension.

(*) इसमें गोदाम में रखा गया आरक्षित स्टाक और यूनिटों के पास रखा गया स्टाक शामिल है।

Includes Reserve Stock in godowns as well as stock with the units.

(**) विभागीय खान-पान व्यवस्था से सम्बंधित काम पर अप्रत्यक्ष रूप से नियुक्त कर्मचारियों/अधिकारियों का खर्च, जिसे केवल उस हालत में विभागीय खान-पान व्यवस्था के नामे डाला जाता है जब ऐसे कर्मचारी/अधिकारी अपना 50 प्रतिशत से अधिक समय विभागीय खान-पान व्यवस्था के काम पर लगाते हैं।

Expenditure on staff/officers indirectly employed on work connected with departmental catering debited to departmental catering only in case such staff/officers spend more than 50% of their time on departmental catering.

टिप्पणी- (i) 31.3.2021 को स्वीकार्य नामे बकाया की राशि (₹ 0) है।
Note : The amount of admitted debits outstanding as on 31.3.2021 is (₹ **0**).

(ii) लेखा द्वारा पाई गई हानि/कमी के कारण दक्षिण पूर्व रेल (₹ 0) की राशि जिस पर बट्टे खाते/वसूली के लिए अन्तिम निर्णय लिया जाना है।
South Eastern Railway (₹ 0/-) due to loss/shortage detected by Accounts, awaiting finalisation/decision for write off/recovery.

ANNEXURE-XV

F. 433 (5) D (See Para 433)

STATEMENT SHOWING BALANCES OUTSTANDING UNDER SUSPENSE AS ON 31.3.2021

(हज़ार ₹ में)
(In thousands of ₹)

क्र.सं. S.No	उचन्त शीर्ष Suspense Head	31-3-2021 को बकाया शेष Balances ending as on 31.3.2021		2020-2021 से संबंधित Relating to the year 2020-2021		2019-2020 से संबंधित Relating to the year 2019-2020		2019-2020 से पहले की अवधि से सबंधित Relating period to the prior to year 2019-2020	
		जमा Credit	नामे Debit	जमा Credit	नामे Debit	जमा Credit	नामे Debit	जमा Credit	नामे Debit
1.	विविध अग्रिम (राजस्व) Misc. Adv. (Revenue)	10602986	28099117	4542587	8477141	1861967	1644391	4198432	17977585
2.	विविध अग्रिम (पूंजी) रेलवे Misc. Adv. (Capital) Railways	6779349	57810850	2002575	7551637	1022180	3589445	3754594	46669768
	म.प.प. M.T.P.'s	1083984	91657755	41463	14189	67043	8746170	975478	82897396
	जोड़ Total	7863333	149468605	2044038	7565826	1089223	12335615	4730072	129567164
3.	खरीद Purchase	221472037	197191480	80655062	76638320	33789427	23628076	107027548	96925084

Ministry of Railways (Railway Board)

*****

अनुबन्ध 'क' 2020-2021

ANNEXURE 'A' 2020–2021

उस खर्च का विवरण जिस पर आपत्ति उठाई गई है

STATEMENT OF EXPENDITURE HELD UNDER OBJECTION

(हजार ₹ में)
(In thousands of ₹)

विवरण Particulars	विगत वर्ष से पहले की मदें Items dating from earlier than the previous year				विगत वर्ष की मदें Items dating from the previous year			चालू वर्ष की मदें Items relating to current year		जोड़ Total	
	मदों की संख्या No. of Items	विगत वर्ष से पहले तक का खर्च Expenditure upto earlier than previous year	विगत वर्ष का खर्च Expenditure during the previous year	चालू वर्ष का खर्च Expenditure during the current year	मदों की संख्या No. of Items	विगत वर्ष का खर्च Expenditure during the previous year	चालू वर्ष का खर्च Expenditure during the current year	मदों की संख्या No. of Items	चालू वर्ष का खर्च Expenditure during the current year	मदों की संख्या No. of Items	रकम Amount
1	2	3	4	5	6	7	8	9	10	11	12
एक लाख रुपये अथवा अधिक की प्रत्येक मदें जिनके संबंध में आपत्तियां उठायी गयी हैं. Items of Objection Amounting to Rupees One Lakh Each or More											
अनुमान के अभाव में Want of Estimates											
2019-20	63	830475	2407	21473	0	0	0	1	38	64	854393
2020-21	41	742080	1500	0	0	0	0	2	6700	43	750280
अनुमान से अधिक Excess Over Estimates											
2019-20	866	140205282	40245207	2209546	38	18219849	693826	62	25964590	966	227538300
2020-21	698	116306306	26796852	2775455	63	20860104	8785490	37	4529362	798	180053569
विविध अनियमितताएं Miscellaneous Irregularities											
2019-20	659	5603906	251782	2556	277	12013465	0	347	21102929	1283	38974638
2020-21	613	12910117	6335	2860	102	11584472	77105	166	6714571	881	31295460
जोड़ TOTAL											
2019-20	1588	146639663	40499396	2233575	315	30233314	693826	410	47067557	2313	267367331
2020-21	1352	129958503	26804687	2778315	165	32444576	8862595	205	11250633	1722	212099309

अनुबन्ध 'क' 2020-2021 Annexure 'A' – (जारी Contd.) 2020–2021

उस खर्च का विवरण जिस पर आपत्ति उठाई गई है STATEMENT OF EXPENDITURE HELD UNDER OBJECTION

(हजार ₹ में)
(In thousands of ₹)

विवरण Particulars	विगत वर्ष से पहले की मदें Items dating from earlier than the previous year				विगत वर्ष की मदें Items dating from the previous year			चालू वर्ष की मदें Items relating to current year		जोड़ Total	
	मदों की संख्या No. of Items	विगत वर्ष से पहले तक का खर्च Expenditure upto earlier than previous year	विगत वर्ष का खर्च Expenditure during the previous year	चालू वर्ष का खर्च Expenditure during the current year	मदों की संख्या No. of Items	विगत वर्ष का खर्च Expenditure during the previous year	चालू वर्ष का खर्च Expenditure during the current year	मदों की संख्या No. of Items	चालू वर्ष का खर्च Expenditure during the current year	मदों की संख्या No. of Items	रकम Amount
1	2	3	4	5	6	7	8	9	10	11	12
एक लाख रुपये से कम की प्रत्येक मदें जिनके संबंध में आपत्तियां उठायी गयी हैं. Items of Objection Amounting to Rupees Less thanOne Lakh Each											
अनुमान के अभाव में Want of Estimates											
2019-20	10	494	0	0	0	0	0	0	0	10	494
2020-21	4	290	0	0	0	0	0	0	0	4	290
अनुमान से अधिक Excess Over Estimates											
2019-20	60	2606	0	0	3	149	0	0	0	63	2755
2020-21	35	1235	0	0	0	0	0	0	0	35	1235
विविध अनियमितताएं Miscellaneous Irregularities											
2019-20	689	4702	0	0	94	4344	0	257	3787	1040	12833
2020-21	469	3571	0	0	31	1190	0	459	99979	959	104740
जोड़ TOTAL											
2019-20	759	7802	0	0	97	4493	0	257	3787	1113	16082
2020-21	508	5096	0	0	31	1190	0	459	99979	998	106265

खर्च के आंकड़े जिनके संबंध में आपत्ति उठायी गयी:-
Statistics of Expenditure under objection:-

(1) वर्ष के दौरान व्यय की कुल राशि (1) Total Amount of Expenditure during the year — Rs. 4172389200

(2) कुल राशि जिस पर इस वर्ष आपत्ति उठायी गयी और जो अभी तक आपत्ति (क) के अधीन है।
Total Amount placed under objection during the year and still under objection (A) — Rs. 22991522

(3) लेखा परीक्षित खर्च की तुलना में आपत्तिजनक खर्च का प्रतिशत
Percentage of objectionable expenditure to expenditure audited. — 0.55%

(4) ऊपर मद 3 के अनुरूप पिछले वर्ष का प्रतिशत Precentage of preceeding year similar to item 3 above. — 1.13%

(5) ये आंकड़े जमा खाते की रकम को वृद्धि के आंकड़े रूप में मानकर निकाले गए हैं। The figures have been arrived at by taking credits as plus figures.

टिप्पणी — इस विवरण में दी गयी मदों का वर्गीकरण एक लाख रुपए से अधिक या कम, खर्च की कुल रकम के अनुसार किया गया जो वर्ष के अंत तक आपत्ति के अधीन थी।
Note— Items in this statement have been classified as above or below one Lakh according to total amount of expenditure placed under objection to end of the year.

ANNEXURE-XVII

Under Charges Detected By Accounts Or Audit

अनुबंध 'ख'
ANNEXURE "B"
2020-2021 के दौरान लेखा या लेखा परीक्षा द्वारा पता लगाए गए और वसूल किए गए अवप्रभारों का विवरण
STATEMENT OF UNDER CHARGES DETECTED BY ACCOUNTS OR AUDIT AND RECOVERED DURING 2020-2021

(हजार ₹ में)
(In thousand of ₹)

क्र.सं. S.No.	रेलवे Railways	अथशेष Opening Balance	वर्ष में वापिस लिए गए अवप्रभारों को छोड़कर लेखा और लेखा परीक्षा द्वारा पता लगाए गए अवप्रभारों की कुल रकम Total Amount of Under Charges detected by Accounts & Audit excluding those withdrawn during the year	कुल आमदनी जिसकी लेखा परीक्षा की गई Total earnings Audited	आमदनी से अवप्रभारों का प्रतिशत Percentage of Under charges to Earnings	अवप्रभार की रकम Amount of Underchages			कुल बकाया अवप्रभार Total Outstanding Underchages
						वसूल की गई Recovered	बट्टे खाते में डाली गई Written off	जोड़ Total	
1	2	3	4	5	6	7	8	9	10
1	मध्य /Central	73363*	15003	92231864	0.02	23738	61	23799	64567
2	पूर्व Eastern	233751	50298	54847161	0.09	41217	0	41217	242832
3	पूर्व मध्य East Central	360012	33739	107454507	0.03	4135	0	4135	389616
4	पूर्व तटीय East Coast	14984	301144	174721102	0.17	302081	0	302081	14047
5	उत्तर Northern	750327*	6145	102048646	0.01	1299	0	1299	755173
6	उत्तर-पूर्व North Central	16588	5328	99161730	0.01	4355	0	4355	17561
7	पूर्वोत्तर सीमा North-Eastern	458663	5403	25507071	0.02	6566	0	6566	457500
8	उत्तर मध्य North Frontier	8079	14415	47782267	0.03	10890	0	10890	11604
9	उत्तर पश्चिम North Western	1244221	402070	59048594	0.68	378022	0	378022	1268269
10	दक्षिण Southern	96943	3506	40264260	0.01	29740	0	29740	70709
11	दक्षिण मध्य South Central	95676	-19949	108142829	-0.02	59890	0	59890	15837
12	दक्षिण पूर्व South Eastern	447134	248180	145613572	0.17	258704	0	258704	436610
13	दक्षिण पूर्व मध्य South East Cen.	918426	50575	138213454	0.04	24481	624210	648691	320310
14	दक्षिण पश्चिम South Western	5162	4428	36696727	0.01	3276	0	3276	6314
15	पश्चिम Western	70301	39695	78840741	0.05	16421	40	16461	93535
16	पश्चिम मध्य West Central	22519	171127	95920404	0.18	182235	0	182235	11411
17	मैट्रो/कोलकाता Metro/Kolkata	0	0	661660	0.00	0	0	0	0
	जोड़ Total	4816149	1331107	1405156589	0.09	1347050	624311	1971361	4175895

नोट Note:- (क) इसमें माल यातायात के मामले में ₹ 2.00 या इससे कम और कोचिंग यातायात के मामले में ₹ 50 पैसे तथा उससे कम के अवप्रभार शामिल नहीं हैं जिन्हें स्टेशनों के नामे खाते में नहीं डाला गया है।
(a) Excludes undercharges of ₹ 2.00 and below in case of goods traffic and ₹ 50 and below in coaching traffic not debited to stations.
(ख) इसमें वसूल किए गए और बट्टे खाते में डाले गए अवप्रभार शामिल हैं, जिनका पता पिछले वर्ष में लगा था।
(b) Includes recoveries and written off undercharges discovered in previous year.
(ग) इसमें बीजक और पार्सल रवन्नों को हिसाब में शामिल न करने और देर से शामिल करने के संबंध में लगभग ... रकम शामिल नहीं है।
(c) Excludes amount of debits for non-accountal and delayed accountal of Invoices and Parcel Way Bills
(घ) इसमें कुछ ऐसे स्टेशनों के आंकड़े शामिल नहीं हैं जिनकी विवरणियां अभी तक नहीं मिली हैं और जिनकी जांच नहीं की गयी है।
(d) Excludes figures of certain stations from where returns have not yet been received and checked.
* अथशेष में अंतर रेलवे द्वारा भेजी गई करेक्शन स्लिप को लेखादान नहीं किए जाने के कारण।
Difference in OB is due to Non Accountal of Correction slip submitted by the Railways.

ANNEXURE-XVIII

Statement Showing Remission And Abandonment Of Claims To Revenue

125

अनुबन्ध 'ग'

ANNEXURE 'C'

2020–2021 के दौरान राजस्व में दावों के छूट और दावों के परित्याग से संबंधित विवरण

STATEMENT SHOWING REMISSION & ABANDONMENT OF CLAIMS TO REVENUE DURING 2020-2021

(₹ हजार में)

(₹ In thousands of)

क्रम संख्या S. No.	रेलवे का नाम Name of Railways	विवरण Particulars	मदों की संख्या No. of Items	रकम Amount		कुल आमदनी जिसकी लेखा परीक्षा की गई Total earnings audited	वसूल किया गया कुल विलम्ब शुल्क और स्थान शुल्क Total Demurrage & Wharfage recovered	कुल बकाया विलम्ब शुल्क और स्थान शुल्क Total Outstandin Demurrage & Wharfage
				ब्यौरा Details	जोड़ Total			
1	2	3	4	5	6	7	8	9
1.	मध्य रेलवे Central Railway	स्थान शुल्क एवं विलम्ब शुल्क:- Wharfage and Demurrage:-						
		₹ 25,000 अथवा अधिक धनराशि की प्रत्येक मदें Items amounting to ₹ 25,000 each or more	137	4775				
		₹ 25,000 से नीचे की प्रत्येक मदें Items below ₹ 25,000 each	320805	230236	235011			
		अन्य मदें:- Other Items:-						
		₹ 25,000 अथवा अधिक धनराशि की प्रत्येक मदें Items amounting to ₹ 25,000 each or more	1	25				
		₹ 25,000 से नीचे की प्रत्येक मदें Items below ₹ 25,000 each	0	0	25	92231864	78336	162075
2.	पूर्वी रेलवे Eastern Railway	स्थान-शुल्क एवं विलम्ब शुल्क:- Wharfage and Demurrage:-						
		₹ 25,000 अथवा अधिक धनराशि की प्रत्येक मदें Items amounting to ₹ 25,000 each or more	615	1799642				
		₹ 25,000 से नीचे की प्रत्येक मदें Items below ₹ 25,000 each	316	391	1800033			
		अन्य मदें:- Other Items:-						
		₹ 25,000 अथवा अधिक धनराशि की प्रत्येक मदें Items amounting to ₹ 25,000 each or more	0	0				
		₹ 25,000 से नीचे की प्रत्येक मदें Items below ₹ 25,000 each	0	0	0	54847161	746386	100562
3.	पूर्व मध्य रेलवे East Central Railway	स्थान-शुल्क एवं विलम्ब शुल्क:- Wharfage and Demurrage:-						
		₹ 25,000 अथवा अधिक धनराशि की प्रत्येक मदें Items amounting to ₹ 25,000 each or more	236	8547				
		₹ 25,000 से नीचे की प्रत्येक मदें Items below ₹ 25,000 each	9417	176979	185526			
		अन्य मदें:- Other Items:-						
		₹ 25,000 अथवा अधिक धनराशि की प्रत्येक मदें Items amounting to ₹ 25,000 each or more	0	0				
		₹ 25,000 से नीचे की प्रत्येक मदें Items below ₹ 25,000 each	457	134	134	107454507	364065	1603090

अनुबन्ध 'ग' (समाप्त)
Annexure 'C' (Concld.)

2020-2021 के दौरान राजस्व में दावों के छूट और दावों के परित्याग से संबंधित विवरण जोकि प्रत्येक मद की राशि रु. एक लाख से अधिक है

STATEMENT SHOWING DETAIL REMISSION & ABANDONMENT OF CLAIMS TO REVENUE ABOVE RS. ONE LAKHS EACH DURING 2020-2021

(हजारों में ₹ Amount in ₹)

क्र. सं. S.No.	रेलवे RAILWAYS	मदों की संख्या NO. OF ITEMS	राशि AMOUNT
1	पूर्व तटीय रेलवे East Coast Railway	352	451062
2	पूर्वोत्तर सीमांत रेलवे North Frontier Railway	224	79299
3	उत्तर पश्चिम रेलवे North Western Railway	12	1942
4	दक्षिणी मध्य रेलवे Southern Central Railway	294	122057
5	दक्षिणी पूर्वी रेलवे Southern Eastern Railway	17	32383

* * * * * * *

ANNEXURE XIX

Review Of Expenditure On Important Open 'Line Works And New Construction

131

अनुबन्ध 'घ'
ANNEXURE 'D'

महत्वपूर्ण चालू लाइन निमार्ण कार्य और नये निमार्ण कार्यों पर खर्च की समीक्षा
REVIEW OF EXPENDITURE ON IMPORTANT OPEN LINE WORKS AND NEW CONSTRUCTIONS
(चालू लाइन निर्माण कार्यों और नये महत्वपूर्ण कार्यों से संबंधित निर्माण कार्यों की समीक्षा को शामिल किया गया है जो वर्ष के दौरान बिना बजट प्रावधान के किए गए थे और वे कार्य जो शुरू नहीं किए गए थे हालांकि इनके लिए धन का प्रावधान किया गया था। यह समीक्षा वास्तविक रूप से पूरे किए गए कार्यों पर वास्तविक व्यय की तुलना भी करती है)
(COVERS REVIEW OF OPEN LINE WORKS AND NEW CONSTRUCTIONS DEALING IMPORTANT WORKS WHICH WERE UNDERTAKEN DURING THE YEAR WITHOUT BUDGET PROVISION AND WORKS WHICH WERE NOT UNDERTAKENALTHOUGH FUNDS HAD BEEN PROVIDED FOR THE SAME.THE REVIEW ALSO COMPARES THE ACTUAL EXPENDITURE ON THE WORKS PHYSICALLY COMPLETED)

भाग 1 (क) ₹ 2.5 करोड़ और उससे अधिक की लागत वाले कार्य जो वर्ष के दौरान बिना बजट प्रावधान के किए गये।
Part-I (a) Works costing ₹ 2.5 crore and over which are undertaken during the year without Budget Provision.

(हजार ₹ में)
(In thousands of ₹)

रेलवे Railway	कार्य का नाम Name of works	आवंटन Allocation	अनुमानित लागत Estimated Cost	प्रारम्भ करने की तारीख Date of Commence-ment	वर्ष दौरान किया गया खर्च Exp. incurred during the year 2020-21	वर्ष के अंत तक किया गया कुल खर्च Total Exp. incurred upto the end of the year	टिप्पणी Remarks
1	2	3	4	5	6	7	8
NIL							

Min. of Rlways Railway Board

अनुबन्ध 'घ' (जारी)

ANNEXURE 'D' (Contd.)

भाग 1 (ख) गत वर्षों के ₹ 2.5 करोड़ और उससे अधिक के कार्य जिन पर व्यय वर्ष के दौरान बिना बजटीय प्रावधान के किया गया है।
Part-I (b) Works costing ₹ 2.5 crore and over of previous years on which expenditure was booked during the year without Budget Provision.

(हजार ₹ में)
(In thousands of ₹)

रेलवे **Railway**	कार्य का नाम **Name of works**	आवंटन **Allocation**	अनुमानित लागत **Estimated Cost**	प्रारम्भ करने की तारीख **Date of Commence-ment**	वर्ष दौरान किया गया खर्च **Exp. incurred during the year 2020-21**	वर्ष के अंत तक किया गया कुल खर्च **Total Exp. incurred upto the end of the year**	टिप्पणी **Remarks**
1	2	3	4	5	6	7	8
मध्य रेलवे **CR**	मिराज–लातूर जीसी Miraj-Latur GC	पूंजी (सीएच) CAP (Ch.)	8022400	1993-94	25772	10404152	न्यायालय के आदेशानुसार भूमि भुगतान पर व्यय किया गया। Expenditure was incurred for land payment as per Court Orders.
	पनवेल–रोहा (75.44 किमी)–भूमि अधिग्रहण Panvel-Roha (75.44 km)-land acquisition	पूंजी CAP	165029	1996-97	500	174149	न्यायालय के आदेशानुसार भूमि भुगतान पर व्यय किया गया। Expenditure was incurred for land payment as per Court Orders.
	माटुंगा कार्यशाला का आधुनिकीकरण Matunga modernisation of workshop	डीएफ DF	398744	2007-08	31870	408018	न्यायालय के आदेशानुसार भूमि भुगतान पर व्यय किया गया। Expenditure was incurred for land payment as per Court Orders.
पूर्व तट रेलवे **ECOR**	टीएलएचआर–एसबीपी नई लाइन TLHR- SBP New Line	पूंजी (शुल्क) CAP (Charge)	5180000	1982-83	3372	4838829	न्यायालय के आदेशानुसार भूमि भुगतान पर व्यय किया गया। Expenditure was incurred for land payment as per Court Orders.
	लांजीगढ़ रोड जूनागढ़ नई लाइन Lanjigarh Road Junagarh New Line	पूंजी (शुल्क) CAP (Charge)	3081976	1993-94	5072	2889587	न्यायालय के आदेशानुसार भूमि भुगतान पर व्यय किया गया। Expenditure was incurred for land payment as per Court Orders.
	अंगुल डीजल शेड में 50 लोको की होमिंग Angul Diesal Shed homing of 50 Locos	पूंजी (शुल्क) CAP (Charge)	386200	1995-96	2479	344808	न्यायालय के निर्णय के अनुसार व्यय किया गया। Charged expendigure incurred as per the verdict of the Court.

अनुबन्ध 'घ' (जारी)
ANNEXURE 'D' (Contd.)
महत्वपूर्ण खुली लाइन संबंधी निर्माण कार्य और नए निर्माण कार्यों पर व्यय की समीक्षा
REVIEW OF EXPENDITURE ON IMPORTANT OPEN LINE WORKS AND NEW CONSTRUCTIONS

(हजार ₹ में)
(In thousands of ₹)

भाग II - ₹ 2.5 करोड़ रु. या उससे अधिक की लागत वाले कार्य जिनके लिए बजट प्रावधान मौजूद थे, लेकिन वर्ष के दौरान शुरु नहीं किए गए।
PART II - WORKS COSTING ₹ 2.5 CRORE OR MORE FOR WHICH BUDGET PROVISION EXISTED BUT WERE NOT UNDERTAKEN DURING THE YEAR.

रेलवे Railways	कार्य का नाम Name of Works	अनुमानित लागत Estimated Cost	बजट प्रावधान Budget Provision	टिप्पणी Remarks
1	2	3	4	5
मध्य रेलवे CR	भुसावल–खंडवा: दुसखेड़े, बुरहानपुर, मांडवा, और भुसावल–खंडवा खंड में दोरगरगाँव स्टेशन पर भुसावल–खंडवा खंड में अप और डाउन लूप लाइनों का विस्तार। Bhusawal - Khandwa Extension of UP & Dn loop lines at Duskhede, Burhanpur, Mandwa, and Dorgargaon stn in Bhusawal-Khandwa section.	94705	1	रेलवे बोर्ड / मुख्यालय के निर्देशों के अनुसार कोविड महामारी के मद्देनजर निधियों की कमी के कारण इसे स्थगित रखा गया था। Due to Scarcity of funds in the wake of COVID pendemic was kept in abeyance as per the directives of Rly Board/Hqrs.
	खंडवा स्टेशन: डाउन मेन लाइन पर 30 किमी प्रति घंटे पीएसआर और अप मेन लाइन पर सामान्य से 75 किमी प्रति घंटे पीएसआर की रियायत के लिए प्रस्तावित यार्ड रीमॉडलिंग Khandwa station proposed yard remodelling for relaxation of 30 KMPH PSR on DN Main line and 75 KMPH PSR on UP Main line to Normal	64731	1	रेलवे बोर्ड / मुख्यालय के निर्देशों के अनुसार कोविड महामारी के मद्देनजर निधियों की कमी के कारण इसे स्थगित रखा गया था। Due to Scarcity of funds in the wake of COVID pendemic was kept in abeyance as per the directives of Rly Board/Hqrs.
	भुसावल–इगतपुरी : भुसावल–इगतपुरी खंड में भुसावल और निफाड स्टेशन पर अप और डाउन लूप लाइनों का विस्तार Bhusawal- Igatpuri Extension of UP & DN loop lines at Bhusawal and Niphad Station in Bhusawal - Igatpuri Section	90923	1	रेलवे बोर्ड / मुख्यालय के निर्देशों के अनुसार कोविड महामारी के मद्देनजर निधियों की कमी के कारण इसे स्थगित रखा गया था। Due to Scarcity of funds in the wake of COVID pendemic was kept in abeyance as per the directives of Rly Board/Hqrs.
	बडनेरा स्टेशन: अप दिशा में 753 एम सीएसआर की अतिरिक्त माल लूप लाइन के प्रावधान के लिए प्रस्तावित यार्ड रीमॉडलिंग Badnera station proposed yard remodelling for provision of additional goods loop lines of 753 M CSR in UP direction.	40068	1	रेलवे बोर्ड / मुख्यालय के निर्देशों के अनुसार कोविड महामारी के मद्देनजर निधियों की कमी के कारण इसे स्थगित रखा गया था। Due to Scarcity of funds in the wake of COVID pendemic was kept in abeyance as per the directives of Rly Board/Hqrs.
	भुसावल–इगतपुरी: पीएसआर में रियायत के लिए श्रीसोली काजगांव में यार्ड रीमॉडलिंग और खेरवाड़ी स्टेशन पर अप और डाउन लूप लाइनों के विस्तार। Bhusawal -Igatpuri yard remodelling at Srisoli Kajgaon for relaxation of PSR and extention of UP and DN loop lines at Kherwadi stations.	120269	1	रेलवे बोर्ड / मुख्यालय के निर्देशों के अनुसार कोविड महामारी के मद्देनजर निधियों की कमी के कारण इसे स्थगित रखा गया था। Due to Scarcity of funds in the wake of COVID pendemic was kept in abeyance as per the directives of Rly Board/Hqrs.

अनुबन्ध 'घ' (जारी)
ANNEXURE 'D' (Contd.)

भाग - III - वर्ष 2020-21 के दौरान पूरे किए गए ₹ 2.5 करोड़ एवं उससे अधिक की लागत वाले प्रत्येक निर्माण कार्य से संबंधित मूल अनुमान तथा व्यय के बीच अंतर।

Part - III - Variation between Original Estimates and Expenditure in respect of Works completed during the year 2020-21 costing not less than ₹ 2.5 Crore each.

(हजार ₹ में)
(In thousands of ₹)

रेलवे Railways	पी.बी. सं. PB No.	कार्य का नाम Description of the work	खण्ड कार्य/ 2020-21 में पूर्ण हुए Section work/ completed during 2020-21	मुल अनुमानित लागत Original Estimated Cost	अंतिम लागत Final Cost	मू.अ.से कमी/आधिक्य Excess/ Saving w.r.t Original Estimates	टिप्पणी Remarks
1	2	3	4	5	6	7	8
पूर्व मध्य रेलवे ECR	पीबी PB 138	समस्तीपुर मंडल – स्टेशन की सीमा के बाहर समपार फाटकों की इंटरलॉकिंग (20000 से अधिक टीवीयू) (18 अदद) Samastipur Division - Interlocking of level crossing gates outside station limits (tvu more than 20000) (18 Nos)		106229	39065	67164	13 समपारों पर कार्य पूरा किया गया और चालू कर किया गया और 5 समपारों पर प्रगति पर है। इंजीनियरिंग कार्य पूरा हुआ और संविदात्मक दायित्व का निर्वहन किया गया। Work completed & commissioned at 13 LCs and in progress at 5 LCs. Engg. work completed and contractual liability discharged.
	एलबी LB-1052	एडीईएन/एसपीजे के तहत आरओए में प्लेटफार्म संख्या 1 और 2 को ऊंचे स्तर तक बढ़ाना Raising of platform No. 1 & 2 to high level at ROA under ADEN/ SPJ		59927	59832	95	प्लेटफॉर्म सं. 1 और 2 की ऊंचाई बढ़ाने का कार्य पूरा हुआ। अंतिम बदलाव को मंजूरी दी गई। अंतिम बिल पास किया गया। Work Raising of Pf no. 1&2 completed. Final variation approved. Final bill passed.
	पीबी PB 683	दानापुर–पैनल इंटरलॉकिंग द्वारा लीवर फ्रेम और ग्राउंड गियर का प्रतिस्थापन। Danapur- Repl.of lever frames & ground gears by Panel Interlocking.		51545	528102	476557	कीमतों/ कार्य के दायरे में वृद्धि Increase in prices /scope of work
	पीबी PB-687	मोकामा–पैनल इंटरलॉकिंग द्वारा लीवर फ्रेम का प्रतिस्थापन Mokama-Repl. of lever frames by Panel Interlocking		39685	75800	36115	कीमतों/कार्य के दायरे में वृद्धि Increase in prices /scope of work
	पीबी PB-688	फतुहा – पैनल इंटरलॉकिंग द्वारा लीवर फ्रेम का प्रतिस्थापन Fatuha-Repl.of lever frames by Panel Interlocking		139068	139100	32	कीमतों/कार्य के दायरे में वृद्धि Increase in prices /scope of work

ANNEXURE XX
Working Expenses And Other Revenue Charges Relating To Strategic Lines

अनुबंध 'ङ'

ANNEXURE 'E'

नीचे दिये गये विवरण में 2020-2021 में सामरिक लाइनों से संबंधित संचालन व्यय और अन्य राजस्व प्रभार दिखाया गया है

STATEMENT SHOWING WORKING EXPENSES AND OTHER REVENUE CHARGES RELATING TO STRATEGIC LINES - 2020-2021

(₹ हजार में)

(₹ In thousands of)

विवरण Particulars	उ.रे. NR	पूर्वो.सी.रे NFR	उ.प.रे. NWR	प.रे. WR	जोड़ Total
मुख्य शीर्ष (3001)-विविध व्यय (सामान्य) M H (3001) -Misc.Expenditure (General)	0	44479	0	203	44682
मुख्य शीर्ष (3003)-01 सामान्य अधीक्षण और सेवाएं M H (3003)-01 GeneralSuperintendence & Services	28562	873704	88791	0	991057
मुख्य शीर्ष (3003)-02-रेलपथ का निर्माण कार्य एवं अनुरक्षण M H (3003)-02-Repairs & Maintenance of P. Way &Works	65883	1664523	308171	9204	2047781
मुख्य शीर्ष (3003)-03-रेल इंजनों की मरम्मत एवं रखरखाव M H (3003)-03-Repairs & Maintenance of Motive Power	82255	140056	36060	0	258371
मुख्य शीर्ष (3003)-04-सवारी और माल डिब्बों की मरम्मत एवं अनुरक्षण M H (3003) -04-Repairs & Maintenance of Carriages & Wagons	156076	853213	42929	0	1052218
मुख्य शीर्ष (3003)-05-संयत्र एवं उपस्करों की मरम्मत एवं अनुरक्षण M H (3003) -05-Reoairs & Maintenanance of Plant & Equipment	62900	584202	121095	0	768197
मुख्य शीर्ष (3003)-06-परिचालन व्यय : चल स्टॉक और उपस्कर M H (3003)-06- Operating Expenses - Rolling Stock & Equipment	144561	783709	235384	0	1163654
मुख्य शीर्ष (3003)-07-परिचालन व्यय-यातायात M H (3003) -07- Operating Expenses - Traffic.	153784	2129837	347466	0	2631087
मुख्य शीर्ष (3003)-08-परिचालन व्यय-ईंधन M H (3003) - 08- Operating Expenses - Fuel.	97839	1625019	26965	0	1749823
मुख्य शीर्ष (3003)-09-कर्मचारी कल्याण और सुख-सुविधाएं M H (3003) - 09- Staff Welfare and Amenities.	55437	910446	173272	214	1139369
मुख्य शीर्ष (3003)-10-विविध संचालन व्यय M H (3003) -10- Miscellaneous Working Expenses.	64422	860182	95740	0	1020344
मुख्य शीर्ष (3003)-11-भविष्य निधि पैंशन तथा अन्य सेवा निवृत्ति लाभ M H (3003) -11 - PF, Pension & Other Retirement benefits.	34775	386027	27112	0	447914
मुख्य शीर्ष (3003 और 3006)-मू.आ.नि. में विनियोग M H (3003 & 3006) - Appropriation to DRF.	53828	34006	18685	13810	120329
मुख्य शीर्ष (3003 और 3006)-पेंशन निधि में विनियोग M H (3003 & 3006) - Appropriation to Pension Fund.	68550	81000	-133533	1548	17565
जोड़-I TOTAL- I	**1068872**	**10970403**	**1388137**	**24979**	**13452391**

अनुबंध 'ड.' (समाप्त)
ANNEXURE 'E' (Concld.)

नीचे दिए गए विवरण में सामरिक लाइनों से संबंधित निर्माण कार्यों पर पूंजी, विकास निधि, मूल्यह्रास आरक्षित निधि तथा राष्ट्रीय रेल सरंक्षा कोष में से किया गया खर्च दर्शाया गया है।
THE FOLLOWING STATEMENT SHOWS EXPENDITURE ON WORKS RELATING TO STRATEGIC LINES MET FROM CAPITAL, DEVELOPMENT FUND, DEPRICIATION RESERVE FUND AND RASTRIYA RAIL SANRAKSHA KOSH.

