

**PUBLIC ACCOUNTS COMMITTEE
(1975-76)**

(FIFTH LOK SABHA)

HUNDRED AND NINETY-FIFTH REPORT

RAJDHANI EXPRESS

MINISTRY OF RAILWAYS

(RAILWAY BOARD)

[Paragraph 10 of the Report of the Comptroller
and Auditor General of India for the year 1973-74,
Union Government (Railways)]



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Minutes of the sittings of the Public Accounts Committee held on—

20-6-75	
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(1975-76)

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SECRETARIAT

Shri Avtar Singh Rikhy—Additional Secretary.

Shri H. G. Paranjpe—Chief Financial Committee officer.

Shri N. Sunder Rajan—Senior Financial Committee Officer.

INTRODUCTION

I, the Chairman of the Public Accounts Committee, as authorised by the Committee, do present on their behalf this Hundred and Ninety-fifth Report of the Public Accounts Committee on paragraph 10 of the Report of the Comptroller and Auditor General of India for the year 1973-74, Union Government (Railways) relating to Rajdhani Express.

2. The Report of the Comptroller & Auditor General of India for the year 1973-74—Union Government (Railways) was laid on the Table of the House on 8-5-1975. The Committee examined this Audit Paragraph at their sitting held on the 20th June, 1975. The Committee considered and finalised this Report at their sitting held on 15-1-76. Minutes of the sittings form Part II* of the Report.

3. A statement showing the main conclusions|recommendations of the Committee is appended to the Report (Appendix V). For facility of reference these have been printed in thick type in the body of the Report.

4. The Committee place on record their appreciation of the assistance rendered to them in the examination of the Audit Report by the Comptroller & Auditor General of India.

5. The Committee would like to express their thanks to the officers of the Ministry of Railways for the cooperation extended by them in giving information to the Committee.

NEW DELHI;
January 15, 1976.
Pausa 25, 1897 (Saka).

H. N. MUKERJEE,
Chairman,
Public Accounts Committee.

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I

RAJDHANI EXPRESS

Audit Paragraph

1.1. In pursuance of a decision taken in 1967 by the Railway Board, in March 1969 Rajdhani Express was introduced as a bi-weekly super-fast train between New Delhi and Howrah covering the distance of 1,441 kms in 17 hours. The train consists of six air-conditioned passenger coaches (one first class coach and five second class chair cars) and three service coaches (two generator cars and one pantry car). The coaches were specially designed and manufactured at the Integral Coach Factory, Perambur, at a cost of Rs. 1.28 crores. The train is hauled throughout, even on the electrified section of 1,237 kms (i.e., about 85 per cent of the distance), by a diesel locomotive modified at a cost of Rs. 45,000 for attaining high speed. The maximum permissible speed of the train is 130 kms per hour while the booked speed is 120 kms. per hour. The special fares charged from passengers travelling by this train cover catering during the journey.

1.2. The next fastest train between Delhi and Howrah, running on the same route as Rajdhani Express (except 25 kms. between Ghaziabad and New Delhi), is Kalka-Delhi-Howrah Mail which has a normal load of 16 passenger coaches, one postal van and a pantry car (on the Northern Railway portion) and covers the distance in 24 hours. This train is hauled by an electric locomotive except over a distance of 204 kms (between Delhi and Tundla), which is not yet electrified. Other fast mail and express trains on this trunk route are also mostly hauled by electric locomotives on the electrified sections. Electric traction is cheaper than diesel traction, but additional cost of haulage of Rajdhani Express by diesel locomotive on electrified sections has not yet (March 1975) been worked out.

1.3. The route of Rajdhani Express has the heaviest traffic density ranging from 10,000 to over 60,000 net tonne kilometres per day. To deal with such heavy traffic and also to cater to the high speed running of Rajdhani Express, tracks on this route have been improved by laying 52 kg rails, increasing the sleeper density and ballast cushion and better signalling system at a cost of Rs. 2.19 crores (upto 31st March, 1973). Except the special signalling works completed cost of Rs. 4 lakhs, it is not possible to identify other

elements of expenditure incurred solely for running of the Rajdhani Express. Look-out men are posted at level crossings of restricted visibility on the days this train runs. The expenditure on these men during 1971-72 and 1972-73 in Eastern Railway was Rs. 98,630. The corresponding expenditure in Northern Railway is not available separately.

