R.C.C. No. 87

RAILWAY CONVENTION COMMITTEE (1996)

(ELEVENTH LOK SABHA)

SECOND REPORT ON NINTH PLAN PERSPECTIVE—INFRASTRUCTURAL REQUIREMENT OF INDIAN RAILWAYS

Presented to Lok Sabha on 14-3-1997
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LOK SABHA SECRETARIAT
NEW DELHI

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RAILWAY CONVENTION COMMITTEE
(1996)

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INTRODUCTION

I, the Chairman of Railway Convention Committee (1996) having been authorised by the Committee to submit the Report on their behalf, present this Second Report on the subject "Ninth Plan Perspective—Infrastructural requirement of Indian Railways."

2. The Committee took evidence of the representatives of the Planning Commission, Ministry of Finance, Power and Railways (Railway Board) on 30th December, 1996. The Committee wish to express their thanks to all of them for placing before the Committee detailed notes on the subject and for furnishing whatever information desired in connection with the examination of the subject. The Committee also appreciate the frankness with which the officials shared their views, perceptions and constraints with the Committee. This enabled the Committee to come to right conclusions in the matter.

3. As per the Approach Paper to Ninth Five Year Plan, the country's economy will grow at the rate of 7%. The Committee feel that in order to achieve the above goal, the Indian Railways should grow at the rate of 10 to 15 per cent. Hence, the Committee has recommended that the Plan outlay of Rs. 65,000 crores asked for by the Railways for the Ninth Five Year Plan should be accepted by the Government.

4. The Committee find that there is an urgent need to bolster the infrastructure of Indian Railways. In this connection, the Committee are of the firm view that the responsibility for capital cost for creation of infrastructure should not be borne by Indian Railways any more. The Government should finance 100 per cent expenditure on development of infrastructure for Indian Railways as is being done in case of development of roads, ports and airports. Even in all the countries world-over, the capital cost for creation of infrastructure is the responsibility of the Government and their Railways only invest on rolling stock.

5. In regard to Management Reforms, the Committee are of the view that keeping in view the growth in the volume of Railway purchases, a post of Member (Stores) needs to be created in the Railway Board.

6. The Committee feel that development does not only mean laying new railway lines and procuring new rolling stock. The development can be said to be wholesome when the safety aspect is not compromised. Keeping in view, the frequent accidents, derailment and dacoities, the present parameters of railway safety needs to be examined *de-novo* and therefore the Committee have recommended that the present set up for Railway Safety should be headed by a full-fledge Member at the apex level of Indian Railways.

7. In an era of acute financial crunch, the Committee deprecate the manner in which the Railways have gone ahead in the creation of six more Zonal Railways. They feel that the entire issue has been handled

lackadaisically as it can be seen that even after a lapse of six months of their creation, the Railways could not define the jurisdiction of the newly created Zonal Railways. According to the Committee, with the growth in the volume of freight and passenger traffic, the need for creation of more Railway Divisions should have been given weightage instead of going in for more Zonal Railways.

8. The Report was considered and adopted by the Committee at their sitting held on 11th March, 1997. The Minutes of the sittings held on 30th December, 1996 and 11th March, 1997 form Part II of the Report.

9. The observations and recommendations have been printed in thick type and form Chapter XIII of the Report.

NEW DELHI;
March 11, 1997

Phalguna 20, 1918 *(S)*

MANORANJAN BHAKTA,
Chairman,
Railway Convention Committee.

CHAPTER I

BRIEF HISTORY OF INDIAN RAILWAYS

1.1 The Railways are an integral part of our socio-economic life. The first train in India steamed out from Bombay's Boribunder to Thane covering a distance of 21 miles on the 16th April, 1853. After one year the line was extended to Kalyan upto which the residential area then extended. Similarly, the first passenger train from Calcutta, the then capital of India and the centre of the jute and tea trade, was run in 1854 when the first section of the then East India Railway from Howrah to Hoogly was opened. This was extended to Vardhaman in the next year. However, the first train in South India was run by the Madras Railway Company in 1856 from Veysarpadi to Walajah Road, covering a distance of 63 miles. With this modest begining, the Indian Railways have now grown to its present gigantic organisation.

1.2 In the 144 years of its existence, it has successfully adapted itself to the changing needs of travel and transport in the Country. As on 31 March 1996, the network consists of Broad, Metre and Narrow Gauges totalling 1,08,336 track kms., the break-up of which is given as under:—

Gauge	Route km.	Running track km.	Total track km.
Broad Gauge	40,620	57,088	79,843
Metre Gauge	18,501	19,559	24,269
Narrow Gauge	3,794	3,794	4,224

1.3 The Ministry of Railways functions under the guidance of the Minister of Railways. The day-to-day affairs and formulation of policy are managed by the Railway Board comprising the Chairman, Financial Commissioner and functional Members. Wide powers are vested in the Board to effectively supervise the running of the Zonal Railways; Metro-Railway, Calcutta; the Production Units; Construction Organisations and other Railway establishments. These are generally headed by General Managers.

1.4 The table below shows holdings of locomotives; passenger carrying fleet and wagons.

Year	Number of locomotives				Passenger Coaches	Other Coaching Vehicles Number	Total Wagons on line Number in units
	Steam	Diesel	Electric	EMU	Conventional		
1950-51	8120	17	72	460	13109	6059	205596
1960-61	10312	181	131	846	20178	7415	307907
1970-71	9387	1169	602	1750	24676	8719	383990
1980-81	7469	2403	1036	2625	27478	8230	400946
1990-91	2915	3759	1743	3142	28701	6668	346102
1991-92	2492	3905	1871	3366	29493	6491	346394
1992-93	1725	4069	2012	3444	30322	6158	337562
1993-94	911	4192	2117	3537	30561	5955	312405
1994-95	347	4259	2302	3618	30060	5536	291360
1995-96	209	4313	2387	3692	29758	5654	280791

1.5 Almost all the double/multiple tack sections and electrified routes lie on Broad Gauge. Metre and Narrow Gauge are mostly single line and not electrified. From 1950-51 to 1995-96, traffic density (million GT kms. per running track km.) has increased from 4.29 to 13.71 on BG.

1.6 Indian Railways have nearly 1.196 lakh bridges, of which 10465 are 'Major Bridges' with a waterway of more than 18m or a clear opening of 12m, in any one span. In 1995-96, 418 bridges were rebuilt/rehabilitated.

1.7 As on March 31, 1996, IR maintained 40671 level crossings of which 16117 had gatemen. Unmanned crossings considered unsafe because of visibility problems or density of traffic are taken up for conversion to manned gates. Busy crossings are being upgraded with advanced safety devices and lifting barriers.

1.8 Indian Railways own 4.19 lakh hectares of land which is mainly used for locating operational and service infrastructure such as track, stations, workshops and colonies. The break up of the land is as under:—

(Area in lakhs of hectares)

(i) Track and structures including stations, colonies etc.	3.33
(ii) Afforestation	0.35
(iii) 'Grow more food' scheme	0.19
(iv) Commercial licensing	0.04
(v) Other uses like pisciculture	0.01
(vi) Encroachment	0.02
(vii) Vacant land	0.25

1.9 Today, out of the seven major trunk routes connecting Mumbai, Calcutta, New Delhi and Madras, five are fully electrified and work is in progress on the other two.

Over the years, progress of electrification on Indian Railways has been as under:—

Period	Route km. electrified
Up to 1980	4918
VI Plan (1980-85)	1522
VII Plan (1985-90)	2812
1990-91	831
1991-92	726
VIII Plan 1st year (1992-93)	479
2nd Year (1993-94)	505
3rd Year (1994-95)	473
4th Year (1995-96)	609
Total as on 31.3.1995	12266*

*Also includes electrified route km. not opened to traffic.

Thus, about 20% of the total route km. opened on Indian Railways has been electrified upto 31st March, 1996. Of the total electrified route km., 1379 route km. are on the suburban section and the balance 11.4% on heavy density freight routes. During 1995-96, 41% of passenger train km. and 59% of the BG freight gross tonne km. were operated on electric traction.

1.10 Steam locomotives have been phased out, except those of tourist interest in hilly sections like Nilgiris and Darjeeling Himalayan Railways. 28 steam sheds were closed down in 1994-95. Another 4 were closed down in 1995-96 and over 635 steam locos withdrawn from service during these two years. As a result, consumption of coal reduced from 0.60 million tonnes in 1994-95 to 0.24 million tonnes in 1995-96 — a reduction of 60%.

1.11 The number of passengers originating from 1284 millions in 1950-51 has increased to 4018 millions in 1995-96. Similarly, revenue earning freight traffic has increased from 73.2 million tonnes in 1950-51 to 390.69 million tonnes in 1995-96. It carries more than 1.1 million tonnes of originating freight traffic & more than 11 million passengers per day.

1.12 The number of regular employees has increased from 9.13 lakhs in 1950-51 to 15.86 lakhs in 1995-96. It consists of 0.137 lakhs (Group A and B) making up 0.86% of the total strength while Group C and D comprise 8.917 lakh (56.2%) and 6.81 lakhs (42.93%) of the total manpower, respectively. Of the employees in Group C and D, 4.90 lakhs (30.88%) are workshop employees and artisans, and 10.83 lakhs (68.25%) from other categories including running staff. Railway Protection Force/RPSF personnel totalled 61597.

In addition to the above regular employees, there were about 57000 Casual Labourers on Indian Railways as on 31st March, 1996.

Physical Performance

1.13 Key performance indicators of Railways during VIII Plan Period.

		1992-93	1993-94	1994-95	1995-96	1996-97
Freight	Target	354.00	370.00	380.00	398.00	410.00
(Mill. Tonnes)	Actual	350.10	358.70	365.00	390.69	
Tonne Kms.	Target	261.30	272.40	273.70	278.80	282.90
(Billions)	Actual	252.40	252.40	249.60	270.49	
Passenger	Target	4256.00	4170.00	3908.00	4120.00	4192.00
(Million)	Actual	3749.00	3708.00	3915.00	4018.00	
PKMs	Target	325.86	326.54	307.60	325.11	341.29
(Billions)	Actual	300.10	296.25	319.37	341.99	
Plan Size	BE	5700.00	6500.00	6515.00	7500.00	8130.00
(Rs. Crores)	Actual	6162.00	5861.00	5472.00	6468.00	
Net Revenue	BE	2130.00	3448.00	3342.00	3426.16	3503.37
(Rs. Crores)	Actual	1955.43	3102.13	3808.11	4135.00	

Financial Performance

1.14 Railways have been doing well in terms of financial performance. The financial performance during VIII Plan period as follows.

Year	Capital							
	At Investment Charge	Gross From	Total Traffic	Net Working	Dividend Revenue	Excess(+) Paid	Operating Short-fal(−)	Ratio
	Capital Fund Receipts — Expenses							
90-91	16125.80	0000.00	12096.49	11153.86	1113.78	927.00	175.67	92.00
91-92	17620.02	0000.00	13729.74	12389.19	1540.95	1037.00	435.00	89.50
92-93	20123.20	0000.00	15688.44	13980.08	1955.43	1172.39	441.05	87.40
93-94	20873.58	1746.99	17946.02	15134.54	3102.13	1296.05	1806.08	82.90
94-95	21762.92	3161.88	20100.99	16590.12	3808.11	1361.71	2446.40	82.60
95-96	22249.82	5020.52	22417.85	18524.90	4136.07	1264.44	2871.63	82.45

Market Share

1.15 While the physical performance of Railways increased over the years its market share declined steadily.

The Planning Commission in its approach paper to Ninth Plan has stated that the share of Railways in freight traffic has declined from 89 percent in 1951 to 40 percent in 1995 while its share in passenger traffic went down from 72 percent to 20 percent during the same period.

1.16 *Investment during Various Plan Periods:*

Investment in Railway Sector during various Plan periods is as follows:

(Rs. in Cr.)

Plan	Internal Resource		Bonds		Total Internal and Extra-budgetary Resource		Budgetary Support		Total
	Amt.	%age	Amt.	%age	Amt.	%age	Amt.	%age	
I	280	66%			280	66%	142	34%	422
II	467	45%			467	45%	576	55%	1043
III	545	32%			545	32%	1140	68%	1685
1966—69	320	42%			320	42%	442	58%	762
IV	397	28%			397	28%	1031	72%	1428
V	384	25%			384	25%	1141	75%	1525
1978—80	316	25%			316	25%	935	75%	1251
VI	2783	42%			2783	42%	3802	58%	6585
VII									
1985-86	1065	55%			1065	55%	877	45%	1942
1986-87	1318	49%			1318	49%	1379	51%	2697
1987-88	1331	39%	720	21%	2051	60%	1368	40%	3419
1988-89	1586	40%	800	20%	2386	61%	1543	39%	3929
1989-90	1789	39%	1000	22%	2789	61%	1773	39%	4562
Total-VII	7089	43%	2520	15%	9609	58%	6940	42%	16549
1990-91	2091	43%	1092	23%	3183	66%	1632	34%	4815
1991-92	2134	40%	1503	28%	3637	67%	1756	33%	5393
VIII									
1992-93	2548	41%	1025	17%	3573	58%	2589	42%	6162
1993-94	4030	69%	856	15%	4886	83%	974	17%	5860
1994-95	3582	65%	745	14%	4327	79%	1145	21%	5472
1995-96	4210	65%	1118	17%	5328	82%	1140	18%	6468
1996-97BE	4111	50%	2750	34%	6861	84%	1269	16%	8130
1996-97RE	4401	53%	2460	30%	6861	83%	1439	17%	8300
1997-98BE	3419	41%	3050	37%	6469	78%	1831	22%	8300

Future Perspectives

1.17 The performance of Railways has so far been reasonably good but there is a lot need to be desired in its performance, especially freight movements. The Railways is facing challenges on all fronts. Being the principal mode of transport it has to play a greater role in the total transportation needs of the country.

1.18 If the economic growth rate of 7 percent envisaged in the Ninth Plan has to be achieved, Railways need lot of investment to augment its transport capacity—both passenger and traffic to meet the ever growing demand of freight traffic. According to a report by NTPC, the Railways has to carry 72 percent of freight traffic by 2000 A.D.

1.19 Optimum utilisation of Assets, modernisation of Rolling stock, and introduction of modern signalling and telecommunication network should

help Railways to meet the fast frowing demands of the economy. For these Railways need huge investments in its infrastructure, which should come through more budgetary support from the Government.

1.20 The Railway being energy efficient, eco-friendly—both in term of space utilisation and pollution-free to a larger extent and safe, should be given an over-riding priority over other modes of transport during plan allocation in the Ninth Five Year Plan.

CHAPTER II

ROLE OF RAILWAY CONVENTION COMMITTEE

Historical Background

2.1 In order to secure primarily stability for civil estimates by providing for an assured contribution from railway revenues and also to introduce flexibility in the administration of the railway finance—Acworth Committee was appointed to give its recommendation. This Committee recommended in 1921 that there should be a fixed contribution to the General Revenue from the Railway Finance. The Committee recommended:

> "We do not think that the Indian Railways can be modernised, improved and enlarged, so as to give to India the service of which it is in crying need at the moment, nor that the railways can yield to the Indian public the financial return which they are entitled to expect from so valuable a property, until the whole financial methods are radically reformed. And the essence of this reform is contained in two things:

(i) the complete separation of the Railway Budget from the General Budget of the country, and its reconstruction in a form which frees a great commercial business from the trammels of a system which assumes that the concern goes out of business on each 31st of March and recommences *de novo* on the 1st April; and

(ii) the emancipation of the railway management from the control of the Financial Department."

2.2 The above passage represented the 'main burden' of the Acworth Committee's Report on the financial side which had expressed their disapproval of a faulty system under which the Finance Department of the Government controlled the Railway Finances. According to this Committee, it was absolutely necessary to treat Railways:

> "as a continuously going concern with a carefully thought out programme both of revenue and of capital expenditure for years ahead with provisional financial arrangements to correspond."

2.3 While submitting to the then Legislative Assembly the resolution for separation of Railway Finances from General Finances on the 17th September, 1924, the then Commerce Member, Sir Charles Innes stated very briefly in the following words the objects which they had in view:

> "In the first place, as far as State Railways are concerned, we want to abolish altogether this system of programme revenue voted for a

year. We want to establish a proper depreciation fund, a depreciation fund arranged in a scientific and intelligible manner. Secondly, we want to build up Railway reserves. We want to build them up in order that our finances may be more elastic, in order that we may have provision to equalise dividends. And generally, we want to introduce a system of finance which, while maintaining unimpaired the control of this House and while ensuring to general revenues a fair return from their Railway property will be more suited to the needs of a vast commercial undertaking. Finally, and most important of all, we want to establish a principle. It is right and proper that the tax payers, the State, should get a fair and stable return from the money it has spent on its Railways: but if you go further, if you take from the Railways more than that fair return, then you are indulging in a concealed way in one of the most vicious forms of taxation, namely a tax on transportation. One of the objects we have most at heart in putting these proposals before this House is to establish that principle.

These then are the reasons why we are asking the House to accept this reform which was insistently pressed by the Acworth Committee, namely, the reform of separating your Railway from your general finance. We considered the possibility of legislating in the matter, but we decided that it would be preferable to proceed in the manner suggested in the Resolution; that is, we decided that it would be preferable to ask this House to agree to a convention, there are some advantages in a convention which can be adjusted from time to time to varying needs and difficulties. It can even be adjusted to the ordered progress of the Constitution. It was always our intention whatever the arrangements we might come to with the House that those arrangements should be subject to periodical revision; and the House will see that on the recommendation of the Committee we have definitely provided for this in the last clause of the amended Resolution."

2.4 This in brief is the genesis of the Convention commonly known as the "Separation Convention" which was adopted by a resolution of the House of the 20th September, 1924, and was approved by the Secretary of State.

2.5 The Convention itself contained provision for its own review within three years. A Committee of the House sat upon it in 1928 but came to no conclusions. The general economic depression in the early thirties hit the Railways Finances hard and depleted all their reserves in the endeavour to maintain the contribution to the General Revenues and also resulted in the postponment of renewals and replacements on the Railways. Ultimately, the situation deteriorated to such an extent that a moratorium had to be declared and General Finances received no contribution from the Railways

until the early forties when the Second World War brought heavy traffic to the railways in India and they showed huge earnings.

2.6 There had been numerous Cut Motions, Resolutions and Questions all of which pointed to the failure of Convention to give satisfaction under the varying conditions prevailing at the time they were moved. During the debate on the Cut Motion moved on March, 20, 1942 member after member emphasised this fact.

2.7 On the 2nd March, 1943, Sir Edward Benthall, the then Member for Railways and War Transport, moved the following Resolution in the House:

> "That whereas it has found that the Convention, which was adopted under the assembly Resolution, dated 20th September, 1924 and which was intended, to relieve the General Budget from violent fluctuations caused by the incorporation therein of the Railway estimates and to enable Railways to carry on a continues Railways policy based on the necessity of making a definite return to General revenues on the money expended by the State, has not achieved these objectives, this assembly recommends to the Governor General in Council that:

(i) for the year 1942-43, a sum of Rs. 2,35,32 thousand shall be paid to general revenues over and above the current and arrear contribution due under the Convention.

(ii) from the 1st April, 1943, so much of the Convention as provides for the contribution and allocation of surplus to general revenues shall cease to be in force.

(iii) for the year 1943-44, the surplus on commercial lines shall be utilised to repay any outstanding loan from the depreciation fund and thereafter be divided 25 per cent to the Railway reserve and 75 per cent to general revenues, the loss, if any, on strategic lines being recovered from general revenues; and

(iv) for subsequent years and until a new Convention is adopted by the Assembly, the allocation on the surplus on commercial lines between the Railway reserve and general revenues shall be decided each year on consideration of the needs of the Railways and general revenues the loss, if any, on strategic lines being recovered from general revenues."

2.8 While explaining the reasons for bringing forward the above Resolution, Sir Edward Benthall stated as below:

> "This first is the necessity of relieving general revenues this year and next. The general budget introduced by the Honourable the Finance Member on Saturday in itself illustrate the justification for this. The second is the necessity of relieving the Railway Budget in the future years, if we are to meet the first necessity to the extent

proposed in the present emergency. We should, in my opinion, definitely not be justified in giving such a large share of the surplus profits to general revenues, unless Railways are relieved of the one per cent, contribution in the future. From the Railway point of view, I consider paragraph (ii) of the Resolution to be an essential, element of the proposals for distributing the anticipated surpuls of 1943-44. If Railways are not relieved of the one per cent contribution for future years, we should allocate more to the Railways Reserve now in order to provide for payment of this contribution in times of depression. Any other course would unsound finance on the long term view."

2.9 Some Members then urged an immediate wholesale revision of the Convention. But Edward Benthall cautioned that they were at that time budgeting on boom conditions (as the War was in full swing) and for a final revision it would be necessary to forecast the probable gross receipts and expenditure in normal times before an appropriate basis of allocation between Railways and General Revenues could be settled. During the debate that took place on the above Resolution, three proposals were made. One was that there should be *ad hoc* committee to examine the whole question. The second was that an expert commission should be appointed. The third proposal was that a Committee of the House should be set up to examine this question. The suggestion made by Sir Edward Benthall was that this matter should be referred to the Standing Finance Committee for Railways and, if appropriate, to the Central Advisory Council for Railways. Sir Edward Benthall while winding up the debate offered to appoint a special Committee of the House to consider this question and the Resolution was adopted.

To sum up, the essence of the Resolution adopted in 1943 was that, so far as the contribution to General Revenues was concerned, the provisions of the 1924 Resolutions should cease to operate. The Resolution directed an *ad hoc* contribution from the year (1942-43) and also the following year (1943-44) and provide that for the subsequent years the contribution should be decided on an *ad hoc* basis according to the circumstances attending both the administration of General Finances and the administration of Railway Finance.

Convention of 1943

2.10 In pursuance of the Resolution passed by the Legislative Assembly on the 23rd March, 1943 to consider matters arising out of clause (iv) of the Assembly's Resolution of the 2nd March, 1943 amending the Separation Convention adopted by the Assembly on the 20th September, 1924, a Railway Convention Committee was constituted but it was wound up soon after it issued an interim report. The Committee *inter alia* recommended that until the Convention was revised, the present rate of contribution to the Depreciation Fund should not be reduced.

2.11 In 1947, during the Budget Session a Committee of the Legislative Assembly was set up for the purpose of investigating into this matter, but owing to the impending constitutional changes on account of the transfer of power, the Central Legislative Assembly and its Committees ceased to exist on the dissolution of the Assembly after the Budget Session 1947.

2.12 The matter of revision of the Convention was also considered by the Indian Railway Enquiry Committee (1946-47) of which Pandit H.N. Kunzru was the Chairman. That Committee were against the immediate revision and suggested that it should wait till the Railways had fully recovered from the impact of accumulated arrears of replacements etc. as a result of the War. This Committee stated as below:

> "As in the present unstable conditions, no fixed principle can be laid down for making allocation to the Fund, we content ourselves to recommending that an annual contribution to the Fund for the next five years be made at about Rs. 22 crores per annum."

The Government, however, did not accept this recommendation.

2.13 The Arrangments laid down in the Convention Resolution of 1943, which, though continued till 1948-49, did not work in a very satisfactory manner. While introducing the Railway Budget for 1948-49, Dr. Johan Matthai, the then Railway Minister, announced the appointment of a Committee consisting of three Members of the Standing Finance Committee and three Members of Railway Standing Finance Committee under the Chairmanship of Shir G.V. Mavalankar, Speaker of the Constituent Assembly of India (Leg.) to decide the question of allocation of the Railway Surplus. This Committee fixed the share payable to General Revenues as 50 per cent (viz. Rs. 4-$^1/_2$ crores) of the anticipated budget surplus of Rs. 9 Crores for 1948-49 and any excess over Rs. 9 crores was to be credited to the Betterment Fund. However, this amount was raised to Rs. 7.34 crores on the basis of the revised estimates of Railways for 1948-49. The same principle was followed while framing the Budget estimates of the Railways for 1949-50.

Convention of 1949 set up after Independence

2.14 In the course of his Budget Speech for 1949-50, the Railway Minister made an announcement about setting up a Railway Convention Committee consisting of Members of the House to go into this matter including also the problems relating to the Depreciation Fund and make its recommendations before the end of the calendar year 1949.

2.15 The working of Separation Convention has been reviewed from time to time by Committee appointed in 1954, 1960, 1965, 1973, 1977, 1980, 1985, 1989, 1991. The present Committee was constituted by the Speaker on 3 September, 1996.

Role of Convention Committee

2.16 The Railway Convention Committee is an *ad hoc* Committee constituted from time to time to review the rate of dividend which is

payable by the railway undertaking to the general revenues as well as other ancillary matters in connection with railway finance *vis-a-vis* general finance and make recommendations thereon. Apart from recommending the rate of dividend payable by the Railways to the General Revenues, it also suggests the level of appropriation to various funds of Railways like the Depreciation Reserve Fund and the Development Fund. The Railway Convention Committee, 1949, which was the first to be set up after Independence, assured a steady return to General Revenues and also enabled the Railways to strengthen their reserves for discharging their obligation towards rehabilitation, increasing operational efficiency and provision of adequate amenities. It also arrested the growth of over-capitalisation in the Railway Undertaking.

Structure of the Committee

2.17 The Committee is constituted from time to time by a resolution moved in Lok Sabha by Government and concurred in by Rajya Sabha. It consists of 12 members of Lok Sabha nominated by the Speaker and 6 members of Rajya Sabha, nominated by the Chairman, Rajya Sabha, are also associated with the Committee. The Chairman of the Committee is appointed by the Speaker from amongst the members of Lok Sabha. The Minister of Finance and the Minister of Railways are among the members nominated to the Committee. However, for the first time, Minister of Finance was not nominated as a Member of the Railway Convention Committee (1989). After change of Government at the Centre on 10 November, 1990, the new Railway Minister was also not nominated to the Committee and the former Railway Minister continued to be a member of the Committee. In Railway Convention Committee (1991) both Railway Minister and Finance Minister were not nominated as a member of the Committee. However, both the Minister for Railways & Finance were nominated to the Committee against subsequent vacancies.

In the Railway Convention Committee (1996) only Railway Minister has been nominated to the Committee.

Functioning of the Committee

2.18 While the Railway Convention Committee of 1949, 1954, 1960 and 1965 confined themselves only to the question of determining the rate of dividend payable by the Railways during the succeeding quinquennium, the Railway Convention Committee, 1971 for the first time selected some subjects for detailed examination and presented seven reports to Parliament covering not only the question of dividend, but also such diverse subjects as accounting matters, suburban services, commercial and allied matters and requirements and availability of wagons. The subsequent Committees, have also been, in addition to reporting on the rate of dividend payable by the Railways to General Revenues, examining and reporting on various aspects of working of Railways and Railway Finances.

The Railway Convention Committee (1996) has also selected a number of subejcts (Appendix I) which have bearing on Railway Finances.

2.19 As regards the rate of dividend that may be payable by the Railways to the General Revenues, the Committee invites a memorandum from the Financial Commissioner of Railways. The memorandum contains the views of both the Ministry of Railways and the Ministry of Finance on various proposals made in the memorandum. The report of the Committee on the rate of dividend is considered by the House on a resolution moved by the Ministry of Railways. Other reports of the Committee are normally not discussed in the House.

2.20 Although the Committee has not drawn up any separate rules to regulate its internal working, it functions more or less on the same lines as other Financial Committees of Parliament. The Committee invites memoranda from the Ministry of Railways and other concerned Ministries as also from non-official individuals/organisations. Sometimes, it also invites memoranda from State Governments.

The Committee takes the evidence of the representatives of the Ministry of Railways and representatives of such other Ministries as it may consider necessary. Whenever necessary, it also hears the views of non-official individuals/organisations who are/have been closely concerned with the working of Railways in India. Thus the workload of the RCC has also multiplied, without adequate increase of staffing pattern.

CHAPTER III

SUPERIORITY OF THE RAILWAYS AS A MODE OF TRANSPORT

3.1 All modes of transport have their own importance in economic development of the country. However, it is important to have a comparative assessment of costs and benefits of various modes, as to allocate the resources and investments to get maximum economic return. Railways and waterways have a definite advantage over road and air in terms of

— Energy efficiency
— Environment friendliness

Energy Efficiency

3.2 Rail transport is estimated to be 7 times more energy efficient than road transport. This assumes special importance when transport volume increases substantially as the economy grows.

3.3. The importance of energy efficiency in transport policy and in determining the optimum inter-modal mix for the future, was also highlighted by the National Transport Policy Committee.

The Committee recommended as follows:—

> "We are concerned about our heavy dependence in transport on petroleum products—a non-renewable resource. Transport consumes nearly a third of the country's oil and a substantial portion of diesel supplies. It is sometimes argued that the real resource constraint in determining an optimal inter-modal mix for the future should not be availability of monetary funds as shortages of oil supplies. Accordingly, it is suggested that the use of private cars and lorries should be discouraged and railways encouraged for energy conservation. There is no doubt that energy conservation will be the most important guiding principle in the framework for determining an optimal mix of our future transport system.....
> .....The second policy consideration is that as modes of transport have varying energy efficiencies, we should choose those which yield maximum transport service per unit of energy consumption.
> .....We hold the view that in choosing an appropriate modal mix for the country's transport system, including choice of technological possibilities within each transport sector, energy conservation, particularly saving of fuel oil, must, other things being equal, receive priority".

3.4 The Report of Steering Committee on perspective Planning for Transport Development (Luthra Committee) has also recommended as follows:

> "The corresponding values of the yield in respect of diesel and electric traction are 23.3 and 24.2 percent respectively. Steam traction is being phased out by the turn of the century. Of the remaining two modes of traction, electric is marginally superior to diesel, but capital investments on overhead structures for electrification are very high. Hence only on heavy density double (or multiple) line sections, electric traction is more fuel efficient than diesel. In view of our continued dependence on import of POL, it is important that conversion from diesel to electric traction be planned on all high density double-line sections. This will also help control air pollution.
>
> ....The electrification programmes of the Railways should help minimise the consumption of diesel. Besides energy conservation, electric traction also avoids atmospheric pollution. In this context, our attention has been drawn to the high electricity tariff charged to the railways by some of the State Electricity Boards and other Public Sector Power Corporations. We recommend that the Central Government should use its good officers to persuade the State Electricity Boards and Public Sector Power Corproations to charge reasonable tariff for the supply of electric power for traction purposes. The rate charged should be related to actual cost of generation and transmission of power".