(हजार ₹ में)
(In thousands of ₹)

विवरण Particulars	उ.रे. NR	पूर्वो.सी.रे NFR	उ.प.रे. NWR	प.रे. WR	जोड़ Total
(क) पूंजी CAPITAL					
पुल कार्य Bridge Work	0	0	0	0	0
आमान परिवर्तन Gauge Conversion	0	0	0	0	0
उचन्त Suspense	35863	125246	0	0	161109
जोड़- II Total -II	**35863**	**125246**	**0**	**0**	**161109**
(ख) विकास निधि Development Fund	0	0	7756	0	7756
(ग) मूल्यह्रास आरक्षित निधि Depreciation Reserve Fund	0	0	9240	0	9240
(घ) रेल संरक्षा निधि Railway Safety Fund.	0	0	0	0	0
(ड़) रा.रे.सं.कोष Rashtriya Rail Sanraksha Kosh.	0	0	10147	0	10147
जोड़-III (ख+ग+घ+ङ) Total III (b+c+d+e+f)	**0**	**0**	**27143**	**0**	**27143**
जोड़-II एवं III Total II & III	**35863**	**125246**	**27143**	**0**	**188252**
कुल जोड़-I, II और III (रा.+पूंजी) Grand Total I, II & III (Rev+Cap)	**1104735**	**11095649**	**1415280**	**24979**	**13640643**

ANNEXURE XXI

(Form F-44) (See Para 433)

289

अनुबन्ध ''च''
ANNEXURE ''F''

वर्ष 2020-2021 में अनुमानित और वास्तविक जमा अथवा वसूलियों का विवरण
STATEMENT OF ESTIMATED AND ACTUAL CREDITS OR RECOVERIES FOR THE YEAR 2020-21

(हजार ₹ में)
(In thousands of ₹)

उप-मुख्य शीर्ष Sub-Major Head	विवरण Particulars	बजट अनुमान Budget Estimates	संशोधित अनुमान Revised Estimates	वास्तविक Actuals	संशोधित अनुमान की तुलना में वास्तविक वृद्धि/कमी Actual compared with Revised Estimate More/Less
1	2	3	4	5	6
3001 (1)	रेलवे बोर्ड Railway Board	100	100	0	-100
3001 (2)	विविध व्यय (सामान्य) Miscellaneous Expenditure (General)	0	0	120474	120474
3002-3003 (01)	सामान्य अधीक्षण और सेवाएं General Superintendence & Services	343685	294508	228168	-66340
3002-3003 (02)	रेलपथ और निर्माण कार्यों की मरम्मत और अनुरक्षण Repairs & Maintenance of Permanent Way & Works	2053148	1920430	2267580	347150
3002-3003 (03)	रेल इंजनों की मरम्मत और अनुरक्षण Repairs & Maintenance of Motive Powers	954921	912967	1567727	654760
3002-3003 (04)	सवारी और मालडिब्बों की मरम्मत और अनुरक्षण Repairs & Maintenance of Carriages & Wagons.	3287883	2901459	3351963	450504
3002-3003 (05)	संयंत्र और उपस्कर की मरम्मत और अनुरक्षण Repairs & Maintenance of Plant & Equipments.	1104799	1034193	1165642	131449
3002-3003 (06)	परिचालन व्यय–चल स्टॉक और उपस्कर Operating Expenses - Rolling Stock & Equipmentns.	3606908	3011724	3540132	528408
3002-3003 (07)	परिचालन व्यय–यातायात Operating Expenses - Traffic.	1888219	1912192	2382813	470621
3002-3003 (08)	परिचालन व्यय–ईंधन Operating Expenses - Fuel.	3116404	2718109	3085103	366994
3002-3003 (09)	कर्मचारी कल्याण एवं सुख-सुविधाएं Staff Welfare & Amenities.	288380	241156	318678	77522
3002-3003 (10)	विविध संचालन व्यय Miscellneous Working Expenses.	10882849	5066741	6656719	1589978
3002-3003 (11)	भविष्य निधि, पेंशन और अन्य सेवानिवृत्ति लाभ :- Provident Fund, Pension Fund & Other Retirement Benefits:-				
	(i) पेंशन निधि से पूरी की गई रकम Amount recouped from Pension Fund	530000000	510000000	484349625	-25650375
	(ii) अन्य जमा Other Credits.	973337	2187000	1409577	-777423

ANNEXURE-XXII

अनुबन्ध "ज"
ANNEXURE ''H''
2020-2021 में हानियों का विवरण
STATEMENT OF LOSSES FOR 2020-2021

(हजार ₹ में)
(In thousands of ₹)

विवरण Particulars	मदों की संख्या No. of Items	रकम Amount
1	2	3
अनुदान सं. 83- प्रमुख शीर्ष 3002 एवं 03 (01) - संचालन व्यय - सामान्य अधीक्षण और सेवाएं **Grant No. 83- MH 3002 & 03 (02) - Working Expenses - General Superintendence and Services.**		
₹ 50000/- से अधिक की प्रत्येक मदें **Items above ₹ 50,000/- each**		
उत्तर रेलवे **Northern Railway**		
(i) चोरी के कारण हानि Loss due to theft.		
उत्तर पश्चिम रेलवे **Northern Western Railway**		
(i) विविध कारण Misc. cause		
दक्षिण पश्चिम रेलवे **South Western Railway**		
(ii) चोरी के कारण हानि Loss due to Theft		
पश्चिम मध्य रेलवे **West Central Railway**		
(i) विविध हानियों के कारण हानि Loss due to Mis. Losses	1	54
सभी भारतीय रेलें **All Indian Railways**		
50,000/- रुपये से कम की प्रत्येक मद **Items below Rs.50,000/- each**		
(i) चोरी से होने वाली हानि (1) Loss due to Theft (1)	1	1
जोड़ Total	**2**	**55**
अनुदान संख्या 83- एमएच-3002-एवं 03 (2) संचालन व्यय - रेल पथ की मरम्मत और अनुरक्षण **Grant No. 83- MH-3002-&03 (2) Working Expenses - Repairs & maintenance of Permanent Way & Works**		
50,000/- रुपये से अधिक की प्रत्येक मद **Items above Rs.50,000/- each**		
मध्य रेलवे **Central Railway**		
(i) दुर्घटना के कारण हानि Loss due to Accident.	8	5817
(ii) प्राकृतिक आपदाओं के कारण हानि - आग, बाढ़, भूकंप, चक्रवात आदि। Loss due to Natural calamities - Fire, Flood, Earthquake, Cyclone etc.	2	130
(iii) विविध के कारण हानि Loss due to Miscellaneous	1	90
पूर्व रेलवे **Eastern Railway**		
(i) दुर्घटना के कारण हानि Loss due to Accident.	2	100
(ii) प्राकृतिक आपदाओं के कारण हानि - आग, बाढ़, भूकंप, चक्रवात आदि। Loss due to Natural calamities - Fire, Flood, Earthquake, Cyclone etc.	33	21750
पूर्व तट रेलवे **East Coast Railway**		

ANNEXURE-XXIII

F. 433 (14) (See Para 433)

अनुबन्ध "झ"

ANNEXURE "I"

2020-2021 में रेलों द्वारा किए गए अनियमित पुनर्विनियोग का विवरण

STATEMENT SHOWING IRREGULAR RE-APPROPRIATIONS MADE BY THE RAILWAYS DURING THE YEAR 2020-2021

(हजार ₹ में)
(In thousands of ₹)

रेलवे /इकाईयां Railways/Units	प्रभावित अनुदान Grant Affected	विवरण Particulars	(राशि) Amount
1	2	3	4
रेलवे/इकाई **Railway/Units**	प्रभावित अनुदान **Grant Affected**	विवरण **Particulars**	राशि **Amount**
सभी भारतीय रेलवे All Indian Railways.	नहीं Nill	नहीं Nill	नहीं Nill

Ministry of Railways (Railway Board)

ANNEXURE-XXIV

F. 433 (14) (See Para 433)

304

अनुबन्ध 'ञ'
ANNEXURE 'J'

महत्वपूर्ण गलत वर्गीकरण और पाई गई अन्य गलतियों का विवरण (2020-2021)
STATEMENT OF IMPORTANT MISCLASSIFICATION AND OTHER MISTAKES DETECTED (2020-2021)

(हजार ₹ में)
(In thousand of ₹)

क्र.सं. S. No.	रेलवे/ इकाई Railway/ Unit	संक्षिप्त विवरण Brief Particulars	अंतर्निहित राशि Amount involved
1	2	3	4
		Part - I	
		संसद द्वारा संविधान की धारा 115 के तहत नियमितीकरण हेतु आधिक्य पर ज्ञापन में प्रविष्टि के लिए अर्हक मदें। **Items qualifying for inclusion in the memorandum on excess for regularisation by Parliament under Article 115 of Constitution.**	
1		**पूंजी अनुदान के स्थान पर राजस्व अनुदान के तहत इन्द्राज के कारण होने वाले त्रुटिपूर्ण वर्गीकरण।** **Misclassification arising due to booking under Revenue Grant instead of Works Grant:**	
	उरे NR	50 टन की ई ओ टी क्रेन की खरीद (57,51,746 रू.) को गलती से 83–मु. शी. 5002–03–29–4200 आर आर एस के (पूंजी) के स्थान पर 83–मु. शी. 3002–03 (04) में दर्ज कर दिया गया, रेल पथ एवं सामग्री के परिवहन हेतू भाड़ा (73,14,332 रू.) को गलती से 83–मु. शी. 5002–03–21–3100–मु. ह्रा. नि.– (पूंजी) के स्थान पर 83–मु. शी. 3002–03 (02) में दर्ज कर दिया गया, अकाऊटिंग रिफॉर्म्स के कर्मचारियों का वेतन (110,35,349 रू.) को गलती से 83–मु. शी. 5002–03–20–1700– (पूंजी) के स्थान पर 83–मु. शी. 3002–03 (01) में दर्ज कर दिया गया, हाईड्रोलिक बचाव उपकरण की खरीद (48,12,551 रू.) को गलती से 83–मु. शी. 5002–03– आर आर एस के म. एवं सं. (29–4100) के स्थान पर 83–मु. शी. 3002–03 (04) में दर्ज कर दिया गया एवं सिंक्रोनाईज्ड विद्युत चालित 5 टन स्क्रुय जैक की कीमत रू. (27,78,195 रू.) को गलती से 83–मु. शी. 5002–03 वि. नि. – III (43–1600) स्थान पर 83–मु. शी. 3002–03 (04) में दर्ज कर दिया गया। Procurement of 50 Tone EOT Crane booked to 83 MH 3002-03(04) instead of 83 MH 5002-03-29-4200-RRSK(Capital) (Rs. 57,51,746), Payment of frieght charges of Permanent way and materials booked to 83 MH 3002-03(02) instead of 83 MH 5002-03-03-21-3100-DRF-(Capital) (Rs. 73,14,332), Pay and allowances of staff of Accounting Reforms Cell of frieght charges of Permanent way and materials booked to 83 MH 3002-03(01) instead of 83 MH 5002-03--20-1700-Capital (Rs.110,35,349),Cost of Hydrolic Rescue Devises booked to 83 MH 3002-03(04) instead of 83 MH 5002-03-RRSK-M&P(29-4100) (Rs. 48,12,551) and Cost of Synchronized Electric operated 5 Ton screw Jack booked to 83 MH 3002-03(04) instead of 83 MH 5002-03-DF-III(43-1600) (Rs. 27,78,195)	31692
	दरे SR	विकास कार्य हेतु मंडल द्वारा भूमि अधिग्रहण हेतु दी गई क्षतिपूर्ती राशी (37,22,913 रू.) को गलती से 83–मु. शी. 5002–03 (पूंजी) के स्थान पर 83–मु. शी. 3002–03 (10) में दर्ज कर दिया गया। Compensation for the acquisition of Land by the Division for developmental purposes booked to 83 MH 3002-03(10) instead of 83 MH 5002-03 (Capital), (Rs. 37,22,913),	3723

Ministry of Rai (Railway Board)

ANNEXURE-XXV (See Para -429)

भारतीय रेलें

ब्लाक लेखा (वाणिज्यिक)-(संकलित)

2020-2021 को समाप्त वर्ष के लिये (आंकड़े रुपयों में)

वर्ष 2020-2021 के दौरान पूंजी, मू.आ.नि., वि.नि., पूंजी निधि, चा.ला.नि. (रा.) रे.सं. निधि वि.रे.सं. निधि और रा.रे.सं. कोष से किया गया खर्च

लेखा शीर्ष Head of Account	परिसम्पत्तियों की श्रेणियां Classes of Assets	पिछले वर्ष के अन्त तक कुल खर्च (1979-80 से) Total Expenditura to end of the previous year (since 1979-80)	प्रारम्भिक खर्च और विविध (10) Preliminary Expenses and Misc.(10)	भूमि (20) Land (20)	संरचना इंजीनियरी के काम (30, 40, 50 और 60) Structural Engineering Works (30, 40, 50 & 60)	उपस्कर संयंत्र और मशीनरी (70) 3400 और 4100 Equipment Plant and Machinery (70), 3400 & 4100	चल स्टाक (2100) और (2200) Rolling Stock (2100) & (2200)
1	2	3	4	5	6	7	8
1100	नयी लाइनें (निर्माण) New Lines (Construction)	9,63,01,35,96,658	5,72,19,348	10,40,26,64,252	-11,05,25,385	11,70,35,544	...
1200	नयी लाइनों की खरीद Purchase of New Lines	-4,09,53,995	...	...	...	...	...
1300	उखाड़ी गईं लाइनों की पुनःस्थापना Restoration of dismantled lines	6,35,90,01,938	...	...	...	...	...
1400	आमान परिवर्तन Gauge Conversion	5,02,30,33,01,269	...	1,11,69,88,359	5,41,06,653	-3,01,813	...
1500	दोहरी लाइन बिछाना Doubling	3,38,17,00,15,930	1,97,980	3,57,70,99,118	20,26,48,697	38,49,356	...
1600	यातायात सुविधाएं-यार्डों के ढांचे में परिवर्तन तथा अन्य Traffic facilities–Yard remodelling and others	1,60,99,30,11,180	2,29,38,838	3,29,58,443	68,84,43,236	39,11,57,544	...
1700	संगणकीकरण Computerisation	34,21,34,96,088	4,55,20,802	...	14,53,96,192	1,72,26,57,406	...
1800	रेल अनुसंधान Railway Research	5,21,30,79,749	2,73,70,670	...	9,53,81,240	44,98,27,628	...
2100	चल स्टाक Rolling Stock	6,01,59,43,85,516	...	...	-19,19,15,401	1,19,33,482	8,06,58,27,099
2200	आई.आर.एफ.सी का पट्टा प्रभार Lease Charges of IRFC	7,03,23,80,42,728	12,53,13,90,704	4,02,85,80,229	4,53,73,31,141	...	98,38,50,99,598
2900	रेलवे सुरक्षा कार्य/ समपार Railway Safety Works/Level Crossing	66,22,95,41,108	...	...	15,27,902	-16,41,881	...
3000	रेलवे सुरक्षा कार्य/ऊपरी सड़क पुल Railway Safety Works/Road Overbridge	2,31,09,44,80,992	...	...	3,13,15,256	-70,13,277	...
3100	रेलपथ नवीकरण Track Renewals	6,70,53,53,50,156	...	...	-40,47,33,623	1,80,26,506	...
3200	पुल संबंधी कार्य Bridge Works	70,70,57,01,028	...	...	7,85,14,767	5,02,198	...
3300	सिगनल और दूर संचार संबंधी कार्य Signal & Telecommunication Works	2,03,09,00,51,212	...	4,946	6,00,50,314	48,71,498	...
3400	डाक-तार विभाग से लाइन तारों का अधिग्रहण Taking over of line wires from P&T Deptt.	-59,68,085	...	...	...	...	...
3500	विद्युतीकरण परियोजनाएं Electrification Projects	1,07,49,62,19,573	...	...	...	1,20,13,981	...
3600	बिजली संबंधी अन्य काम Other Electrical Works	45,44,12,58,727	...	...	22,17,65,422	38,41,37,826	...
3700	ट्रैक्शन Traction	7,97,38,50,196	...	...	...	...	...
4100	मशीनरी और संयंत्र Machinery & Plant	57,76,75,53,022	9,51,98,500	7,91,43,278	17,71,60,164	2,65,27,55,301	...
4200	कारखाने-उत्पादन यूनिटों सहित Workshops–including production units	2,23,10,81,12,094	4,43,29,818	1,15,01,074	1,22,02,68,391	68,73,23,264	8,75,000
5100	कर्मचारी क्वार्टर Staff Quarters	35,13,83,20,198	2,06,32,714	36,71,684	2,59,60,20,900	22,45,88,004	...
5200	कर्मचारियों के लिए सुविधाएं Amenities for staff	37,25,02,80,145	...	...	-29,89,258	29,89,258	...
5300	यात्री सुविधाएं एवं अन्य रेल उपयोगकर्ताओं के लिए सुविधाएं Passenger Amenities & Other Rly. User's Amenities	1,51,56,56,96,957	9,08,953	...	16,11,78,96,468	1,57,33,55,274	...
6100	सरकारी वाणिज्यिक उपक्रमों में निवेश-सड़क सेवाएं Investment in Govt. Commercial Undertakings-Road Services.	1,68,29,58,74,387	...	...	...	...	...

INDIAN RAILWAYS
BLOCK ACCOUNT (COMMERCIAL) - (CONSOLIDATED)
YEAR ENDING 2020-2021 (Figures in unit of Rs.)

Expenditure financed from Capital, D.R.F., D.F., Capital Fund, O.L.W. (R) R.S. Fund Spl. R.S. Fund & R.R.S.K. Fund during the year 2020-2021

सामान्य प्रभार (80 और 90) 98 और 99 को छोड़ कर General Charges (80 & 90) Except 98&99	नयी लाइनों की खरीद (1200) Purchase of New Lines (1200)	सरकारी वाणिज्यिक उपक्रमों में निवेश-सड़क सेवाए (6100) Investment in Govt. Comml. Undertakings –Road Services (6100)	सरकारी वाणिज्यिक उपक्रमों - सार्वजनिक उपक्रमों में निवेश (6200 और 6300) Investment in Govt. Comml. Undertakings –Public Undertakings (6200 & 6300)	उचन्त 7100, 7200, 7300 Suspense 7100, 7200, 7300	घटाइए	वर्ष का जोड़ कालम (4 से 14 तक) Total for the year Columns (4 to 14)	बिना वित्तीय समायोजन के अन्तरण Transfer without financial adjustment	वर्ष के अन्त में जोड़ (कालम 3+15+16) (1979-80 से) Total to end of the year (Cols. 3+15+16) (since 1979-80)
					विविध प्राप्तियां (98) Deduct Miscellaneous Receipts (98)			
9	10	11	12	13	14	15	16	17
11,47,71,587	...	...	...	...	69,02,96,091	9,89,08,69,255	...	9,72,90,44,65,913
...	...	...	...	...	...	...	...	-4,09,53,995
...	...	...	...	...	4,53,50,548	-4,53,50,548	...	6,31,36,51,390
3,91,928	...	...	...	...	82,57,07,347	34,54,77,780	...	5,02,64,87,79,049
80,10,256	...	...	...	...	10,76,26,206	3,68,41,79,201	...	3,41,85,41,95,131
1,68,38,100	...	...	...	...	1,73,52,299	1,13,49,83,862	...	1,62,12,79,95,042
1,48,13,011	...	...	...	...	...	1,92,83,87,411	...	36,14,18,83,499
...	...	...	...	...	...	57,25,79,538	...	5,78,56,59,287
...	...	...	...	...	1,54,44,28,287	6,34,14,16,893	...	6,07,93,58,02,409
...	...	...	...	...	...	1,19,48,24,01,672	...	8,22,72,04,44,400
-17	...	...	...	...	3,73,318	-4,87,314	...	66,22,90,53,794
83,299	...	...	...	...	34,98,278	2,08,87,000	...	2,31,11,53,67,992
8,99,972	...	...	...	...	17,92,70,44,058	-18,31,28,51,203	...	6,52,22,24,98,953
5,66,669	...	...	...	...	2,04,79,957	5,91,03,677	...	70,76,48,04,705
-44,62,856	...	...	...	...	2,87,40,547	3,17,23,355	...	2,03,12,17,74,567
...	...	...	...	...	...	...	...	-59,68,085
65,050	...	...	...	...	5,23,45,665	-4,02,66,634	...	1,07,45,59,52,939
-16,64,125	...	...	...	...	65,54,397	59,76,84,726	...	46,03,89,43,453
...	...	...	...	...	...	...	...	7,97,38,50,196
2,11,15,250	...	...	...	...	1,87,83,157	3,00,65,89,336	...	60,77,41,42,358
3,78,96,559	...	...	...	...	35,05,045	1,99,86,89,061	...	2,25,10,68,01,155
1,67,71,206	...	...	...	...	8,33,233	2,86,08,51,275	...	37,99,91,71,473
...	...	...	...	...	...	...	...	37,25,02,80,145
9,94,16,821	...	...	...	...	13,07,578	17,79,02,69,938	...	1,69,35,59,66,895
...	...	1,56,29,65,00,000	...	...	...	1,56,29,65,00,000	...	3,24,59,23,74,387

भारतीय रेलें
ब्लाक लेखा (वाणिज्यिक)-(संकलित)
2020-2021 को समाप्त वर्ष के लिये (आंकड़े ₹ में)

वर्ष 2020-2021 के दौरान पूंजी, मू.आ.नि., वि.नि., पूंजी निधि, चा.ला.नि. (रा.) रे.सं. निधि वि.रे.सं. निधि और रा.रे.सं. कोष से किया गया खर्च

लेखा शीर्ष Head of Account	परिसम्पत्तियों की श्रेणियां Classes of Assets	पिछले वर्ष के अन्त तक कुल खर्च (1979-80 से) Total Expenditura to end of the previous year (since 1979-80)	प्रारम्भिक खर्च और विविध (10) Preliminary Expenses and Misc.(10)	भूमि (20) Land (20)	संरचना इंजीनियरी के काम (30, 40, 50 और 60) Structural Engineering Works (30, 40, 50 & 60)	उपस्कर संयंत्र और मशीनरी (70) 3400 और 4100 Equipment Plant and Machinery (70), 3400 & 4100	चल स्टाक (2100) और (2200) Rolling Stock (2100) & (2200)
1	2	3	4	5	6	7	8
6200	सरकारी वाणिज्यिक उपक्रमों सार्वजनिक उपक्रम में निवेश- Investment in Govt. Comml. undertakings– Public Undertakings	1,52,19,32,56,980	...	...	...	...	...
6300	गैर सरकारी वाणिज्यिक उपक्रमों में निवेशः- जे.वी.एस./एस.पी.वी.एस. सहित Investment in Non-Govt. Undertaking Including JVS/SPVS	4,21,61,35,76,756	...	...	...	...	...
6400	अन्य विनिर्दिष्ट कार्य Other Specified Works	51,36,18,32,437	68,60,857	...	1,04,48,22,791	6,26,06,433	...
6500	एचआरडी/ट्रेनिंग HRD/Training	2,20,70,30,578	...	...	9,82,58,275	13,59,784	...
7100	भण्डार उचन्त Stores Suspense	26,99,92,48,481	...	...	...	...	...
7200	निर्माण उचन्त Manufacturing Suspense	18,97,26,33,973	...	...	...	...	...
7300	विविध अग्रिम Misc. Advances	45,72,31,29,396	...	...	...	...	...
8100	महानगर परिवहन परियोजनाएं Metropolitan Transport Projects	1,90,93,70,18,388	2,55,00,00,000	...	35,34,527	26,37,577	...
8300	नई लाइन (निर्माण) - लाभांश रहित परियोजना New Lines (Construction) Dividend free Projects	1,85,26,23,39,032	...	...	...	...	...
(क) (A)	जोड़ Total	64,86,01,33,64,792	15,40,25,69,184	19,25,26,11,383	26,66,42,78,669	8,31,46,70,893	1,06,45,18,01,697
(ख) (B)	वर्ष के दौरान बिना वित्तीय समायोजन के अन्तरण T.W.F.A. during the year	...	...	...	...	32,00,000	-32,00,000
(ग) (C)	पिछले वर्ष के अंत तक जोड़ (प्रारम्भ से) Total to end of previous year (since commencement)	...	1,77,31,94,07,686	3,19,89,43,71,293	31,58,90,91,25,408	6,94,51,47,77,049	11,81,04,00,68,779
(घ) (D)	वर्ष के अंत तक जोड़ (क+ख+ग) (प्रारम्भ से) Total to end of the year (A+B+C) (Since commencement)	...	1,92,72,19,76,870	3,39,14,69,82,676	31,85,57,34,04,077	7,02,83,26,47,942	12,87,48,86,70,476

टिप्पणीः- *Note*

(1) पूंजी VIII–विविध शीर्ष के अन्तर्गत वर्ष 1978-79 के अन्त का जोड़ कालम 4 के अन्तर्गत प्रारम्भिक खर्च में जोड़ दिया गया है।
Total to end of the year 1978-79 under the head Capital VIII–Misc. has been added to preliminary expenses under Column 4.

(2) मद क, ख, ग और घ में दिखाया गया जोड़ केवल 4 से 15 के अन्तर्गत है।
Total shown against items A,B,C & D are only under Columns 4 to 15.

(3) कालम 14 के अन्तर्गत विविध प्राप्तियों पुराने लेखा वर्गीकरण की ''पूंजी लेखे में प्राप्तियों की द्योतक है।
Misc. Receipts under Columns 14 represent "Receipts on Capital Account" of the old accounting classification.

INDIAN RAILWAYS
BLOCK ACCOUNT (COMMERCIAL) - (CONSOLIDATED)
YEAR ENDING 2020-2021 (Figures in unit of ₹.)

Expenditure financed from Capital, D.R.F., D.F., Capital Fund, O.L.W. (R) R.S. Fund Spl. R.S. Fund & R.R.S.K. Fund during the year 2020-2021

सामान्य प्रभार (80 और 90) 98 और 99 को छोड़ कर General Charges (80 & 90) Except 98&99	नयी लाइनों की खरीद (1200) Purchase of New Lines (1200)	सरकारी वाणिज्यिक उपक्रमों में निवेश-सड़क सेवाए (6100) Investment in Govt. Comml. Undertakings –Road Services (6100)	सरकारी वाणिज्यिक उपक्रमों - सार्वजनिक उपक्रमों में निवेश (6200 और 6300) Investment in Govt. Comml. Undertakings –Public Undertakings (6200 & 6300)	उचन्त 7100, 7200, 7300 Suspense 7100, 7200, 7300	घटाइए: विविध प्राप्तियां (98) Deduct: Miscellaneous Receipts (98)	वर्ष का जोड़ कालम (4 से 14 तक) Total for the year Columns (4 to 14)	बिना वित्तीय समायोजन के अन्तरण Transfer without financial adjustment	वर्ष के अन्त में जोड़ (कालम 3+15+16) (1979-80 से) Total to end of the year (Cols. 3+15+16) (since 1979-80)
9	10	11	12	13	14	15	16	17
0	...	...	...	...	...	...	...	1,52,19,32,56,980
0	...	...	...	...	...	...	...	4,21,61,35,76,756
1,43,18,775	...	...	...	...	1,18,327	1,12,84,90,529	...	52,49,03,22,966
31,13,644	...	...	...	...	...	10,27,31,703	...	2,30,97,62,281
...	...	...	...	21,47,26,31,037	16,09,62,84,253	5,37,63,46,784	...	32,37,55,95,265
...	...	...	...	6,73,45,49,903	6,64,57,15,066	8,88,34,837	...	19,06,14,68,810
...	...	...	...	2,32,86,55,460	1,09,40,32,213	1,23,46,23,247	...	46,95,77,52,643
6,06,133	...	...	...	...	4,14,63,043	2,51,53,15,194	...	1,93,45,23,33,582
...	...	...	...	...	...	...	...	1,85,26,23,39,032
34,35,51,262	...	1,56,29,65,00,000	...	30,53,58,36,400	45,17,18,38,913	3,18,08,99,80,575	...	68,04,10,33,45,367
...	...	...	...	...	...	...	...	...
2,40,55,73,05,260	7,85,92,156	2,42,25,24,05,448	5,01,73,63,05,428	3,02,72,78,89,840	2,71,59,83,52,604	65,47,43,18,95,743	...	...
2,40,90,08,56,522	7,85,92,156	3,98,54,89,05,448	5,01,73,63,05,428	3,33,26,37,26,240	3,16,77,01,91,517	68,65,52,18,76,318 *	...	...

* इसमें म.प.प. से संबधित 1,68,86,33,76,957/- ₹ और परिक्रमा रेलवे (पूर्व, दक्षिण मध्य एवं पश्चिम रेलवे) से संबधित 19,11,09,92,140/- ₹ और महाराष्ट्र सरकार-सिडको के अंशदान से संबधित 19,91,55,77,051/- ₹ शामिल हैं।
Includes ₹1,68,86,33,76,957/- relating to M.T.P and ₹19,11,09,92,140/- relating to Circular Railway(Eastern, SC & Western Railway) and ₹19,91,55,77,051/- relating to CIDCO (Contribution by Maharastra Govt).

* वर्ष 2020-21 के दौरान इसमें भा.रे.वि.नि. से पट्टे पर ली गई परिसम्पत्तियों की 29110.39 करोड़ रू. की राशि और मार्च, 2021 के अंत तक 258475.08 करोड़ रू. की राशि शामिल नहीं है, और वर्ष 2020-21 के दौरान भा.रे.वि.नि. को देय पट्टे प्रभारों के पूंजी घटक की 11948.24 करोड़ रू. की राशि शामिल है। मार्च 2021 के अंत तक पट्टे प्रभार की संचयी, पूंजी घटक 82272.04 करोड़ रू. है
Excludes the assets taken on lease from IRFC amounting to Rs.29110.39 crore during the year 2020-21 and Rs. 258475.08 crores to end of March, 2021, and includes Capital Component of the lease charges paid to IRFC amounting to Rs. 11948.24 crores during the year 2020-21. The cumulative Capital Component of lease charges to end of March'2021 comes to Rs. 82272.04 crores

* ₹27635.47 करोड़ और ₹50575.29 करोड़ ईबीआर-आईएफ और एस वर्ष के दौरान 2020-21 और ₹124337.74 करोड़ और ₹ 50575.29 करोड़ वर्ष के अंत तक शामिल नहीं है।
Excludes value of project undertaken under EBR-IF&S amounting to ₹ 27635.47 Cr, ₹ 50575.29 cr. during the year 2020-21 and ₹ 124337.74 Cr, ₹ 50575.29 Cr to end of March, 2021 respectively.

*****

CHAPTER-V

Budgetary And Expenditure Control Financial/Management Reporting

Budget, an instrument of Parliamentary financial control and expenditure control	501
Gross Revenue	502 - 503
Revenue and Capital Expenditure	504 - 505
Revenue Expenditure	506 - 507
Proportionate Budget Allotment	508 - 510
Monthly Statement of Approximate Receipts and Expenditure	511
Revenue Allocation Registers	512
Monthly Financial Reviews	513 - 516
Re-appropriations	517 - 518
Expenditure on Acquisition, Construction and Replacement of Railway Assets	519
Watch over Progress of Expenditure	520 - 523
Review of expenditure	524 - 526
Review of Capital Expenditure	527 - 533
Control of Expenditure against the Capital Suspense Grants	534 - 535
Monthly Review of Suspense Grant	536 - 538
Financial Adviser and Chief Accounts Officer's Review of monthly Receipts and Expenditure	539
Exchequer Control	540
Importance and limitations of Exchequer Control	541 - 544
Implementation of Exchequer Control	545
Assessment of Cash Outgo-General Guidelines	546
Staff	547
Fuel	548
Works and Stores	549-550
Civil Grants	551
Railway Board Contracts	552 - 553
Assessment of Quarterly Cash Outgo	554
Control of cash disbursements	555
Monthly Quarterly Report to Railway Board (Deleted)	556

Calendar of returns	557
Watch over Expenditure and Revenue of the Last quarter of the year	559
Annual Review of Expenditure	560
Annual Reports of Railways, Object and Scope	561 - 562
Responsibility for preparation	563
Section –I Report Proper	564
Section II-Financial Statements	565
Section III -Analysis of Working	566
Section IV-Appendices	567

ANNEXURES	
Powers of Chairman Railway Rates Tribunal (Deleted)	Annexure-I
Powers of General Managers, of Indian Railways	Annexure –II
Assessment of cash requirement	Annexure –III
Cash Budget for the year	Annexure-IV
Cash Outgo Quarterly Variation Statement	Annexure-V

*****

CHAPTER-V

Budgetary & Expenditure Control Financial/ Management Reporting

501. As stated in para 304, the Railway Budget is an important instrument of Parliamentary Financial Control, expenditure control and management tool. The financial targets as set out in Budget broadly guide the performance targets of the Railway administration. The manner in which budgetary and expenditure control is exercised is stated in the following paragraphs.

502. Gross Revenue - It is important that a continuous and concurrent watch is kept on the realisation of revenue as envisaged in the Budget. This is done through the medium of a ten-day statement of revenue on "originating" basis and monthly financial review on 'apportioned' basis. These statements should give also the proportionate budgeted revenue on originating and apportioned basis and the actuals for and to end of the relevant period of the preceding year for comparison. The originating basis is adopted to secure prompt reporting since the Railway wise apportioned revenue for each month does not become available until a week later.

Enhancing the Gross Revenue is of utmost importance and it should be ensured that any shortfall in any segment of traffic revenue is promptly brought to the notice of concerned departments.

503. A monthly statement of 'approximate' gross revenue on the basis of estimated apportionment between various Zonal Railways is also sent by the Railways to the Railway Board in the first week of the following month in Form 344-A I**.** This statement should be compared with the proportionate budget for and to end of the month to see the extent of variations, if any, between the budget and actuals, ascertain the causes thereof and take such step as are necessary.

504. Revenue and Capital Expenditure -As all Railways expenditure, other than that "charged" on the Consolidated Fund of India, is voted in the form of the Demands for Grants (para 305), the budgetary control is intended to ensure that expenditure is incurred for the purposes and within the limits, as voted by Parliament. The authorities responsible for the control of expenditure against each Major Head of the Grant are detailed in Annexure I to Chapter III. While it is the duty of the Railway Board, as the controlling authority in respect of the total amount of each Major Head within the Grant voted by the Parliament and Appropriation sanctioned by the President, to watch the progress of expenditure and to keep the aggregate charges within the amount of the Grant or Appropriation placed at their disposal, it is the responsibility of the individual

railway administration to exercise a similar control over the allotments placed at their disposal. When several officers are authorized to incur expenditure relating to a sub-major head, against a lump sum allotment placed at the disposal of a single higher authority, it devolves upon this authority, to watch the progress of expenditure in all the concerned offices and to keep the aggregate charges within the allotment fixed under that sub- major head.

505. Power to incur expenditure on Railway matters have been delegated by the Ministry of Railways (Railway Board) to authorities subordinate to them (vide Annexure I (Now deleted) and Annexure-II). The exercise of authority for incurrence of expenditure carries with it also the responsibility for control of expenditure within the authorized limits. Further, these powers are subject to provisions contained in the various Codes, rules and regulations and also observance of the standards of financial propriety (Para116).

506. Revenue Expenditure -The revised and budget estimates of ordinary working expenses submitted by the General Manager to the Railway Board are based on detailed-estimates of revenue expenditure obtained by him from the various heads of departments of the railway. On receipt of the allotment from the Railway Board, these detailed estimates may require modification consistent with the allotment sanctioned by the Railway Board or as may be deemed necessary by the General Manager.

507. (Ref Para 506)**.** Within the amounts of the allotments fixed by General Manager under paragraphs 365 and 506 for the various spending authorities in charge of divisions and departments, such authorities have full power to sanction expenditure on revenue account during the year, subject to the condition that the specific sanction of the competent authority must be obtained separately to all items of expenditure on establishment and experimental or special temporary works where under rules or orders such sanction is necessary; in a case in which the General Manager has prescribed that detailed estimates should be prepared and administrative approval and technical sanction obtained before the incurrence of expenditure, the procedure laid down by the General Manager must be followed. The sanction as prescribed should be accorded only after ascertaining the quantum of allotment. A liability register should be maintained by executive as well as accounts office for the same including, inter alia, incurred as well as accrued liabilities.

Any sanction should not be based merely on past trends. The principles of Zero Based Budgeting i.e. necessity and utility of any expenditure being sanctioned must be thoroughly applied prior to according sanction.

507 A. (Ref Para 506)**.** A sanction for any fresh charge shall, unless it is specifically renewed, lapse if no payment in whole or in part has been made during a period of twelve months from the date of issue of such sanction. Provided that –

i) when the period of currency of the sanction is prescribed in the departmental regulations or is specified in the sanction itself, it shall lapse on the expiry of such periods; or

ii) when there is a specific provision in a sanction that the expenditure would be met from the Budget provision of a specified financial year, it shall lapse at the close of that financial year; or

iii) in the case of purchase of stores, a sanction shall not lapse, if tenders have been accepted (in the case of local or direct purchase of stores) or the indent has been placed (in the case of Central Purchases) on the Central Purchase Organization within the period of one year of the date of issue of that sanction, even if the actual payment in whole or in part has not been made during the said period.

Notwithstanding anything contained above, a sanction in respect of an addition to a permanent establishment, made from year to year under a general scheme by a competent authority, or in respect of an allowance sanctioned for a post or for a class of Government servants, but not drawn by the officer(s) concerned, shall not lapse.

508. Proportionate Budget allotment -For the purpose of carrying out a meaningful comparison of the actual working expenses for (and to end of) the month with the budget allotment, it is necessary to distribute the sanctioned allotment for the year over the twelve months after taking all known factors of disturbance or special features into account. While the responsibility for the control of expenditure against the budget allotment devolves upon the authority at whose disposal the allotment has been placed, it is the duty of the Accounts Officer, in his capacity as the financial adviser to the Administration, to render all possible assistance to the controlling authorities in the exercise of such control. Accordingly, he/she works out, at the beginning of each financial year, in consultation with the officers responsible for the control of expenditure, the estimated progressive expenditure (Proportionate Budget Allotment – BP) under each Major Head and sub major head keeping in view the following factors:

i. Throw forward from the previous year.
ii. All expenditure whether in cash or by transfer, the liability for which already exists, but which is not likely to be distributed evenly during the year, whether

because it is of a periodical nature, or because it is contingent on the receipt of supplies, or for any other reason.

iii. Expenditure which is practically fixed and evenly distributed throughout the year.

iv. Other expenditure which is likely to be incurred during the year but liabilities for which have yet to be incurred.

v. The need to keep some amount as a reserve for meeting fresh or unanticipated expenditure.

The BP so fixed may be fed in accounting software (IPAS) for monitoring of progress of expenditure.