1.4. It is estimated that on the days this train runs, there is a loss of nearly three paths of goods trains on an average and also increase in detention of goods trains (including the super express goods trains) and other passenger trains on the route, with consequent loss of earnings not susceptible of precise quantification.

1.5. During 1971-72 the average occupancy and punctuality of this train was over 90 per cent. A study by the Research, Designs and Standards Organisation of the Railways has shown that during 1971-72 the total cost of running this train was Rs. 84.07 lakhs while the gross earnings (including cost of meals) were Rs. 76.08 lakhs; and that taking into account only direct costs the profit was Rs. 15.21 lakhs during 1971-72 or about Rs. 7 thousand per trip. The conclusions of this study, which was submitted to the Railway Board in June 1974, have not been accepted by the Railway Board because, amongst others, in the study the already available unit costs (indirect) for goods operations have been adopted in the absence of corresponding data for passenger services which are not worked out.

1.6. Apart from Rajdhani Express and Kalka-Delhi-Howrah Mail, another air-conditioned (Deluxe) train, with ordinary first class and second class coaches as well, runs thrice a week between New Delhi and Howrah on the same route (except between Allahabad and Mughalsarai). It takes almost the same time as Kalka-Delhi-Howrah Mail. During 1971-72, the occupancy ratio was about 90 per cent and above in all these three trains. Taking into account only the direct costs of running the trains, the net earnings per trip (in 1971-72) were computed as Rs. 27,373 for Kalka-Delhi-Howrah Mail. It has been stated (March 1975) that no study of economics of the air-conditioned (Deluxe) train has been undertaken so far.

1.7. A similar biweekly Rajdhani Express train has been introduced between New Delhi and Bombay Central from 17th May, 1972.

[Paragraph 10 of the Report of the Comptroller & Auditor General of India for the year 1973-74, Union Government (Railways)]

Introduction of the Rajdhani Express

1.8 The Committee desired to know the considerations on which the Rajdhani Express was introduced and whether it was meant to serve as a prestige symbol or as an efficient and fast service which would give a return at least as much as the other fast trains like the Kalka-Howrah-Mail. The Chairman, Railway Board stated in evidence:

"It was intended to be a break-through of the barrier of the maximum speed to the maximum extent possible with the very minimum of expenditure and services that would meet its direct cost in operation and in a way also indicate a kind of alternative service that may be available between the capital city and Calcutta or Bombay vis-a-vis air service. It will also cater to the demand for a non-stop faster service between these cities."

He added:

"This is the one single train we have which has made a break-through technology of 100 km, which is the maximum speed of the Indian Railways for the rest of the traffic. In other countries they have gone beyond 200 km, which is now beyond our reach. Nevertheless, it is a testimony of our technological break-through in being able to break 100 km. That train goes up to a speed of 120 to 130 km; the maximum that we can aspire at the moment with our resources and our industry is 160 km. If we have to go beyond that, we have to go into very many detailed problems of major reconstruction of track and so on, which we cannot afford at this point of time. But our technological break-through has definitely crossed 100 km. At the moment we have aspirations of looking forward in the next ten years of getting very much beyond 200 km per hour.

Then, we are selling our products, wagons and coaches abroad. We are trying to promote export effort and this is the train that we exhibit to all the railway delegations that come here."