Environment Friendliness

3.5 The transport causes environment damage due to the following reasons:

— Accident
— Noise
— Air Pollution
— Climate Change.

3.6 the Railways is eco-friendly from the point of space utilisation and also environment friendly from the point of pollution-free comparing to other modes of transport.

3.7 This has been illustrated by the fact that the total consumption of diesel is hardly about 20 percent of the total traffic, whereas the road transport is totally dependent on diesel and petrol, thereby causing enormous hazards to the environment.

3.8 TYPICAL COMPOSITION OF EXHAUST GASES (HEAVY VEHICLES) IN PARTS PER MILLION (PPM) BU VOLUME

Pollutant	Idling	Acce-lerating	Cruising	Decelera-tion
(a) Petrol Engines				
Carbon Monoxide(CO)	69000	29000	27000	39000
Hydrocarbons	5300	1600	1000	10000
Nitrogen Oxides(NO) ×	30	1020	650	20
(b) Diesel Engines				
Carbon Monoxide(CO)	Trace	1000	Trace	Trace
Hydrocarbons(HC)	400	200	100	300
Nitrogen Oxides(NO)	60	350	240	30

Source : **Road Transport and the environment by B. Cottee**

3.9 An expert body in Europe has come out with the following conclusion on the external cost caused by damage to the environment due to different modes of transport — Rail, Road, Air and Waterways based on data collected from 17 Western European Countries.

External Cost (Passenger traffic)		
Private Cars	—	50 ECU/1000 pkm.
Bus traffic	—	20 ECU/1000 pkm.
Rail traffic	—	10 ECU/1000 pkm.
Air traffic	—	18 ECU/1000 pkm.
External Costs (Freight Traffic)		
Road	—	58 ECU/1000 tkm.
Rail	—	6 ECU/1000 tkm.
Waterways		5 ECU/1000 tkm.

Presently there is no system to include these costs while assessing costs and benefits of different modes of transport. What is important to note is that the external costs caused by Rail transport is less than one-fifth in passenger traffic and one-tenth in freight traffc. This factor therefore assumes special importance while formulating comprehensive national transport policy.

3.10 Due to these consideration European Countries have started strengthening railways to carry greater market share of transport by adopting various legislative and reform measures. The European Council Direction EEC/440/01 of 29 July, 1991 provides the basic policy direction to achieve this goal.

CHAPTER IV

EFFECT OF ECONOMIC REFORM

The economic reform process launched in 1991 has brought out structural changes in the Indian economy. Removal of controls dismantling of permit raj, de-bureaucratisation and de-licensing of industries has brought a sea change in the Indian economy.

Economic Growth

4.2 With the introduction of economic reforms, there is a discernable economic growth in various sectors of economy. To meet the ever growing transport requirements of economy, Railways being the bulk transport carrier will have to generate sufficient transport capacity so that the economy does not suffer on account of transport bottlenecks.

4.3 The Approach Paper to Ninth Plan has projected 7 percent growth rate in the economy. It is anticipated that during the next decade, Indian Railway would have to double its freight and passenger transport output. It is roughly estimated that the growth of Railway traffic — both freight and passenger should be in the order of 8—10 percent to enable it to meet the anticipated 7 percent growth rate in the economy.

4.4 Railways should therefore endeavour to modernise in a bigway to meet the challenges on account of spurt in the economic growth. This needs huge investments projected to the order of 10,000 to 12,000 crore annually in the Ninth Plan period.

Competition From Other Modes

4.5 The Planning Commission in its Approach Paper to Ninth Plan have stated that the share of Railways in freight traffic has declined from 89 precent in 1951 to 40 percent in 1995, while its share in passenger traffic went down from 72 percent to 20 percent during the same period.

4.6 Not surprisingly, the economy has turned from one pre-dominantly carried on the rails in the fifties to one another pre-dominantly carried on roads. Now roads, Water Transport and Air Transport together carry 60 percent of freight traffic of the economy and this, according to a Press Report appeared in Business Standard dated 11.9.1996 is likely to go up to 65 percent by the turn of the century.

4.7 Asked about the reason for the reversal in the trend, the Special Secretary, Planning Commission deposed as follows:—

> "I entirely agree with the view that there has been a total reversal of the freight and the passenger traffic. But that is more to do with the commercial outlook that the Railways will be required to adopt

more attracting for passenger and freight traffic, in today's context. The Railways have taken a conscious decision to carry only the bulk commodity because it allows them to utilise the wagon turnover in a better manner. For various other reasons, they are not going into the parcel traffic at all. We have been impressing on them to increase this share which is today forming the bulk of the freight transportation. But they have not agreed to look at this sector at all because perhaps with the public sector, they are in a position to get a better freight and whatever freight they are carrying now is enough for their capacity utilisation.

They have not looked into parcel traffic at all. Also, the bulk of the goods are with the private sector today. The road transport enjoys better consumer preference in the sense, it is a uni-mode of transport that takes goods from the godown to the various places where they are to be sold and distributed. Railways has to develop this sort of outlook to attract better or major portion of this traffic".

CHAPTER V

CHALLENGES AHEAD OF INDIAN RAILWAYS

The formulation of the IX Plan comes at a critical point of time for InR. As the main component of the transport infrastructure, Railways have a crucial role to play in the sustained development of the economy. The change in economic philosophy, rapid acceleration in the pace of the nation's economic growth and the concomitant changes in Government policy have confronted Indian Railways with the sternest challenge in their history. The Railways will require to respond to the changed environment by making the necessary competitive adjustments to deal with the pressures of market forces in a liberalised economic environment, not only in order to remain financially viable but to be able to satisfy the growth in demand for rail transport as a result of accelerated growth of a vibrant economy. At the same time, the Railways as a public utility would have to continue to be responsive to their public service obligations.

5.2 In formulating the IX Plan, the imperative of striking a proper balance between the Railways' dual role as a public utility on the one hand and a commercial enterprise to be run on sound business principles on the other, constitutes the major challenge of investment planning. In a resource-strapped regime and with dwindling Government support, the Railways would have to assess objectively the trade off between targeting investment for capacity generation and investing in developmental projects which are unremunerative. Bold initiatives to improve technology and operating practices would also be required to generate adequate transport capacity and improve the utilisation of existing assets.

Investment Strategy

5.3 The investment strategies for Indian Railways are primarily guided by the anticipated growth in freight and passenger traffic.

5.4 Based on the projections of freight and passenger traffic growth, investments has to be made for commensurate increase in capacity.

5.5 The National Transport Policy Committee has also recommended that huge investments are needed for development of Railways.

The Committee recommended as follows:

> "Railways have been, are and will continue to be the nation's principal mode of transport. The task we visualise for the railways in future is enormous with steady increase in demand for both freight and passenger traffic. The utilisation of assets created have improved over the years, traffic densities increased many fold and most of the trunk routes are working at saturated levels. There

have been frequent shortages of rail services, particularly in the recent past, with bottlenecks appearing in the system. There is thus a need to provide resilience in the rail system to meet changing patterns of traffic and sudden spurts in demand. This would call for an increased investment in the system to enable the railways to meet the demand. Investments are, indeed, a determining factor bold for the future of the railways for their development".

5.6 Railways have projected a comprehensive transport plan for the 9th Five Year Plan. The objectives of the plan are as under:—

(1) Generation of adequate rail transport capacity for handling increasing freight and passenger traffic with special emphasis on development of terminals.

(2) Completion of the process of rehabilitation, replacement and renewal of overaged assets.

(3) Modernisation and upgradation of the rail transport system to reduce the costs, improve reliability, safety and quality of service to customers.

(4) Continue with the policy of Unigauge.

(5) Introduction of 6000 H.P. Electric locomotives and 4000 H.P. Diesel locomotives employing state-of-the-art technology.

(6) Expand and upgrade inter-modal operations including containerisation.

(7) Improvement of Man power productivity, work culture and staff morale.

5.7 The Ministry of Railways have informed the Committee that they have targetted to achieve 525 million tonnes of originating revenue loading (353 billion tonne km.), 2988.87 millions of originating suburban and 1793.25 million of originating non-suburban passengers during the terminal year of IX Plan, i.e., 2001-02. The total plan size proposed by the Railways is Rs. 65000 crs.

5.8 The IX plan working group for Indian Railways in their report have made the following projections in respect of freight and passenger traffic growth in IX plan period:—

Freight Traffic Projections

5.9 The elasticity of freight and passenger transport with respect to GNP has been assessed as 1.5 and 1.9 respectively for the transport sector as a whole. In the case of the railways the elasticity has been historically about 0.9 for freight and 1.0 for passenger. The low elasticity figures are

indicative of the falling share of railways in the transport market which has declined from about 89% in 1950-51 to 40% in 1994-95 in the freight sector and from about 68% to 20% in passenger sector. With the economy poised to grow at 6 to 7% per year the freight output would have to grow at more than the historical growth rate of about 3.6% if the railways are not to become a stumbling block in the growth of the economy.

Considering the pivotal role of the Railways in promoting economic growth, the prime task in the IX Plan would be the generation of adequate transport capacity to handle the traffic offered from different core sectors of the economy. The freight traffic projections in the terminal year of the IX Plan (2001-2002) based on the different calculations or demand projections, the users' forecasts and as estimated by the IX Plan Working Group, taking 1996-97, the terminal year of the VIII Plan as the base year, are given below:—

	Tonnage (Millions)	Btkms (Billions)	Average Growth Rate	Lead (km)
1996-97 (Target)	410	282.9	—	690
User's Projections	614	427	8.41%	673
Time Trend Analysis	490.5	341	3.65%	695
Elasticity with reference to GDP (0.9)	533	360.2	5.39%	695
IX Plan Working Group	525	353	5.00%	673

The Working Group further stated that the projection based on the time-trend analysis does not correctly reflect the users' requirement, as it is essentially based on historical data and does not give adequate weightage to the accelarated future growth. The forecast based on the GDP growth, assumes a GDP growth rate of 6% per annum and a constant elasticity of 0.9. This yields a growth rate of nearly 5.4% per year which is substantially higher than the historical growth rate of 3.65%. The users' projections have been pitched at a level that is unrealistically high when judged against the materialisation of traffic in the past. Moreover, development of railway infrastructure by its very nature has long gestation on account of which it would not be possible for the Railways to create matching infrastructure in the short term even if the projected level of traffic were to materialise. The Working Group has thus moderated the Users' projections on the basis of an analysis of the past performance of users, present status of their expansion programmes as also the estimation of the likely time-frame of new plants going on stream, and railways capacity to augment its fixed infrastructure and production capacity of its production units engaged in the manufacture of locomotives, coaches, etc. Even the capacity of the private sector to significantly increase production

of wagons is limited. IR will thus be required to achieve an incremental growth of 70 btkms during the Ninth Plan against the best ever past performance of 57 btkms of incremental traffic in the Seventh Plan.

The freight projections of the Working Group would mean a 5% compound annual growth rate over the Ninth Plan period, which appears to be a reasonable and realistic estimate of the future growth albeit substantially higher than the growth rate of 3.6% achieved during the last three decades.

Perennial constraint of resources has adversely affected Railways' development resulting in diversion of traffic from rail to road at an overall higher cost to economy, although through successive plans the main theme of the Railways' planning has been creation of enough transport capacity to be just ahead of the demand. National Transport Policy Committee (NTPC) had recommended that Railways should plan to carry 72% of the total land freight by 2000 AD whereas the Railways share has been declining and at present is less than 40% of the total freight.

With the economy growing at a targetted rate of 6-7% per year, even a growth rate of 5% for the Ninth Plan would imply a continuing fall in rail share in the transport market. If, as recommended by the Planning Commission, the rail share in the overall transport system is to be increased by 5% then the rail freight traffic to be lifted in the terminal year of the Ninth Plan, calculated on the basis of modest GDP growth rate of 6%, works out to a staggering 427 btkms. It is not practicable to achieve an incremental freight output of 144 btkms (50%) in a Five Year Plan period. As mentioned earlier, action has to be initiated in the Ninth Plan to generate adequate capacity to arrest/reverse the trend of the decline in the market share of the railway in the transport market by the beginning of the Tenth Plan.

Passenger Traffic Projections

5.10 The passenger traffic projections pose an equally formidable challenge to the Railways especially when one considers that the demand for new services are concentrated on the arterial routes, which are already choked. Elasticity of passenger transport with respect of GDP has been estimated as about 1.0 Anticipated growth of GDP at 6% per annum would generate demand for passenger transport of 6%. The historical rate of growth of passenger traffic, however, has been 4% per annum. At this rate of growth, the passenger kilometres required to be generated in

2001-02 would be 429 billion. However, according to the estimate of the Ninth Plan Working Group, the non-suburban passenger traffic projections are as under:—

	Target 1996-97		Projected 2001-02		
	Passengers (Millions)	PKMs (Billions)	Passengers (Millions)	PKMs (Billions)	Annual Growth rate
Non-Suburban	1590	268.64	1793.25	312.9	3.10%
Suburban	2602	72.65	2988.87	86.5	3.55%

Demographic projections for the year 2001 indicate that the percentage of urban population would increase from 25.72% of the total in 1991 to 33.06% in 2001. This growth would have a large impact on suburban traffic transport demand. Forecasts of urban population growth project a doubling of the urban polulation within the next decade and a fivefold increase over the 1991 figure by the year 2025. As the cost of living in the major urban centres becomes unaffordable for large proportion of the urban population, there may be greater demand for rail transport from the satellite towns and mass rapid transit could possibly be the only system capable of catering to movement of people in such large numbers.

Use of long distance passenger services by the suburban commuters is a source of considerable irritation and inconvenience to the long distance passenger having reserved accommodation and the Railways cannot ignore its responsibility of meeting the suburban transport needs of the large cities. Time has come for creation of dedicated suburban corridors in the major metropolises, as also upgradation of the dispersal systems so as to reduce concentration of congestion on the roads in front of the railway stations. State Government/local authority have to chip in for both initial funding of the cost of suburban infrastructure and for losses incurred in operation of such short distance services so that quality service can be provided to the passengers.

5.11 To meet the above traffic projections—both freight and passenger, huge investments are requirement for increase in railway capacity. The resource mobilisation for the investments is a gigantic task.

5.12 In regard to resource mobilisation for Ninth Plan, the Working Group on Railways have stated that the requirement of resources for the

Plan were estimated for the levels of traffic projected by the users and those estimated by the Working Group. The estimates are as follows:—

Forecast by	btkms	Resource Requirement (in Rs. crores)
Users	427	93000
Working Group	353	65000

5.13 The creation of capacity to move 427 btkms of traffic would call for investment in double/multiple lines on existing corridors, construction of new lines and acquisition of additional rolling stock. It has been estimated that the asset requirement per year would be of the following magnitude:—

Asset	Requirement per year
Doublings/Multiple lines	900 Kms.
Wagons	57853
Locomotives	546

5.14 Generation of manufacturing capacity to meet the above requirements even if finances are available would present a challenge to the industry and the railways. For example at present, the wagon manufacturing industry products about 25000-26000 wagons per year. It would have to nearly double its output to meet the requirements. Similarly, the manufacturing capacity for locomotives would require to be increased substantially. Whether this quantum jump would be feasible in the short run has to be carefully considered in consultation with the industry.

5.15 Since the resource requirements for moving the traffic projected by the users was much above what could realistically be achieved, the analysis of resource mobilisation was confined to the requirement based on the traffic forecast by the Working Group. The methods of raising the

resources required for the Ninth Plan presents the greatest challenge to the Working Group. Year-wise requirement of funds has been assessed as under:—

Year	Rs. in crore
1997-98	10000
1998-99	11000
1999-2000	12500
2000-2001	14500
2001-2002	17000
Total	65000

5.16 In order to appreciate magnitude of the task involved in finding resources for the Ninth Plan, it may be worthwhile to take a look at the source-wise financing of the Eighth Five Year Plan, presented below:—

(Rs. in Crores)

Year	Internal Geneation	Market Borrowing*	Budgetary Support	Total
1992-93	2548(41%)	1025(17%)	2589(42%)	6162
1993-94	4030(69%)	856(14%)	975(17%)	5861
1994-95	3582(65%)	745(14%)	1145(21%)	5472
1995-96 (RE)	4423(59%)	1927(26%)	1150(15%)	7500
1996-97 (BE)	4111(50%)	2750(34%)	1269(16%)	8130

5.17 The Ninth Plan Working Group on Railways have further stated that until now more than 50% of the resources are being generated from the Railways' own earnings and another substantial portion through market borrowings. The recourse to market borrowing by the Railways in view of the reduced budgetary support over the years has severely circumscribed Railways' capacity for mobilising internal resources due to increased payments of lease rentals to IRFC, etc. Moreover in sharp contrast to all other major Railway systems which are dependent on direct subsidies from their Governments, Indian Railways have to pay dividend in perpetuity for all the Government money received since 1951. In 1995-96, the Railways received Rs. 1150 crs. as budgetary support and paid back a dividend of Rs. 1360 crs. It may be further noted that Railway Fund Balances (DRF, PF, CF) maintained with Ministry of Finance are in excess of Rs. 3860 crores, on which railways receive an interest rate of only 7%. The concessional element of low rate of interest on the budgetary support is

*Incl. BOLT & OYWS

more than offset by the low rate of interest received on the huge Railway Fund Balances kept with the Ministry of Finance.

5.18 The financial burden is further exacerbated due to various public service obligations carried by railways as mentioned in Chapter XII, Railways are required to double the investment over the Eighth Plan period due to projected higher rate of growth of economy. The task becomes formidable considering that the Ministry of Finance has indicated that the budgetary support is not likely to increase but on the contrary will be reduced. Another critical factor which will adversely impinge on the Railways' capacity to generate resources internally would be the implementation of the recommendations of the Fifth Pay Commission, the full impact of which will be felt in the Ninth Plan.

5.19 It is evident that current level of Government financial support on the methods hitherto adopted for mobilising funds would leave a huge unfilled gap in resources. An estimate of the financial results in the Ninth Plan has been made at current prices keeping the appropriations to DRF, budgetary support, market borrowing at the same level as in 1996-97, with only Pension Fund appropriation being hiked at 7% every year. The unfilled gap is a staggering Rs. 25178 cr. Even if budgetary support is increased by 10% every year the financial results show only a marginally less dismal position.

5.20 Quite clearly the railways would have to find radical solutions for funding the Ninth Plan. It may be broadly assumed that Indian Railways may be able to generate about Rs. 3900 crores *i.e.* 30% of projected Annual Capital Expenditure Programme of about Rs. 13000 cr. from internal operations with a modest hike in fare and freight to neutralise the impact of rise in input costs. The outgo on account of anticipated hike in the wage bill and pension payments could be contained by the incremental revenue from the projected increase in the billion tonne kms. provided IR is able to strictly observe the discipline of controlling the size of its work force.

5.21 Economy today is poised for accelerated growth as a result of economic reforms initiated by Government. Rail Transport capacity is likely to become a serious bottleneck notwithstanding the fact that the rail mode is most efficient mode in surface transport. Even for a modest growth of 6% per annum in the traffic output in the Ninth Plan, investments required for building up fixed infrastructure and procurement of rolling stock are double of those in the Eighth Plan.

Management Reform

5.22 The Indian Railways is departmentally run organisation falling under the jurisdiction of Ministry of Railways (Railway Board).

5.23 The Ministry of Railways (Railway Board) is under the charge of a Minister of Cabinet rank, who is assisted by Minister of State/Deputy Minister. The Railway Board as at present consists of:—

(i) The Chairman;
(ii) The Financial Commissioner for Railways; and
(iii) Five other members.

5.24 The Chairman, Railway Board is *ex-officio* Principal Secretary to the Government of India in the Ministry of Railways. He is responsible to the Minister of Railways (or as delegated by him) for arriving at any decisions on technical and non-technical questions and advising the Government of India on matters of Railway policy.

5.25 The Financial Commissioner for Railways is vested with full powers of the Government of India to sanction Railway expenditure and is *ex-officio* Secretary to the Government of India in the Ministry of Railways in financial matters.

5.26 The Members of the Railway Board are separately in charge of matters relating of Staff. Civil Engineering, Traffic, Electrical Engineering and Mechanical Engineering. They function as *ex-officio* Secretaries to the Government of India in their respective spheres.

5.27 The Ministry of Railways have the following Field Organisation, Attached and Subordinate offices under it:—

A. Field Organisations

(i) Central Railway, Bombay.
(ii) Eastern Railway, Calcutta.
(iii) Northern Railway, New Delhi.
(iv) North Eastern Railway, Gorakhpur.
(v) North East Frontier Railway, Guwahati.
(vi) Southern Railway, Madras.
(vii) South Central Railway, Secunderabad.
(viii) South Eastern Railway, Calcutta.
(ix) Western Railway, Bombay.

The Ministry of Railways have recently decided to set up the following new Railway Zones:—

(i) East Coast Railway, Bhubaneshwar.
(ii) North Central Railway, Allahabad.
(iii) East Central Railway, Hazipur.
(iv) North Western Railway, Jaipur.
(v) West Central Railway, Jabalpur.
(vi) South Western Railway, Bangalore.

B. Production Units/Metropolitan Projects

(i) Chittaranjan Locomotive Works, Chittaranjan.

(ii) Integral Coach Factory, Madras.

(iii) Diesel Locomotive Works, Varanasi.

(iv) Wheel & Axle Plant, Bangalore.

(v) Metropolitan Transport Projects, Calcutta, Bombay, Delhi & Madras.

(vi) Diesel Component Works, Patiala.

(vii) Central Organisation for Modernisation of Workshops, New Delhi.

(viii) Rail Coach Factory, Kapurthala.

(ix) Northeast Frontier Railway (Construction), Guwahati.

(x) Central Organisation for Railway Electrification (CORE), Allahabad.

C. Attached Offices

(i) Research, Designs & Standards Organisations, Lucknow and CAMTECH at Gwalior.

(ii) Office of the Railway Liaison officer with the Directorate General of Supplies & Disposals, New Delhi.

D. Subordinate Offices

(a) Centrallised Training Institutions/Railway Recruitment Boards.

(i) Railway Staff College, Vadodra.

(ii) Indian Railways Institute of Civil Engineering, Pune.

(iii) Indian Railways Institute of Signal Engineering & Telecommunication, Secunderabad.

(iv) Indian Railways Institute of Mechanical & Electrical Engineering, Jamaplur.

(v) Indian Railways Institute of Electrical Engineering, Nasik.

(vi) Railway Recruitment Boards at Ajmer, Ahmedabad, Allahabad, Bangalore, Bhopal, Bhubaneswar, Calcutta, Chandigarh, Chennai, Guwahati, Gorakhpur, Malda, Mumbai, Muzaffarpur, Patna, Ranchi, Secunderabad, Srinagar, Trivandrum.

(b) Besides the above, there is a tribunal called the Railway Rates Tribunal set up under the Railways Act, 1989

functioning under the Ministry of Railways, with headquarters at Chennai.

E. Other Offices/Units

(i) There are offices of Railway Adviser at Bonn. Dy-Railway Advisers at Paris and London and Technical Assistants at Bonn.

(ii) Two Public Sector Undertakings, *viz.* Rail India Technical & Economic Services Ltd. and Indian Railways Construction Company Ltd. function under the Ministry of Railways.

(iii) Three Corporations *viz.* Indian Railway Finance Corporation, Container Corporation of India Ltd. and Konkan Railway Corporation Ltd., also function under the Ministry of Railways. There is also another organisation namely CRIS (Centre for Railway Information Services) which is an autonomus body functioning under the control of Ministry of Railways.

5.28 The Indian Railways as a kingpin of the national economy face a formidable challenge. The severe resource crunch which Indian Railways now experience may get further compounded in the context of escalating costs and limited scope of revenue increase. While the costs can be pruned largely by down-sizing the apparatus and improving operational techniques, including maintenance of assets, there appears little room left for any major increase in fare and freight tariffs. There are thus only peripheral possibilities for any major internal resource generation.

5.29 It has become imperative for Railways to restructure itself to cope with the pressures exerted by market forces unleased by the liberalisation and globalisation of economy, if it were to stay ahead in the competition.

5.30 Indian Railways is presently able to make surpluses in the annual budgets but this situation may change due to pressures from market forces due to the following reasons:—

(i) Hitherto Indian Railways used to get most of its finances from Central Government at a concessional interest. The interest burden is relatively less. Now that this support is getting reduced and Indian Railways is forced to borrow money from the market the interest liability will increase. Similarly, the projects being dealt with on lease finance basis also will prove to be very costly.

(ii) Staff costs are likely to rise sharply in an environment of liberalised economy.

(iii) Energy costs are likley to rise when the Government controls are relaxed.

(iv) The reform process initiated by the Government, as it moves further, the road sector will become stronger to divert some of the traffic away from rail: other modes of transport such as air and waterways also will become strong to compete in some sectors.

(v) Once Indian Railways losses its ability to generate surpluses to fund the developmental projects, the system will degenerate.

5.31 In the interest of national economy, Railways should be in a strong position to be able to carry greater share of transport volume, since it is an energy efficient, environment friendly mode of transport. Moreover, its external costs are also much less compared to road transport. It is, therefore, important that Indian Railways is not only able to maintain its present share market but improve upon it by adopting more efficient management methods in a competitive environment which generates market forces detrimental to the railway system. Structural reforms, therefore, assumes importance in this context.

Technology upgradation

5.32 Modern Technology plays a vital role in significant savings in investment, cost of operation and economies of scale. It also brings in improvement of quality and reliability of service and also safety.

5.33 To sustain the modernisation efforts in Indian Railways, upgradation of the existing technologies has become almost imperative. That's why, Indian Railways have been trying to do tremendous technological upgradation in several areas such as electrification, rolling stock, track renewal, singal and telecommunication system, computerisation, etc. which would enable the Railways to improve their quality of service, conserve the energy, reduce the pollution, ensure safety and provide other amenities to the passengers.

5.34 It was only during the Seventh Plan that some serious efforts were made for the modernisation of Indian Railways. During this period, high speed and efficient locomotives for both electrical and diesel traction were introduced. New design technology for coaches, chopper control, solid state interlocking, optical fibre, digital communication technologies, computerisation etc. have also been introduced. In the Eighth Five Year Plan, the modernising efforts in the Indian Railways have also been given priority. Some of the main objectives in the Eighth Five Year Plan were:—

(i) Generate adquate capacity.

(ii) Complete the process of rehabilitation/replacement and renewal of overaged assets.

(iii) Modernise and upgrade the system to reduce cost and improve reliability.

(iv) Adopt unigauge—6000 Km. of metre/narrow gauge to be converted to broad gauge.

(v) Phase out steam locomotives completely an broad and narrow gauges by 1996-97.

(vi) Electrify 2700 route km. of dense corridors to reduce dependence on diesel fuel.

(vii) Expand and upgrade inter-modal operations including containerisation.

(viii) Improve manpower productivity.

5.35 The Indian Railways in its 'status paper on Indian Railways' has also drawn up a perspective plan for technology development. Following are the strategies to be adopted and missions identified:—

(i) Operation of 4500 tonne freight trains at double the existing average speeds on mixed traffic routes.

(ii) Operation of passenger services upto 160 km/h on mixed routes and 200 km/h on dedicated routes.

(iii) 'Heavy Haul' freight trains of upto 18,000 tonne trailing loads at 75 km/h.

(iv) Upgradation of the Metre Gauge System, covering passenger and freight services and transhipment facilities.

5.36 The Ministry of Railways has informed the Committee that the objective of the Ninth Plan in regard to modernisation are:—

(i) Modernisation and upgradation of the rail transport system to reduce the costs, improve reliability, safety and quality of service to customers.

(ii) Introduction of 6000 H.P. Electric Locomotives and 4000 H.P. Diesel locomotives employing state-of-the-art technology.

(iii) Completion of the process of rehabilitation, replacement and renewal of overages assets.

CHAPTER VI

INCREASE IN RAILWAY CAPACITY

New Lines

Indian Railways had about 53500 rkm. of rail network at the time of Independence. Since then, up to the end of Eighth Plan, only about 9000 km. are expected to be added to the network. The table showing the growth of network from the Sixth Plan till the end of the Eighth Plan is placed at Appendix I. It is evident that during the last forty years, while the traffic has grown by about 300%, the growth in railway network has been only 16.7%. As about 85% of the existing network was built before independence, its configuration was largely shaped by the strategic and commercial interests of a colonial power. The system had thus certian inherent weaknesses, like absence of inter-connection in central India. There was a felt need to reshape the network to rectify its inherent deficiencies. Moreover, acknowledging the inherent superiority of Railways as a mode of mass transportation, a resurgence is taking place the world over and even in the developed countries after a long period of near stagnation, Railway networks are being expanded rapidly to meet the growing transport demands. It would thus be opportune to make a meaningful start in the direction. This need was realized by the Planning Commission who had set up a Committee for Expansion of Railway Network (CERN) in 1987-88 to go into the details and suggest suitable measures.

New Lines—Objectives

6.2 Based on the recommendations of the National Transport Policy Committee, Railways are now following a systems approach to take up new lines to enhance the aggregate capacity of the network. This has led to laying down of following criteria for the construction of new line.

—project-oriented lines to serve new industries for tapping mineral and other resources;

—missing links for complete alternative routes to relieve congestion on existing saturated routes;

—lines required for strategic reasons; and

—lines for establishment of new growth centres or giving access to remote areas.

6.3 The Ministry of Railways have informed that the present Government has further decided to accord priority to the development of rail transport infrastructure in the NE Region and in all other backward

and tribal areas. Several new line projects have been taken up on these considerations this year.