509. In respect of sub-heads for which such detailed analysis is not practicable or necessary, may be ,interalia ,because the expenditure does not fluctuate from month to month, e.g. establishment charges, past actual as worked out for a number of years may form the basis for this estimate.

510. From the details thus worked out, the "Proportionate Budget Allotment- BP" for each month is worked out for each sub-major head of the Major Head, and the progress of expenditure under each sub-major head is then watched from month to month through Monthly Financial Reviews (see paras 511&513) in order to see that the expenditure is according to anticipations and not at a pace which is likely to lead to an excess at the end of the year.

511. Monthly Statement of Approximate Receipts and Expenditure -A statement of approximate receipts and expenditure under such heads as may be prescribed should be sent to the Railway Board. The merit of this statement lies in supply of information promptly to the Railway Board for the purpose of watching the expenditure against the proportionate budget allotment. The monthly statements will, on receipt from the various railways, be consolidated in the Railway Board's office in one single statement for all the railways. A copy of the consolidated statement should also be furnished to the Ministry of Finance of the Government of India and the Accountant General, Central Revenues, in the first week of the second month following that to which it pertains.

512. Revenue Allocation Registers -As described in para 311 of Accounts Code part I, all revenue expenditure is to be recorded in Registers, which are known as Revenue Allocation Registers, by the various heads of accounts prescribed in the classification given in Appendix I (Volume II). The object of these registers is to keep the heads of divisions, and departments informed of the progress of expenditure

against the allotments placed at their disposal by the General Manager, which should be entered in red ink in the appropriate columns provided for in these registers, so as to form a ready means of comparison and check with the outlay.
However, under computerized system, the RAR may be drawn through system and used for complying with the above objective.

513. Monthly Financial Reviews -The monthly reviews show the expenditure to the end of the previous month, against the allotment placed at the disposal of the controlling authorities under each sub-major head of the Major Head for which they are responsible. The review should be prepared in Form No.513 and submitted to the controlling authorities every month, by such date as maybe fixed in consultation with them. It may be ensured that no liability is committed to in excess of the respective allotments as derived from the Monthly Financial Review.

Form No. F. 513

Sub-major head of the Major Head and heads of account.	Budget allotment for 2021-22	Proportionate budget allotment to end of June,2021	Actual expenditure to end of June,2021	Actual expenditure to end of June,2020	Expenditure upto June-2021 more(+)or less (-)	
					as compared with column-3	as compared with column-5
1	2	3	4	5	6	7

514. The "Proportionate Budget Allotment" to the end of the month (column 3) is worked out by the Accounts Officer in accordance with the Instructions contained in paragraph-508 above. The figures of actual expenditure for and to end of the month (column4), and for the corresponding period of the last year (col.5) will be available from the Allocation Registers and the compiled accounts. The Accounts Officer should complete the other columns of the review provided above and submit it to the controlling authority, along with the comments of the executive officers responsible for the expenditure and with such remarks of his own as may be necessary

515. In compiling this review, the Accounts Officer should see whether-

a) The non-fluctuating expenditure is in accordance with the monthly appropriation as worked out on the basis of actuals in past years,
b) The periodical expenditure is in accordance with the proportion at budget allotment,

c) The correlation assumed between receipts and expenditure, in the preparation of the budget is maintained. For the purposes of this comparison, items pertaining to the period, but remaining unadjusted for any reason, should not be lost sight of.

Care must be taken to ensure that any major deviation in anticipated expenditure, which may either result in extra spending or savings, are accounted for even in case of non-fluctuating expenditure. Savings can be affected due to cancellation of large number of trains for prolonged period, spending can increase due to implementation of Pay commission, commissioning of a new block section etc.

516. The Monthly Financial Reviews should be prepared by the Divisional/Workshop/ Construction Accounts officers concerned for each Division/Workshop/Construction Unit and the Financial Adviser and Chief Accounts Officer should arrange for the consolidation of these reviews into the Monthly Financial Review for the railway, the details of procedure and the due dates being prescribed in consultation with the railway administration.

517. Re-appropriations -No liability, for which a provision does not exist or the provision for which is inadequate in the allotment sanctioned by the General Manager, should be incurred unless the necessary funds can be obtained either by re-appropriation or fresh allotment.

Such liabilities may, however, be liquidated provisionally, if otherwise in order, on the spending authority's undertaking to find the requisite funds. All such expenditures should, however, be held by the Account Officer under objection "for want of appropriation " or as "excess over appropriation."

518. The Accounts Officer should advise the spending authorities about re-appropriations wherever needed, and how they are to be made. He should ensure that re-appropriations are carried out promptly and that whenever a saving under some head is reasonably certain, steps are taken at once to withdraw funds from the sub-head, and whenever it is clear that the progress of expenditure under some head is such as to require an additional appropriation, steps are taken to arrange for it by re-appropriation or otherwise.

Expenditure On Acquisition, Construction And Replacement Of Railway Assets

519. Separate allotments are placed at the disposal of railway administrations under

each Grant for expenditure on works chargeable to Capital, Depreciation Reserve Fund, Development Fund, Railway Safety Fund, Rashtriya Rail Sanraksha Kosh and Capital Fund. These allotments are made in lump sum and their distribution over the various sub-heads and over the works for which they are intended are spelt out in the 'Works, Machinery and Rolling Stock Programmes' which are furnished to the railways along with the Budget orders sanctioning the allotments. These "Programmes" also show, in the case of work costing Rs 2.5 crore and above each, the total estimated cost of each work, and the Railway administrations are required to exercise a control over expenditure, not only against the allotment sanctioned for the year for each work, but also against its total estimated cost as shown in the 'programmes'. In regard to works costing not more than Rs.2.5 crore each, a lumpsum is allotted to each railway administration in the programmes; before any expenditure is incurred against the lump sum allotment, the estimates of such works should be sanctioned by the General Manager or any lower authority empowered by him in this behalf. Thus the control of expenditure on railway is exercised through-

1) the-preparation, in advance, of estimates of the expenditure to be incurred;
2) the allotment of funds through budget Grants for the year, on the basis of these estimates; and
3) the continuous and concurrent review of the expenditure as incurred against the details of the estimates and against the sanctioned grants, so that revisions of estimates or re-appropriation of funds are arranged for at the earliest possible point of time.

The procedure to be followed in controlling expenditure against estimates is detailed in Chapter XIV and XII of the Indian Railway Code for the Engineering and Mechanical Departments, respectively.

520. Watch over Progress of Expenditure -From the moment expenditure or liability is incurred on works, a check at regular and frequent intervals should be made on its progress, both against estimates and against funds. The check should originate in the lowest executive unit,viz., a division.

521. The Works Registers (Form No. E. 1474) maintained in each division enable a running comparison to be made between-

a) The expenditure incurred on each work and the detailed provision made in the estimate for the work, and

b) the budget allotment for the work and the actual expenditure to the end of the month.

The executive officer should examine the works registers monthly or at more frequent intervals, and watch the progress of expenditure on each work, so that any tendency towards excess over sanctioned estimates may be investigated and curbed, or fresh administrative and technical sanction is obtained in time to cover the anticipated excess.

522. The Accounts Officer should also watch the progress of expenditure on works on the lines laid down in paragraphs 523 to 533 and advise the executive officers as to the need of re-appropriations, whenever such necessity arises (vide paragraph 518).

523. In watching the progress of expenditure on works, the Accounts Officer should see whether-

a) the expenditure upto any date is not in excess of the estimate for the quantum of work done;
b) the anticipated credits have actually been realized;
c) all adjustments are made in time and
d) expenditure on any new work is not met by merely postponing or retarding the progress of sanctioned work.

524. Review of Expenditure -The Accounts Officer should prepare every month two reviews, one by Sub-heads /PlanHeads of the Grant and the other by individual works, and present them to the authorities concerned by such dates as may be fixed in consultation with them.

525. The review of expenditure chargeable to Capital, Depreciation Reserve Fund and Development Fund by Sub-heads /Plan Heads of the Grant, should be prepared monthly by the Accounts Officer in Form No. F. 525.

Form No. F. 525
Review showing, Progress of Expenditure chargeable to Capital, Depreciation Reserve Fund and Development Fund to end of----------

Department ---------- Office_____

(Figures in thousands of rupees)

Sub-Head/Plan Head Grant No.16	Budget Allotment for the year	Total Estimates Sanctioned during the Year					
			Capital	D.R.F	D.F.	Other funds	Total
1	2	3	4	5	6	7	8

Percentage	Percentage of Expenditure to allotment of the corresponding period of last year	Reasons for variations between Cols. 10& 11 and brief remarks as to rate of progress of expenditure
9	10	11

Signature

Date.---------- Designation----------

The quarterly reviews for period ending June, September and December may be sent to the Board as per extant guidelines.

Reasons for variations and brief remarks as to the rate of progress of expenditure to be indicated in column 12 of the Form should be meaningful and should be recorded in consultation with the spending authorities.

526. The review of expenditure by works should be prepared in Form No. F. 526

Form No. F.-526

Description of the work and sub-head / plan head.	Amount of sanctioned estimate	Expenditure to end of previous year	Balance of estimate.	Budget allotment for the Year
1	2	3	4	5

Expenditure during the current year.	Commitments	Total

Actuals to end of previous month	Approximate for the month	Total expenditure to end of the month	neither paid for nor included in the approximates for the month	expenditure and commitments to end of the month [Col. 6(iii) + 7]
6 (i)	6 (ii)	6 (iii)	7	8

Probable further outlay to complete.	Deduct estimated throw forward to next year.	Total expenditure and commitments to be paid for in the year (cols. 8+9-10)	Balance of allotment available(5-11)	Remarks.
9	10	11	12	13

Signature .....

Date. ---------- Designation ----------

527. The above review of expenditure on individual works chargeable to Capital , Depreciation Reserve Fund, Development Fund or any other funds, information should be classified under each sub-head/Plan head of the grant,viz.-

Code number of Plan Head	**Description of Plan Head**
11	New Lines
14	Gauge conversion.
15	Doubling.
16	Traffic facilities-Yard remodelling and others.
17	Computerisation
18	Railway Research
21	Rolling Stock.
22	Leased Assets-Payment of Capital portion of lease charges to IRFC etc.
29	Road Safety Works – Level Crossings
30	Road Safety Works – ROB/RUB
31	Track renewals.

32	Bridge works, tunnel works and approaches
33	Signalling and Tele-communication works.
35	Electrification projects.
36	Other Electrical works including TRD works
41	Machinery and Plant.
42	Workshops including production Units.
51	Staff Welfare
53	Customer Amenities
61	Investment in PSU/JV/SPV and others etc. (Government & Non-Government)
64	Other specified works.
65	Training/HRD
71	Stores suspense.
72	Manufacturing suspense.
73	Miscellaneous Advances.
81	Metropolitan Transport Projects
82	Transfer to Special Railway Safety Fund (RRSK)

528. The review of the expenditure on the new lines (construction) should show the information in regard to each construction shown in the "Works, Machinery and Rolling Stock Programme" for the current year or for which, though not so shown, there is a 'throwforward'.

529. In the case of works, other than track renewals and rolling stock, the review should be made in respect of-

i) each individual work estimated to cost over rupees 2.5 crore and above shown in the Works, Machinery and Rolling Stock Programme for the current year, or for which though not so shown, there is a 'throwforward'.

ii) All works costing not more than rupees 2.5 crore each whether in progress or new, not as individual works but as one item for the total of such works, including the 'throw forwards'. If the General Manager so directs, the review should show in detail each item of work for which an estimate has been sanctioned.

530. In regard to track renewals, the review should show each item of work for which a separate estimate has been sanctioned by the competent authority.

531. As regards Rolling Stock, each individual item shown in the Works, Machinery and Rolling Stock Programme for the current year or which, though not so shown, there is a throwforward from the previous year, should be included in the review under the following detailed heads.-

i) Locomotives.
ii) Boilers.
iii) Carriages.
iv) Wagons.
v) Ferries.

532. With a view to complete the review, the information in regard to (a) the expenditure for the month, (b) commitments which have neither been paid for nor included in the accounts for the month and (c) the amount of probable further outlay to complete the work(columns 6 *(ii),* 7 and 9 of Form No. F 526) should be obtained by the Accounts Officer from the controlling authorities concerned.

533. The figures of 'actuals' required for the review will be furnished to the concerned authorities by the Accounts Officer immediately after such figures are available. The reviews should be completed by them in accordance with the instructions contained in paragraphs 525 to 531 and submitted to the Financial Adviser and Chief Accounts Officer, so as to reach him by the date stipulated by Board.

534. Control of Expenditure against the Capital Suspense Grant -The details of allotment placed at the disposal of Railway Administrations under the sub-beads/ Plan heads "Stores Suspense" and "Manufacture Suspense" under capital section are shown on the debit side of the statements of "Stores' Transactions" and "Manufacture Operations" included at the end of the "Works, Machinery and Rolling Stock Programme" furnished to the Railway with the Budget Orders. The details of anticipated credits under these suspense heads are shown on the credit side of the said statements.

535. The detailed manner, in which the control over expenditure, against the funds allotted for purchases of stores under "Stores Suspense" should be carried out, is prescribed in paragraphs 505 to 507 and 2862 of the Indian Railway Code for the Stores Department.

536. Monthly Reviews of Suspense Grant -The progress of debits against the allotments sanctioned by the Railway Board under 'Stores Suspense' and 'Manufacture

Suspense' and the credits in respect of these suspense heads anticipated to be adjusted in the accounts should be reviewed by the Accounts Officer in the form given below.--

Form No. F. 536

Review of Expenditure under----------Suspense to end of June-, 2022

Department---------- **Office----------**

Sub/heads of Grant	Grant for the year.	Actuals to end of progress of May,2022. expenditure.	Approximates for June,2022.	Approximates end of June,2022.	Balance of Grant available (col.2-5)	Remarks as to the rate of progress of expenditure
1	2	3	4	5	6	7

537. The information in column 1 of the review should be given under all the sub and detailed heads appearing in the statements of 'Stores Transactions' and 'Manufacture Operations' referred to in paragraph 534. In column 7, the Accounts Officer should furnish the comments on the progress of actual debits as compared with the sanctioned allotment and credits as anticipated.

538. The attention of the General Manager should be drawn to the progress of debits and credits, if it shows any necessity for the curtailment of the programme of purchases. Debits and credits may be sub-divided by the more important items of stores, if the railway administration so require, in order to regulate purchases.

539. Financial Adviser and Chief Accounts Officer's Review of monthly Receipts and Expenditure – Financial Adviser and Chief Accounts Officer should submit summary of periodical budgetary MIS of receipts, revenue and capital expenditure to General manager to enable him to review progress as per milestones.

Exchequer Control

540. All executive officers of the Railway Administrations, who are empowered to authorize revenue/capital expenditure, must ensure that no expenditure is incurred in

excess of the sanctioned allotments. Any such excess has to be viewed as a 'lapse' for which the officer concerned is liable to be held personally responsible.

Railway expenditure falls into two categories viz., cash and adjustments. The former covers all transactions completed through cash-payments or issue of cheques and broadly comprises disbursements to staff and outsiders as also settlement of bills/claims for supplies and services. Adjustments represent inter or intra accounting unit book keeping transactions which entail no cash outgo. Exchequer Control is a mechanism for concurrent regulation of cash outgo by each Disbursing Officer against the cash content of the budget allotment. The object of Exchequer Control is to establish a system for correct estimation of cash outgo and to monitor disbursements. It is thus an important tool of budgetary control.

It is, therefore, important that there should be a total commitment at all levels of Railway Management to the Exchequer Control procedure.

541. Importance and limitations of Exchequer Control--Para.539 requires the compilation of a 'Financial Review' wherein the revenue receipts and expenses of each Railway Administration for and up to the end of every month are compared to the proportionate sanctioned budget and variances explained. However, as the figures of actual receipts and expenses for a month are available only in the first or second week of the second following month, there is a time lag of 6 to 8 weeks between incurrence of expenditure or realization of revenue receipts and their review with the proportionate budget. The reason for the time lag is that while cash disbursements and receipts are accounted for immediately, book adjustments between one accounting unit/Railway Administration and another take a great deal more time; the books of account for a month are, therefore, kept open for a longer period to accommodate such 'book adjustments'. As 'cash' forms, most of the total expenditure of a Railway, Exchequer Control has the merit of providing an effective means of monitoring a substantial part of the expenditure on a day-to-day basis.

542. Since the budgetary allocations are sanctioned only for expenditure, Exchequer Control mechanism is necessarily limited in scope to the control of cash outgo. Railway revenue receipts are thus excluded from the purview of Exchequer Control but are subject to usual examination through the monthly financial reviews as well as the recurring scrutiny of cash remittances from stations and of Bank advices.

543. Exchequer Control implies a self-imposed expenditure discipline by means of a system of day-to-day monitoring to ensure that the cash component of the budgetary allocations is not exceeded.

For this, the IPAS module may indicate the cash component of each month's revenue/capital expenditure by way of BP (Budget proportion) as also in the trends of expenditure (for and to end of a period).

544. Railway budgeting is on 'gross' basis. i. e., Parliamentary approval is obtained for gross expenditure, ignoring the credits/recoveries which are outside the scope of the Demands for Grants. The actual cash against each budget Demand is also 'gross', since credits/recoveries are usually effected through 'book adjustments' or receipts of cash. Further, the sanctioned budget grants involve a certain amount of overlap, e.g. ,funds for purchase of stores are sanctioned under Capital Section of Demand, but when the purchased stores are utilized for (say) maintenance and operation, budget allocations are also provided under Revenue section. Cash outgo is, however, involved only at the first point of activity, i. e., when stores are purchased and paid for and the 'overlap' is represented in railway accounts through 'book adjustments'.

545. Implementation of Exchequer Control-

Implementation of Exchequer Control involves the following steps.-

i) Correct assessment of the 'Cash' and 'adjustment' portions of the sanctioned annual budget under each segment of the Demand by each Disbursing Officer, and also the cash disbursement in respect of 'non-budget' items e. g. refund of fares and freight.
ii) As accurate an assessment as possible of the monthly requirement of cash,
iii) Issue of monthly cash authorization to Disbursing Officers, and
iv) Concurrent control of cash outgo by each Disbursing Officer.

For the above, the Financial Adviser and Chief Accounts Officers, while submitting their Budget Estimates of revenue / capital expenditure and expenditure for Non-budget items to Railway Board, need to submit monthly/quarterly expenditure plan (MEP/QEP) with Cash/Adjustment bifurcation.

546. Assessment of Cash Outgo-General Guidelines-

Broad guidelines for making a realistic estimate of the 'cash 'and' adjustment' portions of expenditure falling within the sanctioned budget as well as in respect of' non-budget items' are given in Annexure III. 'Adjustments' may involve transactions between two or

more accounting units within the same Railway Administration or between one Railway Administration and another or between a railway and a non-Railway Administration. For example, as stated in para 544, issue of maintenance stores from stock will involve book adjustment by transfer from 'Stores Suspense' under Major Head 5002/5003 to the final head under sub-major heads 04-07 of Major Head 3002/3003. Likewise, in the case of contracts where one Railway Administration is nominated as the paying authority for supplies to be despatched to consignees on other railways, the disbursements by the former will involve cash outgo, but would appear as 'adjustments' in the books of the consignee Railways. The assessment of cash and adjustment portions of the expenditure must, therefore, be made very carefully by each Railway Administration strictly in accordance with the guidelines given in Annexure III. As a further check on the reasonableness of the bifurcation between cash and adjustment, comparison with the corresponding figures of the previous year (s) would also be useful.

547. Staff -The total revenue expenditure of the Railways is accounted for mainly under the heads 'Staff', 'Fuel & Stores' and 'Miscellaneous'. The commitments in respect of staff payments are easily ascertainable, and the cash outgo will represent the net amount payable to the staff, recoveries made through pay rolls/settlement bills being shown as 'adjustments' except in so far as some of them have also to be paid out in cash, e. g., Court decrees, payments to Co-operative Societies etc., (cash & adjustments taken together should add upto the gross debit to the final heads).As staff expenditure does not usually fluctuate to the extent adjustment expenditure does, the outgo on account of cash payments is capable of fairly precise estimation on the basis of the past actual and other relevant factors.

548. Fuel -As regards 'fuel' Exchequer Control is applied at the stage of 'purchases' of coal and diesel oil under 'Stores Suspense'. Under the final heads, however, the payment of tax element as well as the cost of electric current for traction purposes and handling charges will involve cash disbursements. Provision for the cash outgo in respect of 'fuel' will, therefore, be made at the point where cash payment is involved, having due regard to the performance link-up for fuel under sub major head 08.

549. Works and Stores -Works and Stores expenditure involve a substantial amount of cash outgo for payment to contractors/suppliers and departmental establishment. Likely payments to contractors/suppliers should be forecast by the departmental officers on the basis of the budget allotment, progress of works and purchase orders, and the contract terms regarding on account/ final payments.

550. For other disbursements covering Compensation Claims, Municipal Services and Port Charges etc., quarterly/monthly estimates, should be based on the claims likely to be discharged during the period.

551. Civil Grants -Payments against Civil Grants such as 'Loans & Advances' and 'Debt/Deposit' heads mainly involve cash outgo. There is an annual budget for the Civil Grants and this should be the guiding factor so far as the cash outgo for the year is concerned. Subject to this limitation the best possible way of estimating the likely cash outgo for the year would be the past actuals subject to any specific orders of Government regarding advances etc. For short-term forecasts, the claims pending for payment during the quarter/month should be evaluated and provided for.

552. Railway Board Contracts -The effectiveness of Exchequer Control as an aid to budgetary control depends on the extent of its coverage of Railway Transactions. In this connection two important areas of control over cash disbursements in respect of contracts placed by the Railway Board are-

i) Bulk Order contracts, and
ii) Contracts for purchase of free-supply items, steel, track material signalling and general electrical equipment for Open Line Railways and Electrification Projects, etc.

The principle in both the cases is the same, viz., one or more Railway Administrations is/are nominated for making payment to the suppliers, and the debits are then transferred to the Railways concerned in respect of the materials consigned to them. So far as the paying Railways are concerned, authorizations for cash disbursements will be given to them in addition to their own sanctioned budget whereas, for the consignee Railways, there will be no cash authorization, the transaction being only a 'book adjustment'.

553. In the Railway Board, the Directorates placing the orders will furnish to the Budget Branch (Exchequer Control) a statement in the following proforma. This statement should be sent at the beginning of the year, and supplemented, as necessary, during the course of the year.

Form No.F 553

(Rs. In Lakhs)

Contract no. and date	Value of Contract	Estimated payment during the year.	Paying Rly.	Estimated quarterly cash disbursement			
				I Qr.	II Qr.	III Qr.	IV Qr.

In the case of the Railway Board Bulk Order contracts, the estimated amount of payment during the year should be reconciled with the provision in the sanctioned budget to ensure that payments made by the disbursing units are in line with the budgetary allocations.

554. Assessment of monthly cash outgo- As indicted in Para 545, the PFAs, while submitting their Budget Estimates of revenue / capital expenditure and expenditure for Non-budget items to Railway Board, need to submit Major Head-wise monthly/quarterly expenditure plan (MEP/QEP) with Cash/Adjustment bifurcation.

This statement will form the basis for the Board to issue monthly authorization of cash expenditure to each Railway Administration and by the latter to the various disbursing units within the Railway keeping in view the sanctioned budget and extant instructions of Ministry of Finance.

555. Control of cash disbursements-Spending Units like Zonal Railways/Production Units and other Units would project their cash expenditure requirement on a monthly basis by the last working day of a month for the following month under revenue heads (Staff/Pension, Other than Staff), Capital heads (GBS, Railway Funds, EBR) and Non budget items in the manner prescribed by Railway Board (Budget Directorate) from time to time. Based on the sanctioned budget, the Railway Board (Budget Directorate) would issue authorisations for such cash expenditure. The Units may seek authorisation of additional cash expenditure for a month by 20th of the month, if any. Cash utilisation should be reported to Board by 5th of the following month in the manner prescribed by Board.

IPAS (accounting and transaction software) shall disallow any expenditure beyond the authorisation given to the spending unit. PFAs would however have the discretion to

allow additional expenditure beyond authorisation in case of exigencies while keeping the Board informed.

556. Deleted

557. Various documents and returns prescribed have to be submitted to Railway Board as per the extant schedule issued by Board.

558. Deleted

559. Watch over Expenditure and Revenue of the last quarter of the year- Special watch over the progress of expenditure and revenue receipts should be kept by the Financial Adviser and Chief Accounts Officer in the last quarter of the financial year, and the attention of the controlling authorities should be drawn to the necessity of the re-appropriations, withdrawals or additional allotments, as the case may be, and the manner in which such re-appropriations should be made. Orders of the General Manager should also be obtained as to whether savings in the current year's grant, represented by the carry-forward to the subsequent year should be permitted to be utilized for meeting any other expenditure recurring or non-recurring, during the year. If any such savings, or any other savings of a non-recurring character, are sought to be utilized by any authority to meet fresh recurring expenditure, it should be brought to the notice of the General Manager and ,in important cases, to the notice of the Member Finance, Railway Board, as well, through the proper channel.

560. Annual Review of Expenditure- The total expenditure for the year, as actually booked in the accounts of each railway, against the various Grants and Appropriations, is reviewed through the 'Appropriation Accounts' described in Chapter IV Of this Code.

Annual Reports Of Railways

561. Object and Scope -Each Railway Administration should submit to the Railway Board an Annual Report reviewing the year's working under all departments and referring to any matters either materially affecting the results of working or of general interest. These reports are intended for the use of the Railway Board and the administration of the railway concerned.

562. Reports prepared by the Railways will consist of four parts, viz-

I. Report Proper (the narrative portion).
II. Financial statements (Capital and Revenue Accounts).

III. Analysis of Working (Statistical Statements.)
IV. Appendices (Statistical Statements.)

563. Responsibility for preparation-The administrative head of the Railway is responsible for the preparation and submission of the Report, the Accounts Officer compiling the Financial Statements and furnishing such other information and figures as may be required for the purpose of the Report.

564. Section I-Report Proper -This section which is signed by the Head of the Railway Administration should be devoted to a review of the working of the railway during the year. It should contain for instance, the reasons for variations in gross receipts and departmental expenditure (generally as compared with the previous year); brief descriptions of exceptional events, such as damages by floods, etc., and the measures taken to cope therewith; important fluctuations in the operating results together with the contributory causes; major works undertaken or completed during the year; and steps taken to improve or add to the facilities provided for the comfort of the travelling public, particularly lower class passengers, etc.

565. Section II-Financial Statements -This comprises a set of statements of accounts of the capital and revenue transactions of the railway. These should be prepared in accordance with the instructions laid down in Chapter VII of the Indian Railway Code for the Accounts Department, Part I.

566. Section III- Analysis of Working -This section should include statistical statements dealing with the different aspects of railway working, which are chiefly used for the compilation of the statistics published in Indian Railways-Annual Statistical Statements by the Railway Board. This section should also contain detailed Statements of Rolling Stock, Statements of Revenue (Earnings and Expenditure) and of Operating Statistics.

567. Section IV-Appendices -Statements relating to number and cost of staff, accidents, etc., should be included in this section.

*****

ANNEXURE I

(Deleted)

As per Finance Act 2017, Railway Rates Tribunal has been merged with Railway Claims Tribunal.

*****

ANNEXURE-II (See Paragraph-505)

(Annexure to Board's letter No.2021/F(X)II/PW/3 dated 21/09/2021)

POWERS OF GENERAL MANAGERS OF INDIAN RAILWAYS

In supersession of existing orders on the subject, the President is pleased to make the following rules specifying the areas in which the General Managers and DG RDSO may not sanction expenditure or deal with other matters without previous sanction of the higher authority.

The General Managers shall have powers to sanction expenditure and to delegate their powers to authorities subordinate to them alongwith powers to re-delegate further in consultation with the Principal Financial Adviser (PFA) of the Railways.

The exercise of the powers delegated shall be subject to existing Codal Provisions, Rules and Regulations as well as restrictions imposed from time to time by Railway Board on specific subjects.

CAVEATS TO DELEGATION

The previous sanction of the higher authority is necessary for **all items listed below:**

A) Establishment Matters

I) Permanent /Temporary/Work charged posts:

1) the creation of any post.
2) revival of a sanctioned post kept in abeyance or remaining vacant for a period of more than 02 years.
3) the grant of provisional payment beyond 3 months to incumbent of any post beyond available sanction.

(MoF's OM No: 7(1)/E.Coord-I/2017 dated 12.04.2017 & 7(2)/E.Coord/2020 dated 04.09.2020 as revised from time to time)

II) Pay/Allowances etc:

1) grant to a Railway employee emoluments higher than that admissible under the Railway Rules or any orders of the Government of India.

2) permitting Medical Officers to receive fees for professional attendance to patients if they hold posts in which private practice is debarred.

3) permitting a Railway employee to undertake work and/or receive fee (non-recurring or recurring) from private sources exceeding Rs.5,000/- per annum in each individual case.

4) *Additional Post Allowance:*

permitting additional post allowance except as per Board's letter No: F(E) Spl./2009/FR/1/3(7th CPC) dated 05.09.2018 as revised from time to time.

III) Award/Reward/Honorarium:

1) the grant of reward in excess of Rs. 5,000/- in each individual case subject to limit of Rs 1,00,000/- group award.

(Board's Letter No: F(X)II-2016/PW/3/Pt3 dated 16.12.2016 as revised from time to time)

2) the grant of reward in excess of Rs. 30,000/- in each individual case to non-gaz Railway employees who have done exemplary work to avert accidents. This may be re-delegated to DRMs upto Rs.7,500/- in each case.

(Board's Letter No: F(X)II-2014/PW/4 dated 05.02.2015 as revised from time to time)

3) the ex-gratia payment of bonuses or rewards in excess of Rs.50,000/-per case, for inventions.GM may exercise these powers only in those cases where the employee secures the patent for such innovation and transfers the rights to Indian Railways unconditionally and such innovation is considered useful for Indian Railways.

(Board's Letter No: F(X)II-2016/PW/3/Pt3 dated 10.02.2017 as revised from time to time)

4) the acceptance of honorarium by a Gazetted Railway servant in excess of Rs.20,000/- per case for undertaking work as arbitrator in a dispute in which the Railway Administration is a party and in excess of Rs. 5,000/- in a year in all other types of cases, except cases of acceptance of honorarium for conducting Disciplinary Enquiries against Railway Officers arising out of Vigilance/CBI cases where the limit shall be as per the rate fixed by Board from time to time.

(Board's Letter No: F(X)II-2008/PW/6 dated 25/04/2013 & No.2019/Trans Cell/S&T/Suggestions from GMs dated 02.09.2019 as revised from time to time)

5) the grant of honorarium to Non-gaz railway employee in excess of Rs.15,000/- in each individual case. Where the honorarium is recurring, the limit applies to the total amount paid in a financial year. These powers will be exercised with the concurrence of PFA.

(Board's Letters F(X)II/13/PW/4 dated 25.07.2013 as revised from time to time)

6) *Rewards to persons other than Railway Employees*:
   a) the grant of rewards in excess of Rs.25,000/- in each case.
   b) the grant of reward in excess of Rs.50,000/- in each case to the persons who have done exemplary work to avert accidents and saved passengers life. This may be re-delegated to DRMs upto Rs.10,000/- in each case.

(Board's Letter No:F(X)II-2016/PW/3 dated 14.09.2016 as revised from time to time)

IV) Other Matters:

1) the acceptance of resignation of a gazetted officer.

   (DoPT's OM No: 28034/25/87-Estt(A) dated 11.02.1988 as revised from time to time)

2) the deputation of a Railway servant out of India.
3) the sanction of expenditure on deputation of Railway employees for training courses, seminars, symposia in recognized non-Railway Institutions in excess of Rs.1.00 crore in a year for Zonal Railways and Rs.8 lakh in a year for Production Units as detailed in Railway Board's Letter No: 2017/Trans/01/Policy dated 18.10.2017 and 2018/Trans./Cell/E/process reforms dated 12.12.2018 as revised from time to time.
4) the waiver of the cost (Full or partial) of training of a Railway employee who has received training at Railway's cost and who is required to serve the Railway for a minimum prescribed period.
5) permitting a railway servant below Junior Scale to travel by Air on duty as detailed in Board Letter No: F(E)I/2021/AL-28/47 dated 13.08.2021 as revised from time to time.
6) the construction or purchase of a building for use as residence by an Officer or to hire a building for use as residence by an Officer under conditions which fall outside the framework of the extant instructions in regard to the ceiling of rental, minimum period for the lease and other conditions.

7) *the remission of recovery of rent:* beyond four months.

(The General Manager may exempt the incumbent of a post from occupying the quarter allotted to the post and/or from paying rent thereof upto a maximum period of four months in the following circumstances:

a) when an employee is temporarily transferred to a post in another station;
b) when the quarter is subjected to extensive repairs, such as renewals of roofing, replacement of flooring, or such other special works necessitating the vacation of the whole quarter;
c) when an employee is required to vacate the quarter under medical advice on account of an infectious disease or an epidemic.)

8) the write-off of –
   a) Advances
   b) Amounts overdrawn by Officers, or otherwise due from them, which were discovered in audit within a year.

B) Works Matters

I) Expenditure on works not wholly chargeable to Ordinary Working Expenses

1) Sanction of works**:**

In the plan heads New Lines, Gauge Conversion, Railway Electrification works, Metropolitan Railway Projects, setting up of new Production Units, Rolling Stock or Surveys.

2) Sanction of works in other Plan heads beyond Rs.2.5 crore provided and subject to:
   a) Total lumpsum provision made in the Budget for such works is not exceeded.
   b) Works in respect of existing Railway Schools, Hospitals, Dispensaries, Institutes, Officers Club, Rest Houses and Holiday Homes –not more than Rs.1.00 crore in each case,
   c) Works under PH-30- upto Rs.1.00 crore in each case.
   d) Works under Plan head Computerization:-
      i. upto Rs.2.5 crore including cost of Hardware replacement for IT based network applications.
      ii. Extension/Up gradation /Strengthening of LAN: upto Rs.20 lakh in each case.
   e) Machinery and Plant – costing up to Rs.50 lakhs each for GM/Open Line and PUs (including CAO in independent charge). General Managers may decide to delegate these powers upto a maximum of Rs.20 lakh to CWMs/DRMs subject to annual ceiling fixed by the Railway for the Workshop/Division.
   f) *Out of Turn (not permitted for Computerization and M&P):*

Budgetary ceiling for other than safety related items will be Rs.25 crore (other than lumpsum) in a financial year. Safety related works should be completed within a maximum period of 08 months from the date of sanction.

g) For Customer Amneties Works: DRMs may sanction works under the plan head 5300 up to Rs.2.5 crore in each case (under Lumpsum category as well as Out of Turn).

II) Sanction of estimates:

Sanction of Estimates except in the following cases**:**

1) where excess over original sanctioned cost/abstract cost due to reasons other than price escalation is upto 20% of original cost. However, General Managers will have full powers to sanction excess due to price escalation.

2) *Material Modification* upto Rs 2.5 Cr subject to other restrictions laid down in Board's letter dated 25.08.2021

3) *M&P estimates* for increase in cost due to price escalation not more than 100% of original estimate or Rs.2 crore, whichever is less & increase due to reasons other than price escalation including material modification not more than 20% of the original estiamte or Rs. 50 lakh, whichever is less.

4) *Survey Estimates*: where variation is upto 20% on an original estimate sanctioned by higher authorities, General Manager can sanction survey estimates provided the surveys are included in the sanctioned budget.

5) *Estimates of Lump sum works:* General Managers can sanction excess over estimate upto variation prescribed in Board's letter dated 25.08.2021.

6) *Part Estimates*: costing upto 5 % of the total value of the work, as originally sanctioned in the Budget.

(Board's Letter No: 2021/F(X)II/PW/4 dated 25.08.2021 as revised from time to time).

III) Contracts:

1) Incurrence of expenditure for engaging/obtaining consultancy services in excess of Rs.10 crore as detailed in Board's Letters No: 2021/F(X)II/PW/4 dated 10.08.2021 & 12.08.2021 as revised from time to time.

2) the grant of advances to contractors –
   a) Mobilization advance in excess of 10% of the contract value.
   b) Advances against new machinery and plant – in excess of 10% of contract value or 75% of the purchase price of new machinery and plant brought to the site of work (whichever is less).
   c) Advances for accelerating the progress of work in special circumstances in excess of 5% of contract value or Rs.1 crore (whichever is less).