1.9. According to the Audit paragraph, it has been estimated that on the days this train runs, there was a loss of nearly three paths of goods trains on an average and also increase in detention of goods trains (including the super express goods trains) and other

passenger trains on the route, with consequent loss of earnings not susceptible of precise quantification. The route of the **Rajdhani Express** also has, according to Audit, the heaviest traffic density ranging from 10,000 to over 60,000 net tonne kilometres per day. The Committee, therefore, desired to know what advantages had accrued to the Railways by running the Rajdhani Express, especially when it displaced three goods trains and also resulted in increase in the detention of goods trains and other passenger trains on the route. The Member (Transportation), Railway Board stated:

"The advantages have just been explained. We introduced a fast inter-city service at a speed of 120 km. per hour increased to 130 km. per hour. It relieved pressure of accommodation on the other trains and gives greater satisfaction to the customers. That is the advantage. Regarding the density of traffic on this route, there is no doubt that Delhi-Howrah route carries very heavy density of traffic. But, at the time at which this train was introduced, enough capacity was available and there was no difficulty in running the train twice a week. Regarding the point that it displaces three goods trains, this is the point which we have to consider in the light of introduction of a passenger train *vis-a-vis* a goods train. If you take a passenger train, it gets preference over running of a goods train. Even the ordinary passenger train displaces a goods train to some extent. When you come to fast mail and express trains, they displace goods trains to the extent of 2. If you introduce a still faster train, it would come to 2.5 or 3. This is inevitable in operation where trains run on the same section at different speeds and, therefore, the fast train will naturally displace the slower train to that extent. But, we cannot stop introducing more passenger trains and mail trains on that account."

1.10. The Committee pointed out in this connection that the Rajdhani Express had also apparently resulted in detentions to the Super Express Goods trains running between Delhi and Howrah and asked whether, while introducing a prestigious train, attempts should not be made to ensure that it did not affect the movement of other trains, goods as well as passenger. The witness replied:

"We agree with you. Our efforts are to improve the speed of the goods trains also."

In this context, the Chairman, Railway Board stated:

"I may add here that we are running this service biweekly and not daily. There are trains like Kalka Express which are running daily and are, in fact, equivalent to displacing two goods trains. This route is for both the trains."

When asked whether the Railway Board had quantified the loss arising out of the dislocation of goods services on the introduction of the Rajdhani Express, the Member (Transportation), Railway Board stated:

"The goods traffic has not been affected."

When the Committee pointed out that the Rajdhani Express had obviously affected the movement of goods trains, the witness replied:

"If the section is working to the saturation capacity, yes, I agree with you. But there was, as I said, capacity available to run both goods trains and passenger trains traffic. As the traffic goes up higher and higher and the line capacity reaches the saturation point, we agree that this is true."

To another question whether any computation of the quantum of losses likely to accrue by the displacement of goods traffic had been made by the Railway Board, the witness replied:

"No, Sir. But what we do initially when we want to introduce a train is that we have a chart in which we plot all the information and from that chart, we see whether we can introduce a train without interfering with other trains—both goods and passengers. An exercise to that extent was made. The original chart is not available. But we can draw up a chart."

Subsequently, at the instance of the Committee, the Ministry of Railways (Railway Board) furnished statements showing the charted line capacity, i.e., the total capacity for running all types of trains on the route covered by the Rajdhani Express and actual utilisation of the capacity as on 31st March, 1963 (one year before the introduction of the Rajdhani Express) and as on 31st March, 1970 (one year after the introduction of the train) which are reproduced in Appendix I. In a note, the Ministry of Railways (Railway Board) added:

"It will be observed that on all the sections between Howrah and New Delhi capacity was available to provide a path for this train to run on two days in a week."

Haulage of the Rajdhani by Diesel locomotives

1.11. According to the Audit paragraph, while the Kalka Mail, which also operates on the Rajdhani Express route and other fast mail and express trains on this trunk route are mostly hauled by electric locomotives on the electrified sections of the route, the Rajdhani Express is hauled throughout by a diesel locomotive, modified for high speeds at a cost of Rs. 45,000. The Committee desired to know the reasons for not using electric traction, which is considerably cheaper than diesel traction, for the Rajdhani Express and the annual additional cost in respect of haulage by diesel locomotives. The Member (Transportation) Railway Board, stated in evidence:

“The electrified section at that time was only from Hosrah to Kanpur. Also at that time we did not have a suitable electric locomotive which would carry this train at the speed at which we intended, namely 120 km. per hour. Furthermore, even if we had mixed diesel and electric traction on the run, there would have been detention for change of engine at Kanpur and that would have detracted from the idea of running this train in the shortest journey time possible with the maximum speed. We had a diesel locomotive which, with suitable improvements, could be utilised for carrying the train at 120 km. per hour and taking all these factors into consideration, we decided that the whole journey would be covered by the diesel locomotive only.”