Review of Performance in the 8th Plan Period

6.4 In the VIII Plan, an outlay of Rs. 2940 crores was proposed for new line construction. However, since the entire expenditure on new lines is borne out of budgetary support, and adequate resources could not be provided under budgetary support, the plan outlay for new lines was kept at Rs. 900 crs. At the beginning of the IX Plan, Railways will have a huge throwforward of Rs. 4380 crs. for completing the new line works in progress covering 3610 kms. excluding the Udhampur-Srinagar-Baramula line which is to be funded outside the Railways plan in terms of the decision taken by the Government.

6.5 In view of the huge throwforward and the unlikelihood of any substantial relief in view of the dwindling budgetary support, the ongoing projects have been reviewed and categorised as under:—

1. Category 'A' lines required on urgent operational/strategic considerations.
2. Category 'B' national project with funding outside railways plan.
3. Category 'C' lines on which more than 50% expenditure has been incurred and more than 50% gestation period is over.
4. Category 'D' lines on which less than 5% expenditure has been incurred but have been taken up on national commitment.
5. Category 'E' projects on which expenditure over 5% has been incurred.
6. Category 'F' other new line projects on which less than 5% expenditure has been incurred.

6.6 In this connection the Ministry of Railways have informed the Committee that it is proposed to fund and progress first only the projects in categories A and C, as per their *inter se* priority, and to provide only token funds to keep alive the projects in categories D, E and F. As regards the project in category B *viz.* Udhampur-Srinagar-Baramula, this will progressed to the extent funds are provided by the Government of India outside the Railways budget as per the CCEA decision.

6.7 It was proposed to review certain lines in categories D, E & F which do not meet the eligibility criteria, and to drop some of them after opening the bare minimum sections where substantial work has been done. However, the Government have decided to continue all works taken up on developmental considerations and further to accord priority to the development of the rail network in the backward areas as well as in the North East Region as a result of which several New Line Projects have been added to the shelf in 1996-97 and these lines are also required to be progressed. Earlier an outlay of Rs. 1500 crs. was projected for new line

projects in the 9th plan. However, in view of this decision of the Government, this amount will be very inadequate and the Railways will require to be provided with an outlay of Rs. 2500 crs. at the rate of Rs. 500 crs. for progressing new line projects in the 9th plan period. If the outlay provided is less than this, the works will be progressed as per the priority indicated above and commissioning of new lines will be correspondingly less. This would be possible only if the budgetary support is increased suitably for which Government have been requested.

6.8 A calendar showing the new lines constructed in the first 4 years of the VIII plan and those targetted for the 5th year is at Appendix-II. A statement of new line works which will be in progress at the commencement of the IX Plan is at Appendix-III.

New Starts in the 9th Plan

6.9 The Ministry of Railways have informed the Committee that new Starts will be of two types, firstly lines recommended by CERN Committee appointed by the Planning Commission to prepare a perspective plan for the construction of new railway lines, and secondly, the lines required on strategic, and operational considerations during the plan period.

6.10 As regards the works proposed by the CERN Committee, the position is that the Committee appointed by the Planning Commission has already identified the requirement of new lines on capacity consideration till the end of the 9th Plan. These lines cover a total of 2902 kms. of new lines which were then estimated to cost Rs. 2758 crs. The lines recommended by CERN Committee and the present position in respect of each is as under:

Section	kms.	Position
1. Roha-Mangalore	836	Work will be completed within 8th Plan. Alignment modified to 760 Kms.
2. Devas-Maksi-Indore-Dahod-Godhra	316	Work in progress. Category 'F' in list under item 1.
3. Koderma-Manikpur	520	In lieu of this construction of 3rd line has been taken up. Work on First Phase between Mughalsarai and Sonnagar is in progress.
4. Ballarshah-Bibinagar	290	Survey is in progress.
5. Nadikudi-Venkatgiri	346	-do-

6. Bhildi-Viramgam	145	This work has been sanctioned as a part of Kandla-Bhatinda Gauge conversion project. However, the work is temporarily frozen in view of development of alternative route *via* Mehsana-Marwar-Jodhpur.
7. Jaipur-Phulera parallel BG	55	This work is no longer required due to Gauge conversion of Jaipur-Phulera.
8. Rewari-Alwar parallel	74	This work is no longer required due to Gauge conversion of Rewari-Alwar.
9. Bhimsen-Kanpur	20	In lieu, 3rd line is planned between Panki and Kanpur.
10. Kasganj-Aligarh-Palwal-Rohtak	300	This work between Kasganj and Aligarh would not be necessary in view of the Gauge conversion of Kanpur-Kasganj-Mathura which is plannd in the 9th Plan period. For Palwal-Rohtak, this is part of the NCR line for which survey is in progress.
Total	2902	

6.11 In this connection the Committee have been further informed that the final decision regarding taking up of the new line projects for which the surveys are still in progress will be possible once the survey reports become available. Even then, unless the survey reveal urgent operational needs for these lines, further new works may be taken only in the 10th plan so that some of the ongoing projects get completed and the shelf becomes manageable.

6.12 As regards other lines for which requirement may arise on strategic/ operational considerations, during the Plan, the projects would be considered for inclusion in the annual plan after conducting due survey, examination of the survey report by the Technical and Economic Directorates of the Ministry, appraisal by the Planning Commission and approval by the Expanded Board and CCEA as required under the extent procedures, within the outlays approved by the Planning Commission in the Annual Plans, by readjustment of funds and interpolating the priority amongst ongoing projects, on the urgency of the operational strategic requirement.

Gauge Conversion

6.13 The Indian Railways have a multiple gauge system with three gauges *viz.* broad gauge, metre gauge and narrow gauge. As on 31.3.1996, the Railway network consists of total route length of 62,915 kms. The gauge-wise break-up of network is as follows:—

Gauge	Route Kms	Single line	Double/ Multiple line
Broad Gauge	40620	25556	15064
Metre Gauge	18501	18408	93
Narrow Gauge	3794	3794	—

6.14 The Broad Gauge lines are located mostly in the heartland of the country. On the broad gauge network the traffic is concentrated on the quadrilateral and diagonals. The Metre Gauge is located mostly in the peripheral areas.

6.15 The Broad Gauge (BG) has obvious advantages over the Metre Gauge (MG) and narrow gauge as it provides greater carrying capacity for movement of freight and passenger traffic. The multiple gauge system had some disadvantages from operating points of view.

6.16 In this connection the Committee have found that the Railways are carrying out conversion of metre gauge to broad gauge in patches on selected routes since 1951 to cater to the need of increasing goods and passenger traffic. But it was only in 1971 that the concept of gauge conversion (GC) as a policy emerged. In 1971, the Government announced its policy to have new lines only with BG and to progressively convert MG into BG. As a part of it, nearly 4000 kms. of GC had been sanctioned. However, the progress on conversions was slow on account of inadequate resource and high cost of conversion. It was realised that GC could only be done at a modest pace if the other more pressing needs of capacity augmentation and rehabilitation were to be met side by side.

6.17 Various studies were conducted by expert Committees on the subject. A Committee set up in 1978 on Metre Gauge operation gave its recommendations in 1979. The Committee recommended upgradation of MG and conversion to BG on a selective basis. It stated *inter-alia* that "The conversion should be taken up only if it is found to be the least cost alternative or it is otherwise found to be essential from operating consideration such as difficulty in handling the transhipment traffic or provision of a through alternative BG link to relieve congestion on existing routes. While planning for conversion schemes, efforts should be made to maintain a through MG link connecting the Northern and

Southern MG system as well as the Western and Eastern system, if it does not pose any insurmountable problems or too much cost".

6.18 The National Transport Policy Committee (NTPC) appointed by the Planning Commission in their Report in 1980 recommended the following criteria for implementing gauge conversion projects:

(i) when it is discovered that the traffic likely to develop in future cannot be handled on the existing system.

(ii) when the magnitude of transhipment involved is such that it is uneconomical or is not feasible at all, to handle the anticipated volume of traffic.

(iii) when it is needed for providing speedy and uninterrupted means of communication to areas which have potential for growth.

6.19 Based on these studies, the Railway Ministry came to the conclusion in or about 1981 that GC should only be done selectively where the traffic density was heavy, or transhipment at break of gauge points caused severe bottlenecks. Consequently, while presenting the budget for 1981-82, the then Minister of Railways observed that "the MG Railway with adequate inputs can render speedy efficient and economic rail transportation service as had been the experience in serveral foreign countries. Despite the obvious advantages of a uniform gauge, the massive input of resources is a luxury which a developing country like ours, with perennial constraint of resources, can ill afford at this stage".

6.20 In 1992-93 a significant change, if not total reversal, in Railway Policy with regard to gauge conversion was made. While presenting the Railway Budget for 1992-93 the then Railway Minister in his budget speech in February, 1992 announced the launching of Project Unigauge wherein he declared the Ministry's decision to do away with the multigauge system.

6.21 The IX Plan working Group on Railways in their Report have stated that project unigauge was conceived with the objective of generating transport capacity by opening up alternative routes to ease the congestion on the BG trunk route which are working to saturation and to provide speedy and un—interrupted means of communication between areas which have potential for growth. It would also overcome problems associated with break of gauge transhipment which have hitherto stifled industrial growth in areas served by the MG and NG network. These objectives will continue to guide the IX Plan.

In the VIII Plan, over 7000 kms of MG & NG is expected to be converted into BG against the target of 6000 kms. By the end of VIII Plan, total MG & NG network left on IR would be about 20790 Kms. Out of this about 6200 Kms. has been planned to be converted to BG during IX Plan.

6.22 The particulars of various Gauge conversion programmes and the level of progress made in varying degrees including those taken up under BOLT scheme are given at Appendix-IV.

Upgradation of Existing Lines

Doubling of lines

6.23 The Railway network has a total route length of 62915 km. out of which 47758 km. consists of single line and 15157 km. has double/ multiple lines. Thus only 23% of railway track has double or multiple lines. Almost all the double/multiple track section lies on broad gauge.

6.24 Doubling of single line is necessary for augmenting the traffic carrying capacity of the existing railway network. Doubling of railway route is done as per requirement of traffic. Once a route is selected from doubling, doubling of the entire route is taken up in stages according to the forecast of traffic and availability of funds.

6.25 Proposals for doubling are initiated by the Zonal Railways taking into account the traffic pattern and existing line capacity. Traffic projections are made for each five year plan by the Railways in consultation with the actual user sectors and the concerned Ministries. These projections are discussed and finalised in consultation with the Planning Commission. According to the Ministry of Railways (Railway Board) those traffic projections are considered realistic as they are made after active and intense interaction with the actual users and the Planning Commission. Railways take up doubling of single line section when the existing utilisation of single line track reaches around 90 to 95% of the capacity utilisation.

6.26 The Ministry in their Memorandum on "Expansion of Railway network including on-going and proposed new railway lines and doubling of existing lines" submitted to the Committee have stated as follows:—

Objectives

i. To progress and complete the doubling of the quadrilateral and diagonal trunk routes in the IX Plan.

ii. To undertake the construction of third and/or fourth lines on certain very busy routes in order to develop additional line capacities to handle the anticipated traffic on those routes in the IX Plan.

iii. To undertake doubling on other important routes where the existing single line has reached its saturation limit and further increase in traffic on such routes is anticipated in the IX Plan.

6.27 The Ministry of Railways have drawn attention of the Committee that some of the doubling proposals as well as proposals for third and/or fourth lines may be on a new alignment which for all practical proposes would be a new line. The advantages to be gained in taking up the 2nd, 3rd and 4th lines on a new alignment would be development of alternative routes to existing busy and congested

routes, economic development of new areas, flexibility in operations during floods, accidents and agitations on one route etc.

6.28 In the first 4 years of the VIII Plan Railways have completed 838 kms. doublings and have targeted another 302 kms in the last year of the plan making a total of 1140 kms. The spill over into the IX plan, for completion of on-going projects will be Rs. 1575 crores. The total length of on-going doublings yet to be commissioned at the commencement of the IX Plan will be 1657 km.

6.29 Doubling of Railway lines, new starts on doublings in the IX Plan is proposed to be selected from out of the lines identified in the Master Plan, with priority being given to those lines where augmentation of line capacity would be required to deal with the anticipated growth in traffic. The outlay proposed for doublings in the IX Plan will be Rs. 2500 crores out of which Rs. 1500 crores would be spent for on-going works excluding frozen projects and Rs. 1000 crores for new starts. In all about 2000 km of doublings are proposed to be commissioned in the IX Plan. Full doubling of the quadrilateral and diagonal trunk routes will be accomplished in IXth Plan.

6.30 The Ministry of Railways will concentrate on section having 100% capacity utilisation, considering the commodity wise traffic growth projections. While planning doubling, they will also take into consideration the high speed corridors being developed.

6.31 Indian Railways have a large shelf of projects for expansion of railway network. Besides ongoing projects, in every budget more and more new lines are sanctioned and approved by Parliament. These projects, by their very nature are highly capital intensive, requiring heavy investments. However, due to severe resource crunch, and inadequate budgetary support, these projects largely lie unfinished leading to cost and time overruns. The Committee therefore desired to know the view of the special Secretary, Planning Commission.

6.32 During evidence, the Special Secretary, Planning Commission stated the following on this point:

> "I think what is important is that there should be prioritisation, selective approach and reprioritisation so that the on going projects could be completed and they start yielding return. That has not taken place. We have taken up too many projects. We have been telling the Railways that there is a need to prioritise the various projects that have already been undertaken. As I said earlier, there should be a proper mix. Some projects should yield return so that they reinforce the funds which are otherwise not coming. The only way in which Railways can do well is to priorities their projects in a given period of time. We are monitoring it and we have been emphasising the Railways to follow it".

6.33 Clarifying the position the Chairman, Railway Board deposed as follows:

"About giving priorities to the projects and to reduce the cost overrun and time overrun, we knew that this Committee knows better than any other committee; you are mother Committee, so far as the financing is concerned. Certain types of projects are to be supported by the Budget. This is the convention and this is the way of working. For example, we have the railway electrification. It is entirely financed through the Budgetory support. All new lines are entirely supported by the Budget. This is again the second point which the Planning Commission has been saying. I do not know whether I should use very strong language against the Planning Commission. They do not know or they refuse to understand the point. Let us say, when the Budgetary support is Rs. 100, I would be able to complete 'X' number of lines; when the Budgetary support is brought down to Rs. 10, how can I complete 'X' number of lines? Naturally, as far as the shelf of projects is concerned, I dare not cut out even a single project which has been approved by the Parliament. Nobody will allow us to do it. It is with great difficulty that a scheme is approved by the Parliament. If the Budgetary support is 50 or 60 per cent of the Plan size, how can they expect me to complete the entire projects? The current Plan size is Rs. 81.30 crore and the Budgetary support was Rs. 1269 crore plus Rs. 150 crore which comes to about 17 per cent. They are determined to bring down the Budgetary support.

The Prime Minister declared that there would be a national project of Udhampur-Baramulla Railway line which would be financed by the General Budget and outside know whom are we going to deceive. The Prime Minister said that Rs. 50 crore would be given by the Central Government for this. Ultimately they have give Rs. 30 crore and not Rs. 50 crore. In that case, how is it possible to complete it? This is a national project which has nothing to do with the Railways. I never thought that at the highest level in the Government they would be playing like this".

Elaborating the point further he stated:

'About the priority, the Planning Commission has been talking about the new lines. Every year we allocate Rs. 200 crore or Rs. 250 crore for new lines. The number of projects is 50 to 70. Some projects get Rs. 10,000. For example, in Orissa, we have a project for which the allocation was only Rs. 10,000. If the total cost of the project is Rs. 600 crore and if we allocate Rs. 10,000 every year, in how many years can we complete it? So, under the circumstances, are doing our best. Certain projects are very important from the Railway's point of view where we would get

revenue if we complete it. For example, we have the Talcher-Sambalpur line and some other lines in the North-Eastern region, in the Dimapur area, the bridge on the Brahamputra, etc.

I have no objection if we get a huge Budgetary support and we would like to complete the project as soon as possible, I would submit before this Committee that Gauge conversion which the Railways took up on their own or the doubling projects which we took up on our own, we do not get the funds generally. It depends solely on the avilability of resources. We have made a priority list and we would send it to the Finance Ministry or to the Planning Commission. If they want us to drop some of the Projects, we have to get some direction for that. I cannot do it on mv own".

Electrification

6.34 Electric traction is pollution free and energy efficient mode of transportation. Railway electrification has assumed national importance because of the growing emphasis on conservation and substitution of oil energy. As a consequence of heavy industrial and economic development in the country, the traffic on the railway system has been growing rapidly and the originating freight tonnage has been 358.72 million tonnes, in 1993-94, 364.96 million tonnes in 1994-95 and 390.69 million tonnes, in 1995-96. Thus, Railway electrification is going to make a very significant contribution in this rapidly growing transport effort of the Indian Railways. However, the Railway Electrification could not get that much importance in the 8th Plan as compared to the earlier 6th & 7th Plans.

6.35 The following table indicates the progress of electrification on Indian Railway:

Period	Route Km. electrified	Period	Route Km. electrified
1	2	3	4
Upto 1978	4723	1990-91	831
Annual Plans (1978—80)	195	1991-92	726
VI Plan (1980—85)	1522	VIII Plan	

1	2	3	4
VII Plan (1985-90)			
	2812	(1st year 1992-93)	479
		(2nd year 1993-94)	505
		(3rd year 1994-95)	473
		(4th year 1995-96)	609
Total (as on 31.3.1996) 12875			

6.36 The Ninth Plan Working Group on Railways in the Report have stated that the objectives of Railway Electrification in the IX Plan would be to complete the on-going works, to take up electrification of the remaining un-electrified sections of the golden quadrilateral as also to cover certain missing links. A total of 2300 route km. of railway electrification is planned in the IX Plan. Emphasis will also be laid on strengthening overhead equipment to meet requirements of heavy haul freight trains and longer passenger trains at higher speeds. Conversion of 1500 VDC suburban system is Mumbai area (CR&WR) to 25 KV AC is also planned in the IX Plan as it is no longer possible to increase the frequency of the suburban services on the DC system as it is not capable of taking any additional electric load. Replacement of OHE on age-cum-condition basis, obtaining power supply directly from NTPC, installation of capacitor banks to improve power factor, augmentation/construction of new traction sub-stations to cater for requirement of growing traffic demands, would also be required in IX Plan. Substantial drop in the power sector during VIII Plan period is an alarming factor for the Railways.

Signalling and Telecommunication

6.37 To cope with rising density and to meet better safety standards, Indian Railways is steadily modernising its signalling system. Route Relay interlocking, Panel Inter-locking, Colour Light and Automatic Block Signalling and Solid State Interlocking have been introduced on many routes. Safety aids like track circuiting and interlocking of level crossing gates and provision of telephones at manned level crossings have been increasingly adopted to further enhance safety in train operations.

6.38 Progress of signalling and safety works, which are closely interlinked, is indicated in the table below:

	Nature of Signalling/ Safety Works	Total No. of installations As on 31st March 1995	As on 31st March 1996
1.	Interlocking of stations	5594	5593
2.	Route Relay Interlocking	166	170
3.	(a) Panel Interlocking	1396	1494
	(b) Solid State Interlocking	3	6
4.	Multiple Aspect Colour Light Signalling	2378	2496
5.	Automatic Block Signalling (Track Km.)	2724	2787
6.	Track Circuiting:		
	(a) Fouling Mark to Fouling Mark on run-through lines (No. of stations)	2866	3158
	(b) Fouling Mark to Fouling Mark on loop lines (Trunk & Important main lines)	1271	1312
	(c) Fouling Mark to Block Section Limit (Trunk & Important main lines)	1285	1591
7.	Safety devices at level crossing:		
	(a) Interlocking at level crossings	5567	5624
	(b) Telephones at manned level crossings	11175	11685
	(c) Lifting barriers at level crossings	4845	4903
8.	Auxiliary Warning System (Route Km.)	313	313

6.39 In this connection the Ministry of Railways have stated that Solid State Interlocking (SSI) as an alternative to relay/mechanical interlocking is being planned for introduction on Indian Railways. SSI system, designed and developed indigenously by RDSO in association with trade and I.I.T. Delhi, has since been installed at Dushakheds station of Central Railway. Block proving by Axle counter System for ensuring complete arrival of trains has also installed on Central, Western and Northern Railways.

6.40 Indian Railways has developed its own telecommunication network to meet its communication requirements. As a step towards modernisation, digital electronic exchanges, digital microwave system and optical fibre communication systems are being installed in replacement of exisiting old systems or at the stage of expansion to bring about qualitative improvement in the communication services.

6.41 The existing electro-mechancial telephone exchanges are being replaced by digital electronic exchanges for increased reliability efficiency and flexibility. A total of 12981 lines connected to digital electronic exchanges have been added during the year bringing the installed capacity of telephone exchanges to 119607 lines.

6.42 For improving the reliability of long-haul microwave communication, 404 route Km. of long-haul digital microwave system in 7 GHZ range has been installed in 1995-96.

6.43 18 GHZ digital microwave system has been commissioned on 151 route km. on the Eastern Railway for improved reliability of train control circuts in areas prone to theft of underground copper cables. Additional facilities to passengers like auto-answering facility for train enquiry, electornic train display system and public address.

6.44 The IX Plan Working Group on Railways in their Report have stated that safety is an inherent feature underlaying all works under various plan heads. Even the attempt at modernisation and technological upgradation has kept in mind aspects by which safety can be enhanced through better man-machine interaction, easier operating system and reduced need for human interface in maintenance. The outlay for Safety is not only under this Plan Head but, in totality, would come to Rs. 28210 crores.

6.45 Signalling is an area where modernisation and replacement are urgently needed. Railways are dealing with human lives and properties and as such there cannot be any compromise with the safety. In an era of quantum technological advancement resulting in better equipment & providing greater safety through technical aids, e.g. provision of Auxiliary Warning System (AWS) etc., a total of Rs. 1600 crores outlay is proposed in the IX Plan.

Rolling Stock

6.46 The fleet of rolling stock, consisting of locomotives, coaches and wagons, constitutes the bulward of the railway assets. The adequacy of this fleet together with its efficient upkeep and optimum service ability, are matters vital to the operation of this system. The issues pertaining to production and maintenance of rolling stock have, therefore, assumed importance in any kind of appraisal of the modernisation in the railway system.

6.47 For a better understanding of the growing importance of the rolling stock in the Indian Railways, it will be helpful to get a birds eye view of the rolling stock holdings. The following table brings out the comparative position at the end of 1950-51 and 1995-96.

Rolling Stock Holdings

Item	Holding in 1950-51	Holding in 1995-96
1	2	3
Steam Locomotives	8120	209
Diesel Locomotives	17	4313

1	2	3
Electric Locomotives	72	2387
Electrical Multiple Units	460	3692
Conventional Coaches	13109	29758
Wagons (in units)	205596	280791

Source: Railway Board's Year Book 1995-96.

The above table reflects only the quantitative change. There has also been a substantial change in technology. This is illustrated by the fact that the tractive effort of the locomotives has risen manifold; new coaches with better layout and more seating capacity are being manufactured and wagons having higher payload, and speed potential are put into service for optimum utilisation of line capacity. This also reflects in pace of investment in rolling stock that has been quite high.

6.48 Indian Railway is gradually replacing four-wheeler stock by bogie wagons having higher payload and speed potential for optimum utilisation of line capacity. These include BCN, BTPN, BOX'N, etc. wagons.

6.49 During the year, 1995-96, 1854 BOX'N wagons were put into service. This new design has enabled Indian Railways to increase trailing loads on most of the important routes from 3600 to 4500 tonnes.

6.50 The IX plan Working Group on Railway in their Report have stated as follows:

> "Improvement in the wagon productivity has been essentially the result of weeding out of the older design plain bearing wagons, induction of air brake wagons of improved reliability and efficiency, and almost complete embargo on piecemeal loading. Utilisation of electric locomotives has not shown significant improvement due to the fact that the existing trunk routes are working to saturation and the average running time of the freight trains on the congested routes, where bulk of the incremental growth is to take place, has been rising. In the case of diesel locomotives, the utilisation has been low due to relegation of diesel traction to lower traffic density routes consequent on phasing out of steam traction. There has been a fall in the utilisation of diesel locos in passenger services also due to large scale gauge conversions in the VIII Plan as a result of adoption of the "Project Unigauge". The diesel locos are being increasingly used on less important routes for short distance passenger services."

It has been further stated that the requirement of the coaching stock is now worked out as per the actual needs rather than utilisation norms.

Keeping in view the target of railway electrification and gauge conversions in the IX Plan, the likely traction split in the terminal year of the IX Plan *vis-a-vis* 1994-95 is also indicated in the Table below.

	Electric		Diesel	
	1994-95	2001-02	1994-95	2001-02
Passenger	46.29%	50%	53.71%	50%
Freight	57.37%	67%	42.63%	33%

6.51 On the basis of the projected freight transport output of 353 kms and Rolling Stock utilisation norms discussed in the foregoing paragraphs, the requirement of Rolling Stock in the IX Plan has been estimated as under:

(i) *Wagons:* The Total requirement during IX Plan comes to 1.75 lakhs comprising 1 lakh on replacement account and 75000 on account of incremental traffic. Even though the indigenous manufacturing capacity is about 36000 wagons per annum, the industry has not been able to supply more than about 26000 wagon in a year in the past. The industry has, therefore, to gear up their production to the rated capacity by removing the bottlenecks in the production lines, wherever existing.

(ii) *Locomotives:* The requirement of locomotives for the IX Plan has been assessed as under:

	Diesel	Electric	Total
Additional locos for freight	210	678	888
Additional locos for passenger	290	172	462
Locos for Replacement	400	200	600
Total Loco Requirement In IX Plan	900	1050	1950
Locos being procured	800	950	1750
Locos to be released by DMUs/MEMUs	100	100	200
Total Locos Available	900	1050	1950

The above loco requirement takes into account the requirement of locos by Konkan Railway. Indigenous manufacturing capacity of diesel (DLW) and electric locomotives (CLW & BHEL) is 150 and 170 per annum respectively. Thus, for meeting the projected requirement of locomotives, the production capacity would have to be expanded by providing marginal inputs.

(iii) The need based requirement of non EMU coaches is 9000. It is planned to acquire 400 EMUs per annum which is the available manufacturing capacity. Acquisition of 2000 EMU coaches has been planned in the IX Plan. In addition 750 each of MEMUs/DMUs are proposed to be procured.

6.52 Total requirement of funds for the rolling stock in the IX Plan has been assessed Rs. 28950 crores.

Information Technology

6.53 Computerisation is one of the corner stones of the broad strategy adopted to meet the demands for modernising the systems, flow of information and development of human resources. The Ministry of Railways have planned an ambitious computerisation programme for implementation. The application of computers in engineering accounting and personnel administration, freight operation information, transportation, production planning, workshop service and reservations on Indian Railways is significant and sizeable.

6.54 One of the most spectacular application of computer technology in the service of common man has been the railway Passenger Reservation System (PRS). PRS started in 1985 as a pilot project at New Delhi. The main objective was to provide reserved accommodation on any train from any counter, preparation of train charts and accountal of the money collected. This system was enhanced in 1987 to cover the entire Delhi Metropolitan area. In the same year, computerised reservation facilities were provided in Bombay and Calcutta by setting up new computer centres with hardware similar to Delhi and the same software as at Delhi. Subsequently, Madras was also computerised on a similar pattern. By 1988, the four metropolitan cities had computerised railway reservation on four independent computer systems. In further expansions, it was decided that only one more computer centre would be set up at Secunderabad and all the locations will be computerised through provision of remote terminals.

6.55 The IX Plan Working Group on Railways in their report have stated that a key objective of the IX Plan would be to develop IR's computerisation and information technology in a manner that will establish connectivity with the zonal and divisional computer systems and to extend this facility to other systems like production units, training institutes etc. It is also proposed to expand the PRS network to cover 50 additional stations and satellite locations in major and metropolitan cities. Interactive Voice Response System would be provided at more locations. The system of computerised issue of unreserved tickets which has been started at Mumbai will be extended to other metropolitan cities. The computerisation of the materials and inventory management, financial management will be further extended.

Container Traffic

6.56 The Rapid growth in the demand for bulk transport had compelled the railways to evolve operating strategies and technology to match the demand. However, this led to the shift of some non-bulk traffic to the road sector. To satisfy the transport demand for non-bulk traffic as also to win back the traffic which had shifted to road, the Container Corporation of India (CONCOR) was started as a public sector unit under the Ministry of Railways.

6.57 The Container Corporation of India Limited (CONCOR) provides multimodal transport services. CONCOR's multifarious marketing strategy assists I.R. as its "extended marketing arm" in regaining high rated traffic as well as rationalising loading and movement where supply of empty wagons is difficult or involves extensive leads. Some of the highlights of its performance are: (i) Increased handling of Container—594118 TEUs handled during 1995-96 as against 402632 TEUs during 1994-95 registering a growth of 48 percent. (ii) Commissioning of CFS at New Mulund both for import handling as well as export stuffing. A new export warehouse at the existing ICD/Sabarmati in Ahmedabad was also commissioned. In addition, a new Port side CFS at Milavittan near Tuticorin was also commissioned. (iii) A bigger rail-linked ICD at Moradabad is being set up. (iv) Calcutta Port Container Terminal has been linked by rail and movement of international traffic between Calcutta Port, Raxaul and ICD/ Tughlakabad has started. (v) Work on setting up the new ICD at Belanganj in Agra was completed. (vi) Company has also been registered as a Multimodal Transport Operator (MTO) by Director General of Shipping, Mumbai and arrangements for MTO business have been finalised. (vii) Company has also started the business of bonded warehousing at Whitefield in Bangalore and Tuticorin in Tamil Nadu. (viii) During the year CONCOR pioneered the transport of POL traffic in Tank Containers.

Introduction of this container service has helped to partly make good the shortage of tank wagons on IR.

The turnover of CONCOR has increased by 67% from Rs. 217 crores in 1994-95 to Rs. 384 crores during 1995-96.