   (Board's Letters No: F(X)II-97/PW/4 dated 05.05.1998, 2007/CE-I/CT/18 Pt.2 dated 04.10.2012, 2007/CE-I/CT/18 Pt.3 dated 23.05.2012 & 2018/CE-I/CT/1 dated 22.01.2018 as revised from time to time)

C) Legal Matters

1) the reimbursement of legal expenses of a Railway servant –
   a) Who institutes a suit in a Court of Law without the prior approval of the Railway Administration; or
   b) If the suit emanates as a result of actions taken by the Railway servant other than the discharge of official duty.
2) the filing or defending of an appeal in the Supreme Court.
3) the engagement of a Railway Counsel on scale of fees higher than that prescribed by Ministry of Law and Justice;
4) the engagement of counsel at more than Rs.1,050/- per day in Supreme Court or in any of the High Courts or at more than Rs.750/- per day elsewhere;

5) payment of fees in excess of scales of fees fixed by the High Courts concerned.

D) Commercial Matters

1) the write-off of amounts due to the Railways, otherwise than when they are irrecoverable, in excess of Rs.2 lakh in each case other than wharfage, demurrage, storage and lost property charges which may be written off or refunded by Railway Administration without the sanction of higher authority. This shall apply only for persons other than Railway employees.

(Board's Letter No: F(X) II-2016/PW/3 dated 14.09.2016 as revised from time to time)

2) the payment of claims, otherwise than as specified below or claims for compensation other than those relating to goods lost or damaged and those arising out of Railway accidents –

(a) Claims settled out of court	Upto Rs.1,00,000/- in each case.
(b) Claims decreed by a court of Law.	Full powers subject to the condition that particulars of cases involving expenditure of more than Rs.1,00,000/- in each case should be reported to Railway Board for information.

The powers under this item should not be re-delegated to subordinate authorities.

E) Railway Assets

1) the sale of -

   a) Any portion of a Railway line.

   b) Any item of authorized rolling stock.

   However, the sale of following may be excluded from above delegation:-

   i) Railway component can be sold for the purpose of vendor/product development at book rate/latest purchase rate whichever is higher with usual charges as permitted in Stores code.
   ii) Movable asset (other than rolling stock) can be sold on book rate or reserve price whichever is higher, provided it is not to be replaced.

(Board's Letter No: F(X)II-2016/PW/3 dated 22.03.2017 as revised from time to time)

2) the dismantling or otherwise permanently closing to public traffic of any existing open line section.

3) the introduction of new designs for goods and coaching stock sanctioned for construction during each financial year irrespective of whether the stock is to be built to existing, sanctioned or new designs.

4) changes, alterations or modifications in the design, layout or equipment of the existing rolling stock and marine vessels involving:-
   (a) infringements of the schedule of maximum and minimum running dimensions unless previously sanctioned;
   (b) decrease in the revenue earning capacities of coaching and goods vehicles and marine vessels, such as alterations in the class or seating capacity of coaching vehicles and marine vessels and a permanent decrease in the relationship between gross load and tare in the case of goods vehicles;

   (c) conversion of public service vehicles into Railway service vehicles and vice versa and material modifications (such as alterations in the wheel arrangements etc. in existing Railway service vehicles.);

   (d) the introduction of new facilities, fittings and equipments for the traveling public where such have not previously had the approval of the Board, e.g. cooling arrangements in carriages, electric fans in second class compartments, variations in types of lavatory and other equipments which involve matter of policy.

5) alteration in the authorized stock of all descriptions.

F) Miscellaneous Matters

1) reappropriation of funds beyond Railway Board budget directorate's guidelines.

(Board's Letter No: 2011-B-174 dated 26.08.2021 as revised from time to time)

2) the purchase of a motor-car, motor-boat, truck or any other vehicle.
3) the incurrence of expenditure on each ceremonial occasion in excess of Rs.5 lakh.

The incurrence of expenditure on important functions which are attended by Minister of Railways/Minister of State for Railways: in excess of Rs.15 lakh in each case,

The expenditure on functions attended by President/Prime Minister: in excess of Rs.20 lakh in each case.

   a) The powers under this item will be exercised by the General Managers subject to an annual ceiling of Rs.37.50 lakh for Production Units and Rs.75 lakh for Zonal Railways.

b) The power under this will cover the expenditure on Railway week celebration also, the limit for which will be Rs.5 lakh for a Zonal Railway/Production Unit as a whole.

(Board's Letter No: F(X)II-2015/PW/7/Pt.2 dated 29.12.2017 as revised from time to time)

4) the incurrence of expenditure in excess of Rs.5 lakh per year in connection with the entertainment of distinguished visitors, i.e. distinguished official or non-official personages, representatives of foreign technical associates, foreign technical experts, representatives of Trade and Industry including overseas companies.

(Board's Letter No:F(X)II/2016/PW/3 dated 14.09.2016 as revised from time to time)

5) the grant of fees to private persons or donations to private bodies including Institutes, Hospitals and Schools, an excess of the scales or maximum limits laid down by the Railway Board.
6) the payment of arbitration fees to Retired Railway Officers in excess of Rs.2,25,000/- per case.

(Board's Letter No: 2009/CE-I/CT/14/Main dated 09.04.2021 as revised from time to time)

7) the payment of contribution or subscription to a professional institution in excess of Rs.1,00,000/- per annum in each case.
8) the write off of irrecoverable losses of cash, stores, tools and plant –
   a) exceeding Rs.5 lakh in value when a Railway employee is in any way responsible for the loss.
   b) exceeding Rs.5 crore in value when a Railway employee is not in any way responsible for the loss.
      i) Every important case of loss should be brought to the notice of the Railway Board, as soon as possible, after its discovery. When the loss involved does not exceed Rs.50,000/- the case need not be reported unless it represents unusual features or reveals serious defects in procedure.
      ii) Inefficient balances under Suspense Heads not exceeding Rs.1 lakh can also be written off by the General Manager.

(Board's Letter No:F(X)II-2016/PW/3 dated 14.09.2016 as revised from time to time)

9) Except in accordance with the rules contained in the Indian Railway Codes or any general or special orders issued by the Railway Board –
   a) the construction of an assisted siding.
   b) the acquisition, lease or disposal of land.
10) the alteration of or departure from the terms of contracts with Branch or Worked Lines.
11) The supply of electricity to outsiders except under the following conditions –
   a) the provisions of the Electricity Act are not infringed;
   b) such supply does not cause any extra outlay either immediate or contingent;
   c) the supply can be made without any inconvenience to the Railway and after its full needs have been met;
   d) the rates charged allow for profit to Railways after taking into account all costs of production, direct and indirect and are above the rates of electricity supplied to Railway employees; and
   e) the Railway should have power to discontinue the supply without notice and without compensation.
12) any alteration in the existing Cash and Pay arrangements.
13) any expenditure on an object which has not previously been recognized as a fit object for Railway expenditure. If any item is not covered anywhere, clarification from board may be sought.

*****

ANNEXURE III

(Ref. para. 546)

Assessment Of Cash Requirement

(A) Items included in the Railway Budget

Grant No. 3 This is 'Staff Grant : and the expenditure is incurred wholly in cash less some of the Pay-roll recoveries such as credit to Provident Fund, rent and income tax, recovery of loans and advances, etc., which are effected through book adjustment. Recoveries for ultimate Payment to outside bodies such as Co- operative Societies, under small savings schemes, Postal insurance, etc., will however, involve cash outgo. Debits for 'order police' would represent adjustment expenditure.

Grant No. 4 to 9 and 12 Materials drawn from stores will be booked by adjustment whereas payments to officers, class III and IV Staff, including workshop staff, will involve cash outgo. Payments to contractors for handling collection and delivery of goods, and expenses at out agencies, or work done and for materials supplied and debited directly to the Grant, without operating upon any other Grant, will form cash expenditure. A careful assessment by each Department/Abstract should be made for estimating the 'cash' and adjustment' portion realistically. Similarly payment of compensation claims will involve cash outgo. Likewise, contribution and grants, compensation payments and other expenses will involve cash outgo. Under 'Suspense', debit to Miscellaneous Advances will mainly represent cash expenditure except for unallocated stores debits. However under 'Demands Payable', which is budgetted (within the demand) for 'net' increase or decrease, increase in credit will represent book adjustment (by contra debit to final heads), and reduction in credit will result from clearance under Demands Payable by payment. Consequently, if there is a net increase of credit under Demands Payable the budgetted expenditure under the final head should be reduced to this extent so as to exclude the element of book adjustment by operation of Demands Payable. On the other hand, a net reduction under Demands Payable should be added back to the

final head to arrive at the total cash outgo under the latter.

Grant No. 10 Cost of coal and other fuel is adjusted from 'Stores Suspense'. When the diesel locos of one Railway are serviced in the loco shed of a contiguous railway system, the debits for fuel are adjusted on GTKM basis through inter- railway financial adjustment. Transactions directly debited under Grant No. 7 are (i) cost of electric current for traction purposes, (ii) Sales tax, excise duty and cess on coal and (iii) freight and handling charges on fuel. Out of these items (i) and and (ii) involve cash outgo and item (iii) in part cash and Part 'adjustment' item.

Grant No. 13 Contribution to Provident Fund represents purely book adjustment but gratuities and Special Contribution to Provident Fund will involve cash Payment to retiring employees. The expenditure is in respect of pension etc., payments through Civil Accounts Officers and Banks and involves book adjustment mainly, except for Death Cum Retirement Gratuity which is paid in cash by each Railway Administration.

Works Grant No. 16 It represents cash expenditure mainly in the form of payment to work-charged staff and payments to suppliers and works contractors. Debit to Stores Suspense for 'purchases' mainly involves cash payment except where, for imported materials, debits are accepted through the CAO, London or I S M, Washington, etc. Under Manufacture Suspense, however, the debit in respect of materials is entirely by book adjustment and cash is involved only for payment to shop labour and other charges such as for electricity and water, and contract payment for works chargeable to WMS.

(B) Items, not included in the individual Railway Budget

Non-budget Items These consist of refunds of fares, freight, wharfage and demurrage, etc., andinvolve entirely cash expenditure.

Civil grants These involve cash payments towards loans and advances to staff such as House Building Advance and Personal Computer Advance The Railways should make an assessment separately for each type of advance and furnish the details in the form of an annexure in

support of the cash requirement under this head.

Board's Bulk Order Contracts

Even though included in the budget of the Indian Railways as a whole, Bulk Order items are distributed to individual railways only at the Revised Estimate stage. Nevertheless, each contract for purchase of wagon or coaching vehicle stipulates the disbursing authority. Payment by the nominated railways will be outside their respective sanctioned budgets but within the overall railway budget for Bulk Order items. The paying railway should make, contract by contract, an assessment of the quarterly phasing of payment adding up to the total estimated expenditure during the year. This statement should be furnished in support of the Railway's cash requirement for payment against Bulk Order contracts.

ANNEXURE-IV

Cash Budget For The Year

F.554

(Rupees in thousands)

	Sanctioned Estimate/Budget forthe year			Estimated cash Expenditure			
Demands	Cash	Adjustment	Total	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.
1							
2							
3 to 13	(Separately for each Grant)						
16							
Non budget items--							
Refund of fares freight etc.							
Civil Grant							
Bulk order Contracts							
Total							

Note:- Cash outgo in each quarter should be phased on the basis of past trend of cash disbursement, or such other method as may suit the Organization /unit concerned. This estimate of phased cash flow should be up dated and the Boards formal authorization for cash expenditure obtained well ahead of the next quarter.

*****

ANNEXURE V

F.- 556

Cash Outgo-Quarterly Variance Statement

Rupees in thousand

		Actual cash outgo				
(A) Sanctioned Grant	Estimated cash outgo for the quarter	1st month	2nd month	3rd month	Total	Remarks re variation from Estimate.
1						
2						
3 to13 (Separately for each Grant)						
16						
(B)Non- Budget disbursement						
Total						

*****

CHAPTER-VI

Contracts General Principles

Types of contracts, Departments responsible for awarding them	601
Tender System	602-603
Invitation to tender	604 -606
Opening of Tenders (Deleted)	607-610
Tabulation statement (Deleted)	611-613
Constitution of Tender Committees	614-619
Earnest Money and Security Deposits	620
Contract Agreements	621
Execution of contract prior to Commencement of Works or supplies	622-624
Contract Documents	625
Conditions of Contract	626-627
Variation of contract Conditions	628
Settlement of Disputes	629

*****

Ministry of Railways (Railway Board)

CHAPTER VI

Contracts-General Principles

601. Within the powers delegated by the competent authority, contracts are awarded by the officers of the various Departments in the Railway Administration and the Railway Board for and on behalf of the President of India for supplies, services and works as per extant delegation of powers. These contracts are broadly categorized as below unless otherwise specified by Railway Board instructions:-

	Contracts	**Department responsible for awarding contract**
1	Supplies of stores of all description except those which may form part of a work contract.	Headquarters Stores/Railway Board
2	Fabrication and supply of clothing and uniforms, printing and supply of books and forms etc.	Headquarters Stores
3	Fabrication and supply of sleepers, points and crossings and other fabricated stores against items for P. way.	Engineering/Stores
4	Works contracts, including those involving supply and erection/commissioning of machinery and plant.	Civil Engineering, Electrical, Mechanical, Signal and Tele-communication and Stores Departments.
5	All types of 'handling' contracts at Railway Stations Transshipment points and goods sheds, etc. in respect of Public freight and coaching traffic	Commercial
6	Catering contracts of all types	Commercial
7	Cycle/Scooter/moped stands at Railway stations	Commercial
8	Book stalls and weighing machines at Railway Stations	Commercial
9	Out-agency and City Booking Offices	Commercial
10	Lease of plots of land to Railway users	Commercial
11	Contracts with siding owners (whether private siding or assisted siding)	Engineering and Commercial
12	Lease of Railways' surplus land for 'grow more food' campaign, etc	Engineering
13	Zonal contracts for civil maintenance and other	Engineering

	works	
14	Ash-pit cleaning, cinder picking and disposal of foundry waste in loco sheds and mechanical workshops	Operating/Mechanical
15	Technical Collaboration	Concerned Technical Department
16	Hire of tools and plants materials	Concerned Department
17	Hoardings and display of advertisements at Railway stations or on Railway property.	Public Relations
18	Sale of scrap by auction or by inviting tenders.	Stores
19	Sanitation contracts	Commercial/Mechanical/ Medical

The above list of categories of contracts is by no means exhaustive. The guiding principles laid down in this Chapter for inviting tenders and conducting their scrutiny, etc., are generally applicable to all types of Railway contracts and should be treated as supplemental to the rules prescribed in Charter III and IV of Indian Railway Code for the Stores Department and Chapter XII of the Indian Railway code for the Engineering Department. Regarding Contracts for the sale of railway materials, reference may also be made to Chapter XXIII of the Indian Railway Code for the Stores Department.

602. Tender System -It is a primary duty of the officers authorised to enter into contracts to obtain the best value for the money spent, and the tender system should be given very careful and serious consideration in all cases as one of the most effective methods of securing competitive rates.

603. Following are amongst the different methods of obtaining tenders –

1) By advertisement (i.e., 'open'- tenders),
2) By direct invitation to a limited number of firms (i.e.,'limited'/bulletin Tenders,) and
3) By invitation to one firm only (i.e., 'single' tender).

The limits laid down under the orders of the Railway Board from time to time for sorting to any of the above methods of calling for tenders should be followed. Procurement of common use Goods and Services through GeM is mandatory for Goods and Services available in GeM.

604. Deleted.

605.

1) **Invitation of tenders -**Tenders should be invited sufficiently in advance of the date of expiry of the existing contract so as to leave adequate time for negotiation or re-tendering ,if necessary. In all cases ssufficient notice should be given for the submission of tenders, which in case of large works should

not be less than 21 days. The above prescribed tender period may be reduced from 21 days in the exceptional circumstances in consultation with the Financial Adviser and Chief Accounts Officer. This shall be applicable to Works, Earnings and Service Contracts with following modification:

For tenders valued upto and including Rs 2 crore (or as modified from time to time), invited through e-tendering, the tender notice period can be reduced upto 14 days in consultation with associate finance.

2) For works in remote locations or of specialized nature or amount higher than Rs.50 crore (or as modified from time to time) adequate tender notice period (not less than 21 days) should be given for preparation to the potential bidders in order to ensure competitive and well informed bidding.
3) The minimum tender notice period shall be reckoned from the date the tender is published on e-tendering website. The publication in newspaper will continue as per the present practice the effective date of tender notice will be the date of uploading on e-tendering website.
4) The tender validity period shall be kept three times the tender notice period.
5) In case of Supply Contracts the minimum time limit for tender opening is 21 days and the corresponding time limit for global tender is 30 days from the date the tender is published on e-procurement website.
6) For GeM procurement, extant instructions should be followed.

606. Standard tender forms are uploaded on IREPS by the concerned Departments for tendering.

607. Deleted.
608. Deleted.
609. Deleted.
610. Deleted.
611. Deleted.
612. Deleted.
613. Deleted.

614. Constitution of Tender Committees -Tender committees should be constituted by General Manager in consultation with the Financial Advisor and Chief Accounts Officer unless otherwise specified by Railway Board.

615. For Open tenders for Works invited through e-tendering:

1. Tenders having value up to and including Rs.50 lakh (or as modified from time to time) can be directly accepted by concerned executive in Selection Grade/JAG level or Sr.Scale level holding independent charge. However, in case the tender notice period is less than 21 days or accepting authority intend to accept offer other than lowest financial offer; direct acceptance of tender is not allowed in the tender upto and including Rs 50 lakh (or as modified from time to time).
2. For e-tenders above Rs 50 lakh (or as modified from time to time) and upto

and including Rs.5 crore (or as modified from time to time), the Tender Committee shall be constituted with two members out of which, one should essentially be from the Finance Department and the other from the concerned Executive Department.

3. For works e-tender of value more than Rs 5 crore (or as modified from time to time), three members Tender Committee shall be applicable, except for Composite Tenders, where Tender Committee can be constituted with four members.

In case of Supply contracts:

1. For tenders having value upto and including Rs.50 lakh (or as modified from time to time), can be directly accepted by Depot/Divisional SG/JAG Stores Officers as per powers delegated.
2. For tenders having value above Rs.50 lakhs (or as modified from time to time) and upto Rs.1 crore (or as modified from time to time), the tender committee will consist of two members in Sr.Scale, of whom one will be from the Accounts Department and one from Stores Department.
3. For tenders having value above Rs.1 crore (or as modified from time to time), the tender committee will consist of three members one from the Stores Department, one from the Accounts Department and one from the indenting Department, as per powers delegated.

616. The Tender Committee should be so constituted that the officer recommending acceptance of a tender in his capacity as a member of the tender Committee shall not also be the accepting authority for the same tender. In such cases the officer concerned should put up the Tender Committee's proceedings to the next higher authority for acceptance notwithstanding the fact that the Tender Committee's recommendations are within his own powers of acceptance.

617. In the case of open tenders, if the lowest tenderer is not on the approved list of contractors kept by the Railway, but his tender is otherwise satisfactory, he should be asked to produce evidence of his capacity to carry out the proposed work or supply efficiently and of his sound financial position. If he is unable to produce this evidence, and it is proposed to pass over his tender and consider the next higher one, the fact of the lowest tenderer having failed to produce necessary evidence of his capacity and sound financial position should invariably be placed on record.

618. In all cases when a lower offer has been rejected, full reasons should be recorded on the file for any future reference.

619. In cases where specifications in a tender have under gone any major change before the tenders are finalised, fresh tenders should be called for giving sufficient notice to the tenderers.

620. Earnest Money and Security Deposits -Tenders un-accompanied by the requisite earnest money should, under no circumstances, be entertained and should be summarily rejected.

621. Contract Agreements -The basic principles to be always kept in view by those, who are authorized to enter into contracts or agreements, are given below.-

i) The terms of contract must be precise and definite, and there must be no room for ambiguity or misconstruction, and the matters to be agreed upon should include in detail, the following: -

   a) What the contractor is to do; when, where, and to whose satisfaction it is to be done.
   b) What the Railway Administration is to do; and on what terms.
   c) What payment is to be made; what it is to cover, to whom it is to be made; and the method and basis of making it.
   d) The responsibility of the contractor in respect of adequate supervision, care of government property, and the protection of outside interests and those of his staff and workmen.
   e) The terms on which variations and modifications, if any, are to be permitted, the authority competent to order and to assess them, and the occasion and basis of such assessment.
   f) The measures to be adopted in the event of a breach of the contract by either party thereto; and the method of and grounds for the determination thereof.
   g) The method of settling disputes.

ii) As far as possible, legal and financial advice should be taken in the drafting of contracts before they are finally entered into.

iii) Standard forms of contracts should be adopted wherever possible, the terms to be subject to adequate prior scrutiny.

iv) The terms of contract once entered into should not be materially varied except in consultation with the competent legal and financial authority.

v) No contract involving an uncertain or indefinite liability or any condition of an unusual character should be entered into without the previous consent of the competent legal and financial authority.

vi) Provision must be made in contracts for safeguarding Government property entrusted to a contractor.

vii) In entering into long term agreements or contracts, consideration should be given to the desirability of reserving for the Railway Administration unconditional power to cancel the agreement at any time after the expiry of six months' notice to that effect.

viii) The power to retain and "set off" all claims, whether arising out of the particular

contract or out of any other transaction or claim whatever against the contractor should be secured for the Railway Administration.

622. Execution of contract prior to commencement of works or supplies-

i) No contractor should be permitted to commence work or supply materials until the relevant contract has been signed by the parties competent to do so.

ii) Exceptions to this rule are permissible only in cases of extreme urgency such as works or supplies necessary to safeguard life or property or to repair damage to the track caused by flood, accident or other unforeseen contingency, so as to restore and maintain through communication. Even in such cases, if circumstances permit, some form of written contract, or at least an agreed statement of rates to be paid, should be prepared before commencement of works or supplies; the intention being that the conditions, specifications, etc., with sufficient items and rates to carry on with, should be agreed upon beforehand.

iii) In other exceptional but less emergent cases, in which the commencement of or supply cannot be postponed till the preparation and sanction of the contract documents, prior consultation with the Financial Adviser & Chief Accounts Officer shall be necessary.

iv) In all cases of departure from sub-para (i) above, the completion and execution of the main contract should be proceeded with expeditiously.

623. No authority shall execute a contract-

i) Which is beyond its powers as to either "class" or "amount";

ii) Which relates to a work, the incurrence of expenditure or liability on which is not authorized under current rules and orders regarding control of expenditure;

iii) Which involves, in respect of the work to which it relates, an excess over the estimate greater than is within such authority's competence to sanction; and.

iv) Any provision of which contravenes any standing rule or order of higher authority; provided always that an authority may sign any contract within its powers as to "class", with the approval of the authority competent to execute it.

Note- In cases where materials are supplied by the railways to the contractor for the execution of a work, the amount of the contract shall for the purpose of determining the authority competent to execute it, be taken to be the net amount to be paid to the contractor, exclusive of the cost or value of the materials so supplied.

624. On behalf of the contractor the signature of only such person or persons as are competent to bind him legally shall be accepted on a contract.

625. **Contract Documents** -The documents forming integral parts of a 'works'

contract are the Conditions of Contract, Standard or Special; the Specification, Standard or Special (and any plans necessary) ; the schedule of Items, Quantities and Rates; the Agreement Forms; Instructions to Tenderers, and Tender Forms (if any). The documents constituting a contract or the supply of stores consist of the following.-

i) The tender;
ii) Supplier's offer;
iii) Advance Acceptance of Tender, including telegraphic acceptances, if any;
iv) Formal Acceptance of Tender;
v) Conditions of Contract (Standard and/or Special), specifications, drawings, etc.
vi) Any document making any change or deviation in any of the contract terms as embodied in the Advance Acceptance of Tender or the formal Acceptance of Tender. This includes a letter cancelling the contract.

626. Conditions of Contract -The Conditions of Contract may be either Standard or Special. Standard Conditions for stores and works contracts should preferably be embodied in all contracts to which they are applicable. In the event of such conditions proving defective in any way, it will be the duty of the General Manager to report the fact to the Railway Board, if such conditions were prescribed by them, and in all other cases to arrange, in consultation with his Legal and Financial Adviser & Chief Accounts Officers, to amend or amplify them suitably.

627. Any unusual conditions of Contract should before they are imposed, be approved by the General Manager, acting in consultation with his Legal and Financial Adviser & Chief Accounts Officer; or if the contract to which they relate is beyond his powers to execute, by the Railway Board.

628. Variation of Contract Conditions -The power to vary the terms of a contract lies only with the actual parties thereto. The contractor and his sureties, if any, must, therefore, be consenting parties to all variations, which should be the subject of a Subsidiary Agreement stating what is to be varied and what will remain unchanged in the original contract. The drafting of this agreement should be the subject of very careful scrutiny, to ensure that the conditions, specifications etc., of the main contract are adequate for and applicable to the variation or that the latter is made self sufficient in these respects. Such subsidiary agreements should be regarded as fresh contracts and entered into before effect is given to the variation. The Contract Conditions may be varied by various authorities competent to do so to the extent shown below :-

a) i) *Variation of the Standard I. R. S. Conditions of Contract and Specifications*. - These may be varied only with the sanction of the General Manager, in exceptional cases within his powers of placing contracts in consultation with his Financial Adviser & Chief Accounts Officer and after taking legal advice, if necessary, in accordance with the extant orders of the Railway Board.

ii) Variation of the conditions of contract other than the I.R.S. Conditions.- These may be varied with the sanction of the authority that approved the

original contract acting in consultation with his Financial Adviser & Chief Accounts Officer and after taking legal advice if necessary.

b) *Variation of the Rates of Items-*

*Contracts in which a price variation clause is included.-*The rates may be varied by the authority which approved the original contract with the concurrence of his Financial Adviser & Chief Accounts Officer. If the total value of the contract after allowing for the variation is beyond the powers of the authority which approved the original contract, the sanction of the higher authority within whose competence as to amount it lies should be obtained.

c) *Variation of the Quantities of any item* -These may be varied by the authority which approved the original contract to the extent deemed necessary provided that the Indian Railway Code Rules relating to control over expenditure are not contravened thereby, and provided also that the total value of the amended Contract shall not exceed the powers of the authority that approved the original.

Where materials are required during a contract period in excess of the quantities contracted for, and such excess is not sufficiently large to justify the invitation of fresh tenders, there is no objection to the quantities under the existing contract being increased suitably. Effort should, however, be made to secure more favourable terms for the increased quantity.

d) *Variation of the items* - These may be varied at discretion by the authorities which approved the original Contract to the following extent, namely; existing items may be deleted or additional items inserted at rates, which, agreeable to any general or specific orders at the time being in force, may be decided by the authority making the variation ; subject only to the two provisos of the Rule in sub-paragraph (c) above.

e) *Extension of delivery period* -The authority within whose powers the value of the contract falls, is competent to consider requests for extension of delivery period. Such extensions where granted will, however, be subject to government's right to levy liquidated damages in terms of the contract being specifically reserved and likewise. Where higher prices have been paid for earlier deliveries, government's right to recover the amount paid by way of the price difference on this account shall also be reserved.

629. Settlement of Disputes -The standard conditions of contract lay down the procedure for settlement of disputes by arbitration under the 'Indian Arbitration and Conciliation Act, 1996' and the rules made there under. Officers concerned with the operation of contracts and arbitration proceedings should carefully study the provisions of the 'Indian Arbitration and Conciliation Act, 1996' to ensure speedy disposal of claims and disputes arising in connection with the operation of contracts.

*****

CHAPTER-VII

Allocation Of Expenditure

General Principles of Allocation	701 - 716
Land	717 -723
Surveys	724
New Lines	725 - 732
Lines partially opened for traffic	733
New Minor Works (Deleted)	734 - 736
Calculating Machines, and other office appliances	737
Revenue Sidings	738
Additions of Ballast	739
Temporary and Experimental Works	740
Maintenance of Quarters for Construction Staff	741
Rolling stock	742 -748
Stand-bys	749
Spares	750 - 752
Replacement and Renewals	753 - 758
Renewals of rails, etc	759 - 760
Renewals of Boilers (Deleted)	761- 763
Renewals of Carriages and Brake-Vans	764
Renewal of self-propelled Coaches	765
Renewals of Wagons	766 - 767
Renewals of Rolling Stock parts	768 -771
Incidental Works	772 - 774
Expenditure on Ceremonial Occasions	775
Costs of Tools and Plants and Special Posts	776
Inter-Railway Transfer of Assets	777 - 780
Assets other than Rolling Stock	781
Sale of overage or condemned locomotives and wagons	782
Transfer of assets from open line to Construction	783
Replaced stock	784 - 786
Second-hand Rails	787
Private Railways worked by Indian Railways	788

*****

CHAPTER VII

Allocation Of Expenditure

701. General Principles of Allocation -'Allocation' of expenditure implies identifying its source of Finance and should be distinguished from 'classification' which deals with the detailed heads of account under which expenditure is recorded in the accounting books of the Railway. Railway expenditure is financed from Capital provided by the General Revenues, Railway Funds, Extra Budgetary Resources (Institutional Finance) (EBR/IF), EBR (IRFC-Bonds) and Extra Budgetary Resources (Partnership) (EBR/P) and Current Revenues. Accordingly, the expenditure is allocated to (i) Capital, (ii) the Depreciation Reserve Fund (iii) the Development Fund, (iv) EBR/IF (v) EBR(IRFC-Bonds), (vii) EBR/P (viii) Railway safety Funds (ix) other specific fund and (x) Revenue. The detailed classification of (a) the expenditure chargeable to Revenue is given in Appendix I, and of (b) Capital and other Works Expenditure is given in Appendix II. The classification of revenue is given in Appendix III. {Appendices I to III are printed as a separate volume vide Financial Code Volume II). The List of Major and Minor Heads of Accounts of Railway Revenue, Capital, Debt and Remittance Transactions adjusted in Railway Books are, however, given in Appendix IV of Indian Railway Code for the Accounts Department. Appendices I to III referred to in para 701 are in replacement of Appendices I to III of General Code Vol. II.

702. The general principles on which railway expenditure should be allocated between the sources of finance mentioned in the preceding paragraph are described in paras 703 to 715 below. These principles are based on the recommendations of the Railway Convention Committee, 1949, as amended from time to time.

703. **Capital bears** -

1) the cost of land as defined in paragraph 717 except in cases provided in paragraphs 718 and 719 ;
2) the first cost of constructions and equipment of (i) new lines including strategic lines, whether remunerative or unremunerative and (ii) new production units;
3) the cost of maintaining a section of the line not opened for working;
4) the cost of any additions to the line or equipment of the line, when it is not chargeable to Development Fund;
5) the cost of any additional plant and machinery not connected with any specific work; and
6) the cost of any tools and plant specifically purchased, and of any posts specially created for the supervision or construction of a work, in

accordance with the provisions of paragraph 776.

7) the capital component of IRFC lease charges.

(Note -Provided that the capital component of IRFC lease charge shall be charged to Capital, if adequate funds are not available under Capital Fund. However, the above payment shall be the first charge on Capital Fund if sufficient funds are available.)

(Authority: Board's letter no. 2002/AC-II/1/3 dated 25.07.2017)

8) Cost of construction of staff quarters.

(Authority- Board's letter no. F(X)II-94/ALC/3 dated 05.05.1995)

703 A. Capital fund bears –

1) The capital component of IRFC lease charges
(Provided that the capital component of IRFC lease charge shall be charged to Capital, if adequate funds are not available under Capital Fund.)
2) All other expenditure chargeable to Capital Fund as per allocation projected in yearly Pink Book.

Note -

i) The booking of expenditure on Capital and Capital Fund from 1998-99 onwards is to be done as per allocation indicated in yearly Pink Book.
ii) In case of on-going works for which source of allocation is changed in the intervening years, booking already made shall be frozen.
iii) Inventories will continue to remain under GBS portion of Capital.

(Authority: Board's letters No. 93/AC-1/1/1 dated 26.07.1995, F(X)II/93/ALC/1 dated 24.11.1997 and 2002/AC-II/1/3 dated 25.07.2017)

704. Capital is credited with -

1) the cost at debit of Capital of an asset (other than land) which is abandoned or disposed of without being replaced ;

Note –

i) When such an asset is subsequently replaced, the adjustment made under these rules is reversed provided the cost of replacement is chargeable to the Depreciation Reserve Fund according to paragraphs 754 and 755, otherwise the reversal adjustment should not be made, but the cost of replacement should be allocated according to the normal ruler as if it were a new work
ii) When an item of rolling stock is replaced by another of less

tractive power, seating capacity or floor area or carrying capacity as the case may be, the new asset cannot be held to render fully the services for which the old asset was intended and to the extent to which the new stock falls short of the requirement in this respect, the old stock should be considered to have been abandoned, and the credit for the proportion of the original cost thereof afforded to Capital.

2) the sale proceeds of any land acquired at the cost of Capital when it is sold or surrendered;

3) the difference between the cost at debit of Capital of a replaced asset (other than an asset mentioned in item (5) below) and the cost of replacement, when the cost of replacement is chargeable to the Depreciation Reserve Fund ,(vide paragraph 755) and is less than the cost at debit of Capital;

4) the cost of labour originally incurred in laying the assets or parts thereof, when such items are subsequently transferred for use on a new work;

5) the original cost at debit of Capital (estimated if not known) of an asset (falling within the categories mentioned in Note 2 to paragraph 711) replaced at the cost of the Depreciation Reserve Fund.

704 A. Capital Fund shall be credited with:

1) the amount out of the surplus after appropriation to Development Fund.

2) the cost at debit of Capital Fund of an asset which is abandoned or disposed of without being replaced;

Note -

i) When such an asset is subsequently replaced, the adjustment made under these rules shall be reversed provided the cost of replacement is chargeable to the Depreciation Reserve Fund, otherwise the reversal adjustment should not be made, but the cost of replacement should be allocated according to the normal rules as if it were a new work.

ii) When an item of rolling stock purchased from Capital Fund is replaced by another of less tractive power, seating capacity or floor area or carrying capacity as the case may be, the new asset cannot be held to render fully the services for which the old asset was intended and to the extent to which the new stock falls short of the requirement in this respect, the old stock should be considered to have been abandoned, and the credit for the proportion of the original cost thereof afforded to Capital Fund.

3) In case of assets referred to in Note (ii) of Para 703 A, the assets so created as and when retired will be retired by credit to the source from which it was created and where the charge was booked to Capital as well as Capital Fund, the credit will be in the proportion of the charge.

4) The difference between the cost at debit of Capital Fund of a replaced asset (other than an asset mentioned in item (6) below) and the cost of replacement, when the cost of replacement is chargeable to the Depreciation Reserve Fund, and is less than the cost at debit of Capital Fund;

5) The cost of labour originally incurred in laying the assets or parts thereof, when such Items are subsequently transferred for use on a new work;

6) The original cost at debit of Capital Fund (estimated if not known) of specified asset replaced at the cost of the Depreciation Reserve Fund; and

Amount of interest earned on the balance of fund.

(Authority: Board's letter No.93/AC-I/1/1 dated 26.07.1995, F(X)II-93/ALC/1 dated 12.05.1993, and F(X)II/93/ALC/1 dated 24.11.1997)

705. Revenue bears -

1) All charges for maintenance and repairs after opening of the line for traffic, other than charges of the nature detailed in paragraph 727, including the current expenses of conducting the business of a railway, e.g., pay, allowances, etc., of establishment employed on the open line;
2) The contribution made to the Depreciation Reserve Fund under paragraph 710 to meet the cost of replacement and renewals of assets;
3) The cost of such replacements and renewals as are not chargeable to the Depreciation Reserve Fund or the Development Fund under paragraphs 758 and 711;
4) The cost of labour originally incurred in laying the assets or parts thereof at the cost of Capital, when such items are subsequently transferred for use on a new work;
5) The cost of additional pitching stone laid in training works and protective works after the completion of such works; and
6) The cost of procurement on additional account of small items of equipment, including medical equipments apparatus, appliances including instruments and accessories for Railway Hospitals and Dispensaries as also the cost of replacement of these items provided the cost does not exceed Rs. 3 lakh per item or the monetary limit as prescribed by Board from time to time. These powers should be exercised with great

circumspection and justification for the purchase thoroughly examined so as not to place an undue burden on Revenue. In cases where (i) cost of an item of medical equipment exceeds Rs 20,000/- (or the monetary limit prescribed from time to time) and (ii) cost of an item other than medical equipment exceeds Rs 10,000/- (or the monetary limit prescribed from time to time) the powers should not be re-delegated below the level of Heads of Departments.

Note -In the context of provisions contained in sub-para (3) read with para 758(4), replacement of all items included in the list below para 758 (4) is to be allocated to Revenue, irrespective of the cost involved.