1.12. The Committee were informed by Audit that the Research, Designs and Standards Organisation (RDSO) of the Ministry of Railways, had undertaken an economic appraisal of the Rajdhani Express running between New Delhi and Howrah and that, in its Report submitted in May, 1974, had, *inter alia*, recommended the switch-over to electric traction to reduce the direct expenditure on fuel and thereby improve the profitability of the service. When the Committee drew attention to this recommendation, the Member (Transportation) replied:

“The RDSO made an investigation and have opined that in the context of the full electrification of the Howrah-Delhi route up to Delhi, it would be better to run the train by electric locomotive rather than by diesel. We went through their report. There are two conditions. One is that electrification should be completed right up to Delhi and the

second is that we should have a locomotive available which would carry the train at a speed of 130 km. per hour. I would like to inform the Committee that since then we have designed an electric locomotive which we are going to try at speeds of 130 km. and above upto 160 km. So, so far as the locomotive type is concerned, it will be available. It is only the time factor in completing electrification up to Delhi, which will be about a year hence."

1.13. The Committee asked whether it was a fact that no electric locomotive had yet been certified fit to haul the Rajdhani Express and enquired into the reasons therefor, especially when other countries had locomotive capable of speeds of 200 kilometres and more per hour. The Chairman, Railway Board replied:

"Some of the locomotives that we have need certain modifications in the design of the bogie and the gear ratio and the power that is available for hauling the train and then, as Mr. ... has explained, the major factor is that these experiments, modifications and so on would be initiated, and have been initiated, at a time to coincide with the complete electrification of the Delhi-Howrah route. We are anticipating that and when it is completed, the modified locomotive also would be available at that time for electric haulage."

He added:

"Theoretically the RDSO knew that one type of electric locomotive could be modified. It is a question of timing the experiments for making the modifications and testing and proving them which we have now formulated."

When asked whether the technical problems involved in the modification of the locomotive were formidable, the witness replied:

"The traction motor has a fixed section and the gear ratio has to be altered and also the bogie suspension will have to be modified before riding at higher speeds because what happens is that these locomotives are tested at about 160 km. and then permitted to run at 130 km."

1.14. When the Committee pointed out that diesel traction was much more expensive and desired to know the reasons for the apparent slow progress in making the electric locomotives suitable for hauling, the Rajdhani Express, the witness replied:

"Diesel also had to be similarly modified. The diesel engines that we have are only fit to run at 100 km. and the ques-

tion was really that if you have a change of engine in between, then the whole idea of a run through and minimising the time would be lost."

To another question whether changing the engine just once would have a perceptible impact on the running time of the train, the witness replied:

"Yes, but then there were other attendant problems, that this is only a bi-weekly service, it is not a daily service, and a modified locomotive cannot be allowed to lie unused. We use it on other services also. With the through train between Delhi and Howrah, it gets a longer run and a flexibility to use at the other end is also better."

1.15. The Committee called for a copy of the Economic Appraisal of the Rajdhani Express carried out by the Research, Designs and Standards Organisation and found from the Report that the findings of the RDSO in regard to the implications of a change of traction were as follows:

"The primary implication of a change of traction is the effect on running time. The comparative inter-sectional running time between Tundla and Howrah, in both direction, has been worked out as under on the train schedule computer:

Section	Existing with Diesel Engine WDM4 (Maximum speed 130 km/hour)	Electric Loco WAM 4 (Maximum speed 120 km/hour)	
	9-coach	9-coach	16-coach
HWH—TDL	715 mts	705 mts	710 mts
TDL—HWH	720 mts	697 mts	707 mts

The following is the break-up of the journey time between Tundla and Howrah as per current time table :

Computerised Timings		Temporary Engg. allowance		Total halt time	Journey time		
Hrs.	Mts.	Hrs.	Mts.	Mts.	Hrs.	Mts.	
11	42	2	11	22	14	15	TDL—HWH
	702 mts.						
11	55	2	00	22	14	17	HWH—TDL

It is, therefore, obvious that with the use of an electric locomotive, it may be possible to maintain the existing running time and even improve upon it."