6.58 The IX Plan Working Group on Railways in their report have stated that at present the entire container traffic moved on the Railways is handled by CONCOR which caters to both International and domestic container traffic which is expected to grow considerably during the IX Plan period. As per the decision taken by the Ministry of Commerce, setting up of ICDs/CFSs has been thrown open to the private sector and part of the investment required on this account could be provided by them. The international container traffic is expected to increase from 4 lakh TEU in 1996-97 to 10.5 lakh in 2001-2002. During the same period, the domestic traffic is expected to grow from 3.0 lakh TEU to 4 lakh TEU.

CHAPTER VII

STATE RESPONSIBILITY

Railways are the principal mode of transport for freight & passenger traffic in the country. They are the bulk carriers of commodities like coal, raw materials, steel and mineral oils and are the lifeline of the economy. Apart from Railway being seven times more fuel efficient than road transport and also eco-friendly, the land use by it is most economical.

7.2 There has been more than five fold growth in the freight traffic carried by the Railways since independence. However due to inadequate investment in Railways the growth of traffic has been catered to with the minimum of inputs barely adequate to meet the minimum needs. Consequentially, the network expansion has been very low. After independence about nine thousand kms. have been added in the Railway Network till 1996. There have been continuous demands for expansion from tribal, backward, remote and hilly areas still inadequately served by Railways.

7.3 To meet the growing demands, the Railways require major investments for expansion/upgradation in their Five Year Plans & Annual Plan. Budgetary support is an important and less, inexpensive source of funding of Railways Plans. However, the growth of Railways have been adversely affected by perpetual shortage of resources.

Central Government

7.4 Budgetary support to Railways Plan which was 34% during the First Plan was gradually stepped up, reaching a maximum of 75% of total Plan outlay in the Fifth Plan. It came down to 58% & 42% in Sixth and Seventh Plan and finally to 16% in 1996-97 which is the terminal year of the Eighth Plan.

Market Borrowings

7.5 Upto the Sixth Plan, the gap between the size of the Plan and internal resources was wholly financed by the budgetary support. Midway in the Seventh Plan, it was realised by the Government that because of constrained resources it would not be possible to fund the entire approved Plan of Railways through the normal channel of budgetary support extended by the General Finance. Therefore, it was decided by the Government that a part of the requirement of additional assets should be met through market borrowings.

7.6 The funds mobilised by IRFC through Market borrowings amounted to Rs. 6176.61 crs. upto the end of 1994-95. Market borrowings for financing the Railway Plan are comparatively expensive. As against the

dividend rate of 7% Railways have to pay for budgetary support, around 22% have to be paid to Indian Railway Finance Corporation for the amount mobilised by them through taxable bonds. During the last 10 years, the Railways had to raise resources through IRFC and to pay the following lease charges to IRFC:—

Year	Resources raised through IRFC	Lease Charges (Rs. in crores)
1987-88	720	25
1988-89	800	128
1989-90	1000	262
1990-91	1092	465
1991-92	1503	626
1992-93	1025	855
1993-94	856	960
1994-95	745	1125
1995-96	962	1395
1996-97	1850(BE)	1443
Total	10553	7284

While the Ministry of Railways had to mobilise funds through market borrowings, a sum of Rs. 1095.92 crs. was outstanding against State Electricity Boards/Public Sector Undertakings as on 30.11.1994.

7.7 Commenting on the declining Budgetary support to the Railways, the Ministry of Finance have in the Economy Survey 1996-97 stated as follows:—

> "This has forced the Railways to reprioritise on-going projects of line expansion, renewals, gauge conversion and electrification of key routes and has adversely affected procurement of rolling stock. The Railways have so far met the challenge by relying less on budgetary support and more on internal generation of resources which, in future, may have limitations with increased outlay on account of the Pay Commission recommendations and growing lease rentals, etc. Alternative sources of funding based on market borrowings are also being looket at although the servicing costs would be higher. Private Sector participation through schemes like

Build-Own-Lease-Transfer (BOLT) and Own-Your-Wagon-Scheme (OYWS) are also being explored. However, only limited success has been achieved in these areas till now".

7.8 Statements showing dividend paid on capital-at-charge and Budgetary support are given at Appendix-VA & VB.

7.9 When asked to outline the Railways perspective for the Ninth Five Year Plan and the method of financing thereof the Chairman, Railways Board, deposed as under during evidence:—

"Last year, we have increased our traffic by almost 26 million tonnes. Our handling of wagon per day went up by 250—300. We reached a figure of 1750. We have used all the lines to 100 per cent capacity. Therefore, we feel if we want development in the country and if traffic has to increase at the same rate in the Railways, heavy investments are required in the Railways. That is why we are thinking and have given our plan to the Planning Commission. We have asked for a plan of Rs. 65000 crore against the Eighth Plan allocation of Rs. 33000 crore. We feel that unless the Plan size is to the tune of Rs. 65000 crs., the Indian Railway would stand in the way of the development of the country. The progress of the country will be retarded by the Railways.

Therefore, we will have to go in for trebling of lines where the double lines are in existence, and we will have to go in for quadruple of lines where the treble lines are in existence. The hinterland of the country that is, Mumbai-Calcutta, Calcutta-Chennai, Chennai-Delhi and Chennai-Mumbai this circle is called Golden Quadrilateral in Railways, where 65 per pent of the traffic is moved. Both on the four sides and the two diagonals, we have got 65 per cent of the traffic. All fields are developing only in these areas. The development of coal is maximum in Korba, Talcher and IB. Traffic of coal is 40 per cent in Railways. All these are located in these sectors. So, in this area we thought that three lines should be there in place of two lines; where three lines are there, we will have to go in for four lines; and in place of ordinary signalling, we should go in for automatic signalling".

He further stated:

"Heavy investments can only be made by increasing the investment and the equity share of the Government. At the most, we will be able to generate 20/30 per cent for the Capital Budget. In the Revenue Budget, there is no question of subsidy on the Indian Railways for many more years. I am confident that the Indian Railways will be able to meet every penny in the Revenue Budget for many more years. But in the Capital Budget, Railways cannot get more than 30 per cent from the internal resources. According to me, the Budgetary support which is, as I said, should be to the

extent of 70 per cent. No railway system can exist on the borrowed money. Borrowed money means 20 per cent interest. The Railways which have a social obligation to run the passenger trains, cannot be run on borrowed capital. We are paying huge amount of interest. It is almost Rs. 1600 crs. for the current year. I am afraid that if this rate of interest payment continue, soon the Indian Railways will become bankrupt. We may not be able to pay the interest and the economy will suffer very adversely.

My personal perception is that we should get 70 per support from the Government. We are not asking 70 per cent in our document because from 15 per cent if I ask 70 per cent, people will think otherwise. So, I am asking roughly 45 per cent. In the heart, even 45 per cent is a very small figure. If they want the revenue should be very good, the gap between the internal generation and the total Plan allocation should be bridged.

I submit before the august Committee that I am not even for a minute saying that the Indian Railways should not try to generate maximum money from the internal resources. We will try our best to improve our efficiency and to increase the assets to make the best of our resources. That endeavour will be there. By improving the technology, we are able to generate more than 30 per cent resources. To that extent budgetary support will be slightly less".

7.10 Stressing the urgent need for providing more budgetary support to Railways, the Committee asked for the views of the Ministry of Finance on the subject. The Secretary (Expenditure) stated as under:—

"This year, Rs. 1269 crs. was the budgetary support given to the Railways. Recently, of course, the Finance Minister had agreed to provide something more to the Railways. So, in the Supplementary Demands for Grants to the Railways, another Rs. 170 crs. has been provided. So Rs. 1269 crs. Plus Rs. 170 crs., is the budgetary support going to the Railways....

It is about four per cent of the Central Assistance. It could be increased within the overall gross budgetary support, depending upon the studies made. Another aspect is this. The total investment which has gone to the Railways is Rs. 26000 crs. Out of Rs. 26000 crs., slightly more than Rs. 2200 crs. is invested by the Railways in the metro transport system on which they do not pay any dividend. They do not have to pay dividend because nowhere in the world Metro System is sustainable. Operationally, they incur losses because more and more burden on that has to be borne by the general tax payers rather than the actual users. Out of the balance of Rs. 23800 crs. Railways pay dividend @3.5% on capital employed for welfare activities or residential buildings based on the recommendations of the Railway Convention Committee.

They get dividend relief on a few other activities. Relief is refunded back to the Railways, whatever they pay, the amount which comes this year is Rs. 469 crs. If they pay a total dividend of seven per cent on Rs. 23800 crs., leaving aside Rs. 2200 crs. which is treated as expenditure on Metro System and where no return is possible, the amount paid by them will be Rs. 1587 crs. minus Rs. 469 crs., that is, around Rs. 1100 crs. Rs. 1100 crs. is what the Railways pay for the entire capital invested in this and this works out to slightly more than 4.6 per cent. It is the net dividend that is paid".

7.11 Elaborating on the point raised that the dividend paid by the Railways was more than the Budgetary support provided to them the Secretary (Expenditure) further stated as follows:—

"The reply to the specific point which you raised whether it is a negative balance on the part of the Railways, it is not so at all. I will give the figures for 1996-97. The budgetary support if Rs. 1269 crs., increased by Rs. 170 crs. subsidy given to Railways for dividend of uneconomic routes or strategic routes and new routes; welfare activities Rs. 469 crs; and passenger tax Rs. 380 crs. in lieu of the passenger tax amount given to State Governments which normally is a burden on the Railways. This has been taken on the general revenue side. It is a very important point. Because the State Government have a right under the Constitution to levy a passenger tax which would be their revenue. If they had levied the passenger tax the Railways could not have raised the passenger fare because there is a limit beyond which fairs cannot be raised. There is an arrangement with the State Governments that in lieu of their foregoing this revenue they will be reimbursed by the Government of India. Railways are supposed to do that. But the Government of India reimburses it and the income that the Railways raise by additional tariff is retained by the Railway. Together it works out to Rs. 2095 crs. against which they pay as a dividend about 1500 crs. or so".

7.12 In this regard, the Chairman, Railway Board during his evidence stated as follows:—

"That the money that I paid to the Central Government by way of dividend last year was about Rs. 1563 crs. and the budgetary support was Rs. 1269 crs. A time was there when the dividend payment was much less than the budgetary support. Every year dividend payment is much higher than the budgetary support."

7.13 To a question whether regarding more Budgetary support was required for the Railways, the Secretary (Expenditure) stated:

"The Railways do need it. How are they going to have the money for investment? Here the point which is relevant is not the budgetary support *per se* but it is the total capial outlay or the plan outlay which the Railways can have. One fortunate position of the Railways in India is there as compared to the other developing country. You would have been what the Railway Ministry have collected information about two or three western countries. We are on a different footing. There, in the western countries, the Railways have been incurring losses, mainly bacause their Railways cater to six to seven per cent of the passenger traffic, about eight to fifteen per cent of the freight traffic. That is so because they are basically small countries which are more or less in the nature of our Metro traffic, which invariably has to incur loss; it can never be on a profit. But here, our Indian Railways have a high potential in spite of the social cost in certain segments."

7.14 Drawing attention of the Committee to generating of internal resources by the Railways, the witness stated:

"I would only invite the attention of the Committee to the figures of their own internal resources, that means, the profit which they could generate from 1993-94 to 1996-97. One unfortunate part is that this has been stagnating at the same level. Revenue has been going up. Every year, we are having fare revision, tariff revision. But unfortunately, expenditure has been more than these revisions, with the result the internal resource contribution has been stagnating. In 1993-94, it was Rs. 4340 crs; in 1994-95, it was 4055 crs.; in 1995-96, it was 4423 crs. in the BE and in 1996-97, it was Rs. 4111 crs. It is somewhere a around Rs. 4000 crs. which has been the internal resource contribution. This is the money which the Railways have raised because the freight rate in India are much higher as compared to our GDP than what they are in any other country in the West. We have to raise resources. The Government could fund the whole capital cost from the budget and take this as tax revenue.

We have opted for a system under which the Railways get this money as internal resources. The internal resources should not be delinked from Government's own resources given to the Railways. The sector like the Railways will have to necessarily consider this amount also as a part of budgetary support because it is coming from the common consumer. It is the people who use the the Railways and who are paying for this. Otherwise, this money would have been tapped by the Government and put back on investment. This is one major area where our first effort should be to see whether this could be increased. If the dividend is reduced to even below the four per cent level—in other words, the Government's revenue becomes less then, the Government investment to provide a gross budgetary support to Planning

Commission diminishes and the Planning Commission in turn to provide more money to Railways comes down."

He added further:

"They have also been allowed to raise from the market Rs. 2750 crs. No doubt, this has got a cost because if they raise from the market the pay a higher rate of interest of 14 to 16 per cent. But unfortunately again our country is a high interest rate economy. We cannot compare ourselves with the Western countries where the borrowing rate is 4 to 5 per cent. Here the market rate is 20 per cent at which the industries borrow."

Summarising the discussion on this point, the Secretary (Expenditure) stated:

"In short, what I am saying is that we have to take the totality of the whole thing because we have paid for a system under which different resource support to the Railways are all mixed. If we delink all these and look at only the divident part and say after all capital cost has to be borne by the Government, why charge divident on this, let it be free, then we have to take the totality of the whole thing where Railways will have to pay a passenger tax and the Government will have to raise revenue from the people who are using the Railways. I am not sure whether the net result will be better or worse for the Railways.

Perhaps the subsidies inherent and hidden is so large in this sector. That is why we are compelled more and more to go in for roads, ports and airports which no longer need to be supported. The Planning Commission has made certain studies. If you take the infrastructure sector, purely transportation, leaving the other infrastructural sectors like water and sanitation, there is no internal generation of resources at all. But the revenue gap of Railways is so huge that our budget just cannot bridge it. It has to come from additional resource mobilisation and fortunately Railways and road transport still have a potential for resorting to it. They have large areas of social sector where the revenue potential is very low. But there are unfortunately very large areas where the potential is very high because as you have yourself said, no country in the world has a Railways which has got a captive clientele waiting in queue for tickets. In any western country half the trains are empty. The occupancy rate is so low there. But the Government, because they are rich, still maintain it by subsidising from their general budget. We have a 150 per cent occupancy here and many are long distance routes which are like inter-continental routes in European countries. This aspect may kindly be borne in mind before putting all the burden on the Government in waiving this.

Waiving means even with this minimal Rs. 1500 crs. return which is the dividend, the general budget faces a deficit."

7.15 Concurring with the views of the Secretary (Expenditure), the Finance Secretary stated as follows:

"As far as the budgetary support for the Railways is concerned, of course, I recognise that there are certain aspects. The Railways operations require subsidy and that is explicitly given. We have a provision where we do not require them to pay dividend on uneconomic lines. For the rest, I do not share the view that for basic capital development,. the money should come from the budget. I agree that it takes a lot of time to make capital investment, but the Railways should be able to borrow from market and the service debt from their earnings. Perhaps for that it should be corporatised.

The issue whether the Railways should remain departmentally run organisation, the Finance Ministry has not gone into the matter, so, I cannot speak on that. But there is a view widely held among many professionals that persisting with an organisational structure which keeps a departmental organisation and makes tariff fixation, function of the Government decision making is not conducive to the development of health railways system.

Perhaps it should be corporatised. This Committee can make recommendations to both the Ministry of Railways and to the Planning Commission. Elsewhere in the world what happens is that track is run by one organisation and the fellows who are running the trains run it as a commercial operation, paying for the use of traffic and that would totally remove operation of trains to a series of corporations which can be public or private or joint venture of whatever it is. Now, there are many ways of operating the system. If it is indeed the view of this Committee that the existing structure should be re-examined, there is a lot of scope for looking at this possibility. We are already going it in the case of tourist trains. Really there is no reason why this experiment should not be massively brought about. If you really want India to grow at seven per cent, which, I believe, we have the basic capacity to do, then, I think, we have to do major rethinking of structures. What I fear is that everybody thinks that the solution to growing at seven per cent is more budgetary support. For telephones, we need budgetary support and for ports we need budgetary support. In fact, given the heavy demands that we have for rural development, poverty alleviation schemes, basic national security and things like primary health and education — these services are meant to be given free at

the end — I think, any expectation that these problems can be solved through the budget will be totally unrealistic."

7.16 Efficiency in operation by optimising utilisation of existing assets coupled with economy measures adopted can lead to sizeable surplus. The operating ratio. *i.e.* the amount of money spent to earn a rupee, is a barometer to judge the efficiency of any organisation. The less the operating ratio, the better the financial performance.

7.17 In the context of Railways lesser operating ratio means generation of more internal resources, and to that extent less dependence for budgetary support from the Government for financing its various projects.

7.18 While stating that the generation of internal resources has stagnated over the past few years, the Finance Secretary deposed before the Committee as follows:

"In Railways, first of all, although the Government has a policy of inducting the private sector, in other infrastructural services, it does not have a policy of bringing in private sector into Railways. The Railways is not just a public sector corporation which is run as a department of the Government for years. Within that constraint, what is it that we can do? My feeling is, there is no doubt in my mind whatsoever that we should be investing more in the Railways; that we should not be doing through Budgetary support. I think that the Railways have to concentrate on improved operational efficieny. Within the Railway if you look at the data which I think must have been given to you, the fact is that the internal resource generation in the Railways is stagnant in nominal terms. That means, the Railways have generated a declining volume of rail resources. In a growing economy, where the traffic is increasing, this I think simply is not viable. I think the solutions really lie in first of all, greater efficiency. They have lots of problems on the operational front which I am not competent to pronounce upon. But they know perfectly well what is needed. Taking care of problems of overmanning, etc."

7.19 Asked to comment on the above opinion of the Ministry of Finance, the Chairman, Railway Board deposed before the Committee as follows:

"They talk of the Chinese Railways, French Railways and such other Railways. They have been telling us that the Chinese Railway is doing wonderfully well. I have got with me an article which has appeared in an international railway journal which says: 'Chinese Railway suffered an overall operating loss of 10 billion in 1985. This includes an operating loss of 6.5 billion for passenger services, which is an improvement of 9 billion loss incurred during the previous year'. So, the Chinese Railways which suffered a loss of 10 billion is considered by Railways as a wonderful Railway and the Indian Railways which has not suffered any loss and rather

improved its surpluses is not understood anything by the Planning Commission. This is a very funny logic."

7.20 Giving details about improving the efficiency in the Railways, he stated:

"In the passenger traffic we are suffering loss and in the freight operation we are making profits. For freight operation we are using wagons and engines. In the last two years new ideas have been brought into commission. I do not know why we suffer from inferiority. We have taken a decision to make the engines halt with wagons and we started calling it as Engine Unload System. We tried to improve the productivity of wagons appreciably by losing the productivity of engines. This was the experiment which was tried about two to three years back. It was called as Engine Unload System, that is when goods train reaches the destination if we do not want the rake to be detained for 24 to 36 hours, engine will be kept on train if it can come back within four or five hours and then we will try to despatch wagon to the second destination. Normally an engine used to be detained for two to three hours at the terminal. So, it was some sort of a gamble. From three hours we tried to increase the detention to four or four-and-a-half hours. But when we were detaching the engine to procure other engine and then to attach it on the load we were detaining the wagon for 24 hours. The overall detention used to be 18 to 24 hours. We thought it is a worthwhile experiment, if we keep the engine on and within four hours despatch a wagon. I am happy to inform the Committee that normally per year wagon kilometer per wagon which is the most important index so far as wagons are concerned used to increase by 15-16 points. For example, it was 1407, 1457, 1508, 1516 from 1990-91 onwards. There is an increase of about 15 points every year. Last year from a figure of 1560, we touched a figure of 1754, that is, it increased by 200 points. What we could achieve in four years, we achieved in one year and that is how we were able to increase and lift and overall tonnage of 26 million tonnes in spite of the fact that the number of wagons had gone down. If the Planning Commission still wants to repeat what they are saying because they are not able to give money to the Railways, I cannot say anything about it. The deterioration in the engines' statistic is marginal. The improvement in the wagon statistics is phenomenal.

I do not know on what basis they are saying that the improvement in efficiency has to be there. As I said, day-in day-out I have been telling my General Managers and my people that today has to be better than yesterday and tomorrow has to be better than today. This should be the etho of any managment. Let me tell this august Committee that our statistics is one of the best

in the world so far as utilisation and other figures are concerned. It is not correct to pick out one figure from here and another from there—which has no relevance — and then club it."

The witness further stated:

"The second point is about the overall speed of goods train in Indian Railways. It used to be 18 km. and now it is 24km. They say, why it is so low. I would like to quote the same journal: ....unless steps are taken to improve procedures which have reduced the average commercial speed of frieght train to 14 km. per hour'. In the European Railways the speed of a freight train is 14 km. per hour and ours is 26 or 28 km. per hour. So, this is the position. No Manager will be satisfied with the efficiency of the system but to say that there is inefficiency will be unfair to the Railways Employees."

7.21 The Financial Commissioner, Ministry of Railways (Railways Board) supplemented as follows:

"About the operating efficiency I would like to say that it was 90 per cent. We were spending 90 paise to earn one rupee. It has come to 85. This improvement has been achieved despite all the increase in wages and materials which are beyond the control of Railways. As of today, out of the total working expenses about 50 per cent expenses is on staff. This also has been reduced from 60 per cent. The increase is because of the Dearness Allowance — which is released every first of January and July — and other increase in material prices which are of general nature.

The Railways are the only organisation in the Government of India which has got a committed and a contained manpower. In the last four or five years. If you look at the Financial Performance Digest of the Indian Railways, it is a matter for satisfaction. But somehow or other, we are not able to convince the Planning Commission that we are doing everthing that we can to improve the internal resource generation. As our Chairman said, there is always room for improvement. So, to say and to compare us with other Railways or saying with kind of a notional assessment that they are better than the Indian Railways is not correct. We are the only organisation of the Government where 50 per cent of the resources required for development are being generated internally."

7.22 Member (Mechanical) Railway Board also added:

"The operating ratio is worked out after taking into account our expenditure on pension and on replacement on asset. In other words, if we earn Re.1 we pay for pension and for replacing the asset 82 $^1/_2$ paise."

State Government

7.23 At present there is no role for State Governments in the infrastructural development of Railways. Unlike Roads, where respective State Governments spend money for the maintenance of National Highways passing through their States and also State Highways, No such arrangement is there in the case of Railways.

Uneconomic Branch Lines

7.24 A number of branch lines carry traffic below capacity and are not commercially viable with the development of roads and change in the pattern of industrial development and urbanisation. Many branch lines have lost their original utility. The losses on uneconomic branch lines are included in overall social burden on account of fright and coaching services.

7.25 The Railways Convention Committee (1985) had, in their Fourth Report had recommended closing down of 40 unremunerative branch lines where alternative road facilities are already available. It was suggested that in case State Governments disagreed to closure of these lines for their own reasons, losses should be shared on a 50:50 basis. However, this concept has not yet been brought into practice and the Railways have been able to close down 15 such lines only. The Railways have to operate a number of Branch Line Services, in which meagre traffic offerings lead them to become commercially unvaible, to the extent that even operating costs of services is not being recouped. Railway Reforms Committee had also recommended for closure of these lines. However the pace of implementation of closure has been very slow due to stiff public resistance coupled with a marked reluctance of the State Governments to either agreeing for withdrawal of services or to reimburse even the operating loss to the Railways. It has become increasingly difficult to close these lines. A review of financial results of Uneconomic Branch Lines for the year 1993-94, shows that on an original investment of Rs. 64 crores, the losses added upto Rs. 146 crores on as many as 117 branch lines.

City Authority

7.26 With the amendments in the Business Allocation Rules in 1986, the responsibility of planning and coordination of urban traffic including the rail based ones now rests with the Ministry of Urban Affairs and Employment (MOUA&E).

7.27 Processing of proposals for new schemes for urban transport received from the State Governments and arranging Central assistance for them is now the responsibility of the Ministry of Urban Development. However, the Railways' role in respect of providing technical assistance for detailed planning is very vital in such project.

7.28 Railways at present are not investing in Metro Railway Projects and all other new projects coming up in various cities. The funds for

these projects have to come from outside. The Central Government and the respective to States have to fund these Projects.

7.29 During evidence, when asked about the Plans of the Government for running Metro Railway in Delhi and other cities, the Secretary (Expenditure) has stated as follows:

> "This is one area where the Railways have already been relieved. To that extent their funds are not getting into the Metro System except for the old ones which are the legacy of past suburban system of Mumbai and Calcutta. All the new Projects that are coming up, Railways have made it very clear they are not going to invest from their own funds. It has that to come from outside. Delhi system, which has been recently approved by the Government, is hundred per cent funded by the Government of Delhi and the Government of India. As far as the capital cost is concerned, they are borrowing from OECL and it is going to be managed by a separate company. Of course, it creates other problem because its funds are raised from the general public. Some way or other, we will have to levy the surcharges. In Madras, Railways have already reached an agreement of cost sharing between the local Government and themselves. Same is the case with the future expansion programme of Mumbai. Urban Development Ministry has also taken it up."

CHAPTER VIII

CITY TRANSPORT AND METROS

Suburban Railway

Railway transport in cities is generally termed as Suburban Rail services. Suburban Rail services are those shuttle services which serve the population of large cities with reference to the working hours in offices, industrial establishments, educational institutions etc. Suburban services were introduced in three metropolitan cities of India, *viz.*, Mumbai, Calcutta and Chennai. These being the port cities and easily accessible by sea were the first to become centres of trade and industry and therefore EMU were introduced in these cities to cater to mass passenger transport need.

8.2 Organisation to administer and control the suburban rail services in each of the metropolitan cities of Mumbai, Calcutta and Chennai is Divisional Organisation headed by the Divisional Railway Manager who is assisted by the Additional DRMs and officers and staff of the Operations, Commerical, Civil Engineering, Signal and Telecom., Electrical Engineering etc. Details of Divisions in each of the above suburban areas are as follow:

i. Mumbai

Mumbai area has two Divisions, namely, Mumbai division of Central Railway with Headquarters at Chhatrapati Shivaji Terminal and Mumbai Division of Western Railway with Headquarters at Mumbai Central.

ii. Calcutta

Three Divisions of Indian Railways are presently serving the suburbs of Calcutta. These are—Howrah and Sealdah Divisions of Eastern Railway and Kharagpur Division of South Eastern Railway. In addition Metro Railway is also serving the suburban passengers.

iii. Chennai

In Chennai area, there is only one Division, namely, Chennai Division of Southern Railway to administer and control the suburban rail services.

8.3 The length of suburban rail routes in and around all the three metropolitan cities is as under:

Suburban Area	Route Kms.
1	2
1. *Mumbai:*	
a. Western Railways	123.80
b. Central Railways	284.00
2. *Calcutta:*	
a. Eastern Railways	876.93
b. South Eastern Railways	121.76
c. Metro Railway	180.62
3. *Chennai:*	
Southern Railways	166.56

Mass Rapid Transit System for Metropolitan Cities

8.4 The following Mass Rapid Transit System are operating/ commissioned in the Metros of Calcutta, Mumbai and Chennai:—

Calcutta

(i) Metro Railway: The full length of 16.45 km. of the project is under commercial operation since September 1995 and residual works are in progress.

(ii) Circular Railway: 13.50 km. long, non-electrified single line track from Dum Dum to Princepghat for running commuter trains with diesel traction has already been commissioned and is in operation. Proposal to link Majerhat is on the card.

Mumbai

(i) Extension of Railway line from Mankhurd to Belapur with a bridge across Thane Creek:
18 km. long Mankhurd-Belapur link to New Mumbai has already been completed. Residual works are in progress.

(ii) Additional pair of lines between Bandra and Andheri:
The project—construction of an additional pair of lines between Bandra and Andheri (7.2 km.) on the suburban system of Western Railway—is under commercial operation since May 1995. Minor residual works are in progress.

(iii) Works sanctioned in 1995-96 and 1996-97:
To decongest Mumbai and to develop New Mumbai-Thane-Turbhe-Narul-Vashi line (22.60 km.) costing Rs. 403.39 crore, Belapur-Panvel doubling (10.90 km.) costing Rs. 279.83 crore. 5th and 6th line between Kurla and Bhandup (10.00 km.) costing Rs. 49.84 crore, Borivali-Virar quadrupling

(25.84 km.) costing Rs. 327.21 crore, 5th line between Santacruz and Borivali (29.50 km.) costing Rs. 64.17 crore and double line between Seaweed and Uran (27.00 km.) costing Rs. 401.81 crore have been sanctioned. All these projects are under different stages of progress.

Chennai

Commuter services of Chennai Rapid Transit System between Chennai Beach and Luz (8.97 km.) is in progress and the sub-section from Chennai Beach to Chepauk (5.04 km.) has been opened to traffic since November 1995. extension of the system from Luz to Valachery (10.30 km.) costing Rs. 430.21 crores has also since been sanctioned.

Metro Railway

8.5 The commercial running of Calcutta Metro-India's first of its kind commenced on 24th October 1984, over a length of 3.40 km. between Esplanade and Bhowanipur. This was extended further south upto Tollygunge in April, 1986. Thereafter upto August, 1994, the Metro services were operating on this 7.64 km. length between Tollygunge and Esplanade only. Commencing from 13.8.94, the services were progressively extended during 1994-95 to cover a total length of 14.65 km. in two separate stretches in north and south, respectively. The through running between Dum Dum and Tollygunge was finally commissioned on 27th September, 1995 and the last remaining station, *viz.*, Mahatma Gandhi Road was opened to public from 11.2.96.

8.6 The ridership on the Metro Railway has increased rapidly with progressive commissioning of additional lengths from 1994-95 onwards. At present over 2.5 lakh commuters are availing themselves of the Metro services on working days. However, the maximum number of passengers, who have travelled on a single day, has been 2.55 lakhs in normal times and 3.36 lakhs daily during the peak of the Durga Puja festival.

8.7 Considering the high rise in passenger traffic in all the metropolitan cities, there is an urgent need for appropriate transport facilities for the people and also for providing underground rail services.