706. Revenue is credited with the value of material released from works charged to Revenue and the amount realized from the disposal of an asset, after deducting the incidental charges, e.g., the cost of dismantling, handling and shifting, including freight to stores depot.

707. Deleted

708. Revenue is credited with the amount realized from the disposal of an asset without being replaced, the original cost of which has been charged to Open Line Works-Revenue.

709. Depreciation Reserve Fund bears -

1) The cost of replacements and renewals including the cost of dismantling, handling and shifting including freight to stores depot in accordance with the provisions of paragraphs 753 to 755 and 758
2) The cost of replacement of ballast involving improved type of ballast; vide para 739 (ii)
3) The original cost (cost at debit of capital) of an asset other than land, estimated if not known, replaced at the cost of Open Line Works-Revenue;
4) The cost at debit of creation of an asset under works (other than land) which is abandoned or disposed of without being replaced;
   Note -When such an asset is subsequently replaced, the adjustment made is reversed provided the cost of replacement is chargeable to the Depreciation Reserve Fund according to Paragraphs 754 and 755, otherwise the reversal adjustments should not be made but the cost of replacement should be allocated according to the normal rules as if it were a new work.

5) All expenditure incurred on modernization of Rolling Stock ; and

6) The cost of tools and plant specially purchased, and of any posts specially created, for the supervision or construction of a work in accordance with the provision of paragraph 776.

710. Depreciation Reserve Fund is credited with -

1) The amount contributed annually from the Railway Revenues;
2) The amount realized from the disposal of an asset (cost at debit of Capital or Development Fund or similar funds) and the amount realized from the disposal of materials released from a work replaced at the cost of the Depreciation Reserve Fund; and
3) The amount of interest earned on the balance of the Fund.

711. Development Fund bears-

1) The cost of new works relating to amenities for customers falling within one or more of the categories in the list in Note 2 (I) below, irrespective of the cost of work,
2) The full cost of replacement of a work (falling within one or more of the categories in the list in note 2 (I) below, where the original cost was charged to revenue,
3) The cost of all new labour welfare works
4) The entire cost of unremunerative works, for improvement of operational efficiency including addition to existing or new works falling within one or more of the categories in the list Note 2 (III) below;
5) The cost of any tools and plant specifically purchased and of any posts specially created for the supervision or construction of a work in accordance with the provisions of paragraph 776;
6) The original cost at debit of Capital, estimated if not known, of an asset (falling within the categories mentioned in Note 2 below) replaced at the cost of the Depreciation Reserve Fund.

I. Passenger and Other Railway Users' Amenities : -

1) Provision of overhead and/or ground level arrangements at stations for filling water in carriages, water supply at stations for use of Passengers, including not only general water supply arrangements which are used for providing water in carriages but also purification plants installed, water coolers-electric or otherwise-water trollies, etc., provided for use ofpassengers.
2) Provision of waiting accommodation including reinforced cement concrete and other types of benches at stations including extension or improvements

to existing arrangements to meet the requirements of railway passengers.

3) Refreshment Rooms, Retiring Rooms, and vendors, stalls of all descriptions at stations provided for catering to railway passengers, except those which the vendors are required by contract to provide at their own cost.
4) Provision or improvement of latrines provided for railway passengers at stations.
5) Miscellaneous improvements, viz., provision of seats, hedges, shade trees on platforms, at stations to cater to the needs of railway passengers.
6) Provision of bathing facilities at stations for use of passengers
7) Improvement to existing carriages such as provision of fans, improved lighting and lavatories, special insulation in roofs, bigger water tanks in carriages, better fitting etc., intended to provide improved facilities to railway passengers. Cost of additional coaches to compensate the loss in seating capacity when old coaches are replaced by new coaches which have a lower carrying capacity due to provision of better facilities for passengers.
8) Improved lighting and provision of fans on platforms or in waiting halls and sheds or vendors stalls at stations to cater to the requirements of railway passengers.
9) Exhibition of sheets time tables in glass fronted frames at station to serve the requirements of passengers.
10) Computerization of Passenger Reservation System (PRS).
(Authority Railway Board's letter No.F(X)II-87/ALC/1 dated 09.09.1988)
11) Works under all the above heads meant to cater to railway passengers provided in connection with Melas and required for periods exceeding 6 months.

Note -Works of this nature required for periods less than six months will be treated as temporary and charged to Revenue under para 740.

12) Any other work considered essential for meeting the requirements of railway passengers at any station, eg., provision of information Offices or Kiosks, provision of public announcement systems etc.
13) Provision including extensions and improvements of the following to cater to the needs of other railway users in Goods Sheds and Parcel Offices for Arrangements for drinking water including water coolers, water trollies etc,Waiting accommodation, including provision of various types of benches,Refreshment rooms and Vendors Stalls, except those that a contractor has to provide at his own cost, Latrines, Miscellaneous improvements, namely; provision of seats, hedges and shade trees,Lighting arrangements and provision of fans,Any other work considered essential, e.g., Enquiry Offices / Information Centres etc, Work under the above heads provided in connection with melas and required for periods exceeding

6 months.

II. Staff Welfare Works

Provision of new hospitals, dispensaries and schools and additions, alterations and improvements to existing ones, Provision of new institutes, recreation rooms, swimming baths, sports grounds and reading rooms and improvements and additions to the existing ones, Provision and improvement of health and welfare services, child welfare and maternity centres, cooling arrangements for workshops, canteens and rest rooms for workmen, Provision and improvement of sanitation, water supply, roads, lighting and marketing facilities in railway colonies, Improvements and alterations to existing quarters of whatever type.

III. Un-remunerative Works for improvement of Operational efficiency

Works arising out of the need for keeping operational methods up to the latest requirements and standards, viz.-,Improvement in water supply at stations for loco traffic purposes, Removal of infringements, Regrading permanent way and improving curves, Converting dead-end sidings into through loops and the provision of additional loops at stations, Provision, extension, realignment or modernization of catch-sidings, Electric lighting of sheds and stations, whether new works or improvements to existing ones, Provision of guard rails on major bridges with through or deck spans, Duplicating or strengthening girders by adding materials, Additional earth work carried out in raising the roadbed in the approaches to railway bridges on account of replacement of girders by others of greater depth, Strengthening of track by inserting additional sleepers, Provision of Anticreep Anchors, Fitting of automatic vacuum brake equipment to Metre Gauge wagons, Telecommunication works and wireless installations, Accommodation works not called for during the construction of a railway or for the period thereafter laid down in Section 11 of the Indian Railway Act, Schemes for remodelling of station yards, workshops, sheds, stores depots and store yards, Improvements to existing station buildings, sheds, godowns, etc, Improvements, extension and additions to office buildings, Provision of, and improvements and additions to, drivers and guards running rooms and rest houses for officers, Provision for fire fighting arrangements or equipment at stations, Provisions of washable aprons on passenger platform lines, Opening of new flag stations or conversion of halts into flag stations, as a passenger facility where there is no financial justification, Provision or improvement of approaches and circulating areas at stations including improved lighting, tonga-car-taxi-cycle-rikshaw stands to cater to the requirements of railway passengers, Approach roads, circulating areas, bullock and other cart sheds and water troughs etc.

IV. Safety Works – Safety related works can be charged to Development Fund also.

Note **-** A) A work shall be considered to be remunerative for the purpose of this paragraph if it earns the return stipulated in Para 204

B) The cost of plant and machinery required for any of the above works should also be included in the cost of the work for the purpose of the above rules.

C) The works 'Provision or improvement of approaches and circulating areas at stations including improved lighting, tonga-car-taxi-cycle-rikshaw stands to cater to the requirements of railway passengers, Approach roads, circulating areas, bullock and other cart sheds and water troughs etc' which appear in the Pink Book for 1979-80 or were approved separately during that year irrespective of whether they had been commenced or not, will continue to be classified as "Passenger Amenities" and 'Other Railway Users Amenities' respectively, Only new such works included in 1980-81 budget and onwards will be treated as unremunerative operating improvements.

712. The Development Fund is credited with-

1) the amount transferred to it from the Revenue Reserve Fund;

2) the amounts appropriated to it each year from the surplus or otherwise

3) the cost at debit of the Development Fund of an asset which is abandoned or disposed of without being replaced;

Note -When such an asset is subsequently replaced, the adjustment made under these rules is reversed provided the cost of replacement is chargeable to the Deprecation Reserve Fund according to Paragraphs 754 and 755, otherwise the reversal adjustment should not be made but the cost of replacement should be allocated according the normal rules as if it were a new work.

4) the difference between the cost at debit of the Development Fund of a replaced asset and the cost of its replacement, when the cost of replacement is chargeable to the Depreciation Reserve Fund (vide Paragraphs 754) and is less than the cost at debit of the Development Fund; and

5) the amount of interest earned on the balance of the Fund.

713. If a work or scheme consists of several categories, some relating to amenities for customers or labour welfare and other to operative improvements, remunerative

or unremunerative, the allocation should be considered with reference to the work or the scheme as a whole, except that the cost of such item or items of the work or scheme as can be identified to be of the category of amenities for passengers and other railway users should be charged to the Development Fund.

714. Deleted
715. Deleted

715 A. Railway Safety Fund (RSF) bears-
The cost of projects under the following Planheads (PH):

i) Road Safety Works-Level Crossings,
ii) Road Safety Works-Road Over/Under Bridges,
iii) New Lines
iv) Gauge Conversion,
v) Traffic Facilities
vi) Track Renewals,
vii) Bridge Works,
viii) Electrification,
ix) Customer Amenities &
x) Metropolitan Projects.

715 B. Railway Safety Fund (RSF) shall be credited with:

i) Funds received from General Exchequer as Railway's share out of Central Road & Infrastructure Fund (CRIF) from cess levied on HSD oil and petrol etc, as per CRIF Act.
ii) Amounts to be appropriated from Railway Revenues i.e. out of the surplus after appropriation to Development Fund and Capital Fund.

715 C. **Extra Budgetary Resources (EBR)**

EBR(P): Cost sharing with State Government for Plan Heads New Lines, Traffic Facilities, Road Safety Works, Other Electrical Works (incl TRD) and Customer Amenities-
Another component of EBR is EBR-Partnership which captures the investments made by third parties on the railway network and includes sidings, private freight terminals, contributions of state governments in joint venture projects, loans directly provided to Railway companies for which IR stands as guarantor, etc.

EBR (IF): A new source of fund was introduced in the Railway Budget 2015-16 for financing projects. The funds are borrowed from institutional sources so as to ensure availability for completion of projects critical for the Railways for generation of revenues.EBR(IF) allocations would be utilized for priority works under Plan Heads New

Lines, Gauge Conversion, Doubling, Traffic Facilities, Railway Electrification, S&T etc with a view to enhancing throughput on the congested corridors.

EBR (IRFC-Bonds): Allocation of Business Rules of GOI allow only MOF to borrow funds for GOI finances. For supplementing funds to finance Railway Budget, the finance arm of Indian Railways, i.e. Indian Railway Finance Corporation does the borrowings. These funds are utilized primarily for procurement of rolling stock, which is then leased to IR for a fixed period. IR pays lease charges to IRFC - both principal and interest components. After the lease period the assets are handed over to Railways at an agreeable amount.

715 D. RRSK: 'Rashtriya Rail Sanraksha Kosh' (RRSK) was created in 2017-18 for a period of five years (as extended from time to time by MoF) to fund critical safety related works. This fund will be utilized for financing identified works under Plan heads Track Renewal, Bridge Works, Signal & Telecom Works, Road Safety works of Level Crossings and Road Over/Under Bridges, Rolling Stock, Traffic Facilities, Electrical Works, Machinery and Plant, Workshops, Passenger Amenities and Training/HRD.

716. The following detailed rules regulate the allocation of expenditure in particular cases and are intended to be illustrative of the application of the basic principles in practice.

717. Land -Land taken up permanently, whether for works or Revenue purposes of the railway is charged irrespective of cost to Capital All charges incidental to the acquisition of land are included in the cost of land.
Note -Incidental charges are defined in the "Explanatory Note 1120" against' Land' in Appendix II of Volume II of this code.

718. The cost of land provided free to subsidized railways is debited to the minor head "Subsidized Companies" under major head 345-Indian Railways Policy Formulation, Direction, Research and other Miscellaneous Organisations. No readjustment to capital is allowed after such a railway is purchased by Government.

719. The cost of land required for the acquisition of materials by quarrying, mining, boring, or other operation; and payments for royalty, mining rights, etc., connected with the same, is dealt with as part of the cost of the manufacturing operations or charged off finally to the work concerned.

720. Rent or other miscellaneous charges in connection with the hire of land,(e.g., the compensation payable for land acquired temporarily under Section 35 of the Land Acquisition Act of 1894) are charged to the work concerned.

721. The cost of filling up burrow pits as a conservancy measure is chargeable to Revenue. When the filling up of borrow pits is necessitated by the construction of a new work, the cost of filling up should be allocated to the work concerned.

722. When land, originally acquired at the cost of capital, is sold or surrendered, the sale proceeds are in all cases credited to Capital.

723. When land is lost through erosion, its cost is written back from Capital to Revenue. If the land so washed away subsequently reforms and is used by the Railway, the adjustment originally made between Capital and Revenue is reversed.

724. **Surveys -**The expenditure incurred on a survey project is in the first instance charged to the head "3001-A Indian Railways Policy Formulation, Direction Research and other Miscellaneous Organizations (Miscellaneous Expenditure General)" and when the construction of the project is completed it is transferred to the project concerned, irrespective of the year in which the expenditure was originally incurred.
Note -If the adjustment of such expenditure involves large amounts, it may be considered specially in consultation with Audit.

725. **New lines -**The allocation of expenditure on new lines after the date of opening, but before the closing of the completion estimate, is regulated by the rules in paragraphs 726 to 732.

726. The cost of completing works which were incomplete on the date of opening and of works which, though commenced after that date may properly be considered as forming essential parts of first equipment, is charged to Capital.

727. During the period for which such works remain incomplete, the cost of their maintenance, replacement or renewal is also charged to Capital, provided the maintenance, replacement or renewal becomes necessary directly out of their incomplete state.

728. The cost of maintenance of works which were complete on the date of opening is charged to Revenue. The cost of their replacement or renewal is allocated to Depreciation Reserve Fund according to the provisions of paragraph 754 etc For the purpose of this rule a work is considered to be "complete" only when, for the first time, it conforms in all respects to its accepted specification.

729. A few instances are given below to elucidate further the principles enunciated in paragraphs 726 to 728.

730. Cess repairs and earthwork for banks undertaken immediately after the opening of a line, while the construction estimate is still open may be regarded as works necessary to complete the bank, chargeable to Construction Estimate and debitable to Capital.

731. Ballast and permanent way are regarded as "complete" when they are laid to the accepted specification and any subsequent packing or other work that becomes necessary after opening of the line should he charged to Revenue.

732. Repairs to bridge bed blocks, training works, protective works, mile-stones, engine sheds, water columns and quarters which have been completed to specification, and are capable of being put to the use for which they were intended, are chargeable to Revenue irrespective of whether they were actually so used or not. If works were not complete as defined above, the cost of repair is chargeable to Capital.

733. **Lines partially opened for traffic-** Subject to the provisions of Rule 727 in regard to the maintenance of incomplete works, the maintenance charges of a line, or a portion of a line which has been opened for traffic but the maintenance of which continues to be supervised by construction staff should be allocated as follows. Such of the charges as can be identified as directly allocable to the line or portion of the line opened for traffic should be debited to Revenue. The cost of supervising and miscellaneous staff and other miscellaneous expenditure, which is not so identifiable, should be distributed between Capital and Revenue in the ratio which the total Capital expenditure, both on opened and unopened portion of the line, bears to Revenue expenditure on the portion opened to traffic plus Revenue earnings of that portion. So for as the maintenance of permanent way is concerned, the debit to Revenue in respect of expenditure not so identifiable, may be arrived at on an estimated basis having regard to the expenditure on the maintenance of a line similarly located.
Note -The term 'Capital expenditure' in this Paragraph means 'gross' expenditure, ignoring any credits for the value of released materials.

734. Deleted
735. Deleted
736. Deleted

737. Cost of Office Equipment and other office Appliances, Tools and Plants -Cost of Office appliances and machines such as Personal Computers, Xerox machines, Fax machines, small tools and plants (costing upto Rs 1 lakh individually)

should be charged to revenue, except when this is required to be booked under Capital or Depreciation Reserve Fund or Development Fund etc, as per provisions of Para 776,

Note -Personal Computers, upto Rs.1 lakh only will be treated as Office appliances. This rule will not, however, apply to computers of higher configuration, viz, Mainframes etc. or PCs , machines and other office appliances chargeable to works estimates.

(Authority: Board's letter No. 2011/F(X) II/5/11 dated 08.09.2016).

738. **Revenue Sidings-** The cost of sidings required purely for revenue purposes e.g. ballast and fuel sidings are charged to Revenue**.**

739. **Additions of Ballast-** Except when connected with the relaying of permanent way and/or replacement of, and changes in, the type of sleepers, the cost of additions, of ballast shall be charged—

i) to revenue (a) when ballast is added after three years of the opening of a line; (b) when there is an increase in the depth of ballast for the purpose of maintaining the requisite depth;

Note -Cost of ballasting an unballasted line within three years of its opening will follow the allocation of the original construction estimate.

ii) to Depreciation Reserve Fund when there is an improvement in the type of ballast (e.g. when sand or moorum ballast is replaced by stone ballast) or when the depth of ballast is increased beyond the normal prescribed depth to comply with the revised track standards.

If the additions or improvements are so connected with the relaying etc, the supply of additional or improved ballast should form an integral part of the operation of and be combined with the " Permanent Way" portion of the estimate for relaying and replacement for the purpose of allocation.

Note -1) the word "Improvements" occurring in this sub-Paragraph includes "renewals"

2) the expression "connected with the relaying" should be taken to mean strictly only where ballasting is a necessary and integral part of relaying, but when relaying is taken as an occasion to simultaneously add to the ballast, it should not be held that the ballasting is connected with the relaying.

740. **Temporary and Experimental Works-** The cost of a temporary or experimental work is chargeable to Revenue. When, however, it ceases to be temporary or experimental and becomes permanent, or is replaced by a permanent

work, the actual cost of the work should be transferred to the debit of fund in works.

741. **Maintenance of Quarters for Construction Staff-** When quarters built as part of important open line works in progress and not handed over to be managed by the open line, are occupied by the open line staff, the rent realized shall be credited and the cost of repairs and maintenance debited to revenue. But when such quarters or occupied by construction staff, the rent will be credited to, and the cost of repairs and maintenance of such quarters even if vacant should be debited to, the project.

742. **Rolling Stock-** All first equipment of rolling stock for a line of railway is chargeable to Capital/EBR (IRFC-Bond). Whether an item of rolling stock provided otherwise than as first equipment is to be accounted for as an addition or as a replacement or renewal shall be decided according to the following principles.

743. Renewals must always take precedence of " Additions"

744. When additions are made to the Rolling Stock of any class authorised for the Railway, the cost of such additions should be charged to Capital. However, as an exception to this, the cost of new coaches procured to make good the loss in the seating capacity of replaced coaches due to the provision of additional facilities for the passengers in the new coaches (though they are treated as additions to the authorised stock for the Railway) should be charged to the Development Fund in accordance with item 7 of List "A" below Note (2) under para 711.

745. No new rolling stock should be charged to Capital as additions, if the actual stock of that class in existence on the line is below the authorized stock for the railway, when additions to rolling stock are made under classes in respect of which there has previously been a reduction in authorized stock, the new stock should be considered to have replaced the stock previously reduced.

746. The following are the classes into which rolling stock is divided for the purposes of the preceding paragraph, but if there is any doubt whether a particular item belongs to one class or another, the decision of the Railway Board should be obtained-

Class	**Particulars**
1)	Locomotives, diesel and battery.
2)	Locomotives, electric.
3)	Coaching stock (suburban motor units).
4)	Coaching stock, self-propelled and trailers.
5)	Saloons.

6) Tourist cars and Restaurant cars.
7) Coaching stock, upper classes, including all vehicles in which air-conditioned or first class accommodation is provided.
8) Coaching stock, including brake, luggage and postal in which second class accommodation is provided.
9) Other coaching vehicles, including brake, luggage, postal, motor, fruit, fish, poultry, duck (vans) and horse-boxes, in which no passenger accommodation is provided.
10) Officers carriages
11) Service coaching vehicles, including stores vans, tool vans, break down vans and subordinate inspection carriages.
12) General service goods wagons, including open, covered, low sided rail and timber trucks.
13) Acid, oil and petrol tank wagons.
14) Other goods vehicles, including cattle wagons and explosive wagons.
15) Well wagons.
16) Goods brake-vans.
17) Service wagons, including ballast hopper, crane support, crane and weigh bridge testing wagons, and water tank wagons.
18) Mineral centre discharge hopper wagons.

Note -The above represent the maximum number of classes. A similar number of classes may be observed, when deciding whether an item of new rolling stock is to be treated as an addition or a replacement. Within each such class, the particular item of rolling stock which should be considered as being replaced is that which approximates most closely to the vehicle that is being provided on renewal account. Where close approximation is impracticable or where difficulty arises in determining what is the stock most closely approximating, due regard should be paid to the consideration of eliminating any debit to capital that can be avoided consistently with the adequacy of the replacement.

747. The classification given in the preceding paragraph is intended to cover ordinary cases where new stock of particular class is obtained, but when new stock of a particular class supersedes actually old stock of another class, the case should be referred to the Railway Board for orders on its individual merits.

748. Railway administration shall maintain in the necessary detail, statistics of Rolling Stock showing the figures separately for each class of rolling stock, the numbers of the gross authorized stock, the reduction therein made from time to time and the net authorized stock.

749. **Stand bys -**For the purpose of this rule a "stand-by" is a complete unit of machinery, plant or equipment which is kept in order to perform the functions of the main unit of machinery, plant or equipment to which it is a "stand-by" and with which it may be identifiable, when such unit is put out of action temporarily on account of accident or periodical repairs, or is required to assist when the main unit has to meet on overload. The cost of such "stand-by" is chargeable to the head to which the machinery, plant or equipment to which it is a "stand-by" is charged. A "stand-by" does not include articles which have been replaced but continue to give service as unauthorized stock or duplicates for some time after.

750. **Spares -**Other spare items of machinery, plant or equipment, whether complete units or parts, which do not fulfil the conditions of the preceding paragraph, such as boiler tubes, super heater element, armatures, valves, coils, etc., will be called "spares" for the purpose of rule. The cost of such "spares" should, in all cases be brought on to the Stores Suspense Account and charged to revenue when handed over to be retained in the custody or issued to the using department. Exceptional cases where a debit to capital is considered justifiable should be referred to the Railway Board for orders. The following items have been admitted by the Railway Board as justifying a charge to capital provided they cost individually more than the monetary limit prescribed from time to time.

a) spare boilers for each type of locomotive in use, up to 7 percent of their total authorised stock of locomotives, intended to accelerate engine repairs,
b) spare boilers for watering arrangements at stations and power-operated spare pumping sets; and
c) the items of spares of circulatory nature for Diesel Locos /Rail Cars listed below when costing the monetary limit prescribed from time to time or more per loco set/rail car should be charged to capital.

List of spares for Diesel Locos / Diesel Rail Cars to be charged to Capital.

Diesels Electric---

1) Diesel engine complete with Generator.
2) Motor truck assembly complete with traction motors.
3) Traction motors (BG/MG)
4) Traction Generators (BG/MG)

Diesel Hydraulic –

1) Diesel engine (Mak)
2) Suri transmission,
3) Reversing Gear Box.

751. The items of spares for electric locos and EMU stock listed below when

costing the monetary limit prescribed from time to time or more each and not being of the nature of consumable stores but intended to accelerate repairs should be charged to Capital.-

List of spares for Electric Locomotives and EMU Stock to be charged to capital.

Spares for Electric Locomotives

1) Bogies complete with Traction Motors.
2) Main Transformers.
3) Traction Motor.
4) Tap changer.
5) Silicon Rectifier Block.
6) Traction Motor Armature (as distinct from Traction Motor).

Spares for EMUs-

1) Main transformer.
2) Traction Motor.
3) Silicon Rectifier Block.
4) Traction Motor Armature (as distinct from Traction Motor).

752. The cost of spare starting resistances of D.C. Electric Locos will also be charged to Capital in addition to 6 items of spares for electric locos listed in para. 751.

752A. Spare C & W bogies built with wheels and axles provided to facilitate and expedite the out turn of coaches and wagons from the repair shops, has been admitted by the Railway Board as justifying a charge to Capital provided they cost individually more than the monetary limit prescribed from time to time and held in shops/sheds as non-stock items with complete documentation.

753. **Replacement and Renewals--**.After the date of opening of a line for traffic, the cost of replacement or renewal of works or articles of equipment which were complete on that date, is allocated in accordance with the rules in paragraphs 754 to 758.

754. Except as provided in paragraphs 703 (5) and 711 (2), the full cost of replacement, including the improvement and inflationary elements, of an asset should be charged to the Depreciation Reserve Fund.

755. When the cost of replacement is chargeable to the Depreciation Reserve Fund

and is less than the original cost (cost at the debit of Capital or Development Fund etc) of the assets replaced, which may be estimated if not known, the entire cost of replacement should be charged to the Depreciation Reserve Fund and difference between the original and the cost of replacement should be credited to Capital or Development Fund etc as the case may be, by debit to the Depreciation Reserve Fund.

756. Deleted.

757. If the original cost of an asset was partly debited to the Development Fund and partly to Open Line Works-Revenue, the cost of replacement of such an asset shall be allocated to the Depreciation Reserve Fund.

758. For the purpose of paragraphs 754 and 755, a replacement or renewal to admit of a debit to the Depreciation Reserve Fund must fall under one of the fo1lowing categories.-

1) Renewals, including casual renewals of rails, sleepers and fastenings, such as fish plates, fish-bolts, spikes, points and crossings, tongue rails;
2) wholesale renewals or strengthening of bridges and girders;
3) renewals of assets detailed in paragraphs 759 to 768 and
4) Renewals of all assets except those detailed in the list appended below:

    a) Train lighting equipment including dynamos, batteries and re-wiring (Electric equipment).
    b) Locomotive fire-boxes.
    c) Locomotive fire-box plates.
    d) Locomotive axles.
    e) Locomotive tyres.
    f) Locomotive cylinders.
    g) Component parts of wheels and axles of carriages and wagons.
    h) All apparatus and appliances including instruments and accessories for railway hospitals and dispensaries.
    i) Floors and roofs of buildings.
    j) Stair cases and side-walks of bridges.
    k) Ballast.
    l) Re-wiring of high tension circuits of motor coaches of suburban electric rolling stock.
    m) Flexible pinion assembly on the Electric Freight Locomotives.

When a renewal or replacement does not fall under any of the categories detailed in this rule, the cost of replacement will be borne by Revenue

Note - The cost of repairing flood damages, including the cost of repairing damages to track caused by accidents, is chargeable to " Revenue, Maintenance and Repairs", unless the repairs are associated with an element of betterment when the cost should be charged to the Depreciation Reserve Fund.

759. **Renewals of rails, etc.-**When renewal of track is proposed by different weight of rail and different type of Sleeper, the amount chargeable to the Depreciation Reserve Fund will either be the estimated original cost of the material in the track or the full cost of replacement whichever is greater.

760. When rails, which were second-hand when originally put in the line, are replaced by new ones, the entire cost of replacement will be charged to the Depreciation Reserve Fund.

761. Deleted
762. Deleted
763. Deleted

764. **Renewals of Carriages and Brake-Vans-** In the case of replacement of carriages, one bogie should be taken as replacing two four-wheelers.

765. **Renewals of Self-propelled Coaches-** When self-propelled coaches are replaced by locomotives, the Cost at debit of capital in respect of the carriage portion will be written off from capital by debit to the Depreciation Reserve Fund and the cost of replacement, allocated to the Depreciation Reserve Fund in accordance with the provision of paragraphs 754, 755 and 758.

766. **Renewals of wagons-**In the case of replacement of wagons, one bogie should be taken as replacing two 4-wheelers.

767. When new stock is built on old underframes, only the depreciated value of the underframes should be included in the cost of the new stock and the same amount being credited to the Depreciation Reserve Fund as value received for released materials.

768. **Renewals of Rolling Stock parts-**The cost of renewals of complete wheels and axles of carriages and wagons should be allocated to the Depreciation Reserve Fund.

769. Deleted

770. When the motions, or in some cases the engine frames of locomotives, are

altered, the total cost is charged to Revenue.

771. When small fittings are provided for locomotives incidental to conversions, the total cost is charged to Revenue.

772. **Incidental Works-**The allocation of temporary works and diversions, which are incidental to a main work, follows that of the main work in connection with which they are required, and where the main works are debitable partly to Capital or the Development Fund etc and partly to the Depreciation Reserve Fund or Revenue, their cost is allocated in rateable proportions.

773. The cost of incidental works which are not essential for the execution of the main work, but are required merely to maintain the earning revenue of the railway at their normal level is chargeable entirely to Revenue.

774. **Incidental Charges -**The cost of a work includes all charges directly connected with the work. Accordingly the freight on materials to the site of work and charges for loading and unloading, dismantlement, shifting and relaying form part of the cost of the work to which they are directly incidental and are not separately chargeable to Revenue.

775. **Expenditure on Ceremonial Occasions -**The expenditure incurred on ceremonial occasions in connection with the opening of new lines or open line works shall be charged to Revenue.

776. **Cost of Tools and Plants and Special Posts -**No portion of the pay or allowances of permanent open line staff shall be charged to estimates, when such staff is employed on special works and the vacancies thus caused in the open line cadre remain unfilled. The cost (less return value) of tools and plant specially purchased and the cost of any posts specially created, for the supervision or construction of a work chargeable purely to Capital or Depreciation Reserve Fund or Development Fund or Open Line Works-Revenue, is debited to Capital, Depreciation Reserve Fund, Development Fund, as the case may be. Where the cost of work is chargeable partly to Capital or Development Fund, or Depreciation Reserve Fund, the cost of such posts and tools and plants should be allocated to Capital or Development Fund or Depreciation Reserve Fund, in the same proportion in which the estimate for the work excluding the estimated cost of tools and plant and special posts, is chargeable. For working out the proportion, the gross amount of the estimate (ignoring the provision for credits on account of released materials) should be taken into account. The cost of a post, for the purpose of this rule includes the leave salary and contributions towards passages, pensions, provident fund, bonus and special contribution to provident fund, which

the holder of the post may be entitled to.
Note: The provision for credits on account of released materials to be ignored in working out the proportion of cost of tools and plants and special posts, should be the net credit in terms of paragraph 710 (2).

777. **Inter-Railway Transfer of Assets -**When locomotives and other rolling stock are transferred from an Indian Railway to a railway other than Indian Railways the Depreciation Reserve Fund of the selling railway should be debited with the original cost of the stock by credit to Capital and the Depreciation Reserve Fund credited with the depreciated value of the stock, by debit to the railway to which the stock is transferred, the depreciated value being arrived at according to the following formula

Then depreciated value (C) is:

$$C = \frac{a*75\ c}{b*100}$$

Where-

a is the sum of the years the stock has run, six months or less to be ignored and more than six months to count as one year;

b is the sum of the years of its normal life;

c is the original cost of the stock or present day replacement cost, whichever is greater

Note (1) The value of any locomotive,carriage or wagon shall not be at any time less than 25 percent of its original cost or present day replacement cost, whichever is greater.

(2) The cost of an engine, when it is not known separately should be calculated on the following basis :-

Cost of engine for tender/tank engine = ¾/⅔ of the original cost or present day replacement cost, whichever is greater, of the whole locomotive.

778. The normal life of Rolling stock should, for the purposes of the preceding rule be assumed to be as given under para 219, as modified from time to time.

779. The example given below illustrates the formula prescribed in paragraph 777-

Example.-An engine, the original cost of which is Rs 12 Cr is transferred to another railway after it has run for six years.-

a = 1+2+3+4+5+6 = 21.

b = 1+2+3..... 40 = 820
C= 12,00,00,000

$$depreciated\ value = 12,00,00,000 - \left(\frac{21}{820} * \frac{75*12,00,00,000}{100}\right)$$

= 12,00,00,000 - 2304878

= 11,76,95,122

780. When rolling stock is transferred from one Indian Railway to another such railway, the original cost and the amount of depreciation, since purchase or since last renewal if renewed, should both be transferred from the selling to the purchasing railway without any financial adjustment, the cost of part renewals, if any, actually charged to the Depreciation Reserve Fund being deducted before transfer. The depreciation, for the purpose of this paragraph, should be calculated on the basis of "normal life" as modified from time to time.

781. **Assets other than Rolling Stock -**When assets other than rolling stock are transferred from one Indian Railway to another such railway, adjustments, where necessary, will be made between the selling and the purchasing railways in accordance with paragraphs 703 to 715, the sale value being the market value as may be mutually settled between the railways parties to the transaction as in the case of disposal or sale of assets.

782. **Sale of overage or condemned locomotives and wagons -**The sale price of overaged or condemned locomotives and wagons shall be determined in accordance with the following formula -

Locomotives- (a) Scrap value, on weight basis, at controlled rates, on the ferrous portion. Virgin metal value, at present day prices, on non-ferrous portion, e.g., copper, brass, etc.

The aggregate value thus arrived at, to be raised by 25 per cent.

(b) In addition to the sale price, calculated as above, a proportion of the cost of periodical overhaul given to the locomotives prior to their sale, should also be included therein. This should be determined in accordance with the formula given below -

$$\text{Cost of periodical overhaul} \times \frac{\text{Average kilometrage between 2 periodical overhauls} - \text{Kilometrage done by engine since last periodical overhauls}}{\text{Average kilometrage between 2 periodical overhauls}}$$

Wagons- Scrap value at controlled rates excepting for serviceable parts e.g., wheels and axles, springs, draw gear, buffing gear, brake gear, etc., for which 50 percent of the present day prices should be added. The aggregate value thus arrived at should be raised by 25 percent to arrive at the sale price.
Subject to the minimum as fixed above, the actual sale price should be settled in each case depending on the working condition of the unit.

Note -This Formula relating to wagons does not apply to wagon bodies (i.e. condemned wagons after stripping useful fittings) sold by auction.

783. **Transfers of assets from 'Open Line' to 'Construction' -**When an asset borne at the debit of Capital or Development Fund or any other such fund is transferred from Open Line to Construction, the original cost of the asset should be written back from Capital or Development Fund or any other such fund to the Depreciation Reserve Fund and the depreciated value of the asset deviated to the construction estimate by credit to the Deprecation Reserve Fund.

784. **Replaced Stock -**Credits for Rolling stock, replaced but kept running on the lines should be afforded to the Depreciation Reserve Fund only when the stock is actually broken upor returned to the store depot or other wise disposed of.

785. When parts of an engine or vehicle which is borne on the " replaced stock" list, are to be used in construction of new stock, the present value of material so used shall be included aspart of the cost of the new stock, the Depreciation Reserve Fund receiving credit to that extent.

786. The cost of all additions and alterations which may be required to be made in the replaced stock to render it suitable for the purpose for which its retention was intended, should be charged to revenue. Vehicles converted into those of a different class do not come under this rule and incidence of the cost of conversion follows the ordinary rules.

787. **Second-hand Rails -**When second-hand rails, released from existing lines are supplied to new projects or other administrations, their price is determined according the formulaprescribed below: -

Price per ton = R - N/L (R-S)

Where -

R. is the present day price of new rails of the section in questing (exclusive of freight charges)

N. is the age of the rails;

L is the estimated life of the rail; and

S is the scrap value of the rail

L should be taken as prescribed but is subject to variation in cases where the Chief Engineer considers that it is not a fair estimate of the life; and S should be taken at 40 percent of the present day price of new rail unless there are special reason to hold that, at the time of transfer of the rails, the value so arrived at diverges considerably from the current market rates for such scrap when the value may be fixed on the basis of rates obtained for large quantities at recent sales.

788. **Private Railways worked by Indian Railways -** The detailed rules in foregoing paragraphs of this chapter are generally applicable to expenditure on private lines worked by Indian Railways except in so far as they may be inconsistent with the provisions of the contract between the Government and party owning the railway, when the provision of the contract shall prevail. The important deviations from rules in this chapter which the contracts generally provide for are—

a) Petty works, can be grouped together for the purpose of debiting the aggregate cost of such works to capital when they are included in a group of petty works, none of which can be carried out or is effective for the purpose for which intended independently of the construction of others, or when the works are connected by the same general idea and are undertaken at or about the same time as a part of general scheme.

b) The cost of trial stations is charged to capital. It is written back to revenue if the station is eventually abandoned.

c) The original cost of an abandoned work ordinarily remains at the debit of capital. When the work is demolished or sold, Capital pays for the demolition and receives credit for the sale proceeds or the value of the material recovered, as the case may be. When assisted sidings are abandoned, revenue is charged with any balance of the cost, which may remain at debit of Capital after the sidings have been dismantled.