1.16. The Committee enquired into the reasons for the delay in developing an electric locomotive capable of high speeds. The Financial Commissioner replied:

"The RDSO was assigned the task of giving a modified locomotive. They have taken up a survey and are conducting experiments for modified locomotive. If those experiments come to a successful end, we should be able to have these locomotives and the electrification of the Rajdhani route will also be completed."

1.17. In reply to another question whether it would not be desirable to do away with dual traction altogether after the electrification of the entire route was completed, the Financial Commissioner stated:

"That is a policy matter which we will have to reconsider, but there are certain issues which stand in the way of doing it. One is that we have limited resources and so we thought that some railways could be dieselised and other railways could be electrified. Our long-range programme is that wherever there is scope for electrification, it should be done so that the whole trunk route from Delhi to Calcutta and Delhi to Bombay is, in the long run, electrified. This is a long-range perspective."

1.18. The Committee desired to know whether it could be expected, in the near future, that with both electric and steam traction, the targets of passenger and goods movement would be fulfilled. The Financial Commissioner stated:

"In fact, it would be more advantageous—that is to say, if the trunk routes like Delhi to Calcutta are electrified and meter-gauge routes have diesel or steam locomotives. But, apart from the technological problems it will create in regard to maintenance and servicing, there is another aspect i.e., it will need a long-range training programme. We have a large body of employees in those areas who are used to steam traction and they will have to be redeployed to different areas. So, it becomes a sort of problem as to how to make the best use of those people who are useful mainly in those particular areas."

In this context, the Chairman, Railway Board, stated:

"Our objective had been to maximise the pace of electrification, but the regrettable thing is that electrification requires a very large capital input because of the overhead structures, substitution of transmission lines etc. and we have been finding it more and more difficult to get adequate capital for our electrification programmes.

So, this capital restriction is there. For instance, this year, because of the curtailment of the budget, we had to slow down some of our electrification projects, so that it becomes a real constraint on accelerating our electrification programme.

Now, the other point, of course we would like to make it, but it would become almost a hackneyed expression—as to which of the two is more advantageous, diesel or electric. It is really difficult to make a direct comparison between the two."

1.19. Since the electrification programme had been thought of essentially as a replacement of diesel traction so as to conserve diesel oil and to reduce costs, the Committee desired to know how far this programme would replace dieselisation or whether it was only an additional programme. The Chairman, Railway Board, stated:

"As I explained, even with the capital being made available to us, both the forms of traction, electrification and dieselisation, would have to go together in order to cope with the traffic because to-day even our passenger services are not fully dieselised or electrified. There is always a greater demand for electrification of the service on the electrified route. The manufacturing programme of electric locomotives is more or less matched to the pace of electrification we can achieve having regard to the capital constraints. We are always anxious to get more and more capital for electrification, but acceleration of the programme has not yet been possible, and to us it does not seem to be in sight."

The Financial Commissioner added:

"If I may add, dearth of electric power today is as much a problem as availability of diesel."

The Chairman, Railway Board further stated:

"Although it is never done, I think, in the last five years in U.P. three times we have been asked to replace, even temporarily, our electric services by dieselisation—on the Allahabad-Kanpur-Mughalsarai route." --

1.20. The Committee asked whether the electrification programme of the Railways was directly linked with a programme for power generation by the Railways. The Chairman, Railway Board, replied in the negative. When the Committee pointed out in this connection that the electrification programme was likely to be affected on account of delays or setbacks in the power generation programmes of the State Governments, the witness replied:

"That is also one factor. I will give another example, We are doing Madras-Vijayawada electrification. There, as I said, we have our own capital constraints which determine the pace of progress. The Andhra State Electricity Board has promised us power. They are going to add power generation to their capacity within the next four or five years. But they do not have the money to provide transmission lines for our sub-stations, and they are asking us to give them a loan which we are not in a position to do."