8.8 Asked to state whether they have conducted any survey in this regard, the Ministry of Railways, in a written reply, stated that they have not conducted any survey for urban passenger traffic as with the amendments in the Business Allocation Rules in 1986, the responsibility of planning and coordination of urban traffic including the rail based ones now rests with the Ministry of Urban Affairs and Employment (MOUA&E). However, it is understood that certain detailed studies for urban passenger traffic have been carried out by M/s Rail India Technical and Economic Services (RITES), a Government of India Undertaking under the Ministry of Railways, on behalf of State

Governments and MOUAE in certain cities including Delhi, Bangalore, Hyderabad and Calcutta.

8.9 Statement showing status of implementation of various Metropolitan Transport Projects (Railways) is given at Appendix-VI.

8.10 When asked about the opinion of Railways as to whether there should be a separate authority for augmenting and running of the metro rails in the country, the Ministry of Railways in a written reply had stated as follows:—

> "The Indian Railways support the proposal for setting up of a separate authority for augmentation and running of the Metro rails in the country particularly in view of such projects being highly capital intensive projects and the budgetary support being made available to the Indian Railways is not even adequate for the projects of Indian Railways for carrying long distance freight and passenger traffic. However, it may be mentioned that Indian Railways are otherwise capable to handle urban passenger traffic projects if separate funds are made available to build them and also the Railways are compensated the losses incurred in operations and maintenance of suburban systems."

8.11 Asked whether there is any serious thinking in the Government to improve the deteriorating transport services in metros and also about plans for metro railway in Delhi, the Secretary (Expenditure) stated as follows during evidence:—

> "This is one area where the Railways have already been relieved. To that extent their funds are not getting into the Metro system except for the old ones which are the legacy of past suburban system of Bombay and Calcutta. All the new projects that are coming up, Railways have made it very clear that they are not going to invest from their own funds. It has to come from outside. Delhi system, which has been recently approved by the Government, is hundred percent funded by the Government of Delhi and the Government of India. As far as the capital cost is concerned, they are borrowing from OECL and it is going to be managed by a separate company. Of course, it creates other problem because its funds are raised from the general public. Some way or other, we will have to have the surcharges. In Madras, Railways have already reached an agreement of cost sharing between the local Government and themselves. Same is the case with the future expansion programme of Bombay. Urban Development Ministry has also taken it up. Metro Railways will have to be an independent organisation. The capital cost will have to come from the General Budget. There is no dividend on that."

8.12 To a specific question whether Government is thinking to have a separate Corporation for all Metro Railways, the Secretary (Expenditure)

stated that for Delhi, a separate Corporation has been formed because it is a joint venture between Delhi and Union Government.

8.13 The total number of Suburban passengers has increased from 2430 millions in 1994-95 to 2484 million in 1995-96. Passenger kilometres has also increased from 67989 millions to 73291 millions druing the same period.

8.14 The following table shows the number of passengers carried, and the financial performance of the suburban services of different Railways.

	No. of Passengers carried (in lakhs)	Earning (in Rs. crore)	Expenditure	Profit/ Loss
W. Rly.	25 (daily)	271.19	191.50	+79.69
C. Rly.	28 (-do-)	283.72	281.19	+2.53
E. Rly.	4104.7 (per year)	—	—	—
SE. Rly.	619.8 (per year)	20.80	75.49	−54.69
S. Rly.	2140 (per year)	47.75	121.52	−73.77
Metro Rly.	2.55 (daily)	11.70	22.25	−10.55

CHAPTER IX

TARIFF POLICIES

Passenger Tariff

Indian Railways serves as the principal mode of passenger transport in the country. It is economical and ideally suited for long distance journeys. Indian Railways operate daily 7525 trains comprising of 2,973 ordinary passenger and mixed trains, 1,237 Mail/Express trains and 3,315 EMUs.

9.2 The average speed at which the Mail/Express trains run is 47.9 km. per hour, ordinary passengers trains at 31.8 km. per hour and EMUs at 35.6 km. per hour (All on Broad Gauge Track).

9.3 The total number of passenger carried by Indian Railways during 1995-96 stood at 4,018 million and the number of passenger kms. which is the product of number of passengers carried and average distance traversed was 342 billion p.k.m.

9.4 Passenger revenue in different classes with corresponding number of passengers km. for 1995-96 is given below:—

	No. of passengers (Millions)	% age	Passenger Km. (Millions)	% age	Revenue (Rs. in crores)	% age
Non-suburban						
Upper Class	26.9	0.67	15,900	4.65	1124.93	18.40
Second Class Mail/Express*	380.1	9.46	1,66,675	48.74	3358.22	54.94
Second Class Ordinary	1126.7	28.05	86,133	25.18	893.07	14.61
Total	1533.7	38.18	2,68,708	78.57	5376.22	87.95
Suburban (all classes)	2483.8	61.82	73,291	21.43	736.77	12.05
Grand Total	4017.5	100.00	3,41,999	100.00	6112.99$	100.00

9.5 The passenger traffic on railway is classified as suburban and non-suburban. In non-suburban category there are two further classifications-long distance passenger traffic handled by mail and express trains and short distance passenger traffic by stopping passenger trains. A journey of more than 300 kms. could be categorised as long distance passenger traffic.

*Also includes Sleeper Class.

$Excludes Rs. 11.52 crores earned by Metre Railway, Calcutta.

Long Distance Tariff

9.6 By and large long-distance passenger traffic covers its costs and also generates profit. For long-distance journeys, railways operate mail and express services, with a gradation in fare structure, which varies with the quality of service.

9.7 The long distance coaching service is generally by Mail/Express trains and there is lot of demand for such services, particularly during summer season. The seasonal fluctuation in demand for long distance services is more in trunk routes. There is wide gap between demand for and supply of such services. Though the Railways are running special trains and had increased coach and haulage capacity, still there is lot of demand which goes largely unmet.

9.8 In this connection the National Transport Policy Committee has also observed as follows:—

> "There is a heavy fluctuation in demand for non-suburban traffic in the year. The demand for passenger traffic shoots up during the holidays particularly in May and June and, thereafter, from October to December, and in a short period of two to three weeks, a very high demand has to be met by running special trains. This demand mostly for medium and long distance travel, is concentrated on main trunk lines which carry heavy traffic and suffer from serious problems of capacity."

It recommended:—

> "For a country of the size of India and increasing travel needs of her population, it is necessary to plan for a realistic growth of long distance passenger traffic, as otherwise conditions of travel will continue to remain extremely difficult. It has also to be kept in view that many more new centres of economic activity need to be created to disperse and reduce significantly the pressure of population in metropolitan cities which, in turn, will be possible only if travel facilities are available. Until now, the increase in train and vehicle kms. has been lower than in passenger kms. which has led to overcrowding."

Short Distance Tariff

9.9 Apart from mail and express services, Railways also run stopping passenger trains for short distance travel. These services mainly provide for second class travel, and tariffs for them are lower than for mail and express services.

9.10 Short distance stopping trains from the operational point of view are loss making proposition as they do not enjoy economies of scale.

9.11 The National Transport Policy Committee in this connection has also stated as follows:—

> "Slow passenger train services are subsidized... even from the operational view point such pasenger services act as a drag on long distance passenger and freight traffic. As this type of traffic for distances up to 300 kms. can be handled more efficiently by road, the railways should not continue to expand these passenger services. The dominant role of railways should be to meet the demand for long distance passenger traffic and its capacity should be reserved for it."

9.12 The Ministry of Railways in their Memorandum on 'Social Burden on Indian Railway's submitted to the Committee have stated that a number of non-suburban coaching services are maintained due to socio-economic considerations. Efforts to discontinue the uneconomic services or lines have not been very fruitful. The low fares on stopping passenger trains is the single largest factor contributing towards losses on non-suburban coaching services.

9.13 An analysis of the passenger services clearly bring out the following:

(i) Ordinary passenger services (other than mail-express and super-fast) invariably show heavy losses;

(ii) Low passenger fares for 2nd class ordinary and even lower fares for Monthly Season Tickets and Quarterly Season Tickets contribute heavily to losses. The passenger fares have not kept pace with the increase in input costs;

9.14 The IX Plan Working Group on Railways in their Report have stated that apart from heavy losses suffered by Indian Railways due to operation of short distance passenger services, the situation has now become critical because of saturation of the existing high density corridors. It may not be possible to introduce additional long distance passenger and feight services unless restraint is exercised on the growth of such short distance services. Railways want that they should be suitably compensated for the losses incurred on the operation of short distance passenger services.

Freight Tariff

9.15 Indian Railways performs the role of 'Beast of Burden' as it carries bulk of commodities. The following bulk commodities are carried by Railways:

(i) Coal
(ii) Foodgrains
(iii) Iron & Steel
(iv) Iron ore & other ores

(v) Cement
(vi) POL
(vii) Fertilizers
(viii) Limestone and dolomite
(ix) stones
(x) Salt
(xi) Sugar

9.16 Freight movement constitutes only 40% of the total traffic carried by Railways, but contributes 72% to the total Railway revenues.

9.17 During 1995-96, Indian Railways loaded 390.69 million tonnes of revenue earning freight, which is 25.73 million tonnes more than the previous year. This represents the highest ever incremental loading achieved in a single year generating 270.49 billion net tonne kms. (NT kms.) of freight output. Overall loading including non-revenue traffic was 405.50 million tonnes.

9.18 In order to contain the price rise and for the benefit of common man, Indian Railways has been carrying certain essential commodities below the cost of services. During 1995-96 major commodities contributing to social burden were foodgrains, salt, sugarcane, fruits and vegetables, livestock etc.

Cross-subsidisation

9.19 Due to various socio-political reasons Indian Railways have been subsidising passenger traffic particularly suburban and short distance by the earnings of freight traffic. This has been done by periodically increasing freight rates. The relentless increase in freight tariff year after year in every budget had led to decline in market share of freight traffic of Railways due to diversion of its freight traffic to the other modes of transport particularly roads. The Ninth Plan Working Group on Railways in their Report have stated that successive Railway Freight and Fare Committees have recommended that price of each of the services offered by the Indian Railways should be based on the cost of providing the same. At the beginning of the era of planned development passenger operations accounted for 59% of the transport output (in terms of train kilometres) and generated 41% of the total earnings. The freight traffic accounted for 41% of the transport but generated 59% of the earnings. Thus, even at that time the freight traffic was subsidising the passenger traffic. Over the years the extent of subsidy accorded to passenger traffic has increased significantly. In 1994-95, passenger traffic accounted for 60% of the transport output but contributed only 28% to the earnings. Thus, the extent of cross subsidy in the past 45 years has increased. This would have to be brought back at least to the level that existed in 1951 in order to enable railways to provide quality and quantity of services demanded by public and the core sectors of economy.

9.20 A comparative analysis of passenger and freight tariff for the major railway systems of the world is placed at Appendix-VII.

9.21 Pointing out that cross subsidisation of passenger fares by freight tariff by Indian Railways is a major cause of concern, as it adversely affects the financial viability of Railways, the Finance Secretary during evidence deposed as follows:—

> "I think there is no doubt that every time what is happening is there is overcharging in the freight traffic in order to subsidize the passenger traffic in the Railways. Now there is a limit here. Beyond that point the freight just moves to the road, that is frankly what has been happening. The Railways will not be able to overcharge freight. It puts a limit on how much freight overcharging you can do. And what is happening every time is that if you look at the structure of freight of the railways, you can know that the Railways takes care of the bulk of foodgrains, coal and fertilizers. Railways contribute to the general cargo.....the point is that they are trying to overcharge general cargo. To my mind any standard international comparison will tell us that we are vastly subsidizing passenger movement in the Railways. I have the privilege of expressing this view in the earlier sittings of this Committee. If we are not willing to take up this issue, I do not think we are solving the problem of Railways. Passenger fares in Indian are relative to freight.
>
> There is a good indicator which you can ask the Railways to give you. Look at the ratio of passenger fare per passenger kilometer to cargo per tonne kilometer. Just by constructive indication you will find that this ratio is the lowest of virtually of all the countries. You can make comparison. Economic laws are no different in other parts of the world. We should see what other fellows are doing. I am making a slight correction. Compared with India, Sri Lanka has even worse. But all the other countries — I am looking at developing countries — India's ratio is 32.4 index, Indonesia-43, Turkey-43, Thailand-64, Korea-87, China-151. Of all the countries of the world, China is the one we should compare ourselves. The Chinese make a very conscious decision. They will not subsidize passenger fares and their Railways — if you look at the contribution of Railways — to the strength of the economy. What the Chinese have done with minimum resources is that they have upgraded. This is my understanding. Again I would differ with the Planning Commission and in the Railways themselves. They have ensured top class high quality well invested structure in the main traffic areas where freight traffic is supposed to move. And since it is not easy to tax people, they have said that passenger fare movement need not be subsidized. Now, people do not travel on the train every day excepting in suburban traffic."

The witness further stated:—

> "Really, I think, we have been pushed into a completely unjustifiable and counter productive populist desire to keep passenger fares low which in my view is unviable and damaging to the Railways. I think, the Railways, must understand that this problem simply cannot be solved by injecting more funds through the budgets because it is simply to say basically that people of India must be taxed in order to subsidise people travelling by rail in India and there is no justification for that. It seems to me that the biggest problem we have is a completely irrational passenger fare structure. If you give an appropriate direction over a five year period that we should totally eliminate this bias. I think, there is one other point that our Railway network is not rationally planned at all. We have paid far too much importance to expanding Railway network and adding new lines. I think we need to reconsider some of these points. I do not know, if the Railways agree with this view but the consequence of subsidising passenger movement is not just that the resources with the Railways go down. The fact is that when you add every passenger train, you add it in place of three goods trains, which either ends up delaying movement of goods. The introduction of subsidised passenger fares is a double effect on the Railways' efficiency. It not only produces subsidised services which damages that financial viability of the Railways but it displaces goods movement to a much greater extend than the passenger movement that it adds. And not only it displaces it, it lowers the quality.
>
> Quite frankly if you want the internal regions of the country, the ones which are far from sea ports, to benefit from the process of globalising growth, export performance and in terms of having timely delivery of imports then really its goods carrying capacity and the quality of that capacity of the Railways will make sure that we have growth all over India. I think we are jeopardising that by the policy we are following. It is roughly my view on how we should handle this problem and I believe, we can bring in a time-bound five year programme which could receive political support and I think the Railways would be able to solve most of its problems."

9.22 Asked to give his comments on the view expressed by the Finance Secretary regarding cross-subsidisation, the Chairman, Railway Board deposed before the Committee as follows:—

> "I would like to say that what I have heard from thousands and lakhs of people is, 'the fares have gone up.' You too must have

had talks on fares with the people in your capacity as the Chairman, Railway Convention Committee. It is not an absolute figure; it is a relative figure. It is connected with the GDP and the average pay earning of an Indian. I cannot compare my fares with the American fares because of the fact that their standard of living is different. Railways of Germany, France, U.K. and other European countries have been making loss. Second Class fare in India is cheaper but from the GDP consideration is costly. Upper class fares and some traffic costs are much higher in India..... the average level is much higher. Here is the international passenger fare rate ratios: Sri Lanka 19.5; India 32.4; Pakistan 33.8; Greece 34.3....In China, it is 151. That means, passenger fares are very high there. Passenger fare hike by 50 per cent has resulted in a drop in that country. They said that the need for investment has been highlighted by recent decline in Chinese railway passenger traffic. The sharp drop of 400,000 since October, 1995 is blamed on the 50 per cent fare rise combined with the problems of overcrowding and poor ventilation on trains and the growing attraction of the highways."

The witness further stated as follows:—

"My submission before the Committee is that 97 per cent of our passengers travel in second class or second sleeper class. No person can increase the fare of second class by 50 per cent. If you increase the first class fare by even 20 to 30 per cent, you are not going to get large sums. Ninety-seven per cent of persons travel in second class. Now, I leave it to you."

Elaborating the point further, he stated:—

"My personal opinion is that in the case of suburban travels, particularly, seasonal tickets, we can go in for an increase in the fares of seasonal ticket fares in suburban trains by 50 per cent or even double. Then again I do not know whether we would be able to do it or not. Since you have asked me, I am giving the candid reply."

The witness further added:—

"Our seasonal ticket on suburban sections are absolutely very low. There it can increase even by 100 per cent. Secondly, we can increase the fare, to some extent of, the sleeper accommodation on the train because it is a boon on the train and we can definitely charge higher rate towards this. I wonder whether it is possible to increase the fares."

9.23 Supplementing the views of the Chairman, Railway Board, the Financial Commissioner stated as follows:—

"If I increase my second class fare, it will give Rs. 250 crore to Rs. 300 crore; five per cent increase in freight will give Rs. 750 crore to Rs. 800 crore; and monthly seasonal ticket will give Rs. 25 crore to Rs. 30 crore. It is a question of balancing pressures and the reaction of that."

CHAPTER X

PUBLIC SERVICE OBLIGATION AND SUBSIDY

Background

India is a Welfare State as enunicated in the Constitution of India. Indian Railways (IR) being a part of the Government of India, have undertaken a number of social obligations, which they have been discharging for a long time within the constraint relating to availability of resources. Indian Railways have been assigned the dual task of providing a modern Railway Transport System at least cost to the society while maintaining its financial viability. It has a deep social obligation to subserve the national objective by providing the basis and necessary transport infrastructure for promoting economic development and rapid industrialisation of the country. Traditionally, Railways have been providing certain services both passenger and freight below the cost of operation. The losses accruing to the Indian Railways from uneconomic services, both passenger and freight, operated on wider social or national grounds are termed as 'social burdens' or 'social obligations'.

Magnitude of 'Social Burden' on IR:—

10.2 The magnitude of social burden on IR, used to be assessed including cost of Staff Welfare measures and law and order cost till 1991-92, methodology consisted of:

(a) Losses on freight services for carrying certain essential commodities at rates much below the cost,

(b) Losses on sub-urban passenger services, and

(c) Losses on non-suburban coaching services.

The above broad heads also include the Railway's social burden on account of losses on operation of uneconomic branch lines and cost of travel concessions to various categories like students, sportsmen, blind, mentally retarded persons senior citizens, etc. and loss on new line opened for traffic in the last 15 years.

10.3 Table below gives the magnitude of social burden borne by IR over the years:—

Table

Social Burden on IR

(Rs. in crore)

Year	Losses on Commodities Carried Below Cost	Losses on Suburban Services	Losses on Non-suburban Coaching Services	Total Social Burden
1980-81	133	34	253	420
1985-86	183	82	874	1139
1986-87	190	108	1013	1311
1987-88	184	147	1322	1653
1988-89	293	122	1229	1644
1989-90	284	198	1622	2104
1990-91	406	207	1589	2202
1991-92	323	213	1563	2099
1992-93	250	216	1743	1549
1993-94	65	205	1656	1216
1994-95	46	211	1716	1215
1995-96	43	250	1813	1165

(* Total includes staff welfare, law and order cost)

Staff Welfare and Law and Order Costs:—

10.4 During the course of meeting of the Consultative Committee of Members of Parliament for the Ministry of Railways held on 10 February, 1993 the subject of social burden on the Railways was discussed. One of the Members had desired that staff welfare measures and Law and Order costs should not be treated as 'Social Costs' and combined with other Social Costs. The Members of the Consultative Committee were of the opinion that health, housing and staff welfare measures were the 'normal' welfare activities of any commercial organisation and these should be borne by the Railways and should not be included while assessing Social Burden. The matter was examined in the Board's office and since 1992-93 it has been decided, with the approval of Minister of Railways, that the

expenditure on health, housing, education and law and order costs should not be considered as 'Social Costs'.

10.5 Railway Freight and Fare Committee (RFFC) during its examination of the subject of social burden has also made similar observations. It has stated that expenditure on (i) welfare measures like subsidised education, medical care and housing for railway employees and (ii) on police force both RPF and GRP should not be treated as social burden. Therefore, these elements should be taken out of social costs. Further, summing up their recommendations RFFC has suggested that losses due to social responsibilities should be the least component of IR's corporate aims.

Railway Board has accepted and implemented this aspect.

10.6 Hence, net social burden is being assessed after deducting cost of staff welfare measures and law and order from total losses being incurred on Indian Railways on account of carrying freight and passengers below the cost of operation. As a result the net social burden as assessed for 1992-93 and 1993-94, 1994-95 and 1995-96 has come down substantially as compared to the previous years.

Details of social cost for these years are summarised below:

Social Burden for 1992-93, 1993-94, 1994-95 and 1995-96

(Rs. in crore)

		1992-93	1993-94	1994-95	1995-96
1.	Loss on essential commodities carried below costs	250	65	46	43
2.	Loss on Coaching Services				
	(a) Suburban	216	205	211	250
	(b) Non-Suburban	1744	1656	1716	1813
	(c) Total of (a) & (b)	1960	1861	1927	2063
3.	Total Losses 1+2(c)	2210	1926	1973	2106
4.	Deduct: Staff Welfare and Law and Order cost	(−)661	(−)710	(−)758	(−)941
5.	Net Social Cost	1549	1216	1215	1165

Social Burden on account of Freight Services:—

10.7 In order to contain the price-rise and for the benefit of common man, IR has been carrying certain essential commodities below the cost of services. During 1995-96 major commodities contributing to social burden were salt, sugarcane, fruits and vegetables, live stock etc. Details of commodity-wise losses for the last five years are given below:—

Losses on Commodities Carried Below Cost

(In Rupees Crore)

S. No.	Commodity	91-92	92-93	93-94	94-95	95-96
1.	Foodgrains	158.0	160.1			
2.	Sugarcane	24.8	32.2	20.8	14.01	20.74
3.	Salt	56.4	15.6	16.9	10.38	08.57
4.	Fruits & Vegetables	11.3	7.9	3.5	07.95	06.69
5.	Livestock	3.8	3.6	3.0	05.25	03.10
6.	Edible Oils	2.7	2.9	1.2		
7.	Coir Products	—	2.7	2.7	02.10	01.89
8.	Oil Products	—	2.6	—		
9.	Fodder	12.7	2.3	—		
10.	Bamboos	3.2	2.1	—		
11.	Firewood & other fuel	1.1	—	1.8	01.60	01.00
12.	Provisions	5.0	—	1.4		
13.	Other Commodities	43.7	18.3	14.2	01.60	01.09
	TOTAL	322.8	250.8	65.4	46.66	43.08

10.8 The above table indicates that there has been a substantial reduction in these losses from Rs. 322.8 Cr. in 1991-92 to Rs. 43.08 Cr. in 1995-96. One of the major reasons for this reduction has been the elimination of foodgrains from the list due to revision in tariffs.

Social Burden on account of Suburban Services:—

10.9 There has been a substantial growth of suburban traffic in and around the metropolitan cities of Mumbai, Calcutta and Chennai during the last forty years and it provides a lifeline to the people residing in these cities. The rise in suburban passengers kilometres (PKMs) over the past four years from 1990-91 to 1995-96 has been about 6% which had grown by approximately 45% in the decade 1980-81 to 1990-91.

The increase in number of suburban passengers (originating) and passenger kilometres for selected years is given in the Table below:—

Overall Growth of Suburban Passenger Traffic

(Figures in million)

Year	Suburban@ Passenger originating	Suburban* Passenger KM
1980-81	2000	41086
1985-86	1884	45438
1990-91	2259	59578
1991-92	2412	63390
1992-93	2282	60448
1993-94	2302	63045
1994-95	2430	67989
1995-96	2484	73291

Notes:

(1) @In computing no. of passengers originating:

(i) A passenger holding a return ticket is treated as having originated twice.

(ii) Monthly season tickets are taken as equal to 50 single journey tickets each and quarterly as 150.

(iii) Children tickets are treated as adult tickets.

(2) *Transportation of one passenger over one kilometre.

The main reason for losses on suburban services are low second class fares and even lower fares for monthly and quarterly season tickets which are available up to a distance of 150 kms. In addition, inadequate occupancy also adds to the losses.

10.10 Suburban passengers constituted about 62% of the total passengers carried by the Indian Railways in 1993-94 and contributed roughly 12% of the total passenger earnings. On the other hand, suburban passenger kilometres constituted about 21% of the total passenger kilometres. Out of the total traffic of suburban services, the percentage of journeys performed by seasons ticket holders alone accounted for approximately 69% of the total, the balance being made up by single journey passengers. However, the season ticket holders contributed roughly 48% of the total suburban passenger earnings. Suburban passenger kilometres earned by season ticket holders accounted for about 73% of the total suburban passenger kilometres. To sum up, therefore, in 1993-94 season ticket holders constituted 69% of the total suburban passengers, accounting for 73% of the passenger kilometres, but contributed only 48% of suburban earnings.

10.11 The losses on suburban railways on IR for different years since 1989-90 to 1994-95 are given below:—

Railway-wise losses on Suburban Services

(Rs. in Crore)

Railway	89-90	90-91	91-92	92-93	93-94	94-95	95-96
W Rly.	−2.6	8.4	24.9	50.0	63.9		
C Rly.	−24.9	−16.6	−7.8	−7.1	−10.3		
E Rly.	−99.0	−120.7	−150.7	−155.9	−151.5		
SE Rly.	−31.8	−33.8	−32.2	−45.1	−42.2		
S Rly.	−39.3	−44.6	−46.9	−57.6	−65.3		
Total	−197.6	−207.3	−212.7	−215.7	−205.4	−211	−250

Social burden on account of non-suburban coaching services—

10.12 The suburban services for the urban commuters are confined to the three metropolitican cities of Bombay, Calcutta and Chennai. On the other hand non-suburban coaching services cover the length and breadth of the country and even reach the remote corners of the country. A number of services are maintained due to socio-economic considerations. Efforts to discontinue the uneconomic services or lines have not been fruitful as no State Government agrees to do away with the services. The low fares on stopping passenger trains is the single largest factor contributing towards losses on non-suburban coaching services.

10.13 An analysis of the passenger services clearly bring out the following:

(i) Ordinary passenger services (other than mail-express and super-fast) invariably show heavy losses.

(ii) Low passenger fares for 2nd class ordinary and even lower fares for monthly and quarterly season tickets contribute heavily to losses. The passenger fares have not kept pace with the increase in input costs.

10.14 Railways have also been offering concessions to students, sportsmen, deaf and dumb, blind, physically handicapped, mentally retarded persons etc. which contribute towards social burden.

Cost of Services vis-a-vis *Rates Charged—*

10.15 A comparison between the Cost per PKM (for Passenger Services) and Rates being charged per Passenger Kilometre on IR since 1989-90 are given in the following Table:

Passenger Services: Cost vs Rate Charged per PKM

(Figures in Paise)

Year	Cost Per	Rate per PKM
1989-90	17.87	9.49
1990-91	18.63	10.60
1991-92	19.29	11.70
1992-93	22.84	14.40
1993-94	25.18	16.51
1994-95		17.09
1995-96		17.87

10.16 It is seen that the rates being charged from the passengers do not cover the cost of passenger operations and as a consequence the passenger services entail heavy losses for Indian Railway system.

Uneconomic Branch Lines

10.17 A number of branch lines carry traffic below capacity and are not commercially viable with the development of roads and change in the pattern of industrial development and urbanisation. Many branch lines have lost their original utility. The losses on uneconomic branch lines are included in overall social burden on account of freight and coaching services. However, the losses for the last five years on this account are given below:

Losses on Uneconomic Branch Lines

Particulars	91-92	92-93	93-94	94-95	95-96
1. No. of branch lines	116	116	117	119	115
2. Original investment on these lines (Rs. in Cr.)	76	62	64	153	266
3. Losses (Rs. in Cr.)	123	134	146	166	153

10.18 No dividend is paid to the General Exchequer on the Capital Cost of strategic and commercial uneconomic branch lines but losses are being borne by the Railways.

10.19 The Railway Convention Committee (1985) had, in their Fourth Report had recommended closing down of 40 unremunerative branch lines where alternative road facilities are already available. It was suggested that in case State Governments disagreed to closure for their own reasons,

losses should be shared on a 50:50 basis. However, this concept has not yet been brought into practice and Railways have been able to close down 15 such lines only. The Railways have to operate a number of Branch Line Services, in which meagre traffic offerings lead them to become commercially unviable, to the extent that even operating costs of services is not being recouped. The Railways were once the sole mode of transportation in these areas, but have lost their pre-eminence with the development of road networks, coupled with the scenario of shift in the nature of urbanisation and industrial activities. Several High Level Committees such as the Railway Reforms Committee had also recommended for closure of these lines. However the pace of implementation of closure has been very slow due to stiff public resistance coupled with a marked reluctance of the State Governments to either agreeing for withdrawal of services or to reimburse even a operating loss to the Railways and it has become increasingly difficult to close these lines. A review of financial results of Uneconomic Branch Lines for the year 1993-94, shows that on an original investment of Rs. 64 crores, the losses added upto Rs. 146 crores on as many as 117 branch lines.

Subsidies for Social Costs in Foreign Countries—

10.20 The practice of bearing social obligations is a built-in feature of Railway systems the world over. However, to cover such deficits, grants are sought by Railways and sanctioned by Governments in many countries. In some countries, these are made good by revenue grants or subsidy for covering specific deficits, while in others, the growing railway deficits are compensated by other financial arrangements. In many countries, the Railways are compensated for their Public Service Obligations for operating uneconomic services, complying with price restrain orders, carrying traffic at concessional rates, etc. The practice in this regard varies from Country to Country, but the reliefs are mainly in the following forms:

(a) Out-right grant to cover the deficits;
(b) Soft loans to meet the accumulated burdens;
(c) The facility of writing off accumulated debts and unproductive capital;
(d) Making Railway Organisations financially viable and capable of earning marginal profits;
(e) Equalisation of terms of compensation; and
(f) Compensation for socially reduced tariffs.

10.21 In the United Kingdom, British Railways were given Public Service Obligation Grant of 808.9 million Pounds in 1993-94 to sustain the quality and level of passenger business on Provincial Services and Net Work South East. The Swiss Federal Government contributed SW Fr.2439 million in 1993, as Federal compensation towards regional passenger and piggyback freight services, support for investment and infrastructure maintenance. By way of financial support, the Federal Republic of Germany, in 1992, granted the German Railway (DB&DR) D.M. 22683

million towards compensation for social services, payment for welfare activities, investment grants, etc. The French Government granted the French National Railways (SNCF) their support amount of F.Fr. 42900 million in 1993 towards infrastructure, pensions, compensation for socially reduced tariffs and regional passenger services.