*****

CHAPTER-VIII

Inter Railway And Inter Departmental Service

Incidence of Pay and Allowances

Transfers within the Railway of Offices under the Ministry of Railways	801
Permanent Transfers to and from other Department/Ministries	802
Temporary Transfers to and from other Departments/Ministers	803
Leave and joining Time combined with Transfers	804
Employment of Armed forces Units	805 - 806
Army in India Reserve of Officers	807 - 812
Reservists of Indian Army	813 - 815
Territorials Army (Non-railway Units)	816 -817
Study Allowances	818
Compensatory Allowances during leave	819

Incidence of Travelling Allowances

Transfers within the Railways or offices under the Ministry of Railways	820
Permanent Transfers to or from other Departments/Ministries	821
Temporary Transfers to or from other Departments/Ministries	822
Attendance at Courts	823
Journeys on behalf of private bodies	824

Incidence of Leave Salary

Persons exclusively employed in the Ministry of Railways, attached offices of the Ministry of Railways, Zonal Railways, Production Units and other officessubordinate to the Ministry of Railways	825
Open-line staff employed on constructions, and surveys	826
Persons in foreign service	827
Persons with service under different Departments/Ministries	828 - 835

and Governments	
Persons transferred from Company-managed Railways	836

Incidence of Pensions

Ordinary Pension	837
Calculation of Length of Service	838 - 839
Pension for a deficiency in Service	840
Special Pensionary Concessions granted by another Government	841
Pension for Military Service	842
Wounded and injury Pensions	843
Adjustment of Pensionary Charges	844
Commuted Pensions	845

Incidence of Gratuity and Contributions to Provident Fund.

Gratuity and special contribution to Provident Fund	846 - 849
Contribution to Provident Fund	850 -855
Incidence of the cost of Railway Police	856 - 866
Other Inter Railway Adjustments	867
Apportionment of Earnings	868
Working Expenses	869
Miscellaneous	870

*****

CHAPTER-VIII

Inter Railway And Inter Departmental Service

Incidence of Pay and Allowances

801. **Transfers within the Railways or offices under the Ministry of Railways**- The transit pay and allowances of a railway servant proceeding to join an office within the Railways or under the administrative control of Ministry of Railways are charged to the office to which he is proceeding.

802. **Permanent Transfers to and from other Departments/Ministries**- The transit pay and allowances of a person transferred permanently to or from another Department/Ministry of the Central Government or State Government are charged to the Department/Ministry or Government he is proceeding to join.

803. **Temporary Transfers to and from Other Departments/Ministries**- A person transferred to foreign service, or temporarily lent to or borrowed from a State Government, another Department/Ministry of the Central Government, draws his emoluments from the foreign employer or the borrowing authority from the date on which he relinquishes charge of his duties under the lending authority to the date he resumes charge of duties under the latter authority.

Note -The pay and allowances, including travelling allowance of a railway servant summoned to give evidence in his official capacity in a criminal court or in a civil court in a case in which government is party, are, during the period of his absence, debited to the railway which would bear the charge if he were on duty.

804. **Leave and joining Time Combined with Transfers**- The provisions of paragraphs 801 to 803 apply also in cases where the person concerned takes leave either before joining the new office or before rejoining the lending party.

805. Employment of Armed Forces Units -When Armed Forces units are required to perform duties in aid of the Railways, the incidence of expenditure is governed by the following rules :-

1) **For Maintenance of Law and Order** - All expenditure on the employment of Armed Forces will be borne by the Ministry of Defence.

2)

a) For maintenance of essential services.
b) For assistance during natural calamities.
c) Assistance in the execution of development projects.

No recovery will be made from the Railway Administration on account of-

i) Normal pay and allowance and rations of service personnel of units which may be made available from within the order of battle. However, in cases where additional units are maintained by retaining the units due to disbandment or by raising new units specifically to meet the requirements of the Railway(s) the entire cost of these units will be charged to the Project for recovery from the Railway Administration(s). Accommodation, water etc., would, however, be provided for these personnel by the Railway Administrations, if required.

ii) Clothing, equipment, vehicles etc., used by troops.

iii) Supervision charges or interest on the capital value of these articles.

3) Payment will, however, be made by the Railway Administration(s) in respect of the following :-

i) Consumable stores including P. O. L. -The entire cost at payment issue rates.
ii) Non-consumable stores and equipment –
   a) Depreciation assessed on the replacement cost on account of wear and tear. For aircraft, depreciation will be calculated on the original cost.
   b) Cost of repairs and maintenance.
   c) Cost of replacement of equipment rendered unserviceable as a result of such use. The assessment will be made having regard to its condition before its use on the project. In the case of aircraft, normal strike off wastage element only will be included in the charges irrespective of the actual rate of accident.

iii) Incidental expenditure necessitated by the work e.g., cost of move of units, personnel and equipment to and from the site of work and extra allowances, rations, clothing and amenities where provided.

Pensionary liability in respect of any accident to troops will be that of the Ministry of Defence. For this purpose troops will be treated on duty. Any damage to crops or compensation payable to civilians would, however, be the responsibility of the Railway Administration concerned.

4) **Any other type of Assistance** -Complete cost of the Armed Force including ordinary pay and allowances , cost of transport, equipment including loss and repair expenses etc., and extraordinary charges in the shape of special pay or transportation of stores will be payable by the Railway Administration. Pensionary liability in respect of casualties occurring due to employment of the troops with the Railways will be that of the Railway Administration concerned, who will also be liable for a proportionate share of service pension/gratuity on a service share basis.

806. When soldiers are sent under Military escort from one station to another to stand trial on a criminal charge, they will travel like any other party of soldiers on duty, under a warrant furnished by the Military authorities, the charge being met from the Defence Services Estimates. When a soldier is conducted by a Police escort, the charge will be Civil; the warrant issued in such cases should include the accused as he is a soldier proceeding to a certain place under the orders of his Military Superior and therefore on duty.

807. Army in India Reserve of Officers -Railway servants, who belong to the Army in India Reserve of Officers, when called up for training, receive the emoluments stated in paragraphs 808 to 812 below.

808. When proceeding to carry out their training direct from their civil appointments, they draw the pay and allowances, which they would have drawn in their civil appointments but for the training, for the whole period of absence on such training inclusive of the time spent in transit to and fro.

809. When proceeding to carry out their training while on leave in India, they draw the civil leave pay and allowances which they would have drawn but for the training.

810. For the period of actual training, they receive the military pay and allowances.

811. The emoluments drawn under paragraphs 808 and 809 are debitable to the Railway and those under paragraph 810 to the Defence estimates.

812. If it is necessary to provide a substitute in the place of such an officer undergoing training, the additional cost will be a charge against Railway estimates.

813. Reservists of the Indian Army -Reservists of the Indian Army in railway employ when called up for periodical military training will receive military pay and allowances. They will also receive the excess, if any, of their civil pay under the 'next below' rule over their military pay and allowances. Any extra expenditure involved will be charged to the Railway and not to the Defence estimates.

Note -The intention of the 'next below' rule is that a railway servant, out of his regular line should not suffer by forfeiting acting promotion which he would otherwise have received had he remained in his regular line. The fortuitous acting promotion of some one junior to a railway servant who is out of the regular line will not in itself give rise to a claim under the next below rule. Before such a claim is established it should be necessary that all the railway servants senior to the railway servant who is out of the regular line have been given acting promotion, and also the railway servant next below him, unless in any case the acting promotion is not given because of inefficiency, unsuitability or leave. In the event of one of these three bars being applicable to the railway servant immediately below the railway servant outside his regular line, then some other railway servant, even more junior, should have received acting promotion and the railway servants, if any, in between should have been passed over for one of these reasons.

814. For the purpose of paragraph 813, the civil pay in relation to running staff should be held to mean pay proper under the 'next below' rule plus a fixed percentage not exceeding 30 percent, representing the normal running allowance drawn by each category of staff under present day conditions.

815. The orders contained in the preceding paragraph do not apply to cases, if any, in which the civil pay of the reservist is met from the Defence estimates.

816. Territorial Army (Non-railway Units) -Railway servants who are allowed to enroll in the Non-railway Units of the Territorial Army, when called up for training and military duty, receive the emoluments as stated below –

i) During the period of training they will receive pay and allowances according to their ranks. Military pay and allowances received by railway servants will be in addition to their civil emoluments. During the periods spent in Camp, they should be allowed to receive their civil pay and allowances in respect of this period in addition to pay and allowances which they receive from the Defence Services Estimates;

ii) When called out for military duty in aid of civil power or when embodied under the Territorial Army Act, 1948, or the Territorial Army Act Rules 1948 they will receive the military pay and allowance to which they would be entitled in respect of military duty. They will also receive the excess, if any, of their civil pay and allowances under the 'next below' rules over their military pay and allowances. The extra expenditure involved shall constitute a charge against the railway under the ordinary head of expenditure to which the pay of the individual concerned is debitable.

817. Territorial Army (Railway Units) - The provisions in the preceding paragraph will apply in the case of railway servants enrolled or commissioned in the Railway Units of the Territorial Army subject to the following additional concessions being given to the embodied personnel during the period of their embodiment-

a) The actual average overtime, piecework profits and night allowances should be permitted to be drawn.

Note -The word 'average' used above should be taken to mean the monthly average emoluments under those heads drawn during twelve months immediately before the embodiment. In cases where the railway employee was not eligible to draw these allowances for full twelve months before the embodiment the monthly average should be worked out on the basis of the period during which he was eligible for the allowances irrespective of whether actually drawn any or not.

b) When Territorial Army (Railway Units) are embodied in aid of civil power, allowances will be admissible at the following rates –
   i) Officers will be eligible for double the rates and JCOs and other ranks other than Running Staff for 1.75 times the rates of daily allowance to which they are entitled in their civil appointment for the entire period they are away from their civil headquarters without any limit to the period of stay at a station. The daily allowance including the enhanced rates is also admissible in cases where the headquarters of the embodied officers and men remained the same as in civil posts prior to embodiments.
   ii) Running Staff - Shunters and Firemen on shunting engines will be paid kilometrage at 360 kms. per day while other running staff will be paid at 480 kms. per day in relaxation of the provision contained in Rule VIII (i) of the Revised Running Allowance Rules as amended from time to time irrespective of the fact that they are provided with free messing.

818. Admissibility of Allowances during study leave- Except for House Rent Allowance and the Dearness Allowance, no other allowance shall be paid to a Railway servant in respect of the period of study leave granted to him. The allowances paid to a railway servant during study leave are charged to the railway on which he is employed when the study leave is granted.

(Authority: Board's Letter No.2011/F(E)III/2(2)/3 dated 11.10.2018 and E(P&A)II-2002/HRA-2 dated 19.02.2002)

819. **Compensatory Allowances during leave -**House rent and other Compensatory Allowances paid during leave are borne by the department to which the officer is attached at the time he proceeds on leave.

Incidence Of Travelling Allowances

820. **Transfers within the Railways or offices under the Ministry of Railways -**The travelling allowance of a railway servant proceeding to join an office within the Railways or offices under the administrative control of the Ministry of Railways should, in the absence of orders to the contrary be charged to the office to which he is proceeding.

821. Permanent Transfers to or from other Departments/Ministries –The travelling allowance of a Government servant permanently transferred to/or from another Department/Ministry of the Central Government or State Government, is debited to the Department/Ministry or Government to which he is transferred.

822. Temporary Transfers to or from other Departments/Ministries -A person transferred to foreign service, or temporarily lent to or borrowed from a State Government, another Department/Ministry of the Central Government, draws his travelling allowances from the foreign employer or the borrowing party, both when, proceeding to or reverting from service under the foreign employer or the borrowing party.

823. Attendance at Courts -The travelling allowances of a railway servant called away to give evidence in his official capacity in a criminal court, or in a civil court in a case to which Government is a party, is debited to the railway which would bear the charge if he were on duty, but any sum paid to him by the court is deducted from his travelling allowance.

824. Journeys on behalf of private bodies -When a railway servant, permitted to undertake work on behalf of a private individual or body or a public body, performs

journey in connection with such work the travelling expenses for the journey in connection with such work will be a charge against the private individual or body. If the railway servant travels on a free pass, the full cost of the pass for such journey should be recovered from him and credited to railway revenues. Where a journey is made to a station on private business combined with official business, the railway servant should recover from the private party, the cost of a single journey from his headquarters, to the place visited on the private employer's business and credit the same to railway revenues.

Note -This paragraph does not apply to journeys undertaken in connection with the business of Railway Institutes and Sports Clubs.

Incidence of Leave Salary

825. **Persons exclusively employed in the Ministry of Railways, attached offices of the Ministry of Railways, Zonal Railways, Production Units and other offices subordinate to the Ministry of Railways -** Except as provided in paragraphs 826 and 827 below, the leave salary of a Railway servant, who has served exclusively in the establishments mentioned above, will be debited to the office/Railway Administration in which he may be serving at the time of proceeding on leave.

Provided that in the case of a Gazetted Railway servant proceeding on leave from a post in the office of the Ministry of Railways or its attached offices, the Gazetted staff of which is usually obtained from the Railways :-

i) If the officer in question holds a permanent non-tenure post in such an office and is expected to return to that post at the end of the leave, or proceeds on leave preparatory to retirement from such post on leave on average or full pay only, the whole of the leave-salary should be debited to that office. When the post held is a tenure post, the same orders will apply provided that the leave taken does not extend beyond the period of the tenure. In case the leave taken extends beyond the period of tenure, the leave-salary upto the date of expiry of tenure or termination of lien if it occurs earlier, should be debited to that office;

ii) If the officer does not hold a permanent post in the office and he proceeds on leave on average pay not exceeding four months and is expected to return to that office at the end of the leave, the leave-salary should be debited to that office ; and

iii) In all other cases, the leave-salary should be debited to the railway on the cadre of which his lien is borne.

826. Open line staff employed on constructions and surveys - An open line railway servant, who proceeds on leave from a construction or survey, will be considered as having reverted to the open line and his leave-salary will be charged accordingly. As an exception to this rule, however, if the leave taken is for a period not exceeding four months and he is posted to the same construction or survey on return therefrom, his leave-salary should be charged to that construction or survey.

827. Persons in foreign service -The leave-salary in respect of leave taken by a railway servant while in foreign service is borne by the railway which received the contribution for leave-salary.

828. Persons with Service under different Departments / Ministries and Governments -If a railway servant has served partly in the Railway Department/Ministry and partly in a non-Railway Department/Ministry or under a State Government, the leave-salary should be first debited to the borrowing Departments/Ministries or Governments in the reverse order to that of employment and only when the leave earned, by service in the borrowing departments/ministries and Governments is exhausted it should be debited to the Railway Department/Ministry. The same principle will apply if a Government servant belonging to another Department/Ministry or State Government has served partly in the railway Department/Ministry. The Railway share of the leave-salary will be charged to the railway office in which he last served.

Note-

1) a) A lending Department/Ministry or Government is that under which a person first obtains permanent employment. If he was previously holding a temporary appointment under another Department/Ministry or Government, that Department/Ministry or Government should be regarded as the borrowing Department/Ministry or Government. If a person in the permanent service of one Department/Ministry or Government is transferred permanently to another Department/Ministry or Government, the latter should also be regarded as a lending Department/Ministry or Government and the leave-salary adjusted between the lending Departments/Ministries in the reverse order to that of employment by which the leave was earned. An important corollary of this principle is that when an officer of the Indian Army in permanent railway employ is retransferred temporarily to the Defence Department/Ministry for war

work, etc., the Defence Department/Ministry should be regarded as a borrowing Government.

b) The decision that the Government to which an officer is transferred is not to be regarded as occupying the position of a lending Government unless and until the officer obtain permanent employment under that Government is not intended to apply to the temporary or officiating service of an officer under a Government followed by confirmation for the first time under that Government without interruption of duty. In such a case the temporary or officiating service and the service after confirmation should be treated as forming one spell of continuous service for the purpose of distribution of leave-salary and the Government concerned should be regarded as a 'lending Government' for the whole of the continuous service.

2) No share of the leave-salary of a railway servant belonging to the Army in India Reserve of Officers, in respect of the leave earned during the period he is called out for military training will be debitable to the Defence Service Estimates. Similarly, no portion of the leave-salary of a railway servant, who is a member of the Territorial Army, in respect of leave earned during the period he is called up for Military duty will be debitable to the Defence Service Estimates.

3) Leave earned by service under the Government of Burma prior to separation will for purposes of allocation be treated as earned under the Government under which the officer concerned was permanently employed on the 1st April, 1937.

4) When the leave-salary of a railway servant has to be allocated under this rule between an original lending Department/Ministry or Government (vide note 1 above) and a second lending Department/Ministry or Government, it should be debited first to the second lending Department/ Ministry or Government to the full extent of the leave earned under it and a debit to the first lending Department/Ministry or Government will be made only when all leave earned under the second lending Department/Ministry or Government has been exhausted. Similarly if the leave-salary has to be allocated among three lending. Departments/Ministries or Governments, the leave earned under the third or the last lending Department/Ministry or Government will first be exhausted, then the leave earned under the second and finally the leave earned under the first or original lending Department/Ministry or Government. This principle of debit of leave-salary according to the reverse order to that of employment shall also apply when leave-salary has to be allocated among two or more borrowing

Departments/Ministries or Governments and in respect of different periods of service rendered by a railway servant under a particular Department/ Ministry or Government. In the latter case, the leave-salary in respect of the leave earned in each period of service under the particular Department/Ministry or Government will be dealt with separately

5) a) The leave-salary of an officer of the Indian Audit and Accounts Service, in respect of service rendered in the Railway Audit and Accounts Offices, taken together, will be debited to the Railway Department, Audit or Accounts, from which the officer proceeds on leave. In the case of an officer who after having served both in the Railway Audit and Accounts Department, reverts to the Civil Department and takes leave from that Department, the railway portion of his leave salary will be debited to the Railway Audit or Accounts Department in which he was last employed before reversion to the Civil Department.

b) In the case of personnel temporarily lent from the Railway Accounts Department to the Railway Audit Department, no adjustment of leave, Provident Fund or Pension, etc., contributions should be made as the entire cost of the Railway Audit is met from the railway estimates.

6) When a railway servant is granted an extension of service and the whole of the leave at his credit on the date of compulsory retirement lapses under 2127-R and no leave is carried forward on extension of service, the Government for whose benefits the extension is sanctioned will bear the entire charge for leave-salary in respect of the leave earned by him during the period of extension, any liability of any Government on that date as shown in his subsidiary leave account being automatically cancelled. When, however, such a railway servant carries forward any leave on extension of service, such liability continues, but only in respect of the leave actually carried forward.

7) For the purpose of this paragraph, leave-salary does not include a house rent allowance or other compensatory allowance drawn during leave.

829. In respect of railway servants subject to the Revised State Railway Leave Rules (February,1930), or the Liberalized Leave Rules(1949), contribution for leave-salary is recovered from borrowing Departments/Ministries or Governments at the rates prescribed for foreign service contributions.

The liability of a borrowing Department / Ministry or Government to pay contributions to the lending Department/Ministry or Government ceases when a railway servant is permanently transferred to the former but the lending Department/Ministry or Government remains responsible for the leave-salary in respect of leave earned, both on average and half average pay, which may be at his credit on the date of his

permanent transfer to the borrowing Department/Ministry or Government. The amount of leave on average pay carried forward should be exhausted first before any leave in respect of service after permanent transfer to the borrowing Department/Ministry or Government is taken by him. The debit in respect of leave on half average pay is accepted only if and when the employee concerned actually consumes such leave.

Note -The above rule applies in the case of candidates transferred from a Railway Office to a Civil Department or Ministry of the Government of India including Army and Indian Air Force Head quarters.

830. In respect of Government servants whose services are borrowed by Railways and who are subject to the Central Government's Revised Leave Rules, 1933 Central Civil Services (Leave) Rules, 1972, as amended from time to time, or similar rules issued by other government which make the calculation of leave in relation to the period of duty impossible, contribution for leave-salary is recovered from Railways. The liability of Railways to pay contribution to the lending Government ceases when a Government servant is permanently transferred to the former, but the lending Government remains responsible for the leave-salary of the Government servants in respect of "earned leave" at credit on the date of his permanent transfer to Railways. This amount of "earned leave" should be exhausted first by the Government servant before any leave in respect of service after permanent transfer to Railways is taken by him. The leave-salary in respect of any other kind of leave which may be taken by the Government servant after his permanent transfer to Railways under the railway leave rules will be borne by railways.

831. There will be no allocation of leave salary with regard to deputations, from the Railway Audit Offices to Railway departments and vice versa of Government servants governed by the leave rules in the fundamental rules. Similarly, no contributions for leave-salary shall be recovered by the lending department for such deputations if the Government servant concerned is subject to the Central Civil Services (Leave) Rules, 1972.

Note -In respect of transfers of members of the Indian Audit and Accounts Service and the Indian Railway Accounts Service under the scheme of exchange of officers between the Indian Audit and Accounts Department and the Indian Railway Accounts Department, there shall be no allocation of leave- salary/recovery of leave-salary contributions as between the two Departments.

832. When "Leave not due" is granted to a railway servant while in the service of a non- Railway Department/Ministry or a State Government the borrowing Department/

Ministry or Government sanctioning the leave will bear the charge on account of such leave in the first instance in all cases, but if the Railway servant on return from such leave is transferred back to Railways before the "leave not due" taken by him is completely wiped out, such readjustment of the charge may be made as may be agreed upon by the two Departments/Ministries or Governments concerned.

833. Leave-salary in respect of Special Disability Leave granted to a railway servant will be borne by the Railway Administration which sanctioned the leave, provided that where a railway servant has served under non-Railway Departments/Ministries or State Governments and is granted Special Disability Leave on average pay under Rule 2122 (7)(b) of the Indian Railway Establishment Code, Volume II, half of which is debitable to his Leave account under Rule 2118(b) of the Indian Railway Establishment Code, Volume II, the debit for such leave should be made both in the main and subsidiary leave accounts and the actual amount of leave-salary drawn by him for the whole period of such leave will be apportioned among the non-Railway Departments/Ministries and Governments concerned in the proportion in which that leave is debited to his leave accounts with those Departments/Ministries and Governments.

834. The leave-salary for the period of Special Disability leave granted to a railway servant in respect of whom leave-salary contributions are recovered from the borrowing Government /Department will be borne by that Government/Department under which the railway servant was serving at the time the disability was incurred even though the disability manifests itself subsequently.

835. In the case of persons whose leave is regulated by the Fundamental Rules or the Civil Services Regulations, the liability of the borrowing Government or Department/ Ministry should be taken at 5/22nds of duty in the case of Military Commissioned Officers and persons subject to the Special Leave Rules and at 2/11th of duty in the case of others, without regard to the maximum limit of leave that can be earned or granted under the leave rules to which they are subject.

836. **Persons transferred from Company-managed Railways -**When an employee of a company-managed Railway is transferred permanently to an Indian Railway, the leave-salary in respect of the amount of leave which he may under the orders of competent authority be permitted to carry forward will, unless the terms of transfer provide otherwise, be borne by the Company-managed Railway, and no portion of his leave-salary will be charged to the Indian Railway, until the entire leave brought forwarded had been exhausted.

Note -i) The provisions of this rule will also apply in the case of transfers from the Indian Railway Conference Association to an Indian Railway, but not vice-versa.

ii) Not withstanding anything contained in the above paras, from 1st January, 1978 the existing system of allocation or sharing of the liability on account of leave salary or payment of leave salary contribution by one department of Central Government to another has been dispensed with. The liability for leave- salary will be borne in full by the department from which the Government servant proceeds on leave whether it be his parent department or a borrowing department with whom he is on deputation. This will apply to all cases of leave salaries paid on or after that date. In the case of Government servants who avail of leave on termination of their deputation period the liability for the leave salary will be borne by the Department which sanctions the leave.

Incidence Of Pensions

837. **Ordinary Pension -**Subject to what is provided in paragraphs 839 to 845 below, the pensionary charges of a railway servant whose service has been exclusively on the Indian Railways or an office under the administrative control of the Ministry of Railways (Railway Board) shall be borne by the railway or office where the railway servant last served immediately before quitting service even if he had no lien on that Railway/office. Similarly, when a railway servant has also served under a State Government or any other Ministry of the Central Government, the railway's share of the pensionary liabilities will also be borne by the railway/office on which he last served immediately before quitting service or if he quits service from a non-railway post, immediately before his transfer to such post.

However, in the case of a railway servant who proceeds on leave preparatory to retirement or retires or quits service due to some other reason from a post in the Railway Board's office or a temporary project, the pensionary liability will be borne either by the Railway Board's office or the Railway Administration, according to where his lien happens to be on the date of his quitting service.

Note -1) For the purpose of this paragraph, compassionate allowances (see Rule 65 of Railway Services (Pension) Rules, 1993) are treated as pensions.

2) In the case of a pensionable employee falling under President's decision below Rule 2405 (C.S.R.362)-Appendix XXX of the Indian Railway

Establishment Code, Volume II- the pensionary liability shall be shared proportionately between the Indian Railways and the Indian Railway Conference Association on the length of service basis. Similarly, when a railway servant is transferred to the Indian Railway Conference Association under the conditions referred to in the aforesaid President's decision and he quits service from the Indian Railway Conference Association, the proportionate pensionary liability in respect of Railway service shall be borne by the Railway Office concerned in terms of the above para.

3) No allocation of pensionary charges is, however, necessary in the following cases of transfers under the 'Exchange Scheme' -

i) Transfers (between Railway Audit and Railway Department) at the level of Assistant Audit Officers/members of the subordinate Railway Audit Service.

ii) Transfers of members of the Indian Audit and Accounts Service/Indian Railway Accounts Service between the Indian Audit and Accounts Department and the Indian Railway Accounts Department.

838. **Calculation of Length of Service -**The expression "length of service" used in the preceding paragraph means "length of qualifying service" as defined under Railway Services(Pension) Rules, 1993. Except as provided in note (1) below, periods of probation of training during which the Government servant did not hold a sanctioned charge, commuted furlough leave on average pay other than the first four months of each period of such leave, and leave on less than average or full pay and in the case of Government servants governed by the Central Government's Revised Leave Rules, 1933 Central Civil Services (Leave) Rules, 1972, any period of leave during which leave-salary was drawn other than earned leave not exceeding 90 days (120 days under the rules as liberalized in 1949) in any one spell, and special additions (excluding additions in respect of periods of war service vide paragraph 839) to qualifying service, should be disregarded in calculating length of service. The effect of omitting these periods will be that the pensionary liability in respect thereof will be distributed among the employing Governments in the same proportion as the liability for the rest of the 'Government servants' service. The service of a pensioner under any Department/Ministry should be calculated to the nearest month, 15 days or more being regarded as a month and less than 15 days being ignored. When the share of pension debitable to a particular Government comes to less than a rupee, it should be neglected.

Note - 1) In the case of pensions which are earned by total service including leave, the pensionary liability should subject to these rules, be distributed among

the employing Governments or Departments/Ministries in proportion to the periods for which the Government servant concerned has drawn pay or leave-salary from each Government or Department/Ministry.

2) Service under a Government includes period for which a Government servant drew pay or leave-salary from that Government.

3) The periods of leave counting as qualifying service for pension under Rule 2424 (C.S.R. 407) of the Indian Railway Establishment Code, Volume-II earned under and paid for by a particular Government as shown in the subsidiary leave account are part and parcel of the qualifying service rendered under that Government. While calculating the length of qualifying service, such periods should not be separated from the spells of actual qualifying duty immediately preceding or following such leave.

4) Foreign service should be treated as service under the Government which received or remitted, as the case may be, the contributions for pension in respect of such service.

5) In the case of pensions of Government servants transferred from Burma -to India before the lst April, 1937 and retiring on or after that date, service rendered under the Government of Burma before that date should be ignored for the purposes of this rule. The effect of ignoring such service will be that the pensionary liability for that service will be distributed among the other employing Governments in the same proportion as the liability for the rest of the 'Government servants' service. The entire pensionary liability in cases of such transfers from India to Burma is borne by the Government of Burma. In the case of transfers on or after the lst April, 1937, liability of the Government or Governments in India, as the case may be, and of the Government of Burma will be limited unless settled otherwise by mutual agreement, to the pension earned by service under each.

6) In respect of pensions sanctioned on or after the 1st April, 1937 for Government servants who have rendered a part of their service in Aden prior to its separation-including in their case any service after separation also-the liability of the Government or Governments in India, as the case may be, and the Colonial Government should be fixed on the basis of length of service, any period of service in Aden for which India recovered pension

contribution from the Colonial Government in any individual case being allocated as service in India.

7) Service rendered under the late Crown Representative should be treated as service under the Central Government (Civil).

839. In the case of railway servants who held higher temporary or officiating posts in the Defence Services during the Second World War (1939) to whom Article 487-A of the Civil Service Regulations applies and for whom pension contributions were originally recovered on the basis of the substantive appointments held by them, the extra pensionary liability should be debited against the Defence Estimates.

840. Pension for a Deficiency in Service- When a deficiency in qualifying service is condoned, the period condoned should be reckoned as service under the Government or Department/Ministry which condones it.

841. **Special Pensionary Concessions granted by another Government-**

1) When a pension granted by a Department/Ministry or Government under its own rules is more generous than that admissible under the rules of another Department/Ministry or Government, the latter Department/Ministry or Government will bear only the proportionate share which would be admissible under its own less favourable rules. This principle will come into operation when there is a divergence in the pension codes of two Governments, and a pension calculated under the normal working of one set of rules is more liberal than under the other set of rules. It does not take into account any concessions which may be allowed under the discretionary powers contained in the two sets of rules.

2) When a pensionary concession other than the grant of compassionate allowance or the condonation of a deficiency in qualifying service is granted by one Department/Ministry or Government, under its own rules (irrespective of whether or not they are more liberal than the rules of another Department/Ministry or Government), that Department/Ministry or Government will bear the resulting increase in pension, unless any portion of the increased liability has been accepted by the other Departments/Ministries or Governments affected. In the event of another Department/Ministry or Government agreeing to the grant of a concession, the share of the total pension debitable to each Department/Ministry or

Government will be determined on the basis of the length of service under each.

Note -1) In the case of a Government servant who has served partly under the Central Government and who retires on or after 2nd March, 1938 under the pension rules of the Government of the Central Provinces and Berar (now Madhya Pradesh) before completing qualifying service of 30 years and is entitled under these rules to a retiring pension the Central Government's share of his pension will be calculated according to the following formula:--

Central Government's share — $\frac{A}{B} \times \frac{Y}{X} \times C$

When C = the total pension admissible,

A = the number of years of qualifying service under the Central government,

B = the number of years' service which the Government servant would have rendered on attaining the age of 55 years or 30 years' service, whichever is less,

X = the commutation value at the actual age (next birthday) of retirement, of the pension admissible (C) expressed as number of years' purchase, and

Y = the commutation value of the pension admissible(C), expressed as umber of years' purchase at the age (next birthday) of the Government servant (i) at the date on which he would have completed 30 years' qualifying service or (ii) at the date on which he attains the of 56 i.e., age next birthday after the age of superannuation (assumed as 55 years for this purpose for all classes of Government servants) whichever would have come first.
For the purpose of calculating X and Y reference shall be had to the tables prescribed as Annexure to Appendix XL to the Indian Railway Establishment Code, Volume II.

This formula will apply only to retiring pensions of Government servants if the Central Government Pension Rules were applicable.

2) In the case of a Government servant in Superior Service who has served partly under the Central Government and who retires on a retiring pension on or after the 1st April, 1940 under the pension rules of the Government of Sind before completing qualifying

service of 30 years, the Central Government's share of his pension will he calculated in accordance with the formula under Note (1) above.

In the case of such a Government servant who retires on a retiring pension after completing qualifying service of 30 years or more, the Central Government's share of pension will be determined according to Rule 279-A of the Bombay Civil Services Rules.

3) In the case of Government servants governed by the pension rules in the Mumbai Civil Services Rules the share of pensionary charges of the Central Government for the period of service rendered under that Government will be calculated under those rules.

842. **Pension for Military Service -**The principles stated in the preceding two paragraphs will not apply to military service in respect of any matter in regard to which special orders exist. No share of the pensionary charges of a railway servant belonging to the Army in Indian Reserve of Officers for the period he is called out for military training will be debitable to the Defence Service estimates, the share being debited to the Government from which the officer drew pay or leave-salary for the period in question.

843. **Wound and Injury Pensions -**Extra-ordinary pensions granted for an injury is chargeable to the Department/Ministry or Government under which the recipient was serving when the injury was received.

844. **Adjustment of Pensionary Charges -**

1) When an Adjustment has to be made under these rules between two or more Governments, it may, except, as provided in sub- paragraph (5) below, be made either by the payment in lump or in instalments of the commuted value of a pension or in accordance with any special arrangement which may be concerted between the Governrnents Governments concerned. The system of lump-sum adjustments of pensionary charges by payment of commuted value between the Central Government and State Governments is not, however, to be applied to pensions which are subject to revision after retirement. In such cases the adjustments with the Governments concerned should be made as pensions are paid with reference to the actual amounts paid. In cases where the pensions are divisible between the Posts and Telegraphs Department and the Railways, the adjustment will be made on the basis of actual pensions paid.

   Note -Pensions divisible between the Central and Tamil Nadu Governments should be treated as Central or State by recovery of the capitalized value with effect from

the 9th February, 1945 The pensions sanctioned between the 22nd October, 1940 and the 9th February, 1945 which have been treated as divisible between the Central and Tamil Nadu Governments, should be treated as debitable wholly to one of the Governments by the adjustment of the Capital value, as on the 9th February, 1945, between the two Governments.

2) In adjusting pensionary charges between two or more Governments by payment of commuted value, the tables of present values prescribed in Appendix XL to the Indian Railway Establishment Code, Volume II, should be employed unless the Governments concerned mutually agree to employ any other table.

3) The Defence Department's share of a divisible pension should in all cases, excepting those falling under sub- paragraph (5) below, be extinguished by credit of the commuted value of that share to Central (Civil) by debit to Defence, the adjustment being made as and when each case arises. This procedure will have the effect of converting the Defence Department's share of the divisible pension into one relating to Central (Civil) for all purposes and will not in any way effect the arrangements that may be agreed upon for the adjustment of pensions between the Central and State Governments.

4) The provisions contained in the preceding sub-paragraph will be applied conversely for the settlement of the civil shares of military pensions which are not subject to revision after retirement. That is to say, the Civil share of a divisible pension debitable to a state or to the Central Government (Civil) will be extinguished by credit of the commuted value of that share to Defence by debit to Central (Civil), the adjustment being made as and when each case arises. The Defence Accounts Officer will report periodically to the State Accountant General the amount of pensions paid in respect of cases where the arrangement between the Central and State Governments concerned for the adjustment of pensions is with reference to actual payments. This report should also cover cases where a pension which has been adjusted as provided in this rule is subsequently transferred for payment in the United Kingdom.

5) The system of adjustment between Governments or Departments/Ministries by payment of commuted value does not apply to pensions payable in England.

845. **Commuted Pensions -**When a portion of a pension which is debitable to more than one Government is commuted by payment of the capitalized value of a portion to

the pensioner, the amount commuted may be taken as being in absorption or reduction of the shares debitable to the different Governments in the order in which those shares rise from the least to the largest amount, except in the case of pensions paid by the Commonwealth Relations Officer, London, where the amount commuted is taken first in absorption or reduction of the share debitable to Defence estimates.

Thus, if, out of a pension of Rs. 400 per month which is apportioned as follows:-

Government A	Rs.	80.
Government B	Rs.	100.
Government C	Rs.	220.

Rs. 100 is commuted, the commutation will have the effect of extinguishing the shares of Rs. 80 debitable to Government A and reducing from Rs. 100 to Rs. 80 the share debitable to Government B.

The capitalized value of the amount commuted should, in such a case, be debited to Governments A and B in proportion to the amounts by which their monthly shares of the pension have been reduced.

In respect of pensions which are divisible between the Central Government and a State Government, the Central Government may authorize the debit to Central Revenues of the whole commuted value of a portion of the pension not exceeding the commuted value of the share of the pension debitable to it, if the State Government concerned cannot find funds to meet the payment of its share of commuted value.