1.21. The Committee desired to know whether the Railways had any plans for power generation on their own instead of depending on the State Governments. The Chairman, Railway Board stated:

"We have a proposal for putting up our own power stations. There is one more factor. Today, economic power generation means large power stations. It is not the old power station of 50 megawatts or 110 megawatts. We have to go upto 220 or even 250. If we put up a power station at a particular point, we would be able to supply, let us say, to about 400 or 500 kilometres of our route or even more, but we would still have surplus power available which we would have to transmit back into the grid of the State. We are thinking of providing for our own power stations for these reasons. First of all, it will give us a better control over the cost of power. What is happening in most of the States today is that the cost of power is jacked up. The fact that the Railways are a bulk con-

sumer of electricity does not carry any weight with the State Electricity Board, and we are not given any lesser rate for buying power than what is given for other industrial units. We are not treated as a bulk consumer and allowed a cheaper rate. In many advanced economies where there is enough power available, load is regarded as a great advantage to the power system and because of that they are prepared to pass on the economies of bulk consumption to the Railways. That does not happen in our country because we have power shortage and the tendency of the Electricity Boards is to maximise their earnings and they have no discriminatory treatment in the matter of rates."

1.22. In view of the fact that the Railways appeared to be in a position to establish power stations, the Committee asked whether it would not be desirable to have effective coordination in this regard between the Central and State Governments and a pooling of resources so as to have a coordinated plan for power generation. The Chairman, Railway Board, replied:

"That is what we are attempting through the planning Commission. We are asking them to give us a chance to put up, if not all, at least a couple of stations."

When asked the present position in this regard, the witness replied:

"We are still arguing. As it is, at least for the present year and the next year, the allocation of resources for power generation having already been made, they have not been able to take a final decision on this. We have a very old power station in Bombay the Chola Power House. It is a D.C. generating station. It has become an uneconomic unit in the present day terms and we have been wanting to replace it with a higher capacity unit and we have been trying to get approval for this, but even this has not yet been given to us."

He added:

"It is basically a question of finance. But we cannot spread out entirely into generating our power. We will have some stations where we will generate our power, but to do it on an All India scale, I do not know whether it would be possible."

A note subsequently furnished to the Committee in this regard by the Ministry of Railways (Railway Board) is reproduced below:

"The Ministry of Railways in consultation with the Planning Commission have proposed to set up 3 new thermal power stations along the electrified routes in the Northern and Eastern regions. The proposals under consideration consist of setting up 3 power stations each with 2x110 MW units-one each in West Bengal, Bihar and Western U.P. These Power Stations will be interconnected with the Grid system of the State Electricity Board for economical operation and to provide assured power supply for electric traction and other important railway installations. It is also proposed to expand the capacity of Railways' existing Chola Thermal power station near Kalyan on Central Railway by 2x110MW units.

Site studies and preparation of Feasibility Reports have been completed for the above mentioned power stations and the reports have been submitted to the Planning Commission for approval and allotment of funds. These Reports are under examination by the Planning Commission."

1.23. As regards the comparative cost of haulage of the Rajdhani Express by diesel and electric traction, enquired into by the Committee, the Ministry of Railways (Railway Board) informed the Committee, in a note, that an assessment of the comparative costs was not possible in view of the fact that no electric locomotive had yet been certified fit to haul the Rajdhani Express at the required speed.

Remunerativeness of the Rajdhani Express

1.24. The Committee desired to know whether any cost analysis had been conducted before introducing the Rajdhani Express and the estimated annual receipts and expenditure connected with the running of the train and the actuals in this regard. In a note, the Ministry of Railways (Railway Board) stated as follows:

"Before the introduction of the Rajdhani Express, an estimate of out of pocket expenses of running the train was made with a view to fixing the level of fares to be charged for travel by this train. The out of pocket expenses or the direct costs were assessed as Rs. 34.26 lakhs per annum. On the basis of this, the fares were fixed at Rs. 280/- for A. C. sleeper and Rs. 90/- for A. C. Chair Car and with the anticipated occupation of 60 per cent in A. C. First

Class and 80 per cent in A. C. Chair Car, the annual earnings were estimated at Rs. 49.84 lakhs. The fare of Rs. 280/- for A.C. sleeper and Rs. 90/- for A.C. Chair Car included the catering charges of Rs. 15/- and Rs. 8/- respectively. Excluding the catering charges, the estimate of earnings was Rs. 45.63 lakhs.