10.22 The percentage of social obligations reimbursed to the total revenue can be seen from the following table:—

Social Obligations reimbursed as a %age of Total Revenue of Foreign Railways

Railway System	Passenger earnings (In millions)	Subsidy (In millions)	Total Revenue earnings (In millions)	Percentage of subsidy to total revenue
1. Swiss Fed. Rlys	SWFr. 1702	SWFr. 2546	SWFr. 6347	40.1
2. German Rlys (DB&DR)	DM7842	DM23128	DM33771	68.4
3. French Nat. (SNCF)	FFr. 31421	FFr. 42900	FFr. 90007	47.7

Source: Jane's World Railways, 1995-96 (Latest available figures)

10.23 On the issue of social burden, the Railway Convention Committee (1991) in their Fifth, Ninth and Twelfth Reports on 'Rate of Dividend for 1994-95, 1995-96 and 1996-97' respectively, had observed that when the Ministry of Railways are facing acute resource crunch due to dwindling Budgetary support, they should adequately be compensated for carrying social burden. In their Memorandum on 'Rate of Dividend for 1996-97 and other ancillary matters', the Ministry of Railways had submitted that the amount on this account was Rs. 1515 crs. during 1994-95 whereas during evidence held on 13 February, 1996, the Chairman, Railway Board deposed that the amount was Rs. 1973 crs. during the same period and after substracting the cost towards law and order, staff welfare, etc. it came to Rs. 1250 crs. The Committee, had therefore, recommended that the Railways should carry out a fresh study regarding compensation to be paid to the Railways for carrying social burden and furnish the details of the study both to the Committee and the Ministry of Finance.

10.24 The Ministry of Railways, in their Action Taken Replies on the Ninth Report of RCC (1991) on Rate of Dividend for 1995-96 and other ancillary matters submitted as under:—

> "A copy of the 'Report on Social Burden on Indian Railways' was sent to the Ministry of Finance who opined that since the study was an inhouse exercise of the Railways a Working Group associating representatives of Ministry of Finance and Planning Commission should be set up for examining the issue in its entirety. Accordingly, a Committee of Officers including representatives from Ministry of

Finance and Planning Commission has been constituted and their report is awaited".

10.25 On being asked about the latest position in the matter, the Chairman, Railway Board, during evidence stated that the above Committee had submitted the draft report. However, Final Report is still awaited.

CHAPTER XI

EXPERIENCE OF RAILWAYS IN DEVELOPED COUNTRIES

(A) German Railway (Deutsche Bahn)

Germany is one of the seven richest developed countries with highly developed transport infrastructure. In Germany the size of railway network is 40000 km. for a population of 80 million whereas Indian Railways network is 62600 km. for a population of 900 million. Even then, the German Government is providing support to the Railways to exploit its full potential as a mode of transport, due to its inherent advantages:

—Energy efficient
—Environment friendly
—Less external cost

11.2 This support continued even after privatisation came into effect i.e. 1.1.1994. It would be evident from the fact that during 1995, the revenue generated by the Railways by sale of tickets and other internal resources was DM 30723 million and the support it received from the Government for carrying short distance passenger traffic and to clear up old liabilities was DM 12996 million. At the same time, the responsibility for infrastructure development continues to be with the Government which provides fund in form of grants and interest free loans.

Financial Performance

11.3 Market share of German Railways steadily declined from 1950.

	1950	1990
Passenger Traffic	36%	7%
Freight	63%	24%

This reduction in market share affected financial performance. By 31 December 1993 the accumulated debt was DM 66 billion and loss for 1993 was DM 15.5 billion.

11.4 To improve the situation, major reforms were introduced w.e.f. 1.1.1994 which eventually led to privatisation.

Privatisation of German Railway—

11.5 German Railway is more cautious in their Railway privatisation programme. They appointed an eleven members commission in 1989 to recommend measures for reform. This commission consisted of members from different walks of life i.e. Politicians, Industrialists, Railway Managers, Trade Unionists, etc. The Commission gave their report in December 1991 [Summary of recommendations at (Appendix-8)].

Structural Reforms

11.6 This report of the Commission underwent the process of public debate and finally it was accepted by the Parliament with suitable amendments in December, 1993. A new Railway organisation came into existence w.e.f. 1.1.1994. Consequently, a new relationship was established between the Germans and the Railways and many structural changes took place both externally and internally. Unlike Britain, the German Railway reform had the sanction of all political parties in Germany and hence it is more stable.

External Reforms

11.7 (i) With effect from 1.1.1994, the German Railway is a Public Limited Company with 100% of the shares held by the Government. The volume of shares has been fixed at DM 12 billion and no return need to be paid to the Government by the Railways till they are able to consolidate their position and improve their profitability. At a later date same payment has to be made from the profit and this matter will be reviewed and agreed upon. It is now free from public service and budgetary laws. It can operate as a company run on the lines of a private enterprise.

(ii) It is now freed from the accumulated debt of DM 66 billion. A separate body has been formed in the Ministry of Transport for the administration of this debt till it is liquidated.

(iii) The Railway assets which was valued at DM 100 billion has now been fixed at a depreciated value of DM 25 billion. Moreover, there is no interest liability on this capital.

(iv) A special authority has been formed for the administration of about 120000 Civil servants working in the Railways. The staff will continue to work for the Railways, draw their salaries, but their service condition will be controlled by this special authority. There has been an agreement between the special authority, Deutsche Bahn and the Ministry of Transport. Gradually, these civil servants will be replaced by staff coming under the new company regulation.

(v) Another body has been set up in the Ministry of Transport to take charge of the disposal and development of surplus Railway land. Funds generated by this agency will be utilized for the liquidation of debts.

(vi) The policy of operating subsidy continues but the manner in which it is administered has changed. Compulsion is brought on the Railways to reduce the need for subsidy by bringing in competition.

(vii) Obligation imposed on the Railway by the Government will be compensated. This is mainly applicable to short distance passenger traffic where the tarrif system is unable to meet the cost.

(viii) Investment will be a joint responsibility *i.e.*, the capital cost for creation of infrastructure will be financed by the Government and investment on rolling stock by the Railways.

(ix) Major policies will be decided by a Supervisory Board (20 members) consisting of railway, government, political and industry representatives while executive function will be managed by a Board of Directors (12 members).

Internal Reforms

11.8 Major changes have taken place in the internal structure of this organisation. Accordingly, the Railways has been reorganised into following 9 business units:

—Long Distance traffic
—Local traffic
—Passenger stations
—Freight services
—Parcel services
—Rail Network
—Railway construction
—Traction
—Railway works

Each of these business unit have to endeavour to make profit. This is contractual relationship between each of these business unit for the work they have to do and payments they have to make for the service they obtain from other units.

After 5 years there will be further regrouping of Railways into 3 companies:

—Passenger traffic PLC (for both long and short distance)
—Freight traffic PLC
—Infrastructure PLC

These companies will then be floated in the stock market. However, the infrastructure company will have 51% share owned by the Government. Before implementing this stage of reform one more review and Parliament act will be required. This process is expected to be completed by 2002 AD.

The pricing policy in totally left to railways in respect of freight, long distance passenger traffic, etc. However, pricing policy for short distance passenger traffic is decided in consultation with the Government, since it involves the element of subsidy.

No distinction is made with regard to Government goods and private goods. Government goods are to be treated at par with other cargo and no separate statistics is to be kept.

All cleaning functions (trains, stations and depots, etc.) are handled by subsidiary companies by employing less qualified and less paid staff. These staff continue to do such jobs on long term basis and get limited promotion. However, more qualified staff can seek opportunities in other business units of the Railways on their own merit and effort. German Railway will only provide the assistance in form of training facilities.

There are nearly 170 subsidiary companies under the roof of German Railways performing rail related offline functions.

The subsidiary companies generate 20% revenue and the balance 80% revenue is generated by main nine business units.

Operating subsidy

11.9 The major element of operating subsidy is to support the short distance passenger traffic. In 1995, income from short distance traffic was DM 10597 million, this included the payment for the services ordered by the State Authorities amounting to DM 7282 million. Local Governments invite tenders for short distance passenger traffic and other private operators quote to German Railways. By this process, the prices and subsidy are controlled.

In addition to this, after privatisation, the new railway company is compensated for old liabilites. This arrangement will continue till the liabilities are liquidated. In 1995, old liability on material and personnel expenses was DM 2310 million and DM 3404 million respectively.

The German Railway, in 1995, had an outlay of DM 30723 million of which income by Railway was DM 17397 million and Government support was DM 12996 million (7282+2310+3404).

The following has been the financial result of the German Railway since 1993:—

—1993—Loss DM 15.5 billion
—1994—Profit DM 0.489 billion.
—1995—Profit DM 0.390 billion
(1 DM billion=Rs. 2200 crs.)

Investment Subsidy

11.10 The investment plan for 1996-2000 (5 years) is DM 77 billion. The breakup is as follows:—

—New lines/upgrading existing lines	—DM 51 billion (by Govt. loans and grants)
Rolling Stock	—DM 18 billion (by Railways)
Station/Ticket vending machines, etc.	—DM 6 billion (by Railways)
Information Technology	—DM 2 billion (by Railways)
Total:	—DM 77 billion

Construction of New Lines

11.11 Before finalising any new projects regarding construction of a new line a detailed discussion will be held between the Government and the Railway. If a new unprofitable line is to be constructed, the investment is done by the Government and is treated as grant. Investment of profitable line is also funded by the Government but treated as interest free loan to be returned in agreed terms. For example, the new speed line (300 km.p.h.) between Koln and Frankfurt (200 km. route length) will be constructed at a cost of DM 8.7 billion and this will be treated as interest free loan. Similarly, high speed project between Hannover and Berlin will be funded by a combination of grant and loan.

Closure of Unprofitable Lines

11.12 An application can be made by the German Railway for closure of an unprofitable line. The matter will be considered by the Federal and local Governments and a decision is reached within one year and if the decision is to continue the line, the railway is to be suitably compensated by the Government.

Staff Reduction

11.13 Major savings in expenditure is proposed to be by reduction of staff. In 1993, the Staff of German Railway was reduced to 387829 which further declined to 294911 by 1995. Reduction in Deutsche Bahn alone 8.3% per annum and reduction in Deutsche Bahn group which includes subsidiaries is 7% per annum. This indicates that some more activities are transferred to subsidiary companies. The investments are also carefully planned so that while achieving staff reduction, quality of services is not affected but rather improved.

Trade Unions are cooperating with this transformation and reduction in staff because they are also convinced that if productivity is not improved, the survival of the railway as a mode of transport will be in danger.

(B) French Railway (SNCF)

11.14 French Railway is a Government Undertaking, having an integrated structure, with considerable autonomy in functional management. The internal structure continues to be mostly departmental oriented. Presently, the system works as follows:

(i) There is a 5 year contractual agreement between railway undertaking and Government. The task of the Government and railway are clearly laid down in the agreement.

(ii) Unprofitable projects if imposed on them by the Government will be financed wholly by the Government.

(iii) Unprofitable local services and branch lines are subsidised by the local Government. There is an annual agreement defining the level of services provided by the Railway and subsidy to be provided by the local body to the Railways.

(iv) The railway is expected to run profitably in regard to freight, long distance passenger operations etc.

11.15 Under the present system of working, French Railway were not able to make profit, on the contrary they have been making losses. Although there is a strong feeling that major reforms are needed, but the Unions which are very strong are not in favour of it.

11.16 However, a new system came into existence with effect from 1.1.1997 which brought about major structural changes. But there is no attempt to privatise French Railway as has been done both in U.K. and Germany.

11.17 Accordingly, the system of 5 years agreement between railways and Government has been discontinued. For construction of new lines, it is proposed to create a new company called Rail Infrastructure Company. The infrastructural subsidy will now be given to this new Company. French Railway will continue to manage the existing infrastructure and operate the system. Operating subsidy will be received by French Railway and will be distributed to the regions. Financial responsibility for running local passenger services will be given to the following six regions:

(i) Alsace
(ii) Centre
(iii) Nord Pas-de-Calias
(iv) Pays de la Loire
(v) Rohne-Alpes
(vi) Provence-Alpes-Cote d' Azure

By this arrangement, the French Railway is expected to improve its efficiency, reduce cost and level of subsidy.

Special features of French Railway

11.18 The following table shows the market share and tariffs levied by French Railway:

Market Share

Passenger	8%
Freight	24%

Tariff: Passenger per PKM—0.39 FF=Rs. 2.73
Freight per TKM—0.64 FF=Rs. 4.48

Compared to the income level, French Railway operate at the lowest tariff structure compared to UK and Germany.

Subsidy

11.19 Low tariff structure is compensated by the Government by high subsidy which is provided mainly to support the regional passenger transport system. Operating subsidy for the year 1995 was as follows:

(i) Paris Regional Transport	—4.79 billion FF
(ii) Other Regional Transport	—8.10 billion FF
(iii) Parcel/Posts	—0.16 billion FF
(iv) Others	—1.46 billion FF
Total:	—14.51 billion FF

This is about 37% of the operating income. Infrastructure subsidy for 1995 was FF 12.4 billion. This subsidy is meant to support projects which are not profitable and to be implemented at the instance of the Government. However, profitable projects are financed by French Railway.

Financial Result

11.20 For the year 1995, the income/expenditure statement is as follows:

(a) Operating income	—39.4 billion FF
(b) Operating subsidy	—14.5 billion FF
(c) Infrastructure subsidy	—12.4 billion FF
(d) Other income	—20.8 billion FF
Total:	—87.3 billion FF
Total Expenditure	—103.8 billion FF
Loss	—16.5 billion FF

The loss increased to 16.5 billion on FF in 1995 from the level of loss of 7.7 billion FF in 1993.

(C) British Railway (BR)

11.21 British Government took the extreme measure of dividing the British Railway into nearly 90 business units and sell it to private agencies. 60 companies have already been sold and balance are expected to be sold before March 1997 (*i.e.*, before the next election). The decision to go for privatisations was taken by the present Conservative Government without the consensus from the opposition Labour Party. Labour Party stand is that they will reverse this process if they are voted to power in the comming election. The Conservative Government therefore wants to speed up and complete the privatisation process to make it irreversable.

11.22 A white paper was presented to Parliament in December, 1992, based on some consultants report. It is learnt that the team of consultants did not have any Railway representatives. The new Railway Act, passed by the Parliament, got the Royal Assent in November, 1993. The new organisational structure came into force w.e.f. 1.1.1994.

Salient Features

(i) Rail regulator will exercise quasi judicial powers to approve licences, to ensure that there is fair play among the various companies. He is also responsible to protect the consumers interest. His functioning will be similar to the Electricity Regulator is Britain.

(ii) Franchise Director is responsible to franchise the 25 passenger operating companies and the government will channel the payment of subsidies through him.

(iii) The franchises are so designed to bring down the subsidy gradually.

—The agencies wanting to purchase the long distance passenger business which has been traditionally a profitable business, should be willing to pay premium to the Franchise Director and the one who offers the highest premium wins the contract.

—The agencies wanting to purchase the short distance or local traffic which are traditionally loss making and subsidised should quote for reducing the subsidy gradually. Whosoever quotes for least subsidy wins the contract.

—Franchises are given for 7 years, 10 years, 15 years etc.

(iv) The Rail Track which owns the ground infrastructure is the single largest company and that will play the coordinating role.

—They will be responsible to co-ordinate the time tables.

—They will co-ordinate the safety programmes.

(v) Safety is monitored by Her Majesty's Safety Inspector who functions as part of Health and Safety Executives.

(vi) Passenger and Freight operating companies will pay the access charge for using the rail and station infrastructures.

(vii) In like manner each of these companies will have contractual relationship with other companies from whom they are bying or selling the services.

(viii) Each company is to present a SAFETY CASE to be scrutinized by HMRI and approved by the Rail Regulator.

(ix) One important aspect of their privatisation process is to encourage purchase of these companies by MEBO team (Management employee Bay Out Team). What it means is that Managers and employees of a particular unit can form themselves into a company and purchase that company. Government gives some special concession to such MEBO teams. Some such teams have been successful in purchasing some units.

Investment

11.23 Investment on infrastructure will be joint responsibility of the Government and the infrastructure company (RAIL TRACK) but investment on rolling stock and other areas are the responsibility of the respective companies. However, depending on the nature of investment, Government will contribute if social responsibilities are involved. For example, the project on the new high speed link Channel Tunnel Link between London and Paris (110 km. of British portion) has now been operational but on the British side trains are operating at low speed on old track. A new high speed link will now be constructed and the project has been awarded to a new company London and Continental Railway Limited (LCR) to construct and operate.

Market Share

11.24 The market share of British Railway has come down over to a low level *i.e.* 8% passenger and 9% freight. Passenger business is still considered to be very important and therefore special attention is being paid in that aspect. Accordingly, the passenger business has been split into 25 companies and 15 of these have been sold out. The winner of these franchise have agreed to bring down the subsidy over the next 10 to 15 years to zero level, while providing services defined in the contract in terms of both quality and quantity. The expectation of the Government is that within a period of 10 to 15 years, the subsidy now being paid to the regional railways will be reduced to practically nil. The statutory authority called Franchise Director will keep a watch on the performace of these passenger companies. He is responsible for the following:

—dispensing the subsidy
—monitoring the quality and quantity of services provided.
—impose penalty for bad performances.
—rewarding better performance above bench marks.

All other business companies are expected to run on profit on their own.

11.25 A comparative analysis of (i) size of Railway Network; (ii) major Railway Assets (iii) Passenger Traffic (iv) Freight Traffic and (v) Tariff & Income are given in Appendix-IX to XIII.

CHAPTER XII

EXPERIENCE OF RAILWAY IN DEVELOPING COUNTRIES

The Chinese Railway

Historical Background

The Peoples' Republic of China is a country with an extensive territorial expansion. The distribution of natural resources and the economic development are uneven. The railway is the main artery of China's economy. The first railway line in China was built in 1876. By 1949 the tracks had reached a length of 21000 Km. The standard of the tracks was low and the equipment primitive. Most of the network is located in the North-East and on China's East Coast.

Since 1949, the Government is putting large emphasis on the railway's development. New lines were built and existing tracks upgraded. By the end of 1995 the operating network of the whole country reached a length of about 60000 km. Of this, the National Railway shares 55000 km. the local railways 5000 km.

12.2 The railway carries most of the whole country's travel and freight transportation requirements. In 1994 passenger and cargo transportation reached 57.9% and 68.8% respectively of the entire transportation volume.

12.3 The Organization of the Chinese Railway consists of the Transportation Center and Integrated Divisions such as Transportation, Industry and Engineering as well as Science and Technology, Training, Logistics and others. Other than uniformly organizing and managing transportation for the entire network, the railway also adminsitrates factories producing rolling stock and specific equipment as well as the organizations responsible for planning and building railway lines and associated transporation facilities.

12.4 The Railway Administration has their own departments for scientific and technical training, medical and health care and food supply.

12.5 For traffic, 12 Railway Directorates were established under the Ministry. These Directorates administer 56 railway offices. Stations and the various operating facilities are under the command of these offices.

12.6 For the industry, the General Company for Rolling Stock Manufacturing and the General Company for Signalling and Communication Equipment were set up. For building projects, the General Company for Engineering and the General Company for Construction were established. For material supply, the General Company for Railway Material was created.

12.7 The above mentioned 5 General Companies administer a total of 35

factories for signalling and communication equipment, 19 construction companies for projects, 5 project planning institutes and the operations for construction machinery.

12.8 The Chinese Railway Ministry has 10 Universities, 1 Railway Science Academy, 7 Research Institutes and more than 100 mid-level occupational training facilities for various fields of learning.

Operating Network

12.9 In 1990, the operating network had a length of 53000 km. of which, 13000 km. (24.4%) were double track. By the end of 1995 the operating network reached a length of 60000 km. with 29.6% being double track. In 1990 diesel traction amounted to 30.2% electric traction 13% and, by 1995 the percentage changed to 40% for diesel and 18.3% for electric traction.

Equipment

12.10 At the end of 1990, the railways owned over 13,592 locomotives, of which 5680 were diesel and 1633 electric locomotives. By the end of 1994, the locomotives increased to 14694 of which 7673 were diesel—and 2356 electric locomotives. Diesel and electric locomotives account for total 69% of all locomotives in stock, yet fulfill 85.9% of all transportation tasks. Most of these locomotives were built in China.

12.11 In order to develop the superiority of diesel and electric locomotives, the Chinese railways actively conducted traction trials and overload transports to promote increased weights for freight trains. The average total houled load of a freight train was increased from 2414 tonnes(t) in 1990 to 2659 t in 1994. Signalling, automatic train control and communication reached 90% of all trains operations thereby effectively warranting traffic safety.

12.12 There were 27261 coaches and 365000 freight cars at the end of 1990 and by the end of 1995 their number increased to 32000 and 430000 respectively. Most passenger coaches and practically all freight cars were manufactured in China itself. Coinciding with the increasing quality of life of the population, high speed passenger coaches with air conditioning and double deck cars were introduced. Freight cars with loads of 60 t and more count 67.4% of the entire fleet. With the increased use of large freight cars, the average allowed loading weight was raised to 56.6 t.

12.13 The technical speed of passenger and freight trains was 57.9 km/h and 44.2 km/h respectively in 1994.

At this time, passenger train speeds of 140 km/h and freight train speeds of 90 km/h are being tested.

Transportation Performance

12.14 At the end of 1990, the railway's share of transportation in relation to all other modes of transportation shows the following picture:

(a) passenger traffic	17.6%
(b) passenger transportation volume	53.4%
(c) frieght traffic	53%
(d) freight trnsportation volume	71.3%

By the end of 1994 these numbers reached:

(a) passenger traffic	22%
(b) passenger transportation volume	57.9%
(c) freight traffic	55.3%
(d) freight transportation volume	68.8%

12.15 The railway is the main means of transportation for passenger and freight traffic in the Peoples Republic of China. Owing to the lag in the development of the railways, the increasing demand for transportation was not being met. The saturation point on most of the main lines has already been reached. It has become more and more difficult, to transport passengers and freight. The problems have not been solved yet. However, the direction of development of the railways is one of increasing passenger train speeds and density and to develop highest load freight trains and container traffic.

Personnel

12.16 At the end of 1994 there were 3.39 million employees, of which 2020000 engaged in transportation, 416000 in the industries and 515000 in construction projects as well as in material supply, scientific research, culture and education and health care.

Status of the Railways' Development under Chinese 8th Five Year Plan and the present problem

12.17 Under the 8th Five-Year Plan, the Chinese railway laid 6011 km. new line and 5170 km. double track and electrified 2200 km. Meanwhile, local railways laid 1000 km. of track.

12.18 Similarly, 4230 locomotives, 9600 passenger coaches and 128800 freight cars were built. Through the built during the same period up in five years, the extent of the rail network was expanded and the equipment quality was increased. But, in comparison with the development of the national economy, there were still large gaps. On the whole, the Chinese Railways are still confronted with the following problems in traffic:

(a) Obvious Increase in Traffic Load and Lack of Traffic Capacity

12.19 The traffic load which was 24.75 million ton-kilometers/km. and 28.88 ton-kilometers/km. in 1990 & 1993 respectively increased to 30.06 million ton-kilometers/km. by 1995. However, it was 8.18 ton-kilo-

meters/km. and 25.37 ton-kilometers/km. for the USA and for Russia respectively. In comparison with others of the worlds state railroads, the traffic demand on the Chinese Railway is very high. Its capacity is very scanty. 55% of 498 line segments operate at the saturation point.

(b) Lack of Passenger Transportation Capacity

12.20 An average of 1088 train pairs are running daily in China. The transportation capacity is 2.47 million passengers per day. Yet 2.797 million passengers per day were actually transported during 1995. This exceeds 20% of the whole capacity. Not only that, during spring and summer vacation periods capacity were exceeded by 50%.

(c) Demand on Freight Transportation

12.21 The demand on freight transportation increased unceasingly but bottlenecks are still in existence.

(d) Exchange between Provinces and Territories

12.22 The exchange between the provinces and territories has rapidly increased. Corridors in large areas face continuous problems. In 1990, the transportation volume between the provinces was only 55.3% of the country's entire transportation volume increased to 61.2% by 1995.

12.23 In passenger traffic, the volume between 501 and 1000 km. distances rose by 11.87% and at over 1000 km. distance by 10.63% between 1990 and 1995.

12.24 As the Indian Railways have been paying dividend on the capital invested to the General Revenues the Chairman enquired whether the Chinese Railways were also contributing to the General Exchequer. The Expenditure Secretary replied as follows:

> "They cannot. They do not have surplus. You have mentioned about China. All those countries are coming up with innovative methods of funding their network. They are going on 'toll'. In the last five years, they have created eight line express service, which is not from their Budget, but through privatisation and toll collection. They must have been planning for this. They must have got from the turn around of wagons. Their wagon turn around has increased".
>
> The witness further stated:
>
> "If in these areas we can back to a normative level, we can do better. How fast can we come back on wagon turn around, instead of buying more and more wagons, how can we improve our efficiency or structural reforms, based on all these, we can easily increase further our internal resources.

12.25 On this issue the Special Secretary, Planning Commission deposed as follows:

"I would like to add what has already been indicated by the Secretary, Expenditure. I completely agree with him. Even if we compare it with China, we find that the operations there are much more profitable; the turn around of wagons and others are much faster than in India. So, there is a scope even in India inspite of the fact that the Railways have been doing better in the last two years. There is scope for more improvement in so far as the Indian Railways are concerned".

12.26 When the Committee wanted to know the comments of the Ministry of Railways on the above observations made by the representatives of Planning Commission and Ministry of Finance, the Chairman (Railway Board) stated:

"They talk of the Chinese Railways. They have been telling us that the Chinese Railways is doing wonderfully well. I have got with me an article which has appeared in an international railway journal which says: 'Chinese Railway suffered an overall operating loss of 10 billion in 1985. This includes an operating loss of 6.5 billion for passengers services, which is an improvement of 9 billion loss incurred during the previous year'. So the Chinese Railways which suffered a loss of 9 billion is considered by Planning Commission as a wonderful Railway and the Indian Railway which has not suffered any loss and rather improved its surpluses is not efficient according to the Planning Commission. This is a very funny logic."

CHAPTER XIII

OBSERVATIONS AND RECOMMENDATIONS

The Railways are today an integral part of our socio-economic life. From a modest beginning in 1853 with a route of 21 miles, the Railways have blossomed into a gigantic organisation with a network of over 62915 route kms. of all the three gauges. The Indian Railways are the largest network in Asia and the second largest network under a single management in the World. This can be judged by the fact that it employs more than 16 lakh persons; have a holding of 6909 locomotives, 39104 coaches and 280791 wagons; carries more than 1.1 million tonnes of originating freight traffic and 11 million passengers per day; maintains 40671 level crossings; owns 4.19 lakh hectares of land. The Capital-at-charge at the end of financial year 1995-96 was Rs. 22249.82 crs. Inspite of this heavy investment in Railways, its market share has declined in freight and passenger traffic from 89% and 72% in 1951 to 40% and 20% respectively in 1995. The Committee are of the firm opinion that this trend will have to be reversed if the Indian Railways are to survive.

13.2 The need for heavy investment for the Railways was visualised as early as in 1924 when Acworth Committee was appointed to give its recommendations. That Committee disapproved the faulty system under which the Finance Department of the Government controlled the Railway Finances. In the opinion of that Committee it was absolutely necessary to treat Railways 'as a continuously going concern with a carefully thought out programme both of revenue and of capital expenditure for years ahead with provisional financial arrangements to correspond'. Keeping in view the recommendations of Acworth Committee, the then Commerce Minister moved a Resolution in the then Legislative Assembly for Seperation of Railway Finances from General Finances on 17 September, 1924 which was adopted by a Resolution of the House on 20 September, 1924 and was approved by the Secretary of State. The working of the Seperation Convention was reviewed from time to time by Committees appointed by the Legislative Assembly. The Railway Convention Committee 1949, which was the first to be set up after Independence, assured a steady return to General Revenue and also enabled the Railways to strengthen their reserves for discharging their obligation towards rehabilitation, increasing operational efficiency and provision of adequate amenities. It also arrested the growth of over capitalisation in the Railways.

While the Railway Committees of 1949, 1954, 1960 and 1965 confined themselves only to the question of determining the Rate of Dividend payable by the Railways, the Railway Convention Committee (1971) for the first time selected some subjects which had bearing on the finances of the

Railways for their detailed examination and presented Reports on those subjects to Parliament. The subsequent Committees have also, in addition to the reporting on the Rate of Dividend payable by the Railways to General Revenues, been examining and reporting on the various aspects on working of Railways and Railway Finances.

13.3 As is evident from the succeeding paragraphs, the Indian Railways have again been trapped in the same situation prevailing prior to 1921. The Committee, therefore, recommend that the financial requirements through more budgetary support will have to be made both by the Planning Commission and the Ministry of Finance to enable the Indian Railways to keep pace with the fast growing demands of the economy.

13.4 With the introduction of economic reforms, there is a discernable economic growth in various sectors of the economy. The Committee find that the Approach Paper to Ninth Plan has projected 7% growth rate in the economy and to meet the growing transport requirements, Railways being the bulk transport carrier, will have to double its freight and passenger output so that economy does not suffer on account of transport bottlenecks. The Planning Commission have also, in that Approach Paper, admitted that the share of Railways in freight traffic has declined from 89% in 1951 to 40% in 1995, while its share in passenger traffic went down from 72% to 20% during the same period. According to a Press Report appeared in Business Standard dated 11.9.1996, the share of road traffic which is at present 60% of total freight traffic of the economy, is likely to go upto 65% by the turn of the Century. It is roughly estimated that the growth of Railway traffic should be of the order of about 10% per year for absorbing the anticipated growth of the economy. To acheive this goal, the Committee feel that the Railways need huge investments of the order of 10000 to 13000 crs. annually in the Ninth Plan Period. They, therefore desire the Railways to endeavour to modernise in a big way and to ensure better management on one hand and on the other Planning Commission and the Ministry of Finance should ensure to make available the required funds to the Railways so that the challenges on account of spurt in the economic growth can be met efficiently by them.