Note -Not withstanding anything contained in the above paras, from Ist January, 1978 the liability for pension including gratuity will be borne in full by the department to which the Government servant permanently belongs at the time of retirement. No recovery of proportionate pension need be Made from other Central Government Departments under whom he had served. This will apply to all pensions sanctioned on or after that date.

Incidence Of Gratuity And Contribution To Provident Fund

846. **Gratuity and special contribution to Provident Fund -**The gratuity of a railway servant exclusively employed in the Ministry of Railways, attached offices of the Ministry of Railways, Zonal Railways, Production Units and other offices subordinate to the Ministry of Railways, will be charged to the office where he held a lien at the time of

retirement or death provided that in the case of an officer confirmed as General Manager of an Indian Railway, the Railway from which the officer retired or proceeded on leave preparatory to retirement will accept the debit.

Note **-**The term 'Gratuity' used in this section includes also special contribution to the Provident Fund.

847. In the case of a Railway servant transferred to and from, the Indian Railway Conference Association, the gratuity shall be apportioned on the basis of the length of service under the Indian Railway Conference Association and the Railway Administration provided such apportionment has been mutually agreed upon.

848. For the purposes of the preceding two paragraphs, the service rendered by a railway servant under the foreign employer, a State Government or another Department/ Ministry of the Central Government or on a Construction or survey will be deemed to be service rendered on the Railway which received the contribution towards gratuity in respect of such employment.

849. When a person who is permanently transferred from Railways is admitted under proper sanction to the contributory (Transferred Railway Personnel) Provident Fund Rules, the Special Contribution or Gratuity admissible will be paid by the Department/Ministry which last employed him and apportioned between Railways and the other Department/Ministry on the basis of the length of service. The non-railway portion of the charge is accounted for under the appropriate head relating to the Department /Ministry concerned.

In the case of temporary transfers the question of apportionment of Special Contribution or Gratuity does not arise, vide paragraphs 852-854.

Note -The provisions of this paragraph do not apply in the case of persons transferred to the organisation of the Commissioner of Railway Safety under ministry of Civil Aviation in whose case annual contribution for special contribution to provident fund/gratuity is paid by the Railways and the entire charge is borne by that Ministry.

850. Contribution to Provident Fund -The Government contribution made to the State Railway Provident Fund account of a railway servant is charged to the railway to which his pay was charged for the half-year to which the contribution relates.

851. When a railway servant is transferred to another railway or accounts circle during the course of a half-year, his account should be credited with the amount of

Government contribution at the prescribed rate, before transferring the account.

852. Except as provided in Rules 853 and 854 contributions in respect of Provident Fund of a Railway servant in foreign service or in another Government Department/ Ministry or State Government will be payable by the foreign employer, another Department/Ministry or State Government concerned, or by the railway servant himself, as the case may be, at the rate of 1/8th of the total of the emoluments drawn by the railway servant from time to time plus the contribution payable or that would have been otherwise payable on account of leave-salary.

Note -The above contribution will not be recovered during leave taken by the railway servant while in service under the foreign employer, etc.

853. The contributions that will be recoverable in respect of a subscriber lent to a construction or survey or to a large open line work to fill a post especially created for the construction or supervision of the work, shall be recovered at the rate of 1/8th of the emoluments only, drawn by or admissible to him from time to time unless the account of the subscriber has been transferred to the new organization, in which case the recovery shall be limited to 1/24 th of the emoluments.

854. In the case of candidates transferred from a Railway Administration to a Civil Department or Ministry of the Government of India including Army and Indian Air Force Headquarters, the Payment of contributions will be suspended during the period of probation though the railway servant concerned will continue to subscribe to the State Railway Provident Fund. If the Railway servant is confirmed in the new post, no contribution will be paid by the Civil or Military Department/Ministry for the period of probation and it will be for that Department/Ministry to determine what part of the service of the railway servant prior to such confirmation will count for pension. If the railway servant is not so confirmed and is reverted to the Railway Administration, contribution with interest thereon will be paid by the Civil or Military Department/Ministry retrospectively in respect of the period of probation as though the railway servant had been lent to that Department/Ministry for the period in question.

Provided that- (i) In cases where, instead of contribution for leave-salary, the incidence of cost of leave-salary is regulated by paragraph 828, the contribution shall be recovered at 1/8th of the total of the emoluments drawn from time to time plus contribution that would have been otherwise payable on account of leave-salary.

(ii) In the case of candidates transferred from a Railway Administration to a Civil Department or Ministry of the Government of India including Army and Indian Air Force

Headquarters, the payment of contributions will be suspended during the period of probation though the railway servant concerned will continue to subscribe to the State Railway Provident Fund. If the railway servant is confirmed in the new post, no contribution will be paid by the Civil or Military Department/Ministry for the period of probation and it will be for that Department/Ministry to determine what part of the service of the railway servant prior to such confirmation will count for pension. If the railway servant is not so confirmed and is reverted to the Railway Administration, contributions with interest thereon will be paid by the Civil or Military Department/Ministry retrospectively in respect of the period of probation as though the railway servant had been lent to that Department/Ministry for the period in question.

855. The Government contribution in respect of open line staff employed on a construction or survey is chargeable to the construction or survey concerned.

Note -Notwithstanding anything contained in the above paras, from 1st January, 1978 the liability on Government Contribution will be borne by the parent department and no share of contribution will be recovered from any borrowing department of the Central Government with effect from that date.

Incidence Of The Cost Of Railway Police

856. With effect from 1st April, 1979, the cost of GRP (without distinction of 'Crime' and 'Order Police') will be shared between the State Government and Railways on 50:50 basis, provided that the strength of GRP is determined with the approval of the Railways.
(Authority Railway Board's letter no.92/Sec(CA)/50/4 dated 21.07.1993)—acs no.29

857. For the purpose of calculating Railway's share of cost of GRP the following will be included :-

i) Pay and all types of allowances in respect of GRP staff including office and supervisory staff up to the level of Inspector General of Police provided they are exclusively in-charge of GRP.
ii) Office expenses and contingencies.
iii) Cost of pensionery charges.
iv) Cost of rent of building occupied by GRP staff.
(Authority Railway Board's letter no.92/Sec(CA)/50/4 dated 21.07.1993) acs no.30

858. In addition to above, charges on account of medical reimbursement and medical allowances payable to staff, may also be considered in internal check for payment.

However, charges on account of Pay and allowances of medical staff viz. Doctors, Nurses etc. are not to be shared.
(Authority Railway Board's letter no.92/Sec(CA)/50/4 dated 21.07.1993) acs no.31

859. Protection of Railway Bridges under normal condition is the responsibility of the concerned State Governments and the expenditure incurred thereon will be borne by them.
(Authority Railway Board's letter no.92/Sec(CA)/50/4 dated 21.07.1993) acs no.32

860. When the services of the Military or other armed forces of the union are placed at the disposal of the Railways at the request of the Railway Administration, the expenditure of the guards will fall upon the Railway.
(Authority Railway Board's letter no.92/Sec(CA)/50/4 dated 21.07.1993) acs no.33

861. If the substitution is made on general ground of Government Policy and service is taken over by Defence Services, or other Public Service Department as part of the regular duties, the charges will be debited to Defence Services or the Public Department concerned as the case may be.
(Authority Railway Board's letter no.92/Sec(CA)/50/4 dated 21.07.1993) acs no.34

862. The debits will be based on yearly actual expenditure and the total liabilities for any one year will be payable by the railway during that year.
(Authority Railway Board's letter no.92/Sec(CA)/50/4 dated 21.07.1993) acs no.35

863. For convenience of accounting however, the recoveries for the first three quarters of a year will be made on the basis of the budget estimates of the State concerned and those for the fourth quarter, which are adjusted in the accounts for March, will be based on the revised estimate of the year of the State concerned and will include any adjustment which might be necessary in respect of the previous three quarters on account of the difference between budget and revised estimate figures, so that the total recovery for the four quarters will be equal to amount provided in the revised estimates. Any difference between the revised estimate and actuals for the year will be adjusted in the following year.
(Authority Railway Board's letter no.92/Sec(CA)/50/4 dated 21.07.1993) acs no.36

864. The debits raised by State Governments shall be supported by statements of actual expenditure which should be checked by the Accounts Officer, as far as possible, before acceptance. The number of staff for which debits are raised should be scrutinized with reference to the number of police actually employed on railway premises. The Principal Chief Security Commissioner and Financial Adviser and Chief Accounts Officer shall maintain registers showing the strength accepted and variations

there to made from time to time to prevent excessive or wrong debits being accepted by the Railway Administration. The other items in respect of which debits are raised should be adjusted to whatever checks as are possible.
(Authority Railway Board's letter no.92/Sec(CA)/50/4 dated 21.07.1993) acs no.37

865. Notwithstanding the provisions in paragraphs 862 to 864 above, recoveries may also be made on the basis of a fixed annual lump sum figures as may be agreed upon between the State Governments and the Railway Administration(s) concerned. This annual lump sum figure will be fixed for the period of three or five years and will be based on the basis of average cost of Government Railway Police depending on the actual number of staff agreed to.
In the case of any increase in the strength of police or any substantial changes in the scales of pay or allowance, etc. during the currency of the period for which the lump sum figure is fixed, the lump sum figure already fixed will remain unchanged but the question of a supplementary payment for the additional cost might be considered on the specific request of the State Government concerned. This increase will, however, be taken in to account for the purpose of fixation of the lump sum figure in the next triennium or quinquennium.
(Authority Railway Board's letter no.92/Sec(CA)/50/4 dated 21.07.1993) acs no.38

866. Bills for the cost of Railway police employed on each railway will be sent by State Governments direct to the Railway Administration concerned.
(Authority Railway Board's letter no.92/Sec(CA)/50/4 dated 21.07.1993) acs no.39

Other Inter Railway Adjustments

867. Inter Railway adjustments will be made in respect of the following.-

a) through traffic earnings,
b) transfer of deposits or recoveries from staff or out-siders,
c) receipts or issues from stores and manufacturing suspense, and
d) expenditure incurred on repairs or manufacture of rolling stock by one railway for another.

868. Apportionment of Earnings -

A) Through Traffic -The apportionment of earnings in respect of through traffic should be made as indicated below :-

i) The Zonal Railways performing the terminal and transhipment operations should, in the first instance, be credited with the amount calculated at the following rates :-

Transhipment operations- at the public traffic rates for transhipment charges, and Terminal operations- at the rates adopted for payments to Port Railways from time-to-time.

ii) The residual freight earnings should be apportioned amongst the individual Zonal Railways on distance basis.

B) Diverted Goods Traffic -The through earnings should be apportioned as indicated below:-

i) Credit the Railways which actually perform the terminal operation and/or transhipment operation at the rates of terminal/transhipment charges applicable to public traffic.

ii) The residual earnings, after giving due allowance for terminal/transhipment operation as indicated in (i) above, should be apportioned amongst the Zonal Railways on the basis of kilometres by the carried route.

Where diversions are of a permanent nature and consist of definite identifiable streams of traffic, adjustments should be made so that the financial position of the Railways concerned is correctly presented. It is also essential that meticulous calculations involving time and labour should be avoided and broad estimates should be made by taking representative samples.

869. Working Expenses -

1) Provision of' Engines -Debits will be passed on by the owning Railway to the using Railway at the unit cost based on the total engine hour on outage basis (i.e. from the time it leaves from the shed & till it returns to the shed) earned by the engines on the using Railway. It should be ensured that the constituent elements of the debit viz., repairs and maintenance, and depreciation charges are not lumped together and shown under ordinary working expenses. These elements should be exhibited under the relevant heads and grants.
(Authority Ministry of Railway (Railway Board)'s letter No. F(C)/2004/27/1 dated 30.09.04)-acs no.61

2) Fuel Consumption - For adjustments on account of fuel consumption (diesel oil and coal), credit or debit should be afforded for the work done by the Railway on behalf of the other Railway systems. Adjustments should be made on the basis of rate of consumption per 1000 G.T. Kms. This rate should be as realistic as possible taking the specific trip/shed/divisional rate of consumption. Recourse to sampling should be made only in cases of heavy gradients or significant changes in loads, etc., where the shed/divisional averages may not reflect the position correctly.

3) Wagon Hire charges -The per diem wagons hire charges are made up of the elements of repairs and Maintenance, and depreciation charges. The debits or credits should be shown separately under the relevant heads and grants i.e., the element pertaining to repairs and maintenance, and depreciation charges should be shown under the appropriate head of account and grant.

4) Hire of passenger coaches -The credit/debit adjustments should be worked out on the basis of kilometres earned by through rakes/passenger coaches running on more than one railway system. Vehicle kilometres in respect of through coaches should be worked out on the basis of the working time table periods and the rake links. As in the case of wagon hire, hire of Passenger coaches should have three distinct constituent elements, viz., Repairs, maintenance and Depreciation charges. Unit cost should be worked out by the Zonal Railways separately for each of these constituent elements per vehicle kilometre and the individual rates should be applied.

870. **Miscellaneous** -In respect of all other items of work done or service rendered by one railway on behalf of other railways or facilities provided by one Railway for other Railways which do not fall in the above categories, credits or debits should be worked out by the owning/serving Zonal Railways and raised against the using Railways if the annual cost (depreciation and working expenses) of individual operation or facilities is more than Rs. One Crore to that Railway. The cost of facilities and operation at joint stations if more than Rs. One Crore (for which credit, debit has not been afforded through the apportionment of earnings) should also be similarly distributed between the owning and using Railways on a 'reasonable basis' in consultation with their respective Financial Adviser and Chief Accounts Officer.

Similarly where any moneys are received by a Railway, which are attributable to services provided by the other Railways also, e.g. income from bulk advertisement contracts, the share attributable to each Railway will be credited to that Railway if the total income is in excess of Rs. One Crore.

Explanation of 'reasonable basis: The parameters to be used for apportionment and the documents for extracting the figures are given below:-

i) The apportionment of the operation and maintenance cost may be worked out at the beginning of the financial year after every three years. The apportionment study so done may be kept valid for three years. For successive years (for 2nd and 3 rd year) the cost of apportionment may be escalated by 10% over the cost arrived for the preceding year. The first such study may be done for the year 2009-10 and next study would be due in 2012-13. The apportionment may be done for each year. For efficient apportionment the process may be computerised.

ii) The apportionment of various costs may be done on the basis of the ratios based upon the various documents mentioned against each item as detailed in Annexure "A" of Railway Board's letter No.2007/F(C)/Misc/27/l dated 31-07-09. The documents used for apportioning the cost may be made available by the owning Railway to the adjoining Railway on demand by the latter.

iii) The earnings accruing from the Joint Stations (which have not been accounted for in the station (which have not been accounted for in the station balance sheets of the Railways but which have been accounted for as earnings by the owning Railway) need to be subtracted from the apportioned cost to arrive at the net amount to be debited to the using Railway. These earnings should be distributed between the Railways in the ratio of the originating passengers. The various sources of earnings which should be taken into consideration are mentioned in Annexure "B" of Railway Board letter No.2007/F(C)/Misc/27/l dated 31/07/2009. This will come into force with effect from 01-04-2009.

(Authority Ministry of Railways (Railway Board's) letter No.2007/F(C) 27/l dated 31/07/2009.)-ACS NO.68

Note -No inter-railway financial adjustment need be made in respect of interest/dividend charges as referred to in paras 869 and 870 above. Nevertheless the effect of this element may be assessed and the net amount thereof at the end of the year exhibited as a foot note in the statement showing calculations of dividend on loan capital payable to General Revenues so that this amount can duly be taken into account in arriving at the amount of dividend to be exhibited proforma in the Profit and Loss accounts of the various Zonal railways.

ANNEXURE A

Various elements of costs to be reckoned for apportionment of Joint Station Cost

Department	Activity Centre	Basis of apportionment	Document to be used
1. Commercial	Booking Supervisor	Ratio of passenger originating at Joint Station	10 days statement of gross earnings
	CIT Indoor	Ratio of passenger originating at Joint Station	10 days statement of gross earnings
	Luggage and Parcel	Ratio of passenger originating at Joint Station	10 days statement of gross earnings
	Goods	Ratio of tons originating	7 B statement
2. Health	Health Inspector	Ratio of passenger originating at Joint Station	10 days statement of gross earnings
3. Security	RPF	Ratio of passenger originating at Joint Station	10 days statement of gross earnings
4. S&T	Senior DSTE*	Ratio of trains originating for each railway	Time table
5. Engineering	Senior SE(C&W)	Ratio of passenger earnings	10 days statement of gross earnings
	Senior SE(Works)	Ratio of passenger earnings	10 days statement of gross earnings
	Senior SE(Civil)	Rauo of passenger earnings	10 days statement of gross earnings
6. Operating	SM*	Ratio of trains originating for each railway	Time table

	CYM*	Ratio of trains originating for each railway	Time table
7. Electrical	Senior DEE(G)	Ratio of passenger originating at Joint Station	10 days statement of gross earnings
	Senior DEE(TRD)*	Ratio of trains originating for each railway	Time table
	Senior DEE(TL)*	Ratio of trains originating for each railway	Time table

Note -*If there are no originating trains for either or both the railways then apportionment of the costs for activity centre suffixed with an asterisk (*) may not be done.

*****

ANNEXURE B

Various elements of earnings to be reckoned for apportionment of Joint Station Cost provided the same are not included in the balance sheets of the using Railways.

Sources of earnings at Joint Stations to be considered for reduction from the apportioned cost	
1	Platform Tickets
2	Cloak Room charges
3	Dormitory and Retiring Room
4	Car/cycle/motor cycle parking
5	Phone booths
6	Commercial advertisements
7	Any other source of earning not accounted in the balance sheet.

(Authority Ministry of Railways (Railway Board's) letter No.2007/F(C) 27/I dated 31/07/2009), ACS NO.68.

*****

CHAPTER-IX

Statutory Audit

Comptroller and Auditor-General of India	901 - 908
Railway Accounts Separation from Audit	909
Director of Railway Audit	910 - 915
Communications from Audit	916
Disposal of Audit Objections	917
Audit Notes and Inspection Reports	918
Replies to Inspection Reports	919
Disagreement between the Accounts Officer and the Principal Director of Audit	920
Audit Objections and Provisional Payments	921
Rectification of mistakes in Accounts disclosed by Audit	922
Audit Report-Railways	923 - 928
Internal Audit	929-932

******

Ministry of Railways (Railway Board)

CHAPTER IX

Statutory Audit

901. Comptroller and Auditor General of India- Comptroller and Auditor General of India is an authority *sui generis* created by the Constitution of India for conducting audit of the accounts of the Union, the States and the Union Territories. His functions are derived in the main from Articles 149 to 151 of the Constitution and these have been further defined by the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act-1971 which came into force from 15th December, 1971 and the amendment Act, 1976 which came into force from 1st March, 1976. This enactment lays down in detail his duties, powers and conditions of service. According to these Acts his duties are-

a) to audit all expenditure from the Consolidated Fund of India and of each State and of each Union Territory having a Legislative Assembly and to ascertain, whether the moneys shown in the accounts as having been disbursed were legally available for, and applicable to, the service or purpose to which they have been applied or charged and whether the expenditure conforms to the authority which governs it;

b) to audit all transactions of the union and of the States relating to Contingency Funds and Public Accounts.

c) to audit all trading, manufacturing, profit and loss accounts and balance sheets and other subsidiary accounts kept in any Department of the Union or of a State and in each case to report on the expenditure, transactions or accounts so audited by him.

Ministry of Railways (Railway Board)

902. It is also the duty of the Comptroller and Auditor General to audit all receipts which are payable into the Consolidated Fund of India and of each State and of each Union Territory having a Legislative Assembly and to satisfy himself that the rules and procedures in that behalf are designed to secure an effective check on the assessment, collection and proper allocation of revenue and are being duly observed and to make for this purpose, such examination of the accounts as he thinks fit and report thereon.

903. He also has authority to audit and report on the accounts of stores and stock kept in any department of the Union or of a State.

904. He has, in connection with the performance of his duties, authority-

a) to inspect any office of accounts under the control of the Union or of a State, including treasuries and such offices responsible for keeping of Initial or subsidiary accounts, as submit accounts to him;
b) to require that any accounts, books, papers and other documents which deal with or form the basis of or are otherwise relevant to the transactions to which his duties in respect of audit extend, shall be sent to such place as he may appoint for his inspection ;
c) to put such questions or make such observations as he may consider necessary to the person in charge of the office and to call for such information as he may require for preparation of any account or report.

905. The Act of 1971 read with amendment Act, 1976 also contains provisions about audit by Comptroller and Auditor General of authorities and bodies substantially financed from the revenues of the Union or States or the Union Territories. It also specifies his functions in the case of grants or loans to outside authorities or bodies. It also provides for entrustment to him of audit of accounts of authorities or bodies by the President, the 'Governor of a State or the Administrator of a Union Territory subject to certain conditions. His duties and powers in relation to audit of the accounts of Government companies are defined in the Companies Act 1956. He conducts audit of the accounts of Corporations established by or under law made by Parliament in accordance with the provisions of the respective enactments.

906. Under Article 150 of the Constitution, the accounts of Union and State Governments shall be kept in such forms as the Comptroller and Auditor General of India may, with the, approval of the President, prescribe. Article 279 of the Constitution provides that the Comptroller and Auditor General of India shall ascertain and certify the "net proceeds" of any tax or duty collected by the Government of India but which are assigned partly or in full to the States in terms of Part XII of the Constitution of India.

907. His oath of office requires him to uphold the Constitution and the laws and to discharge his duties without fear or favour, affection or ill-will. The Constitution safeguards the independence and freedom of the Comptroller and Auditor General in a variety of ways. Article 148 of the Constitution provides that the Comptroller and Auditor General shall be appointed by the President under his hand and seal and shall only be removed from office in like manner and on the like ground as a Judge of the Supreme Court. It also provides that he would not be eligible for any other office either under the Government of India or the Government of any State and that the administrative expenses of his office, including all salaries, allowances and pensions payable to or in respect of persons serving in that office, shall be charged

upon the Consolidated Fund of India.

908. The scope and extent of audit are determined by the Comptroller and Auditor General at his discretion.

909. Railway Accounts- Separation from Audit -As stated in para 104, the process of separation of accounting and auditing functions on the Railways was completed in 1929 as a sequel to one of the recommendations of the Acworth Committee. Under this arrangement, the Comptroller and Auditor-General has been relieved of the responsibility for compiling the accounts of Railway department. His responsibility for statutory audit of the accounts of Indian Railways is the same as that for the other departments of the Government of India.

910. Director of Railway Audit -The responsibility of the Comptroller and Auditor General for audit of Railway accounts is discharged through the Deputy Comptroller and Auditor-General of India (Railways) who conducts the audit on behalf of and under the direction of Comptroller and Auditor General. He is assisted by Principal Director of Audit posted at head-quarters of the Zonal Railways/Production Units.

911. One important object of statutory audit for the Railways is to ensure that the system of accounts adopted and used in the Accounts Department of the Railways is suitable and that the check by the internal check mechanism is sufficient, that the accounts are maintained and the checks applied with accuracy and that arrangements exist in the Railways Accounts offices to ensure attention to the financial interests of Railways. This object is secured by a test check applied to the vouchers and connected accounts records of the Accounts Department and by inspections on the spot of initial records and documents in the offices in which the transactions originate. The Railway officers should afford all facilities to statutory Audit officers in the discharge of their duties.

912. The Deputy Comptroller and Auditor-General of India (Railways), is responsible for scrutinising the adequacy and suitability of all instructions governing compilation of the accounts of Railways and the internal check procedures, whether those instructions be in the form of Codes or otherwise. He is to satisfy himself that such instructions are consistent with the relevant statutory rules and facilitate conduct of an effective audit thereof. He is also responsible for scrutinising the Railway portion of the Finance Accounts of the Union Government including Annual Review of Balances Compiled by the Railway Board (Accounts). He also examines the Appropriation Accounts prepared by the Railway Board for certifying their accuracy and prepares the Audit Report (Union Government-Railways) of the Comptroller and

Publish by Railway Board

Auditor – General of India.

913. The Deputy Comptroller and Auditor-General (Railways) is responsible for audit of-

i) sanctions, having financial effect, accorded by Government of India other than those pertaining solely to an individual railway or railway accounts office;
ii) sanctions regarding financial rules and general orders issued by the Presidentwhich are not of) a general nature but are applicable exclusively to the Railway Department ;
iii) tenders invited and accepted by the Railway Board for purchase of materials; and
iv) accounts maintained in the office of the Railway Board (Accounts Branch).

914. The Principal Director of Audit of a Railway is responsible for detailed audit of the accounts of that Railway and for conducting inspections of the records of the various offices of that Railway. This responsibility extends to all expenditure and receipts of that Railway whether under construction organization or open to traffic and to the account of stores, stock and manufacture. He audits inter alia (1) the financial sanctions, pertaining to his Railway and offices under his audit, accorded by the various Railway authorities, (2) allocation of estimates sanctioned by those authorities, (3) general orders issued by the General Manager, (4) all sanctions pertaining to local traffic, (5) sanctions issued by the Railway Administration relating to interchange traffic between two railways.

915. The cost of Railway audit is borne by the Railway revenues and is debited to Major Heads-3001 "Indian Railways-Policy Formulation Direction Research and other Miscellaneous Organisations, Annexure-D":-

Annexure 'D' – Reimbursement of cost of Railway Audit	**Budget Estimate**
Cost of Railway Audit Offices	----
Deputy Comptroller and Auditor General of India (Charged)	----
Total - Annexure 'D'	----

The cost of the Railway audit wing of the office of the Comptroller and Auditor-General is treated as charged expenditure in accordance with Article 112 (3) of the Constitution. Payments of all charges relating to Railway audit offices are made by

the Railway Accounts Officers (of the respective Railways) who function as treasury officers and accounting officers for expenditure of the Railway Audit Department and exercise such checks as are prescribed from time to time by the Ministry of Railways in consultation with the Deputy Comptroller and Auditor-General of India (Railways).

916. Communications from Audit - Ordinarily, the results of statutory audit are communicated through-

1) Specific reports of the more important and serious irregularities discovered in the course of audit of accounts and departmental offices and station records.
2) Audit notes detailing minor irregularities discovered in the course of audit of accounts office records.
3) Inspection reports showing the results of audit of the initial records of executive offices and stations.

Ministry of Railway (Railway Board)

Note -A record of petty objections not formally raised is also maintained by Principal Director of Audit and sent periodically, as may be arranged, to the Financial Adviser and Chief Accounts Officer for scrutiny and review.

917. Disposal of Audit Objections -All audit objections and notes should be promptly attended to by the Accounts Officer. Audit objections may either relate to matters which can be disposed of by the Accounts Officer himself without reference to the executive or to matters which can be elucidated only by the executive. In the former case, no reference should ordinarily be made by the Accounts Officer to the executive except to advise disallowances, if any, arising out of the audit objections. For the latter, the Accounts Officer should arrange to elicit necessary information for disposal of the audit objection; and if in his opinion, the audit objection should be upheld, he should arrange to see that suitable action is taken. The Accounts Officer should generally take the same action on defects and irregularities brought to notice by the Principal Director of Audit as he would take if they had been discovered in the course of internal check exercised in his own organisation.

918. Audit Notes and Inspections Reports -An inspection report consists of two parts, Part I dealing with the more important matters and Part II dealing with the rest, containing minor routine matters. Audit notes detailing the results of monthly test-audit similarly consists of two parts and should be dealt with by the departments and accounts officers without delay.

The final disposal of Part II of the audit notes and inspection reports, whether on the

accounts or executive offices, rests with the Accounts Officer, and no formal reply to the Principal Director of Audit is necessary. The disposal of such audit notes and inspection reports should, however, be made available to the Principal Director of Audit.

Replies to Part I of inspection reports and audit notes and specific reports on the more important irregularities should be sent to the Principal Director of Audit as soon as possible showing clearly the action taken thereon.

A record of the specific reports, audit notes Parts I and II and inspection reports, Parts I and II received from audit and dealt with or outstanding should be kept and reviewed periodically to ensure their prompt disposal. The connected records on which objections have been raised should not be destroyed till the objections are settled.

919. Replies to Inspection Reports - Replies to inspection reports of executive offices should be send by those offices to the Accounts Officer. In scrutinizing them, the Accounts Officer should call for further information, if necessary, and consult the head of the division or department, where desirable, before giving a reply to the Principal Director of Audit. The Accounts Officer should, in giving replies to the communications to the Principal Director of Audit, act in close collaboration with the administrative authorities concerned, so that the information given to audit may be an authoritative statement of facts on behalf of the Railway Administration, and there may be no possibility of any dispute at a later stage.

920. Disagreement between the Accounts Officer and the Principal Director of Audit -If the Accounts Officer is unable to accept the views of the Principal Director of Audit, he should, if requested by the latter, make a reference to the General Manager. When making such a reference, the Accounts Officer should send a verbatim copy of the Principal Director of Audit's objection and a statement of his own views. The General Manager should be requested to obtain the orders of the Railway Board if the matter is beyond his Competence to decide. However, when the question is one of accounts procedure, the matter should be referred to the Railway Board.

921. Audit Objections and Provisional Payments -If the Principal Director of Audit objects to any payments of a recurring nature and it is considered necessary to continue them pending settlement of the objection, they may, if the objection is not on ground of violation of a law or a statutory rule, be made provisionally and subject to recovery, the payee being so informed. Unless there are strong reasons

to the contrary in the view of the Financial Adviser and Chief Accounts Officer and the General Manager, if the audit view appears to be prima facie acceptable to the Accounts Officer, he should act upon the audit objection provisionally pending receipt of formal orders from higher authorities, if necessary. Under this procedure, where it is considered necessary to continue the payments, these should be treated as provisional and action taken to get the objection answered satisfactorily as early as possible.

922. Rectification of mistakes in Accounts disclosed by Audit -If the audit scrutiny discloses any inaccuracy in the accounts compiled by the Accounts Officer the following procedure, which is equally applicable to mistakes detected in-internal check, should be adopted:-

1) If the accounts of the year have not been finally closed, the mistake should be rectified through the accounts of the month in hand.

2) Mistakes and misclassifications noticed after the March accounts have been closed should be rectified before the Capital & Revenue Accounts and Finance Accounts are prepared and intimated to the Railway Board by the first week of August either through a revised account or through corrections to accounts already submitted.

3) Mistakes and misclassifications noticed after the submission of the Capital & Revenue and Finance Accounts should be dealt with in accordance with the following rules :-

a) No correction need be made, if the item properly belongs to one revenue or service head but is wrongly classified under another, a suitable note against the original entry being sufficient. If, however, the error affects the revenue or expenditure of another railway, or a branch line company or another Government Department or a capital head outside the Revenue Account or a debt or remittance head, it must be corrected.

b) If the corrections, or transfers affect capital major heads, unless they affect the accounts of different Governments or represent readjustment of less important misclassifications of a previous year, they should usually be effected by altering the progressive figure of capital outlay without financial adjustment i.e. , without passing the debit and credit entries through the accounts of the year's financial transactions. This would prevent unnecessary inflation of the current year's accounts and the voting of grants which the inclusion of the correcting entries in the current accounts

Ministry of Railways (Railway Board)

would otherwise involve.

c) If the error affects a debt or remittance head, the procedure should be as follows:

i) Item taken to one debt or remittance head instead of another :- The correction should be made by transferring it from the one to the other. Such corrections affecting the heads for which grants are obtained should be made as plus credit or minus credit under the heads concerned, instead of as minus debit or plus debit.

ii) Item credited to a debt or remittance head instead of a revenue head, or debited to a debt or remittance head instead of to a service head. The correction should be made by transferring it to the head under which it should originally appear.

iii) Item credited or debited to a revenue head instead of to a debt or remittance head- The correction should be made by minus crediting or minus debiting the revenue head and crediting or debiting the proper head.

4) If the rectification of a mistake would lead to an excess over a grant or grants voted by the Parliament or an appropriation sanctioned by the President or to a considerable change in the dividend payable during the year to general revenues, the orders of the Member Finance, Railway Board must be first obtained.

923. Audit Report-Railways -The Deputy Comptroller and Auditor- General of India (Railways) is responsible for preparation of the Report of the Comptroller and Auditor-General of India, Union Government (Railways) which also includes comments on the Appropriation Accounts of Railways compiled by Ministry of Railways (Railway Board).

924. All important cases coming to notice of Audit during inspections or regular audit which, in the opinion of the Principal Director of Audit, merit inclusion in the Report of the Comptroller and Auditor-General are, ordinarily, brought to the notice of the Railway Administrations through special letters, notes of objection or factual statements issued to the Heads of Departments/Financial Adviser and Chief Accounts Officers by the Principal Director of Audit of the Railways. The Railway Administrations should take up with promptitude the scrutiny of the facts brought out therein and send their replies to the Principal Director of Audit within the time prescribed for the purpose. Since these special letters, factual statements, etc., form the basis of the material for the Report of the Comptroller and Auditor General, the

Railway Administrations should deal with them at a sufficiently high level and bring out their point of view in a convincing manner so that the Principal Director of Audit may have the full presentation of the Railway's case before they proceed to prepare a draft paragraph for incorporation in the Audit Report.

925. The Principal Director of Audit sends the draft paragraphs to the General Manager. He also sends simultaneously advance copies of the draft paragraphs with connected correspondence, to the Financial Adviser and Chief Accounts Officer, the Head of the Department concerned, the Deputy Comptroller and Auditor-General of India (Railways) and the Director (Accounts), Railway Board to facilitate prompt action and detailed examination of the points brought out in the draft paragraph. The General Manager should send the reply to the draft paragraph to the Principal Director of Audit, duly approved by the Ministry of Railways (Railway Board), if the draft para involves more than one Railway/Unit, within eight weeks, simultaneously endorsing copies to the Deputy Comptroller and Auditor-General of India (Railways), and Director, Accounts (Railway Board). To enable the Railway Board to approve the draft reply prepared by the Railway Administration, the General Manager should furnish the following additional information to the Railway Board along with the proposed reply to draft paragraph :-

i) A history of the case with copies of relevant correspondence not covered in the Principal Director of Audit's letter.
ii) Sentence-wise comments on the draft para specifically verifying /correcting the facts and figures quoted therein.
iii) A chronological summary of the case where there has been unusual delay in dealingwith the subject matter.
iv) Remedial action called for or taken to avoid similar cases in future.
v) Disciplinary aspects where individual lapses have been brought to light.

Any aspects which the Railway Administration, may wish the Principal Director of Audit to consider before sending the final reply should, as far as possible, be settled by personal discussions so that the time limit may not be exceeded.

In cases where the cause of audit objection and the remedial/corrective measures are within the control of an individual Railway, General Manager of Zonal Railways/PUs are authorized to send replies to Draft paras after vetting by Railway's Finance directly to the Principal Director of Audit. In such cases, the reply to the draft paras should be sent to Audit within six weeks.

926. Draft paragraphs on matters arising from the scrutiny of Railway Board's contracts, schemes and sanctions etc., are issued by the Deputy Comptroller and

Auditor-General of India (Railways) addressed to the Railway Board. In such cases the material which is required to be furnished by the Principal Director of Audit of Railways to the Deputy Comptroller and Auditor-General of India (Railways) should be vetted promptly by the Financial Adviser and Chief Accounts Officer of Railways, when they are requested to do so. Enquiries, if any, made by the Deputy Comptroller and Auditor-General of India (Railways) for further information should be given high priority and, as far as possible, such information should be supplied promptly to the Principal Director of Audit by the Railway Administrations duly vetted by the Financial Adviser and Chief Accounts Officer for onward transmission to the Deputy Comptroller and Auditor-General of India (Railways). The Deputy Comptroller and Auditor-General of India (Railways) will send the edited paragraphs to the Railway Board for verification of facts and clarification on any point which the Railway Board may like to give before the paragraph is finalised by the Deputy Comptroller and Auditor General of India (Railways) for inclusion in the Report. A time-limit is usually specified within which the Railway Board are expected to complete the factual verification or offer their comments on these revised/edited paragraphs. These revised paragraphs should, on receipt by the Railway Board/Railway Administration, be scrutinized promptly with utmost care as it is not possible to correct any factual inaccuracies in the draft paragraphs at a later stage.

927. The Report of the Comptroller and Auditor General of India is presented to the Parliament, generally during the Budget session, where it is taken up for consideration by the Public Accounts Committee consisting of members of Lok Sabha and Rajya Sabha. The Committee obtains personal evidence of senior officers of the Railway Board in respect of the various items in the comptroller and Auditor General's Report. The results of the deliberations of the Public Accounts Committee are published in the form of Reports which are laid on the table of each House of Parliament and forwarded to the Ministry of Railways (Railway Board). These Reports contain the recommendations of the Public Accounts Committee for implementation by the Ministry of Railways.