The train was introduced in 1969. Estimates of the direct costs and actual earnings made for the year 1970-71 are indicated below:

Estimated direct expenses	Revenue earned
Rs. 29.22 lakhs	Rs. 68.66 lakhs

*Notes :—*The direct expenses exclude catering expenses, cost of provision and maintenance of permanent way, signal and telecommunication and overheads, etc., which are common with other services and includes cost of diesel oil, engine crew, train staff, interest and depreciation of coaches and engines. The revenue earned is excluding passenger tax and catering charges”.

1.25. In reply to another question whether any study of the economics of operating the train had been conducted, the Ministry of Railways (Railway Board) stated:

“The Rajdhani Express between New Delhi and Howrah was introduced with effect from 1-3-1969. A study of the economics of running this train was made on a broad basis in 1971. The earnings from passengers travelling by this train were readily available. An assessment of the total cost of running this train was, however, not found feasible. Expenses are not booked train-wise and costs of provision and maintenance of permanent way, signal and telecommunication, other equipments and facilities, the cost of train passing staff, coaching yard staff and overheads which are common with other services could not be estimated since the unit costs for the coaching services have not yet been finalised. The assessment of expenditure was, therefore, confined to the direct costs covering the cost of diesel oil consumed by the engines, engine crew, train staff, staff for operation of the generator cars, repairs and maintenance of locos and coaches, fuel and other stores for the generator coaches and interest and depreciation of coaches and engines. Whereas cost of haulage of the pantry care was taken into account, the cost of staff and stores utilised for the catering services was not

included. The catering earnings were also excluded from the earnings of the train.

The initial assessment of direct costs was utilised to estimate the expenditure for subsequent years by application of suitable escalation factors to cover increase in staff, material and fuel costs. The earnings (excluding catering) for each year was obtained and compared with the costs (excluding staff and stores of catering). The figures are as under:

Year	Estimated direct expenses	Earnings
(In lakhs of rupees)		
1970-71	29.22	68.66
1971-72	30.19	72.02
1972-73	31.39	81.57
1973-74	37.42	93.42

It will be seen that the earnings exceeded the direct expenses in all the years by a substantial margin.

A similar study of the economics of Rajdhani Express running between New Delhi and Bombay Central (introduced from May, 1972) was also conducted. The relative figure are given below :—

Year	Estimated direct expenses	Earnings
(In lakhs of rupees)		
1972-73 (from May 1972 to March 1973)	26.88	51.58
1973-74	41.21	87.22

1.26. The Audit paragraph points out that to deal with the heavy traffic on the Rajdhani route between New Delhi and Howrah and also to cater to the high speed running of the Rajdhani Express, an expenditure of Rs. 2.19 crores had been incurred upto March 1973 on improvements to the track and better signalling systems. The Committee asked whether the track improvements on this route had little to do with the running of the Rajdhani Express and whether the improved turnouts provided on the track for higher speeds over

points and crossings would not have been necessary if the Rajdhani Express had not been introduced. The Chairman, Railway Board replied:

"Actually, the track improvements that have been referred to in the Audit Report had been started much earlier than when the Rajdhani Express was even thought of because there was growing density of traffic on the trunk routes. In 1961 we had established in conjunction with the RDSO a standard of track that wherever the traffic was going to be 20 million gross tonnes per annum, the standard would be 100 lbs. rail with N+6 and 7 sleepers. This had nothing to do with the Rajdhani Express. The Rajdhani Express today also is running on the old standard of track of 90 lbs. with N+3. All that we did for the Rajdhani Express was that we introduced a more intensive system of monitoring of the track by means of more precise instruments and re-organised the maintenance into what we call the directed maintenance instead of having a routine system of maintenance which only was possible with the less precise instruments that we had earlier. The method is of riding in coaches, riding in locomotives, and seeing how the track behaves and picking up the defects. We had instrumented monitoring and as a result we were able to locate the defects and the extent of the defects much more precisely and categorise the track and our track gangs were reorganised to work at concentrated points only."