13.5 The Committee do agree that all modes of transport have their own importance in economic development of the Country. However Railways and Waterways have a definite advantage over road and air in terms of energy efficiency and environment friendliness. The importance of energy efficiency in transport policy and in determining the optimum inter modal-mix for the future has also been highlighted by the National Transport Policy Committee. Rail transport is estimated to be 6-7 times more energy efficient than road transport. It is eco-friendly from the point of space utilisation and also environment friendly from the point of pollution free compared to other modes of transport. According to a study conducted in Europe the external costs caused by damage to environment by rail transport is about one fifth in passenger traffic and one tenth in freight

traffic. Keeping in view the above facts, the Committee recommend to the Union Government to strengthen railways to carry greater market share of transport by assisting them in creating basic infrastructure by providing ample budgetary support from General Budget. They are of the firm opinion that development of infrastructure for the Indian Railways should be wholly financed by the Government as for the development of Roads, Airports and Ports, Government do provide 100% budgetary support.

13.6 The Committee note that the Railways are the principal mode of transport for freight and passenger traffic in the country and are the bulk carriers of commodities like coal, raw materials, steel and mineral oils. Although, there has been more than 300 per cent growth in the traffic carried by the Railways since Independence yet the network expansion has been only 16.7 per cent as is evident from the fact that only 900. route kms. could be added in the railways network till 1996. There have been continuous demands for its expansions from tribal, backward, remote and hilly areas still inadequately served by the Railways but its growth has been adversely affected by perpetual shortage of resources.

13.7 In this connection, the Committee find that upto the Sixth Plan gap between the size of the Plan and internal resources was wholly financed by the budgetary support which was 34% during the First Plan. It was gradually stepped up, reached a maximum 75% of total Plan outlay in the Fifth Plan and then it came down to 58% in Seventh Plan. However, midway in the Seventh Plan, it was realised by the Government that because of constrained resources, it would not be possible to fund the entire approved plan of Railways, through the normal channel of budgetary support which came down to 42%. It was, therefore, decided that a part of the requirment of additional assets should be met through market borrowings. With this decision the budgetary support started declining which finally came to about 16% in 1996-97, the terminal year of Eighth Plan and market borrowings started increasing. The funds mobilised through market borrowings amounted to Rs. 6176.67 crores upto the end of 1994-95 whereas the Railways had to recover dues amounting to Rs. 1095.92 crores from the State Electricity Boards/Public Sector Undertakings as on 30-11-1994. On this amount no interest is chargeable. As against the dividend rate of 7% Railways have to pay for budgetary support, around 22% has to be paid to Indian Railway Finance Corporation for the amount mobilised by them through taxable bonds. Had the Central Government helped the Ministry of Railways in recovering the outstanding dues of Rs. 1095.92 crores by adjustment against plan allocations of these States. Railways would have been saved from mobilising funds through IRFC at a very high rate of interest. The Committee are concerned to note further that the lease charges paid to IRFC have increased from Rs. 626 crores in 1991-92 to Rs. 1443 crores in 1996-97.

13.8 The effect of this declining budgetary support, as stated in the Economic Survey 1996-97 has forced the Railways to re-prioritise their on-

going projects of line expansion, renewals, gauge conversion, electrification of key routes etc. and has also adversely affected procurement of rolling stock. With the implementation of the Pay Commission recommendations, the Committee feel that it would not be possible for the Railways to rely more on internal generation of resources.

13.9 The Ministry of Railways have informed that the present Government have decided to accord priority to the development of rail transport infrastructure in the North-East Region and in all other backward and tribal areas. In consonance with the above decision, a sum of Rs. 400 crores—300 crores for North-East Region and 100 crores for Jammu Kashmir Region—has been allocated for new line projects.

In this connection, the Committee note that in the Eighth Plan, an outlay of Rs. 2940 crores was proposed for construction of new lines. Since the entire expenditure on new lines is borne out of budgetary support and adequate resources could not be provided under budgetary support, the plan outlay for new lines was kept at Rs. 900 crores only. The Committee are concerned to find that at the beginning of the Ninth Plan the Railways will have a huge throwforward of Rs. 4380 crores for completing the new line works in progress covering 3610 kms. They therefore, desire perspective plan should be drawn up to complete these lines in time so that there may not be any cost/time over-run. Keeping in view the unlikelihood of any substantial relief due to dwindling budgetary support, the Ministry of Railways have reviewed the on-going projects and categorised them in six categories from category A to Category F. The Ministry of Railways now propose to fund and progress first only the projects in category A and C *i.e.,* lines required on urgent operational/strategic considerations and lines on which more than 50% expenditure has already been incurred and of which more than 50% gestation period was over, as per their *inter-se* priority. For the remaining categories D, E and F only token funds would be provided to keep the projects alive. The projects under category B, *i.e.,* National Projects, with funding outside railways plan, will be progressed to the extent funds are provided by the Government of India outside the Railway Budget. Keeping in view the above criteria fixed by the Government, the Committee would like to have details of the new line projects which are likely to be taken up and completed during Ninth Plan.

13.10 Doubling of lines is another area for augmenting the traffic carrying capacity. The Committee find that out of a total route of 62915 kms., 47758 kms. consists of single line and only 15157 (23%) route km. has double/multiple lines. In this connection, the Committee have been informed that proposals for doubling are initiated by the Zonal Railways taking into account the traffic pattern and existing line capacity. Traffic projections are made for each Five Year Plan in consultation with the actual user sectors and the concerned Ministries. Thereafter, these projections are discussed and finalised in consultation with the Planning Commission. The Ministry of Railways take up doubling of single line

sections only when the existing utilisation of that track reaches around 90 to 95% of the capacity utilisation. The Committee note that the Railways expect to complete doubling of 1140 kms. during the Eighth Plan and the spill over into the Ninth Plan for completion of on-going doubling projects will be 1657 kms. at a cost of Rs. 1575 crores. The outlay proposed for doublings in the Ninth Plan is Rs. 2500 crores out of which 1500 crores are to be spent for on-going works and Rs. 1000 crores for new starts. In all about 2000 kms. of doubling are proposed to be commissioned in the Ninth Plan. The Committee desire that the Ministry of Railways should concentrate only on those sections for doublings which are being used 100% of their capacity. While planning doubling of railway lines they recommended to the Ministry of Railways to develop high speed corridors so as to utilise the ABB Engines effectively.

13.11 The Committee note that the Indian Railways have a multiple gauge system with 3 gauges *viz.*, Broad Gauge, Metre Gauge, Narrow Gauge. As on 31st March, 1996 the railway network have 40,620 route kilometre of broad gauge, 18,501 route kilometre of metre gauge and 3,794 route kilometre of narrow gauge. On the broad gauge network, the traffic is concentrated on the quadrilateral and diagonals and the metre gauge is located mostly in peripheral areas. As the multiple gauge system had certain disadvantage from operating point of view, the Railways have been carrying out conversion of metre gauge to broad gauge in patches on selected routes since 1951. But it was only in 1971 that the concept of gauge conversion as a policy emerged and the Government announced to have lines only with BG and to progressively convert MG into BG. Accordingly, it was decided to convert nearly 4,000 kilometres at that time but the progress on conversion was slow on account of inadequate resources and high conversion cost.

In this connection, the Committee find that a number of studies were made by Expert Committees on the subject of Gauge Conversion. A Committee set up in 1978 on metre gauge operation recommnended for upgradation of metre gauge lines and conversion to BG on a selective basis. The National Transport Policy Committee appointed by the Planning Commission had also in their Report in 1980 laid down certain criteria for implementing gauge conversion projects. On the basis of the criteria fixed and the studies conducted, the Railway Ministry again came to the conclusion in 1981 that gauge conversion should only be done selectively where the traffic density was heavy or trans-shipment at break of gauge points caused severe bottlenecks. However, the Committee find that in 1992-93 a significant change, if not total reversal, in railway policy with regard to gauge conversion was made when the then Railway Minister announced the launching of "Project Unigauge". After converting about 7,000 kms. of MG and NG into broad gauge, the total MG and NG network left on Indian Railways would be about 20,790 kilometres by the end of Eighth Plan. The Committee have been informed that about 6,200 kilometres of MG/NG is planned to be converted into broad gauge during

Ninth Plan. The Committee recommend that sufficient funds should be provided to the Railways for achieving the above target.

13.12 Railway electrification has assumed national importance because of the growing emphasis on conservation and substitution of oil energy. The Committee find that upto 31 March, 1996, only 12,875 route kilometre has been electrified. As per the objectives laid down by the Ninth Plan Working Group on Railways for railway electrification in the Ninth Plan, the Railways would complete the on-going works, take up electrification of the remaining unelectrified sections of the Golden Quadrilateral and also cover certain missing links. The total target for railway electrification planned during Ninth Plan is 2,300 route kilometres. The Committee desire that while doing electrification of railway lines, emphasis should be laid on strengthening overhead equipments so as to meet requirements of heavy haul freight trains and longer passenger trains at higher speeds. Simultaneously, railways should also take action for replecement of Over Head Equipments on age-cum-condition basis, obtaining power supply directly from NTPC, installation of capacitor banks to improve power factor, augmentation/construction of new traction sub-stations to cater to the requirement of growing traffic demands during Ninth Plan period. Substantial drop in power production during Eighth Plan period should also be kept in view while planning for electrification of railway lines.

13.13 The Committee also recommend that the State Electricity Boards/ Public Sector Undertakings should be pursuaded to levy electric charges on the Railways as is being levied on bulk electric consuming industries.

13.14 To cope with rising traffic density and to meet better safety standards, the Committee feel that the Indian Railways will have to steadily modernise its signalling and telecommunication system. Route Relay Interlocking, Panel Interlocking, Colour Light and Automatic Block Signalling and Solid State Interlocking on all the routes. Safety aids like track circuiting and interlocking of level crossing gates, provision of telephones at manned level crossing and auxiliary warning system will also have to be adopted to enhance safety in train operations. The Committee, therefore, recommend that sufficient funds should be made available to the Ministry of Railways during Ninth Plan as railways are dealing with human lives and properties and there cannot be any compromise on this issue.

13.15 The fleet of rolling stock, consisting of locomotives, coaches and wagons, constitutes the bulwark of the railway assets. The adequacy of this fleet together with its efficient upkeep and optimum serviceability are matters vital to the operation of railway system. The rolling stock holdings of the Railways as on 31 March, 1996 have been 6909 locomotives (209 steam; 4313 diesel and 2387 electric); 3692 EMU; 29758 conventional coaches and 280791 wagons. The Ninth Plan Working Group on Railways in their Report has projected the likely traction split in the terminal year of the Ninth Plan (2001-02) as 50% each by electric and diesel locomotives in

respect of passenger traffic and 67% of freight traffic by electric and 33% by diesel locomotives. Keeping in view the projected freight transport and rolling stock utilisation, the Working Group has estimated that about 1.75 lakh wagons, comprising 1 lakh on replacement account and 75000 on account of incremental traffic; 1950 locomotives (900 diesel and 1050 electric) including 600 locos on account of replacement; 9000 non-EMU coaches; 2000 EMU coaches and 750 each of MEMUs/DMUs would be required to be procured during Ninth Plan period and to acquire the rolling stock proposed at above, total requirement of funds would be Rs. 28950 crores. The Committee recommend that Central Government should ensure to provide the required funds to the Ministry of Railways for the acquisition of rolling stock as assessed by the Working Group on the Ninth Plan so that they could be able to meet the demand for increased freight and passenger traffic.

13.16 The Committee however note that the performance of the wagon industry has been poor in the past and against their manufacturing capacity of about 36000 wagons per annum, the industry could not supply more than 26000 wagons in a year. They also desire the wagon industry to gear up their production to the rated capacity by removing the bottlenecks in the production line. Simultaneously, the Ministry of Railways should also ensure to place orders for wagon supply well in advance so that the wagon industry may be prepared to meet the challenges ahead.

13.17 The Committee also note that the manufacturing capacity of diesel (DLW) and electric locomotives (CLW & BHEL) is 150 and 170 per annum respectively. The Committee are of the firm opinion that the production capacity of these units would have to be expanded by providing marginal inputs for meeting the projected requirement of locomotives.

13.18 The Committee find that in order to satisfy the transport demand for non-bulk traffic as also to win back the traffic which had shifted to road, the Container Corporation of India (CONCOR) was started as a public sector unit under the Ministry of Railways. At present the entire container traffic moved by the Railways is handled by the Corporation which caters to both International and Domestic container traffic. The Ninth Plan Working Group on Railways has estimated that the International Container traffic would increase from 4 lakh TEU in 1996-97 to 10.5 lakh TEU in 2001-02. During the same period the domestic traffic is also expected to grow from 3 lakh TEU to 4 lakh TEU. The Committee hope that necessary funds and infrastructure would be provided by the Government to the CONCOR for handling the increasing demand.

13.19 The Ministry of Railways have informed the Committee that they had targetted to achieve 525 million tonnes of originating revenue loading (353 billion tonne kms.) 2988.87 million of originating suburban and 1793.25 million of originating non-suburban passengers during the terminal year of Ninth Plan *i.e.* 2001-02.

13.20 The Ministry of Railways have also stated that if the rail share in the overall transport system is to be increased by 5% as recommended by the Planning Commission, the rail freight traffic to be lifted in the terminal year of the Ninth Plan, calculated on the basis of modest GDP growth rate of 6% works out to a staggering 427 billion tonne kms. The historical rate of growth of passenger traffic has been 4% per annum against the expected demand of 6% per annum during Ninth Plan and at this rate of growth 429 billion passenger kms. will be required to be generated by 2001-02.

13.21 During evidence the Chairman, Railway Board has also stated that the Railways have asked for a Plan of Rs. 65000 crores against the Eighth Plan allocation of Rs. 33000 crores. It is felt by the Indian Railways that unless the Plan size is to tune of the amount proposed, the Indian Railways would stand in the way of the development of the country and the progress of the country is likely to be retarded.

13.22 The Committee feel that the Railways will have to respond to the changed environment by making the necessary competitive adjustments to deal with the pressures of market forces in a liberalised economic environment, not only in order to remain financially viable but to be able to satisfy the growth in demand for rail transport as a result of accelerated growth of the vibrant economy. At the same time, the Railways as a public utility would have to continue to be responsive to their public service obligations. Apart from having a high budgetary support, the Committee feel that the Ministry of Railways will have to be efficient as they have to find the ways and means to economise on a large scale so that they could generate more internal resources.

13.23 The Committee note that the Indian Railways is departmentally run organisation falling under the jurisdiction of Ministry of Railways (Railway Board). The Railway Board at present consists of the Chairman; the Financial Commissioner and five other Members. Whereas the Chairman, Railway Board is *ex-officio* Principal Secretary to the Government of India, the Members of the Railway Board are separately in charge of matters relating to staff; Civil Engineering; Traffic; Electrical Engineering and Mechanical Engineering. After considering the growth in the volume of railway purchases during the last decade, the Railway Convention Committee (1991) had, in their Fourth Report, recommended for creation of a post of member (Stores). In their Action Taken Reply dated 8th April, 1994, the Ministry of Railways had informed the Committee that the recommendation for "creation of a post of Member (Store) is being studied by a Committee, which has recently been set up by the Ministry of Railways to make a detailed study of the organisation and structure of the Railways to bring about necessary changes in the Management Ethos so that rail transport becomes a way of business." The Committee are constrained to note that no action has so far been taken by the Ministry of Railways in this

regard. The Committee therefore, reiterate their earlier recommendation for creating a post of Member (Stores) in the Board immediately.

13.24 The Committee feel that development does not only mean laying new railway lines and procuring new rolling stock. The development can be said to be wholesome when the safety aspect is not compromised. Keeping in view the frequent accidents, derailments and dacoities the present parameters of railways safety needs to be examined *de-novo* and therefore the Committee recommend that the present set up for Railway safety should be headed by a full-fledged member at the apex level of Indian Railways.

13.25 The Committee note that against the recommendations of the Railway Reforms Committee made in 1984 for creation of four zones at Ajmer, Jabalpur, Bangalore and Allahabad, the Ministry of Railways have abruptly created in August, 1996 six zones at Hajipur, Bhubaneshwar, Jaipur, Allahabad, Jabalpur and Bangalore. The Ministry of Railways did not take any action for creation of any zone during the last 12 years and created six zones without any examination at a time when Railways were facing acute financial crunch. What is more surprising to the Committee is the fact that the Ministry of Railways could not notify the areas which will come under the jurisdiction of these zones even after a lapse of six months. In the opinion of the Committee creation of more Divisions instead of creating zones should have been given weightage with the growth in volume of freight and passenger traffic. The Committee take a serious view of the manner in which these zones were created and want to have an explanation in this regard.

13.26 There is also need for management reforms in the Railways. The Committee recommend that the costs need to the pruned largely by improving operational techniques including maintenance of assets and income increased by commercial utilisation of their land.

13.27 Modern technology plays a vital role in significant savings in investment, cost of operation and economies of scale. It also brings in improvement of quality and reliability of service and also safety. Therefore, the Committee recommend that the Indian Railways should upgrade their existing technologies in areas of high speed and efficient locomotives for both electrical and diesel traction, new design for coaches, operation of 4500 tonne freight trains at double the existing average speed on mixed traffic routes. Heavy haul freight trains of upto 18000 tonne trailing loads at 75 kms. per hour, operation of passenger services upto 160 kms. per hour on mixed routes and at the rate of about 200 kms. per hour on dedicated routes.

The Committee are also unhappy to note that high speed state-of-art locomotives were procured by Ministry of Railways without creating supporting infrastructure.

13.28 The Indian Railways is a departmentally run organisation falling under the jurisdiction of Ministry of Railways. The Ministry is under the

charge of a Minister of Cabinet rank who is assisted by Minister of State/ Deputy Minister. Indian Railways being a part of the Government of India, have undertaken a number of social obligations, which they have been discharging for a long time within the constraint relating to availability of resouces. It has been assigned the dual task of providing a modern railway transport system at least cost to the society while maintaining its financial viability. It also has a deep social obligation to subserve the national objective by providing the basic and necessary transport infrastructure for promoting economic development and rapid industrialisation of the country. To meet the growing demands for expansion of railway network from every corner of the country, the Railways require major investments for expansion/upgradation of their system. The Committee find that the budgetary support which was about 75 per cent of the total Plan outlay in the Fifth Plan came down to 16 per cent in 1996-97, terminal year of the Eighth Plan. The decline in budgetary support has adversely affected the growth of Railways as against the dividend rate of 7 per cent on budgetary support, it has to pay around 22 per cent to Indian Railway Finance Corporation (IRFC) for the amount mobilised through market borrowings. Since 1987-88, the funds mobilised by the Railways through IRFC amounted to Rs. 10553 crores on which the Railways have so far paid Rs. 7284 crores as lease charges to IRFC.

13.29 The Committee find that the private sector participation through schemes like Built-Operate-Lease-Transfer (BOLT) and Own-Year-Wagon-Scheme (OYWS) has limited success. No money is coming under BOLT as the schemes covered under it are highly capital intensive and the private participants hesitate to invest money in long gestation projects. As the policy of creating assets through BOLT has failed, the Committee recommend that the Railways should immediately by freed from this policy.

13.30 From the Railway Budget Speech for 1997-98, the Committee find that out of the Annual Plan of Rs. 8300 crores, the Railways would be able to generate internal resources to the extent of Rs. 3419 crores. The borrowings through IRFC have been estimated at Rs. 2150 crores and the budgetary support from General Revenues would be of the order of Rs. 1831 crores only. The Committee are constrained to find that the Indian Railways have been asked to raise Rs. 2150 crores from market at an interest rate of about 20—22 per cent. The Committee are of the firm opinion that no railway system can exist on the borrowed money. Throughout the world, Indian Railway is the only Railway which are earning profit and paying dividend to the Government for the capital invested. The Committee would be failing in their duty if they do not warn the Government that if timely action is not taken for meeting the railway requirements from the Union Budget, the Indian Railway will also be having the same fate as of other Railways of the world and then it will require huge sum of money beyond control.

13.31 The Committee note that Indian Railways operate daily 7525 trains comprising of 2973 ordinary passengers and mixed trains, 1237 mail/ express trains and 3315 EMUs. They are constrained to note that the average speed at which the mail/express trains run per hour broad gauge is 47.9 Km., ordinary passenger trains at 31.8 Km. and EMUs at 35.6 Km. The total number of passengers carried by Indian Railways during 1995-96 stood at 4018 million. In this connection, the National Transport Committee had observed that there has been heavy fluctuation in demand for non-suburban traffic in the year. The demand shoots up during holidays in May & June and thereafter again from October to December. These demands mostly for medium and long distance travel is concentrated on main trunk lines which carry heavy traffic and suffer from serious problems of capacity. The Committee, therefore, feel that it is necessary to plan for a realistic growth of long distance passenger traffic, by introducing high speed trains. Simultaneously, more new centres of economic activity would have to be created so as to disperse and reduce singificantly the pressure of population in metroplitan cities which, in turn, could be possible only if travel facilities with high speed trains are made available. As recommended by the Committee in earlier paragraphs of this Report, there is urgent need for raising the average speed of trains to 120 to 160 Kms. per hour for which all the new lines, renewals of railway lines, doubling of lines, gauge conversion of lines etc. should be laid keeping in view the necessity for running the trains at the above speed.

13.32 All those trains with a journey of less than 300 Kms. are categorised as short distance passenger trains. All these short distance stopping trains which are loss making from the operational point of view. In this connection, the Ninth Plan Working Group on Railways have, in their Report, stated that apart from heavy losses suffered by Indian Railways due to operation of short distance passenger services, the situation has become critical because of saturation of the existing high desnity corridors. The Committee also feel that it would not be possible to introduce additional long distance passenger and freight services unless restraint is exercised on the growth of such short distance services.

13.33 The Committee note that out of a total loading of 405.5 million tonnes, Indian Railways loaded 390.69 million tonnes of revenues earning freight during 1995-96. Although freight movement constitutes only 40% of the total traffic carried by Railways, yet it contributes 72% to the total railway revenue. On the other hand, passenger traffic accounted for 60% of the transport output, contributes only 28% to the earnings. Due to various socio-political reasons Indian Railways have been subsidising passenger traffic particularly suburban and short distance by the earnings of freight traffic and this has led to periodical increase in freight rates. The International passenger fare to freight rate ratio in India has been 32.4% which is the least in the World except that of Sri Lanka. In a developing country like China it is 151%. During evidence, the Finance Secretary has also pointed out that cross subsidisation of passenger fares by freight tariff

by Indian Railways is a major cause of concern as it adversely affects the financial viability. Moreover, when one passenger train is added, it is added in place of three goods trains. The introduction of subsidised passenger fare has a double effect on the railways efficiency. It not only produces subsidised services which limits the financial viability of the railways but displaces goods movement to a much greater extent than the passenger movement that it adds. The Finance Secretary was against taxing the public for subsidising people travelling by rail. Clarifying the position in this regard, the Chairman, Railways Board submitted before the Committee that 97% of passengers travel in second class or second sleeper class and no person can increase the fare of second class by 50%. However, he admitted that the seasonal ticket of suburban sections are absolutely very low and there it can be increased even by 100%. Keeping in view the views expressed by both the Finance Secretary and Chairman, Railway Board, the Committee feel that there is a scope for rationalisation of passenger fare over the years so that there may not be any need for cross subsidy. The Committee also recommend that the Railways should have a study of cost analysis, class-wise *vis-a-vis* service rendered by them for future evaluation of increase in passenger fare.

13.34 Railway transport in cities is generally termed as suburban rail services which serve the population of large cities with reference to the working hours in offices, industrial establishments, educational institutions etc. Organisation to administer and control the suburban rail services in each of the metropolitan cities of Mumbai, Calcutta and Chennai is divisional organisation headed by Divisional Railway Manager. There are at present 2 divisions in Mumbai, 3 division in Calcutta and 1 division in Chennai responsible for administering and controlling the suburban rail services. In addition to the above divisions, Metro Railway and Circular Railway covering a distance of 16.45 Kms. and 13.50 Kms. respectively are also serving the suburban passengers of Calcutta. The total number of suburban passenger has increased from 2527.02 millions in 1995-96 to 2560.40 millions in 1996-97 and passenger kilometres increased from 73651 millions to 74624 millions during the same period. Whereas the suburban services of Western and Central Railways have shown a profit of Rs. 79.69 crores and Rs. 2.53 crores respectively, all other suburban services have been incurring havey losses. During their Study Tours to Mumbai and Chennai during October 1996 and to Calcutta during January 1997 there was demand for additional lines, additional EMU and DMU coaches. The commuters had also complained to the Committee about late running of these services. There was also demand for completing the Circular Railway and extension of Metro Railway. Considering the high rise in passenger traffic in all the metropolitan cities, the Committee feel that there is an urgent need for augmenting the transport facilities for the daily commuters. However, the Committee have been informed that with the amendment in the Business Allocation Rules in 1986, the responsibility of planning and

coordination of urban traffic including the Rail based ones now rests with the Ministry of Urban Affairs and Employment. As augmentation and running of Metro and Suburban services are highly capital intensive projects, the Committee recommend that a separate Corporation should be set up for running these suburban and metro services.

13.35 The Committee have also been informed that Delhi Metro System is a Joint Venture and 100 per cent of the funds required are to be funded by the Government of National Capital Territory of Delhi and the Central Government. The capital cost is to be met by borrowing from OECL. Delhi Metro would be managed by a separate company. The Committee would like to have the full details of the project.

13.36 The Committee note that the magnitude of social burden of Indian Railways used to be assessed including cost of staff welfare measures and law and order cost till 1991-92 and it consisted of (a) losses on freight services for carrying essential commodities at rates much below the cost (b) losses on suburban passenger services and (c) losses on suburban coaching services. However, after the matter was raised during the course of a meeting of the Consultative Committee of Members of Parliament for the Ministry of Railways in February 1993, it was decided, after examination by the Railway Board, that the expenditure on health, housing, education and law and order costs should not be considered as social costs. After deducting staff welfare and law and order costs, the railways have been made to bear social burden of Rs. 5145 crores from 1992-93 to 1995-96. From the analysis of the loss suffered by the Railways, the Committee find that the maximum losses are being suffered on suburban and non-suburban coaching services. Against a cost of Rs. 25.18 per passenger Km. the Railways have been charging Rs. 16.51 in 1993-94. Similarly, a review of financial results of uneconomical branch lines for the year 1993-94 shows that on an original investment of Rs. 64 crores the losses added upto that period were Rs. 146 crores on as many as 117 branch lines.

13.37 In this connection, the Committee find that the practice of bearing social obligations is a built-in feature of Railway systems the world over and to cover such deficits grants are sought by Railways and sanctioned by Governments in many countries. In the United Kingdom, British Railways were given Public Service Obligation Grant of 808.9 million pounds in 1993-94 to sustain the quality and level of passenger business on Provincial Services and Net Work South East. The Swiss Federal Government contributed SWFr. 2439 million in 1993, as federal compensation towards regional passenger and freight services. Similarly, the Federal Republic of Germany, in 1992, granted the German Railway the DM 22683 million towards compensation for social services, payment for welfare activities, investment grants. etc. The French Government also granted to the French National Railway an amount of F.Fr. 42900 million in 1993 towards infrastructure, pensions, compensation for socially reduced tariffs and regional passenger services. The percentage of subsidy to total revenue in

these countries has been 40 to 68%. The Railway Convention Committee (1991) in their Fifth, Ninth and Twelfth Reports on Rate of Dividend for 1994-95, 1995-96 and 1996-97 respectively had also recommended that when the Ministry of Railways are facing acute resource crunch due to dwindling budgetary support, they should adequately be compensated for carrying social burden. The payment of compensation for carrying social burden also assumes greater importance as for meeting their requirements, Railways were forced from 1987-88 to 1996-97 to raise an amount of Rs. 10553 crores through market borrowings for which they had to pay Rs. 7284 crores as lease charges.

13.38 The Committee have been informed that as recommended by them, a study for carrying social burden by the Railways was made and a copy of the Report was sent to the Ministry of Finance who opined that since the study was an inhouse exercise of the Railways, a Working Group associating representatives of Ministry of Finance and Planning Commission should be set up for examining the issue in its entirety. The Chairman, Railway Board, informed the Committee during evidence that a Committee of Officers as suggested by the Ministry of Finance was appointed and they had submitted a Draft Report on the subject and their final report is still awaited. The Committee recommend that the Committee of Officers should be asked to give their final Report expeditiously so that the Railways could get the much needed financial support from the Government on account of carrying social burden at this crucial juncture.

13.39 In order to have a view of the financial performance of the Indian Railways *vis-a-vis* that of other Railways in developed/developing countries, the Committee want to share the experience of those countries. In Germany, the size of Railway network is 40000 Km. for a population of 80 million whereas Indian Railways network is 62915 Kms. for a population of 900 million. Inspite of that the German Government has been providing support to their Railways in order to expedite its full potential as a mode of transport due to its inherent advantages. Even after privatisation of their railway with the consent of all political parties w.e.f. 1-1-1994, the support the German Government gave to their Railways amounted to DM 12996 million against generation of internal resources to DM 30723 million. At the same time, the responsibility for infrastructure development continued to be with the Government which provided funds in the form of grants and interest free loans. If a new unprofitable line is to be constructed, the investment is done by the German Government and is treated as grant. Investment on profitable line is also funded by the Government but treated as interest free loan to be returned in agreed terms. Similarly, for closure of any unprofitable line, if a decision is taken to continue the line, the Railway is suitable compensated by the Government.

13.40 French Railway is a Government Undertaking having an integrated structure, with considerable autonomy in functional management. The internal structure continues to be mostly departmental oriented.