928. The recommendations made by the Public Accounts Committee are considered by the Ministry of Railways (Railway Board), and other Ministries of Government of India, where, some of the observations and recommendations concern them also, and notes on action taken on the Public Accounts Committee's recommendations are submitted to the Committee, along with any comments which Audit department may have to make on these notes, within six months of the date of presentation of the Reports.

929. Internal Audit- Focus -Traditionally, the focus of internal audit has been on

compliance of rules, regulations, policies and procedures. As is evident from the role assigned to the Internal Audit Wings in the "Redefined Charter for Financial Advisors" issued by Ministry of Finance on June 1, 2006, the remit of Internal Audit has been enlarged. While Compliance Audit remains important, internal auditors are now expected to focus on evaluation of controls with reference to the risks and to provide an assurance to the Management that the controls are functioning in the intended manner and hence there is a reasonable assurance that the goals and objectives of Ministry/Department will be achieved. Through this, Internal Audit contributes to the efforts to strengthen governance processes in Ministries/Departments.

930. Internal Audit Process: The internal audit process comprises of five action phases. 1. Planning the audit engagement. 2. Preparing for Audit. 3. Performing the audit engagement. 4. Reporting upon the audit engagement; and 5. Follow up action.

931. A typical internal audit assignment involves the following steps: 1) Establish and communicate the scope and objectives for the audit to appropriate management/authorities. 2) Develop an understanding of the operational area under review. This includes objectives, measurements and key transaction types. This involves review of documents and interaction with the auditee. Flowcharts and narratives may be created if necessary. 3) Describe the risks facing the business activities within the scope of the audit. 4) Identify control procedures used to ensure each key risk and transaction type is properly controlled and monitored. 5) Develop and execute a risk based sampling and testing approach to determine whether the most important controls are operating as intended. 6) Report problems identified and review action plans with management to address the problems.7) Follow-up on reported findings at appropriate intervals for which Internal Audit departments must maintain a follow up database.

932. Internal audit is a concurrent process and may not involve the detailed audit process, unless it is a specific theme based audit, undertaken as a special audit. By analyzing and recommending business improvements in critical areas, auditors help the organization to meet its objective. In addition to assessing business processes, Information Technology (IT), Auditors also review information controls.

*****

CHAPTER-X

Petty Contingent Expenses Cash Imprest

Nature of Contingent charges	1001- 1003
Classification of contingent charges	1004
Special contingencies	1005
Liveries and warm Clothing	1006 -1007
Conveyance hire	1008 - 1009
Ordinary Contingencies	1010
Postal Charges	1012
Telegram Charges (Deleted)	1013 - 1015
Stationery and Printing Stores (including Rubber Stamps)	1016 - 1019
Type writers, Calculating Machines, etc.,	1020 - 1025
Service Contracts	1027 - 1028
Other Stores	1029
Printing and Binding (Deleted)	1030 - 1032
Official Publications	1033 - 1035
Non-official Publications	1036 - 1039
Recurring Charges	1040 - 1042
Bills for Contingent Expenditure	1044
Vouchers of Contingent Expenditure	1045
Duties of Drawing Officer	1046
Disbursement of contingent charges	1047 - 1049
Cash Imprests,	1050 - 1055
Imprest card	1056

*****

Chapter-X

Petty Contingent Expenses - Cash Imprest

1001. Nature of Contingent charges -"Contingent expenditure" means all incidental and other expenditure including expenditure on store which is incurred for the management of an office, for the working of establishment (DFPR Rule 13).

1002. Expenditure in respect of rents, rates and taxes, clothing, stationery and other stores required for traffic and running staff, the repairs and maintenance of furniture and office equipment, and rental of and stationery used for electronic computers is booked under sub-heads other than contingencies and is regulated by rules embodied elsewhere in this and other Indian Railway Codes.

1003. No pay, or additions to pay, or compensatory allowances of any kind may be charged as Contingent Expenditure. As an exception to this, however, pay and allowances in the following cases are treated as Contingent Expenditure;

i) Staff employed in connection with the upkeep of an office.
ii) Safaiwalas etc. provided they are not entitled to service gratuity specially permitted by Railway Board.
iii) Such Class IV staff as malies and grass cutters etc., specially permitted by the Railway Board to be charged to contingencies.

1004. Classification of Contingent Charges -The contingent charges may be broadly divided into two classes, viz. ordinary and special contingencies. Charges coming under each of these classes may be recurring or non-recurring.

1005. Special contingencies include -

i) charges, the bills for which require the counter-signature of the head of the department such as charges on account of taxi hire.
ii) unusual charges that require the special sanction of competent authority such as entertainment expenses on special occasions.

Note 1- The expenditure on entertainment/refreshment at important meetings/conferences etc. will be regulated by the instructions issued by the Railway Board from time to time. The General Manager, in consultations with FA&CAO, may re-delegate his powers for incurrence of expenditure on serving of light refreshments such as plain coffee/tea/ cold drinks in conferences and meetings with official/non-official visitors as are considered specially important and unavoidable as far as the railway working is concerned.

The luncheon parties, dinners and receptions on the Railways can be arranged only with the personal sanction of the General Manager of Zonal Railway/ Production Unit and Divisional Railway Managers with prior concurrence of the Associate Finance. However, the powers to sanction working lunches at formal inter-departmental and other meetings and conferences can also be re-delegated by the General Managers in consultation with FA&CAOs.

Note 2 -In addition to above powers, separate authorization as detailed below have been given to GMs, CCM/CMSM and CPROs for hospitality and entertainment expenses in connection with the entertainment of distinguished visitors, sales promotions, commercial publicity and public relations works.

i) GMs may incur expenditure as per extant delegation in connection with the entertainment of distinguished visitors, i.e. distinguished official or non-official personages, representative of foreign technical associates, foreign technical experts, and representatives of trade including overseas companies.

ii) For the purpose of maintenance of cordial press and public relations to project the Railway's image, expenditure by CPROs from Hospitality Fund should be as per extant delegation. The General Manager, is however, empowered to incur the expenditure as per extant delegation in special circumstances where the need for such expenditure is imperative and in the best interest of the press relations and commercial advertising works. Such cases of enhanced expenditure should be rare and advised to the Board.

iii) The expenditure to be incurred by Divisional Railway Managers on entertainment/hospitality etc. will be as per extant delegation.

1006. Liveries and Warm Clothing -Provision for clothing and other articles for Class IV servants employed in the office of the Railway Board, and subordinate and attached offices located at Delhi is to be regulated by the rules prescribed by the Government of India, Ministry of Home Affairs from time to time.

1007. Provision for uniforms and warm clothing to Class III and IV Railway staff, other than those covered in Para 1006, is to be regulated by the instructions on standardised uniforms issued by the Railway Board.

1008. Conveyance hire -For journeys performed on duty, suitable charges for hire of conveyance may be paid subject to orders issued by Railway Board from

time to time.

1009. Unusual charges should in no circumstances be incurred without the previous sanction of a superior authority, viz., the General Manager of a Railway Administration or the Railway Board.

Ordinary Contingencies

1010.

a) Unless it is otherwise stated in any rule, expenditure on ordinary contingencies (i.e. on other than special contingencies) may be sanctioned by the, head of an office.

b) The power vested under these rules in the General Manager may also be exercised by the following authorities in respect of their offices and the offices under their control -

i) The Secretary, Railway Board.
ii) The heads of offices directly subordinate to the Railway Board.

c) The General Manager and the authorities detailed in clause (b) above may re-delegate all or any of their powers to authorities subordinate to them.

1011. Deleted.

1012. No charges shall be entered in any contingent bill for any postage stamps other than service postage stamps, except in cases where the latter are not acceptable.

1013. Deleted.
1014. Deleted.
1015. Deleted.

1016. Stationery and Printing Stores (including Rubber Stamps) -Except as provided in paragraphs 1017 and 1018 all stationery and printing stores shall be obtained through the Controller of Stores. In the case of offices attached to a railway, the indent for stationery on the Controller shall be made by the General Manager of the Railway. Costly articles of stationery shall not be purchased at public expense.

1017. General Managers of Railways may make direct purchases in emergencies, i.e. arising out of delay on the part of or the failure of supplies from the Deputy

Controller of Stationery, or sudden unforeseen demands of stationery articles subject to the condition that such purchases at any one time should not exceed 3 months requirements and that the Controller of Stores is advised giving particulars of each purchase, party purchased from, rates and references to the indent against which supplies have been delayed.

The powers of direct purchase of stationery stores, office machinery and appliances and printing stores may also be exercised by Controller of Stores in emergency as per extant delegation for each item in consultation with the Financial Adviser and Chief Accounts Officer.

1018. When it is inconvenient to obtain stationery stores through the Controller of Stores, Petty local purchases may be made by heads of the Departments as per extant delegation and by Mechanical Engineers holding independent charge of workshops as per extant delegation. The exercise of these powers will be subject to the following conditions -

a) Local purchases should be so regulated that the overall procurement of stationery stores including those received through the Government of India Stationary / Regional Stationery Depot does not exceed the total requirements of the indentor on the basis of the prescribed 'quantity scale'.

b) These delegations do not extend to the purchase of paper for printing purposes except with the prior concurrence of the Controller of Stores.

These powers may be re-delegated to the Divisional Officers posted away from Railway/Divisional Headquarters to the extent necessary, provided the same are considered useful in actual practice subject to conditions (a) & (b) mentioned above.

1019. The authorities empowered to make local purchases shall carefully observe the general rules which have been issued by the Government of India laying down the policy to be followed in making purchases of stationery and printing stores.

1020. Deleted.
1021. Deleted.
1022. Deleted.

1023. Subject to the provisions of paragraph 1019, the General Managers of railways may purchase locally, to meet urgent and unforeseen requirements, an article of office machinery or appliance or any number of similar articles at one time, as per extent delegation in each case and Rs.25,000/- in the aggregate in

each case in any one year. Petty local purchases of office machinery and appliances may also be made subject to the provisions of paragraphs 1018 and 1019.

1024. Deleted.
1025. Deleted.
1026. Deleted.

1027. The rates shown in the bills submitted by the company for spare parts should be verified with the latest price lists. It is important that the correct part numbers should be shown by the repairers in their bills.

1028. Office equipments for which there is no Rate Contract or where authorized firms holding Rate Contracts or their agents have no servicing facilities, shall be maintained by the Heads of Departments, Divisional Railway Manager and Mechanical Engineer (Workshops) concerned either by entering into adhoc annual contracts themselves on competitive basis in consultation with Associated Finance by making local arrangements. In order to ensure uniformity of rates for servicing and overhauling of the equipments, it should be ascertained from the firms whether they already have a similar contract with any other Government Department/Office.

1029. Other Stores -The head of an office except that of an office not attached to any particular railway must obtain all stores by an indent on the Controller of Stores of the railway, unless he has been permitted to obtain them himself by the General Manager of the railway.

1030. Deleted.
1031. Deleted.
1032. Deleted.

1033. Official Publications -Official publications issued in India by the Ministry of Railways will be supplied free to railway officers in accordance with any general distribution sanctioned by the Railway Board in respect of such issues. Additional copies of such publications and other official publications may, if required, be obtained by the heads of offices from concerned Office.

1034. Office -publications (other than Parliamentary papers) published in any foreign country should be procured by the General Manager, through the respective High Commissioners or Embassies, as the case may be.

1035. For maps supplied by the Survey Department separate rules have been issued by the Surveyor General of India.

1036. Non-official Publications -Books and newspapers or other periodical

publications whether published in or out of India shall not be purchased, or subscribed for, at the public expense by any public officer without the previous sanction of the General Manager.

1037. The General Manager and lower authorities to whom he may delegate powers in this behalf, should make their own arrangement direct with the agent or publishers for the supply of such news papers, periodicals and books as may be required for their use and or the use of officers subordinate to them.

1038. The sanction for the supply should be communicated to the Accounts Officer who will check the charges in the same way as other items of recurring contingent expenditure.

1039. Payment in the Railway Offices abroad for supplies received from out of India should be arranged for through the embassy/High Commissioner of India.

1040. Recurring charges -Except as otherwise provided in these rules, no charge which binds Government beyond a single payment may be incurred without the sanction of the General Manager.

Note -A General Manager may authorize Heads of Departments and Divisional Railway Managers to sanction the payment of rents, rates and taxes of buildings occupied as, offices and the installation of telephones in offices and residences of officers and Subordinates under their control.

1041. For contingencies of their own offices the Secretary, Railway Board, and the Director General Research, Designs and Standards Organization may sanction recurring charges as per extant delegation.

1042. All other officers authorized to draw contingent bills may incur recurring contingent charges other than those specified in paragraph 1043 as per extant delegation subject only to the existence of the necessary allotment and to any restriction which the General Manager may impose.

1043. Deleted.

1044. Bills for Contingent Expenditure.-Bills should be prepared separately for ordinary and special contingencies. In regard to periodical charges and scale-regulated contingencies, it should be stated when the charges were last incurred, to enable the Accounts Officer to see that the expenditure has not been incurred before the expiry of the prescribed period. The sanction of competent authority

should be quoted in cases in which superior sanction is necessary for incurring expenditure. All contingent bills containing charges for miscellaneous supplies should bear a certificate that the articles have been received in good condition and entered in the stock account.

1045. Vouchers of contingent Expenditure –The limit below which vouchers need not be forwarded to the Accounts office in support of the contingent bill should be approved by the General Manager in consultation with Financial Adviser and Chief Accounts Officer, but all vouchers which are not submitted to the Accounts Office should be effaced and cancelled in such a way that they cannot be used again in support of claim against the railway. All vouchers must be submitted to the Accounts Office in support of the payment.

Note -The vouchers whether sent with the bill or retained in the office should be certified as under by the executive/divisional officer-"Certified that in the case of vouchers attached to the bill and those retained in my office relating to the purchase of goods made thereunder and the amounts paid on account of GST on those goods are correct under the provisions of that Act or the Rules made thereunder and in case of supplies against regular contracts, the relevant contract includes a specific provision that GST is payable by Government".

1046. Duties of the Drawing Officer –The drawing officer is expected to exercise the same vigilance over contingent expenditure as a person of ordinary prudence would exercise in spending his own money. He should further see that the vouchers are in proper form, have been receipted by the proper person and have been so made out that a second claim against the railway for the same charge is impossible, that the expenditure is absolutely necessary for the efficient management of the office or the performance of the service to which it relates, that the rates are not uneconomical, that the sanction of higher authority is not required under the financial restrictions laid down in any rules or orders issued by competent authority and, where necessary, the requisite sanction is obtained and quoted in the bill in support of the charge and that adequate budget provision exists to cover the expenditure involved.

1047. Disbursement of contingent charges –Contingent charges are disbursed in the following ways -

i) Payment by the officer incurring the expenditure out of imprest or permanent advance allowed to him.

ii) Payment by the Accounts Officer direct to the supplier, on the authority of the officer competent to incur the expenditure and on receipt of proof of

supply. In such cases, the firm's bill and receipt should be sent in original to the Accounts Office.

iii) Payment by the head of the office on receipt of money from the Accounts Office:

No money should be obtained from the Accounts Office unless it is required for immediate disbursement and adjustment bills supported by necessary vouchers and payee's receipts should be sent to the Accounts Office immediately after disbursement.

iv) Book adjustment by the Accounts Office when supplies have been made by another department of the railway, or another railway or a department or Ministry of the Government of India, provided the charges have been acknowledged by the offices concerned.

In such cases the rules of adjustment prescribed by supplying departments should be followed. If any such rules prescribe cash payment, the procedure will be as in *(ii)* above. For supplies from the Railway Stores or other Railway Departments the rules on the subject should be followed.

v) The charges for service postage stamps are drawn on separate contingent bill forms in the usual way, and separate cheques therefore are issued by the Accounts Officer in favour of the officer who supplies the stamps. Cheques so issued are not subject to any special minimum amount.

1048. Control over Contingent Expenditure -A register of contingent expenditure should be kept in each office, analysing the amount charged to the head "office contingencies" in such detail and under such sub-heads as may be considered necessary for the control of expenditure. The contingencies register should be examined at least once a month by an officer and if there are signs of extravagance under any sub-head of contingencies these should be investigated and steps taken to restrict the expenditure under those sub-heads. The following are amongst the items which should be watched in this way -

i) Stationery and forms and printing charges.
ii) Telephones.
iii) Hire and purchase of office equipment.
iv) Hot and cold weather charges.
v) Uniforms.
vi) Conveyance hire

Note -The cost of electric energy (whether generated in a Railway Power House or purchased in bulk from an outside source and distributed by the railway), the expenditure on the maintenance and repairs of telephone instruments and apparatus provided by the railway at its own cost and the rent paid to Government

Telegraph Department on account of wires provided by that department are not treated as contingent charges and will be finally charged to Abstracts E, F and H. Where, however, telephones are obtained on hire from the Government Telegraph Department or private companies the charges paid on account of rent and trunk calls shall be treated as contingent expenditure and debited to office contingencies.

1049. The control of expenditure against the budget allotment for "office contingencies" should be exercised by the Heads of Departments and Divisional Railway Manager with the help of the Allocation Register maintained in the accounts Office. In the case of other railway offices, such control will be exercised by the officers to whom such a grant may be given through the registers of expenditure maintained by them.

1050. An imprest is a standing advance of a fixed sum of money placed at the disposal of an individual to meet the following types of expenditure:

1) Petty Office expenses.

2) Cost of raw materials for the diet of indoor patients of hospitals.

3) Emergent charges which cannot be foreseen.

4) Other petty expenses as per extant delegation in each case. Emergency petty advances may also be made on the responsibility of the imprest holder out of imprest money placed at his disposal.

A certificate to be recorded by the procuring official/Imprest holder in the following format:
"I,, am personally satisfied that these goods purchased are of the requisite quality and specification and have been purchased from a reliable supplier at a reasonable price."

1051. The amount of an imprest must not be larger than is absolutely necessary. It should be reckoned at the lowest possible figure calculated to suffice for meeting charges of the nature referred to in the preceding paragraph and should be fixed in consultation with the Accounts Officer who will advise as to the appropriate amount of the imprest.

1052. Subject to the provisions of the previous paragraph, the General Manager of a railway will have full power to sanction imprests. He may re-delegate his power in this respect to authorities subordinate to him on such conditions as he may think fit to impose. In the case of other offices, the grant of an imprest will require the sanction of the competent authority as decided by Railway Board.

1053. The number of imprests should not be multiplied unnecessarily. An officer's imprest should meet the needs of every branch of his office. If he has subordinates who require petty sums, he should rather spare a small portion of his own imprest for their use than apply for separate imprest for them, taking acknowledgements from them in the same way as he himself furnishes to the Accounts Officer and retaining them in his office.

1054. The responsibility for making proper arrangements for the safe custody of the imprest money rests entirely with the imprest holder and he must at all times be ready to produce the total amount of the imprest in vouchers or in cash.

1055. The imprest account should be kept in duplicate, the counterfoil being kept by the imprest holder and the original, supported by the necessary vouchers, forwarded to the Accounts Officer from time to time as the holder of the imprest may require it to be replenished. The account should be closed ordinarily on the 27th of each month and recouped before the end of the month so as to ensure as many of the month's transactions as possible being included in the account. The imprest should be recouped once in a month only.

1056. Imprest Card -Few National Banks have launched imprest card scheme for handling Imprest under which imprest card holders are given a card with fixed amount. Imprest card holder receives transactions messages through SMS. Since the imprest card eliminates handling of cash and is a safer and more reliable system, it may be actively used by the Railways. It will also bring efficiency in the system. Guidelines issued by Ministry of Finance (Department of Expenditure) vide OM dated 14.07.2021 for use of prepaid debit cards for permanent imprest and contingent Advance in Ministry/Department, may be referred. Accounts Directorate of Railway Board has also issued guidelines in this regard.

*****

CHAPTER-XI

Reporting And Investigation Of Loss Of Cash, Stores Or Other Railway Property.

Losses, Frauds And Embezzlements**.**

Responsibility for Losses	1101
Report of Losses	1102 - 1103
Losses involving the Reserve Bank	1104
Investigation of Losses	1105
Legal Advice	1106
Laxity of Control	1107
Recoveries of Losses	1108 - 1110
With holding of Pension and Provident Fund Bonus	1111 - 1112
Police Investigation	1113 - 1114
Prosecution	1115 - 1116
Witness	1117
Appeal against Acquittals	1118
Reports to the General Manager	1119 - 1120
Departmental Inquiries	1121 - 1124

*****

CHAPTER-XI

Reporting And Investigation Of Defalcation And Loss Of Cash, Stores Or Other Railway Property.

1101. Responsibility for Losses -The cardinal principle governing the assessment of responsibility is that, every Government officer should exercise the same vigilance in respect of expenditure from public fund generally as a person of ordinary prudence would exercise in respect of the expenditure and the custody of his own money. Means should be devised to ensure that every railway servant realises fully and clearly that he/she will be held personally responsible for any loss sustained by Government through fraud or negligence on his/her part and also for any loss arising from fraud or negligence on the part of any other railway servant to the extent it may be shown that he/she contributed to the loss by his/her own action or negligence.

While, the competent authority may, in special cases, condone an officer's honest errors of judgement involving financial loss if the officer can show that he has acted in good faith and done his best up to the limits of his ability and experience, personal liability shall be strictly enforced against all officers who are dishonest, careless or negligent in the duties entrusted to them.

1102. Report of Losses -Any defalcation or loss of cash, stores or other property belonging to Government should be reported immediately if it is discovered, to the head of the division or department as the case may be, and in serious cases to the General Manager also, copies of the reports being sent simultaneously to the Financial Adviser and Chief Accounts Officer who will forward a copy to the Principal Director of Audit. If any irregularity or loss is detected by, or is brought to the notice of the Accounts Officer in the first instance, it will be his duty to apprise immediately the administrative authority concerned of the facts of the case and ask for a proper investigation; the Accounts Officer will send a copy of his communication on the subject to the Principal Director of Audit. If, however, the irregularity or loss is discovered by, or is brought to the notice of the administrative authority in the first instance, that authority should immediately report the matter to the Accounts Officer, who will forward a copy of the report to the Principal Director of Audit. Petty cases, that is cases involving losses not exceeding- Rs.10,000/- each need not be reported to the Financial Adviser and Chief Accounts Officer nor by him to the Principal Director of Audit unless there are important features which require detailed investigation and consideration. Every important case involving loss of cash, stores, or property, whether caused as a result of frauds perpetrated or negligence shown by the railway servants, or caused purely by accidents such as fire, etc., should be brought to the notice of

Ministry of Railways (Railway Board)

the Railway Board by the General Manager through a preliminary report (to be followed by a detailed report see Para 1103) within six weeks from the date of detection of the loss and a copy of the report endorsed to the Principal Director of Audit simultaneously through the Financial Adviser and Chief Accounts Officer. When the loss involved does not exceed Rs. 50,000 the case need not be reported to the Railway Board unless it represents unusual features or reveals serious defects in procedure.

The preliminary report, which should be based on the facts and first-hand information available, should bring out-

i) the nature of the loss ,
ii) whether the matter has been reported to Civil/GR, Police/RPF and Departmental Enquiry Committee ;
iii) amount involved, actual or approximate;
iv) steps taken to plug the loop holes, if any; and
v) the name of the staff apparently responsible.

1103. General Manager's detailed report should clearly bring out-

a) the amount involved and recovered,
b) the modus-operandi of the fraud,
c) the nature of checks which ought to have been exercised under any rule or order and which were omitted, thereby facilitating the fraud.
d) whether the procedure in force is ineffective in preventing such frauds and, if so, what modification are suggested therein,
e) disciplinary action taken against the party at fault and the adequacy or otherwise of such action,
f) whether the Financial Adviser and Chief Accounts Officer agrees to the reports submitted. In the case of his disagreement with the administration on any aspect of the case such disagreement should be reported verbatim to the Railway Board.

Ministry of Railways (Railway Board)

The detailed report should be accompanied by Police Report and the findings along with a copy of the proceedings of the Departmental Enquiry committee in all cases involving more than Rs. 50,000 and should contain comments of the railway Administration on all points brought out by the enquiring officer(s). The proceedings of the Enquiry Committee need not, however, be sent to Railway Board where the losses do not exceed Rs. 50,000 but instead these cases, on finalisation, be put up for review by a committee of two Deputy heads of Departments (including a Deputy Chief Accounts Officer) and the Board furnished with (i) the main gist of the recommendations of the Enquiry Committee, (ii) special features brought to light in the report of enquiry and (iii) the result of review indicating, inter-alia, the detail of action taken by the railway administration.

1104. Losses involving the Reserve Bank -Whenever any case of loss, in which there is a possibility of the Reserve Bank being made liable to Government either in respect of operations on Government Accounts conducted by itself or by its agents or otherwise, comes to notice, a report of the loss should also be made, without delay, to the Railway Board. On receipt of the report, the Railway Board will arrange to have the facts examined, while they are fresh, by officers of the Bank and of Government with a view to reaching an amicable settlement or, if this is impossible at least to clearing the ground as far as possible, so that a stated case may be referred to some outside arbitrator or legal authority. This examination will be undertaken at once and independently of any departmental or police inquiry.

1105. Investigation of Losses -It is of the greatest importance to avoid delay in the investigation of any loss due to fraud, negligence, financial irregularity, etc. Should the administrative authority require the assistance of the Accounts Officer in pursuing the investigation, he may call on that officer for all vouchers and other documents that may be relevant to the investigation, and if the investigation is complex and he needs the assistance of an expert Accounts Officer to unravel it, he should apply forthwith for that assistance to the General Manager who will then arrange with the Financial Adviser and Chief Accounts Officer for the services of an investigating staff. Thereafter, the administrative authority and the accounts authority will be personally responsible, within their respective spheres, for the expeditious conduct of the inquiry.

Depending upon the results of the inquiry, departmental proceedings and/or prosecution shall be instituted at the earliest moment against the delinquent officials concerned and conducted with strict adherence to the Disciplinary & Appeal Rule, 1968 and other instructions prescribed in this regard by Government.

1106. Legal Advice -In any case in which it appears that recourse to judicial proceedings is likely to be involved, competent legal advice should be taken as soon as the possibility emerges. In the case of losses involving a reasonable suspicion of fraud or the criminal offence, a prosecution should be attempted unless the legal advisers consider that the evidence available is not such as will secure a conviction. The reasons for not attempting a prosecution should be placed on record in all such cases.

1107. Laxity of Control -In cases where loss is due to delinquencies of subordinate officials and where it appears that this has been facilitated by laxity of supervision on the part of the superior officer, the latter should also be called strictly to account and his personal liability in the matter carefully examined.

1108. Recoveries of Losses -The question of enforcing pecuniary liability should always be considered as well as the question of other forms of disciplinary action. In deciding the degree of the railway servant's pecuniary liability it will be necessary to look not only to the circumstances of the case but also the financial circumstances of the railway servant, since it should be recognized that the penalty should not be such as to impair the railway servant's future efficiency.

1109. In particular if the loss has occurred through fraud, every endeavour should be made to recover the whole amount lost from the guilty persons, and if laxity of supervision has facilitated the fraud, the supervising officer at fault may properly be penalised either directly by requiring him to make good in money a sufficient proportion of the loss, or indirectly by reduction or stoppage of his increments of pay.

1110. It should always be considered whether the depreciated value of the Government property or equipment lost, damaged or destroyed by the carelessness of individuals entrusted with their care should be recovered from the delinquent official. The depreciated value should be taken as prescribed by Railway Board from time to time. The amount to be recovered may be limited to the Government servant's capacity to pay.

1111. Withholding of Pension and Provident Fund Bonus -One reason why it is important to avoid delay (paragraph 1105) is that in the course of a prolonged investigation, Government servants who are concerned may qualify for pension and a pension once sanctioned cannot be reduced or withheld for misconduct committed prior to retirement. As a primary precaution, steps should be taken to ensure that a railway servant concerned in any loss or irregularity, which is the subject of an inquiry, is not inadvertently allowed to retire on pension while the inquiry is in progress. Similar precaution should be taken in the case of a person entitled to the benefits of the State Railway Provident Fund. Accordingly when a railway servant is concerned in any irregularity or loss, the authority investigating the case should immediately inform the Accounts Officer and the administrative authority concerned and it will be the duty of the latter to make a note of the information and to see that pension is not sanctioned or the Provident Fund Bonus is not allowed to be withdrawn before either a conclusion is arrived at as regards the railway servant's culpability or it has been decided by the sanctioning authority that the result of the investigation need not be awaited.

Note -In sanctioning the pension of a railway servant, who is involved in any loss or irregularity which is the subject of an inquiry, the provisions of Rule 2308 of the Indian Railway Establishment Code, volume II and Government of

India's decision under Rule 2534 of the same Code reproduced in Appendix XXX thereof should be borne in mind.

When a pensionable Government Servant is concerned in any irregularity or loss, the authority investigating the case shall bear in mind the provisions contained in Disciplinary & Appeal Rules as amended from time to time and immediately inform the Audit Officer and/or the Accounts Officer, as the case may be, responsible for reporting on his title to Pension or Death- Cum-Retirement Gratuity, and the authority competent to sanction Pension or Death-Cum-Retirement Gratuity and it will be the duty of the latter to make a note of the information and see that the Gratuity or Death-Cum-Retirement Gratuity is not paid before a conclusion is arrived at as regards the Government servant's culpability and final orders are issued thereon.

1112. The fact that persons who were guilty of frauds or irregularities have retired and have thus escaped punishment, should not be made a justification for absolving those who are also guilty but who still remain in service.

1113. Police Investigation -As soon as a reasonable suspicion exists that a criminal offence has been committed, the senior officer of the department concerned present in the station will report to the Senior Superintendant of Police/Commissioner of Police and ask for a regular police investigation under the Code of Criminal Procedure.

Note -Cases of corruption and malpractice have to be referred to the Chief Vigilance Officer/ Vigilance Officer of the Railway Administration/Organisation and if there is no such officer, to the Vigilance Directorate of the Railway Board. The Chief Vigilance Officer/Vigilance Officer /Vigilance Directorate will, in keeping with the instructions on the subject, refer to the Special Police Establishment such of these cases as require investigation by them. As a rule, allegations involving offences of bribery, corruption, forgery, cheating, criminal breach of trust, falsification of records or other serious criminal offences or those requiring expert Police investigations such as cases of possession of disproportionate assets or cases in which a number of non-official witnesses are to be examined, should be referred to the Special Police Establishment for investigation. In such cases a prompt reference to the Special Police Establishment is necessary to guard against the possibility of material evidence being tampered with or destroyed. Once a case is referred to and taken up by Special Police Establishment for investigation, further investigation must be left to them. Parallel investigation by the Administrative authority should be avoided. There would, however, be no objection to investigations being undertaken by the administrative authority to deal with ancillary matters like

examination of existing procedures having a bearing on the cases under investigation by the S. P. E. Further action on the main case should be taken by the department on the completion of the investigation by the S.P.E. and on the basis of their report. However, in the event of delay in completion of investigations by the S. P. E., the department also should move the appropriate authorities to have the finalization of the cases by the S. P. E. expedited.

1114. If the Senior Superintendant of Police/Commissioner of Police agrees that an investigation may be made, the Senior Officer of the department concerned present in the station will (a) request the Senior Superintendant of Police/Commissioner of Police to arrange for the investigation to proceed from day to day ; (b) see that all witnesses and documents are made available to the investigating Officer, and (c) associate with the investigating officer an officer of the department who is not personally concerned with the irregularity leading upto the loss, but who is fully cognizant of the rules and procedure of the office in which the loss has occurred.

1115. Prosecution -When the investigation has been completed, an officer of the department (accompanied by the officer who attended the investigation) must be made available for conferences with the authority who will decide whether a prosecution should be instituted. If it is decided not to prosecute, the case must be reported through the usual channel to the General Manager for orders.

1116. If it is decided to prosecute, the departmental representative will ascertain from the prosecuting officer, having regard to the engagements of the prosecuting staff and the state of work in the Court which would ordinarily hear the case, whether it is necessary to move the District Magistrate to make special arrangements for speedy trial, and will request the prosecuting officer to make any application that he may think necessary.

1117. Witness -When the case is put into Court by the Police, the Senior Officer of the department concerned present in the station will see that all witnesses serving in the department and all documentary evidence in the control of the Department, are punctually produced, and will also appoint an officer of the department (preferably the officer who attended the investigation) to attend the proceedings in Court and assist the prosecuting staff.

1118. Appeal against Acquittals -If any prosecution results in the discharge or acquittal of any person, or in the imposition of sentences which appear to be inadequate, the Senior Officer of the department concerned will at once consult the State Government concerned as to the advisability of instituting further

Ministry of Railways (Railway Board)

proceedings in revision or appeal, as the case may be, and if the State Government is of opinion that further proceedings are necessary, the State Government shall direct the Public Prosecutor to proceed in the matter. Appeals against acquittals if advised by the state Government should be made only after obtaining the order of the General Manager.

1119. Reports to the General Manager -The Senior Officer of the department concerned present in the station will see that, in addition to the reports required under paragraphs 1102 and 1115 above, prompt reports are submitted to the General Manager through the usual channel regarding-

a) the commencement of a police investigation,
b) the decision to prosecute in any particular case,
c) the result of any prosecution,
d) the decision to proceed further in revision or an appeal in any case,
e) the result of any proceedings in revision or appeal.

1120. Notwithstanding anything contained in the foregoing paragraphs, the senior Officer of the department concerned present in the station may, if he thinks fit, refer any matter through the usual channel for the orders of the General Manager before taking action.

Departmental Inquiries

1121. Where fraud or embezzlement of Government funds has occurred, the institution of criminal proceedings should not be regarded by the officer responsible as absolving him from the often laborious task of conducting immediately a thorough departmental inquiry. The natural reluctance to hold an inquiry, enhanced by an apprehension that it may prejudice the result of the trial in a Court of law, has sometimes led to great delay in taking departmental proceedings and the results have been inconclusive. Departmental inquiries should not be delayed pending decision of criminal cases, as at a later stage, the evidence might disappear and the departmental inquiry could not be brought to any conclusion at all. (Also refer to the Note under para 1113).

1122. Prosecution should be the general rule in all those cases which are found fit to be sent to Criminal Court after investigation and in which the offences are of bribery, corruption or other criminal misconduct involving loss of substantial public funds. In such cases, departmental proceedings should not precede prosecution. In other cases involving less serious offences or involving malpractices of a departmental nature, departmental action only should be taken and the question of prosecution should generally not arise. Whenever, however, there is unresolved

difference of opinion between the Central Bureau of Investigation and the administrative authority concerned as to whether prosecution in a court or departmental action should be resorted to in the first instance, the matter should be referred to the Railway Board who will consult the Central Vigilance Commission for advice.

1123. Where a number of persons are involved, one or more criminally, and others in such circumstances as to show negligence, or warrant the suspicion of criminal abatement without sufficient proof to justify prosecution, or have similar features which necessitate, a criminal prosecution of one or more and a departmental inquiry against others, the neglect to institute a formal departmental inquiry, or to carry it to the requisite stage, before criminal proceedings are taken, has the result that many month later, when the criminal case is over, effective departmental action becomes impracticable. The administrative authority concerned should therefore decide on the basis of the facts and records of each case how far and in what cases he can proceed departmentally at once against the subsidiary offenders. Care should also be taken to ensure that as far as possible the offenders are not transferred to another Railway till after the finalization of the criminal/ departmental proceedings against them.

In some cases where action is required against subsidiary offenders it may be possible to take suitable action without assuming or even referring to the guilt of the principal offender and without pre-judging the issues before the Court. For this purpose the authorities may find that the evidence already available is sufficient and in any case they may retain copies (Photostat copies if necessary) of such documents as may have to be put in Court. If action is taken accordingly and it is found later that there is a divergence in the penalties imposed by the Court on the principal accused and those imposed by the departmental authorities on the subsidiary offenders, further departmental action can be taken to suitably revise the penalties already imposed.

1124. The proceedings contemplated in these instructions are those which are regulated by the rules in Appendix XVII to the Indian Railway Establishment Code, Volume I. Where action is taken under the Public Servants (inquiries) Act, XXXVII of 1850, this ordinarily takes the place of a criminal prosecution as regards the person or persons accused; but the procedure as regards other persons involved, against whom this Act is not employed should be in accordance with the instructions given above.

*****