Unprofitable projects, if imposed on that Railway, are to be financed wholly by the Government. Similarly, unprofitable locs[1] services and branch lines are subsidised by the local Government. However, the Railway is expected to run profitably in regard to freight, long distance passenger operations etc. Inspite of the above provisions, the Committee find that the French Railway was not able to make profit and on the contrary, it has been incurring heavy losses. The loss suffered by the French Railway was 6.5 billion FF in 1995 even after getting operating subsidy of 14.51 billion FF and infrastructure subsidy of 12.4 billion FF. However, w.e.f. 1 January, 1997, a new system has come into existence which brought about major structural changes but there has been no attempt to privatise French Railways as unions are very strong in France and are not in favour of it.

13.41 The British Railways were also given service obligation grant of 808.9 million Pounds in 1993-94 to sustain the quality and level of passenger business on Provincial Services and Net Work South East.

13.42 The Peoples Republic of China is a Country with a extensive territorial expansion and where the distribution of natural resources and the economic development is uneven. The operating network of Chinese Railway has increased from 21000 Kms. in 1949 to 60000 Kms. by the end of 1995 with 29.6% being double track. The diesel and electric traction amounting to 32.2% and 13% respectively in 1990 has increased to 40% for diesel and 18.3% for electric by 1995. Although the diesel and electric locomotive account for 69% of all locomotives in stock, yet they carry 85.9% of all transportation traffic. By 1994 passenger and Cargo transportation reached 57.9% and 68.8% respectively of the entire transportation volume.

13.43 During evidence the Expenditure Secretary had admitted that the Chinese Railway does not pay any dividend on the capital invested as they do not have any surplus. However, both the Expenditure Secretary and the Special Secretary, Planning Commission stated that the Chinese Railways are more efficient than the Indian Railways and there is a large scope for improving the efficiency in the Indian Railways. Refuting the above statement, the Chairman, Railway Board informed the Committee during evidence that the Chinese Railway had suffered an overall operating loss of 10 billion in 1985 and that included a operating loss of 6.5 billion for passenger services, whereas the Indian Railways have always been making profit.

13.44 Keeping in view the experience of different world Railways, the Committee have come to a conclusion

—that the policy on market borrowings at high interest rate is highly deterimental to the health of Indian Railways and needs to be discontinued;

— development of infrastructure for the Indian Railways should be wholly financed by the Government as for the development of Roads, Airports and Ports, Government do provide 100% budgetary support;

—non-profitable/strategic lines should be financed in the form of grants and other profitable projects need to be financed in the form of dividend free loans;

—short distance passenger operations, which is universally unprofitable and compensated, should be compensated by the Union Government;

—social burden imposed on Railways should be adequately compensated either by the Government or by the respective Ministries;

—there should be rapid extension and upgradation of Rail Network to meet the demands of the Indian economy expected to grow at the rate of 7%. Accordingly growth rate of Railways should be 10 to 15% if the demands of the economy are to be met and the market share of Railways is to be improved.

NEW DELHI;
March 11, 1997

Phalguna 20, 1918 *(S)*

MANORANJAN BHAKTA,
Chairman,
Railay Convention Committee.

APPENDIX I

(*Vide* Para No. 6.1)

NEW LINES COMPLETED AND EXPENDITURE INCURRED

PLAN	YEAR	KMS	EXPENDITURE (Rs. in crs.)
6th Plan	80-81	301	42.18
	81-82	0	47.32
	82-83	335	63.49
	83-84	72.14	76
	84-85	339.8	96.32
	Total	1047.94	325.31
7th Plan	85-86	109.05	79.16
	86-87	70.2	127.77
	87-88	158	188.54
	88-89	307	255.21
	89-90	237	265.59
	Total	881.25	916.27
Annual Plan	90-91	107.11	293.94
Annual Plan	91-92	193	269.36
	Total	300.11	563.3
8th Plan	92-93	249	241.09
	93-94	211	213.41
	94-95	18	193.61
	95-96	145	209
	96-97@	105	220
	Total	728	1077.11

@ TARGET

Appendix-II
(*Vide* Para No. 6.8)

Calendar of New Lines 92-93 to 96-97 (8th Plan)

92-93 Completed Section	KMS	93-94 Completed Section	KMS	94-95 Completed Section	KMS	95-96 Completed Section	KMS	96-97 Completed Section	KMS
Rampur Rd-Rewa	21	Deeg-Alwar	79	Sanichara-Nonera	13	Damanjodi-Rayagada	145	Beas-Goindwal	27
Mathura-Deeg	29	Rudrapur-Kathgodam	14	Kulpi-Karanjali	5	Udupi-Kundapura KRC	32	Chhitauni-Bagaha	19
Birlanagar-Sanichara	16	Sambalpur-Maneswar	18			Veer-Khed	51		
Shivpuri-Khajuri	15	Chitaradurg-Rayadurg	100			Khed-Chiplun	30	Work in progress	
Bilaspur-Rudrapur	22	Veer-Roha (KRC)	47						
Ambathural-Madurai	44								
Alleppey-Kayankulam	43							Karanjali-Nischantpur	8
Trichur-Guruvayoor	24							Chiplun-Kundapura(KRC)	532
Telapur-Pattancheru	9							Jogighopa-Goalpara	10
Talcher-Angul	18							Khajuri-Mohana	41
Mangalore-Udupi(KRC)	68								
	241		211		18		145		105
+KRC	68	+KRC	47			+KRC	113	+KRC	532
	309		258				258		637

Appendix III
(*Vide* Para No. 6.8)

DETAILS OF NEW LINE ONGOING PROJECTS, THROWFORWARD AND PROPOSED OUTLAYS IN 9TH PLAN PERIOD

	Project	Year of approval	Kms.	Cost Rs. in crs.	Exp. upto 31.3.96	Outlay 96-97	Throw forward on 1.4.97 Rs. in cr.	Proposed outlays in IXth Plan (in crs. of Rs.) 97-98	98-99	99-2000	00-01	01-02	Remarks
	Category 'A' Lines Required on Urgent Operational/Strategic Considerations.												
1.	Talcher-Sambalpur (Orissa)	84-85	174	348	192	50	106	106	0	0	0	0	TD Dec. '97.
2.	Jammu Tawi-Udhampur (J&K)	81-82	56	335	196	40	99	99	0	0	0	0	TD Dec. '97.
3.	Jogighopa-Guwahati (Assam)	83-84	142	496	363	27	100	100	0	0	0	0	TD Dec. '97.
4.	Daitari-Baaspani (Orissa)	92-93	155	243	57	20	400	—	—	—	—	—	*To be funded with private funds (*Revised cost).
5.	Panvel-Karjat##	96-97	28	89	1	12	76	30	66	0	0	0	Work included in supplementary demands and cleared by Planning Comm. and Expanded Board. Exp. so far is on land acquisition.
	Total		555	1511	809	149	781	335	66	0	0	0	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	CATEGORY 'B' NATIONAL PROJECT WITH FUNDING OUTSIDE RAILWAYS PLAN												
6.	Udhampur-Srinagar-Baramulla (J&K)	94-95		1900	.1	1							
	Total			1900	1	1							
	CATEGORY 'C' LINES ON WHICH MORE THAN 50% EXPENDITURE HAS BEEN INCURRED AND MORE THAN 50% GESTATION PERIOD IS OVER												
7.	Guna-Etawah via Shivpuri-Gwal-Bhind' (Madhya Pradesh)	85-86	348	256	133	22	101	55	45	0	0	0	171 kms already opened. TD Dec '97 for Guna Gwalior sector. Work on Gwalior-Etawah portion will be taken up thereafter.
8.	Lakshmikantapur-Namkhana (W)	87-88	47	50	40	5	25	10	15	0	0	0	Will be completed in Dec '99.
	Total		395	306	173	27	126	65	60	0	0	0	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	CATEGORY 'D' LINES WHICH HAVE BEEN TAKEN UP ON NATIONAL COMMITMENT.												
9.	dudhnoi-Depa (Meghalaya)	92-93	17.5	23	6	5	20	10	10	0	0	0	Will be completed in 97-98.
10.	Mandarhill-Rampurhat (Bihar)	94-95	130	170	2	1	167	10	40	60	57	0	
	Total		147.5	193	8	6	187	20	50	60	57	0	
	CATEGORY 'E' PROJECTS ON WHICH EXPENDITURE OVER 5% HAS BEEN INCURRED												
11.	Howrah-Amta(WB)	74-75	73	30	22	2	50	10	40	0	0	0	Howrah to Bagrachia (24 kms) opened. Work being done only in one block section from Bagrachia to Munshirhat (5 kms) Rest in frozen (44 kms).
12.	Peddapalli-Karimnagar-Nizamabad (AP)	93-94	177	193	8	3	182	15	40	60	67	0	Work in progress on Ph. 1 between Peddapalli and Karimnager (18 Kms).
13.	Kapadvanj-Modasa (Gujarat)	78-79	59	38	10	1	45	10	35	0	0	0	80% EW + bridges completed.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14.	Tamluk-Digha (WB)	84-85	87	109	27	1	75	10	40	25	0	0	
15.	Eklakhi-Balurghat(WB)	85-86	87	94	9	3	82	10	40	32	0	0	Entire expenditure incurred in first block section from Eklakhi to Gazole 12 kms. which will be opened in 96-97.
16.	Katra-Faizabad (UP)	94-95	7	51	4	1	45	2	25	18	0	0	
	Total		490	515	80	11	479	57	220	135	67	0	
CATEGORY 'F' OTHER NEW LINE PROJECTS ON WHICH LESS THAN 5% EXPENDITURE HAS BEEN INCURRED													
17.	Amravati-Narkhed (Maharashtra)	93-94	138	183	3	3	177	5	19	50	60	43	
18.	Lanjigarh-Junagarh (Orissa)	93-94	54	100	4	1	95	1	5	20	30	39	
19.	Godhra-Indore *via* Dahod-Maksi (Gujarat & MP)	89-90	316	297	10	1	286	2	5	20	26	50	Work being done only on Dewas-Maksi (Total cost Rs. 48 crs.)
20.	Khurda Rd-Bolangir (Orissa)	94-95	289	353	2	1	350	2	10	20	25	30	
21.	Nangaldam-Talwara	81-82	83	150	24	1	126	1	5	20	25	30	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
22.	Kottur-Harihar		65	66	0	1	65	1	5	20	20	18	
23.	Nandyal-Yerraguntala	96-97	126	156			155	2	10	20	20	50	
24.	Kadur-Chickmagalur-Sakleshpu	96-97	100	157	0	1	156	2	10	20	20	50	
25.	Kumarghat-Agartala	96-97	119	575	0	1	574	2	10	56	60	60	
26.	Sakri-Hassanpur	96-97	76	103	0	3	100	5	5	20	20	50	
	Total		1366	2140	43	13	2084	23	84	266	306	460	
	Total (A+C+D+E+F)		1587	4665	1113	206	3657	500	480	461	430	460	
PROJECTS INCLUDED IN THE BUDGET BUT NOT YET TAKEN UP FOR WANT OF DEPOSIT OF SHARE/CLEARANCE OF EXPANDED BOARD/CCEA. (WORK CAN BE TAKEN UP ONLY AFTER OBTAIN THESE CLEARANCES)													
1.	Ahmednagar-Beed-Parlivaijnath	95-96	250	353	1	0.01	353	0	5	10	10	10	Approval of Exp.. Bd/CCEA not received.
2.	Dallirajahara-Jagdalpur	95-96	235	369 incl.241 Dep.	1	1	128	0	5	10	10	10	MOU not yet signed with State Govt./SAIL NMDC not yet signed.
3.	Haridaspur-Paradeep	96-97	78	121			121	0	5	10	40	50	Planning Commission's clearance awaited.
4.	Dausa-Gangapur City	96-97	93	151			151	0	5	9	10	10	Exp. Board/CCEA clearance not received.
	Total		656	1094	2	1.01	753	0	20	39	70	80	
	Grand Total:		2243	5759	1115	207.01	4410	500	500	500	500	500	
	Total for 5 years Rs. 1750 crs.												

APPENDIX IV

(*Vide* Para No. 6.22)

Category 'E' Projects to be done under Bolt Scheme

1.	Agra-Bandikui	UP/Rajasthan	95-96	151	89	0
2.	Wankaner-Maliya-Miyana	Gujarat	95-96	90	51	0
3.	Katpadi-Tirupati	AP/TN	92-93	105	62	8
4.	Bhildi-Viramgam	Rajasthan/Gujarat	90-91	157	155	0
5.	Mudkhed-Adilabad	AP	84-85	162	108	24
6.	Mathura-Achnera	UP	95-96	35	20	0

APPENDIX VA

(*Vide* Para No. 7.8)

(Rs. in cr.)

Year	Capital at charge	Current Dividend	Deferred Dividend	Total Dividend
1	2	3	4	5
82-83	7251	436	72	508
83-84	7568	379		379
84-85	8286	270		270
85-86	9078	507	117	624
86-87	10373	579		579
87-88	11622	639		639
88-89	12988	716		716
89-90	14629	809		809
90-91	16126	926	12	938
91-92	17712	1032	74	1106
92-93	20123	1172	342	1514
93-94	20874	1296		1296
94-95	21763	1362		1362
95-96	22248	1264		1264
96-97 BE	23779	1587		1587
96-97 RE	23536	1515		1515
97-98 BE	25197	1630		1630

APPENDIX VB

(Vide Para No. 7.8)

(Rs. in Cr.)

Plan	Internal Resource		Bonds		Total Internal and Extra-budgetary Resource		Budgetary Support		Total
	Amt.	%age	Amt	%age	Amt	%age	Amt	%age	Total
I	280	66%			280	66%	142	34%	422
II	467	45%			467	45%	576	55%	1043
III	545	32%			545	32%	1140	68%	1685
1966-69	320	42%			320	42%	442	58%	762
IV	397	28%			397	28%	1031	72%	1428
V	384	25%			384	25%	1141	75%	1525
1978-80	316	25%			316	25%	935	75%	1251
VI	2783	42%			2783	42%	3802	58%	6585
VII									
1985-86	1065	55%			1065	55%	877	45%	1942
1986-87	1318	49%			1318	49%	1379	51%	2697
1987-88	1331	39%	720	21%	2051	60%	1368	40%	3419
1988-89	1586	40%	800	20%	2386	61%	1543	39%	3929
1989-90	1789	39%	1000	22%	2789	61%	1773	39%	4562
Total-VII	7089	43%	2520	15%	9609	58%	6940	42%	16549
1990-91	2091	43%	1092	23%	3183	66%	1632	34%	4815
1991-92	2134	40%	1503	28%	3637	67%	1756	33%	5393
VIII									
1992-93	2548	41%	1025	17%	3573	58%	2589	42%	6162
1993-94	4030	69%	856	15%	4886	83%	974	17%	5860
1994-95	3582	65%	745	14%	4327	79%	1145	21%	5472
1995-96	4210	65%	1118	17%	5328	82%	1140	18%	6468
1996-97 BE	4111	50%	2750	34%	6861	84%	1269	16%	8130
1996-97 RE	4401	53%	2460	30%	6861	83%	1439	17%	8300
1997-98 BE	3419	41%	3050	37%	6469	78%	1831	22%	8300

APPENDIX VI
(Vide Para No. 8.9)

Metropolitan Transport Projects (Railways)
Projects costing Rs. 100.00 Crore and above

(Rs. in Crores)

	Name of the Project		Sanctioned/ Anticipated Cost	Expenditure upto 31.3.96	Allocation for 1996-97	Balance to complete	Target date	Cost time	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
	Calcutta:								
1.	Design & construction Dum Dum-Tollyganj (16.45 Km.)		1562.68	1507.00	*50.00	5.68	Mar. 97	—	
	Mumbai:								
2.	Addl. pair of lines between Bandhra-Andheri (7.20 Km.)		111.57	93.20	*15.25	3.12	Mar. 97	—	Line in operation and residual work in progress
3.	Extension of railway lines from Mankhurd-Belapur with a bridge across Thane Creek and ancilary facilities on Harbour branch (17.98 Km.)		440.87	377.67	47.11	16.09	Mar. 97	—	
		Rly.	145.48	139.23	1.00				
		Cidco	295.39	238.44	46.11				

(Vide Para No. 6.8)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4.	Thane-Turbhe-Nerul-Sashi part of corridor no. 2 in Mumbai (19.0 Km.)		403.39	3.06	39.49	360.84	Mar. 99	—	
		Rly.	131.47	3.06	*15.00				
		Cidco	271.92	—	24.49				
5.	Belapur-Panvel doubling of commuter line (10.9 Km.)		279.83	31.13	10.00	238.70	Mar. 99	—	Works included in 1995-96 budget and works are in progress
		Rly.	92.34	14.08	*10.00				
		Cidco	187.49	17.05	—				
6.	Quadrupling between Borivali-Virar (25.84 Km.)		327.21	11.17	1.00	315.04	Mar. 2000	—	
7.	Seawood-Uran electrified 5th line (22.30 Km.)		401.81	—	1.00	400.81	Mar. 2000	—	Works inclded in 1996-97
		Rly.	129.87		1.00				
		Cidco	271.94		—				
	Chennai:								
8.	Construction of line MRTS line from Madras Beach-Luz (8.55 Km.)		197.23	149.27	*34.49	13.47	Dec. 96	12 month	5.5 Km. line in operation due to land acquisition problem cost/time.
9.	Luz-Velachery extension of MRTS (10.3 Km.)		430.21	—	1.00	429.21	Mar. 2000	—	works included in 1996-97.
		Rly.	141.96		1.00				
		T.N. Govt.	288.25		—				

*August review/re-appropriation

APPENDIX VII

(*Vide* Para No. 9.20)

International Passenger Fare to Freight Rate Ratios

(Ratio $ per passenger-kilometer to $ per ton-kilometer)

Sri Lanka	19.5
India	32.4
Pakistan	33.8
Greece	34.3
Turkey	42.7
Indonesia	43
Thailand	83.8
Portugal	77
Korea	87.4
France	141.2
China	151.8
United Kingdom	160.2
Germany	184.2
Japan	191.8
Canada	347.8
United States	623.0

0 100 200 300 400 500 600 700 in Percent

(Indonesia-1987: Thailand-1990: Canada-1990)

APPENDIX VIII

(*Vide* Para No. 11.5)

GOVERNMENT COMMISSION REPORT ON THE RAILWAYS

December 1991

Summary of Recommendations

1. The structure of the Railways should undergo change to make the Railways a commercial enterprise. The Commission recommends the conversion of the Railways DB and DR into a Federal owned German Railway Public Limited Company (DEAG).

2. This Federal owned Public Limited Company is to be divided into Track, Freight traffic and Passenger traffic.

3. The divisions Freight traffic and Passenger traffic compete with each other and with third parties for the track. They pay a price to the track division for use of the tracks.

4. Insofar as the division Passenger traffic cannot cover the costs especially on the suburban lines, then it must demand the difference as a subsidy from the Federal Government, other regional cooperatives, specific administration or institutions. The Commission has made proposals for calculating such contractual payments.

5. The divisions freight and passenger traffic shall make autonomous decisions regarding investments in rolling stock, in the stations and centres of freight traffic.

6. The track division shall make investments in the improvement of the quality of the lines and in the expansion of the lines under its own commercial responsibility on the one hand, and in co-ordination with the Federal Transport Plan on the other. If the Federal Transport Plan plans the constructions of new lines the Federal Government and other interested parties shall bear the investment costs. The division Track shall take over the operations on this line either on its own or on a contractual basis for the contractor.

7. The basis of the Commission's considerations was the investment plan resulting from the medium-term economy plan of the Railways for the period 1991 to 2000. Similar plans or corporate wishes like for *e.g.* more social services was not submitted to the Commission.

8. Without the proposed structural reform the financial needs of the Railways will climb from the current 27 Billion DM to over 63 Billion Deutschmarks in the year 2000. Should the structural reform take place the financial need of the Railways which has to be covered by the Federal

Government, would presumably not increase. It should on the contrary, show a slight tendency to fall (24 billion DM in the year 2000).

9. The Commission's calculations are based on the presumption that the present network shall not be cut back. That does not mean that in certain cases lines won't be shut down. The Commission however, is for the expansion of the railway network.

10. The Commission expects that the Railways having a freer hand with privatisation shall improve the utilisation of its lines to full capacity. The Railways can, by introducing relatively cheap technical measures increase its line capacity from 30% to 50%. It will increase the quality of its service considerably.

11. At present (1991) the Railways expenditure is 6,5 billion DM. This amount would reach 71 billion DM in the year 2000. The Commission has assessed that the Railways by improving its services could handle more passenger traffic which the public sector would have to pay when buying these services. From this point of view the Commission have calculated an expenditure of 74,5 billion Deutschmarks *i.e.* 3,5 billion more than the present amount.

12. The Commission expects that the Railways will become more competitive in the freight sector. It recommends that in the non-heavy traffic sector the Railways combine and cooperate with the road traffic operators. The Commission is of the view that the Railways can extend and spread out its services. In the past the Railways had lost to individual transport companies and to the road carriers but recommends that the Railways to regain impetus should cooperate with road traffic operators.

13. The DEAG (Railway Public Limited Company) shall be more productive.The cut in labour in achieving this, can be undertaken but kept within natural fluctuations. In cases where in certain areas a higher cutback of labour is required, the steps should be done in a socially positive way. The need for a special treatment of this problem due to the nature of the tariff and government contracts for Railway employees has been considered with the proposal of drawing up a Personnel Transition Body. The Commission has considered the cost of such measures and has included them in its estimates.

14. In future the Railways will purchase according to commercial vantage points and no longer purchase its material and equipments chiefly from the domestic market. The Commission expects that in doing so larger rationalization reserves will be mobilized. Procurement quotas in the purchase sector should be a thing of the past.

15. The Commission is of the opinion that the structural reform will only be successful when all the individual components are realized in one piece. Prerequisite is the amendment of Article 87 of the Constitution for redefining the Corporate identity of the Federal Railways followed up by considerable changes in the Acts. To totally drop the mention of the Federal Railways in Article 87 of the Constitution is out of the question.

APPENDIX IX

(Vide Para No. 11.25)

Railway Network Size (Compared)

Country	Germany	France	UK	IR (94-95)
Railway	DB	SNCF	BR	IR
Area in thousand sq. km.	357	547	244	3287
Population in million	80	57.5	58.2	850
Railway Route KM	40,355	32,432	16,400	62,600
Railway Network—				
— per thousand sq. km	113	59	67	19
— per million inhabitants	504	564	281	74

— Provision of Railway Network (per capita) in India is less than a quarter compared to developed countries like Germany, France, UK etc.

— In a growing economy like India the demand for additional rail network will increase.

APPENDIX X

(Vide Para No. 11.25)

Major Railway Assets (Compared)

Railway	DB	SNCF	BR	IR (94-95)
Route Km	40,355	32,432	16,400	62,660
Electrified Route Km	17,054	13,717	4,940	12,266
Staff Strength (thousand)	370	177	120	1602
Locomotives—Diesel & —Electric	7,388	5,390	1,886	6,908
Coaching Stock	16,273	15,507	10,258	39,214
Freight Stock	233,066	76,348	13,871	2,91,360
EMU/DMU etc.*	3,223	1,866	2,706	920

* To have a common basis this information has been taken from UIC statistics.

This is the count of traction units (motor coaches in the DMU/EMU)

— In DB, SNCF and BR, major portion of the local passenger traffic is handled by DMU/EMU. These services are heavily subsidised by the governments.

APPENDIX XI

(Vide Para No. 11.25)

Key Operating Statistics

PASSENGER TRAFFIC

Railway	DB	SNCF	UK	IR
Year	1993-94	1994	1994	1994-95
Market Share%	6	8	7	20
Passengers—million	1435	806	713.2	3,915
Passenger km-billion	56	58.9	18.8	319
Average Lead km	39	73	26	81.6
Average Fare per km	DM/Rs.	FF/Rs.	GBP/Rs.	Rs.
- Second class	0.29/6.6	0.39/2.73	*0.17/9.4	0.19
- Upper class	0.39/8.9	0.64/4.48	0.23/11.96	0.67

1 DM=Rs. 23; 1 FF =Rs. 7, 1GBP=Rs. 53

APPENDIX—XII

(Vide Para No. 11.25)

Key Operating Statistics

FREIGHT TRAFFIC

Railway	DB	SNCF	UK	IR
Year	1993-94	1994	1994	1994-95
Market Share%	29	24	9	46
Tonnes million	315	129.3	103.3	381.5
Billion Tonnes km	67	49.7	8.5	252.9
Average Lead km	212	385	82.5	684
Average cost per Km	0.13 DM	0.32 FF	0.041 GBP	0.54 Rs.
- In Rupee terms	2.99	2.24	2.15	0.54

1 DM = Rs. 23, 1 FF = Rs. 7, 1 GBP = Rs. 53

APPENDIX—XIII

(Vide Para No. 11.25)

Tariff and Income (Compared)

Railway	DB	SNCF	UK	IR
Passenger Traffic				
Average fare per PKM in rupee terms				
- Second Class	6.6	2.73	9.4	0.19
- Upper Class	8.9	4.48	11.96	0.67
Freight Traffic				
Average cost per TKM in rupee terms	2.99	2.24	2.15	0.54
Minimum wages (Net) - in rupee terms per month	58,900	42,000	51,600	2,000
GDP in US$ per person per annum	24,666	21,285	17,645	223 (Rs. 6929-1993-94)

— Compared to minimum wages, the second class fare in IR appears to be cheaper. But compared to GDP per person it is costly.

— Upper class fare as well as freight traffic costs are high in India.

PART—II

Minutes of the sittings of Railway Convention Committee (1996) held on 30th December, 1996 and 11th March, 1997.

PART II

MINUTES OF THE 4TH SITTING OF THE RAILWAY CONVENTION COMMITTEE (1996) HELD ON 30TH DECEMBER, 1996

Fourth sitting of the Railway Convention Committee was held on Thursday, the 30th December, 1996 in Committee Room 'D' Parliament House Annexe from 1100 hrs. to 1330 hrs.

The following were present:

Shri Manoranjan Bhakta — *Chairman*

Lok Sabha

2. Shri Jayanta Bhattacharya
3. Shri Prem Singh Chandumajra
4. Shri Syed Masudal Hossain
5. Shri S.S. Palanimanikkam

Rajya Sabha

6. Prof. Vijay Kumar Malhotra
7. Shri Md. Salim
8. Shri N. Thalavai Sundaram

Lok Sabha Secretariat

1. Shri R.C. Gupta — *Deputy Secretary*

2. The Committee took evidence of the representatives of Planning Commission & Ministry of Finance (Department of Economic Affairs) on the subject of 'Ninth Plan Perspective — Infrastructural requirement of Indian Railways.'

3. The representatives of both Planning Commission and Ministry of Finance (Department of Economic Affairs) clarified various points raised by the Members of the Committee on the subject.

4. A verbatim record of the proceedings was kept.

The Committee then adjourned

MINUTES OF THE 5TH SITTING OF THE RAILWAY CONVENTION COMMITTEE (1996) HELD ON 30TH DECEMBER, 1996

Fifth sitting of the Railway Convention Committee was held on Thursday, the 30th December, 1996 in Committee Room 'D' Parliament House Annexe from 1500 hrs. to 1745 hrs.

The following were present:

Shri Manoranjan Bhakta — *Chairman*

Lok Sabha

2. Shri Jayanta Bhattacharya
3. Shri S.S. Palanimanikkam
4. Shri Surendra Singh

Rajya Sabha

5. Shri Md. Salim
6. Shri N. Thalavai Sundaram

Lok Sabha Secretariat

1. Shri R.C. Gupta — *Deputy Secretary*

2. The Committee took evidence of the representatives of Ministries of Power & Railways (Railway Board) on the subject of 'Ninth Plan Perspective — Infrastructural requirement of Indian Railways.'

3. The representatives of both Ministries clarified various points raised by the Members of the Committee on the subject.

4. A verbatim record of the proceedings was kept.

The Committee then adjourned.

MINUTES OF THE 6TH SITTING OF THE RAILWAY CONVENTION COMMITTEE (1996) HELD ON 11TH MARCH, 1997

Sixth sitting of the Railway Convention Committee was held on Tuesday, the 11th March, 1997 in Main Committee Room, Parliament House Annexe from 1500 hrs. to 1600 hrs.

The following were present:

Shri Manoranjan Bhakta - *Chairman*

Lok Sabha

2. Shri Syed Masudal Hossain
3. Shri S.S. Palanimanikkam
4. Shri Chandresh Patel
5. Shri Sartaj Singh
6. Shri Brij Bhushan Tiwari
7. Shri P.R.S. Venkatesan

Rajya Sabha

8. Dr. Srikant Ramchandra Jichkar
9. Prof. Vijay Kumar Malhotra
10. Shri Md. Salim
11. Shri N. Thalavai Sundaram
12. Shri S.S. Surjewala
13. Shri Ranjan Prasad Yadav

LOK SABHA SECRETARIAT

1. Smt. Roli Srivastava - *Joint Secretary*
2. Shri R.C. Gupta - *Deputy Secretary*

2. The Committee took up for consideration the Draft Report on the subject 'Ninth Plan Perspective - Infrastructural requirement of Indian Railways' and adopted the same with some modifications/amendments as shown in the Annexure.

3. The Committee also authorised the Chairman to present the Report to both Houses of Parliament after making verbal or other consequential changes arising out of factual verification by the Ministry of Railways.

The Committee then adjourned.

Page	Para	Line	Modifications/ Amendments	
158.	13.9	1	*Add* after "....covering 3610 Kms." "They therefore desire perspective plan should be drawn up to complete these lines in time so that there may not be any cost/ time over run"	
167.	13.27	20	*Add* at the end the following paragraph:— "The Committee are also unhappy to note that high speed 'state-of-art' locomotives were procured by the Ministry of Railways without creating supporting infrastructure."	
171.	13.33	29	*For* the last sentence:— "Keeping in ....subsidy"	*Read* as follows:— "Keeping in view the views expressed by both the Finance Secretary and Chairman, Railway Board, the Committee feel that there is a scope for rationalisation of passenger fare over the years so that there may not be any need for cross subsidy."
172.	13.33	3	*Add* at the end:— "The Committee also recommend that the Railways should have a study of cost analysis class-wise *vis-a-vis* services rendered by them for future evaluation of increase in passenger fare."	