When asked whether any additional expenditure was incurred on this score, the witness replied:

"No. The result was that this was possible with the old track of 90 lbs. and N + 3 and N + 4 sleepers."

1.27. As regards the look-out men posted at level crossings of restricted visibility on the days the Rajdhani operates, referred to in the Audit paragraph, the Committee desired to know the additional expenditure incurred on this account during 1970-71 to 1974-75 on the Northern Railway and during 1970-71, 1973-74 and 1974-75 on the Eastern Railway and the mode of utilisation of these men on the non-Rajdhani days. In a note furnished to the Committee, the Ministry of Railways (Railway Board) stated:

"No separate lookout men were posted by the Northern Railway. Already security patrollers were being employed

in that length, at the instance of U.P. State Government, due to disturbed conditions of law and order. These same men were deployed for the short duration on the days that Rajdhani Express was running, as lookout men. Therefore, no additional expenditure was incurred by Northern Railway on that account.

On the Eastern Railway lookout men are provided from amongst the permanent gangmen by giving them half a day off when required. Thereafter recoupment of man days lost is done at the end of the month. The expenditure incurred on this account for the three years referred to, is as under:

1970-71	.. Rs. 22,300
1973-74	.. Rs. 40,088
1974-75	.. Rs. 38,182"

1.28. During evidence, the Committee enquired into the duties performed by these lookout men and also desired to know the position in this regard in respect of the New Delhi-Bombay Rajdhani Express operated by the Western Railway. The Chairman, Railway Board replied:

"The lookout men are largely on the Eastern Railway. These men were initially there before the telephones were provided on the gates. From the nearest station as soon as the Rajdhani passes, they inform the gate people. On the Northern Railway, they were using the security men, but they have also reduced the number gradually as the telephones have been provided. But the Eastern Railway, notwithstanding the provision of telephones, to provide a double safety they have retained them. On the Western Railway this device was not used at all. They find that the safety is all right. They have provided the telephones. They do not need any additional look-out men, apparently because of the nature of the location of the level crossings."

1.29. In reply to another question whether any additional expenditure specifically identifiable and attributable solely to the running of the Rajdhani Express had been incurred, the witness stated:

"I do not think there is any expenditure that we can attribute specifically to the Rajdhani Express."

In a note furnished subsequently to the Committee in this regard, the Ministry of Railways (Railway Board) stated:

“The following expenditure could be specifically attributed to
Rajdhani Express by the Railways in this regard:

	Rs. in lakhs
(a) Capital cost of coaches specially manufactured (including spares)	100.45
(b) Cost of providing public address system on the train	0.52
(c) Cost of modification of loco for higher speed	0.45
(d) Cost of separating warning signals at 9 stations and providing telephone connections at level crossings	4.01
(e) Cost of extra commercial staff at Howrah & New Delhi exclusively for Rajdhani Express per year	0.29
(f) Expenses on look out men on Eastern Railway per year	0.42”

1.30. According to the Audit paragraph, the study by the Research, Designs and Standards Organisation of the Ministry of Railways had shown that during 1971-72 the total cost of running this train was Rs. 84.07 lakhs while the gross earnings (including cost of meals) were Rs. 76.08 lakhs and that taking into account only direct costs the profit was Rs. 15.21 lakhs during 1971-72 or about Rs. 7 thousand per trip. The Report of the Comptroller and Auditor General of India also points out that taking into account only the direct costs of running the trains, the net earnings, in 1971-72, of the Kalka-Delhi-Howrah Mail, operating on the same route as the Rajdhani Express, were computed at Rs. 27.373 per trip. In view of the fact that this train appeared to be more profitable than the Rajdhani Express, the Committee enquired into the special justification for operating the Rajdhani Express which gave a lower return on the same route. The Member (Transportation), Railway Board replied in evidence:

“I think your observation is based on the Audit paragraph Report. To that, we have sent a reply. The calculation made by us is not in accord with that assessment. The difference is not to the extent indicated by you.”

The Chairman, Railway Board stated in this connection:

“Our costing people have examined it and they are not agreed with those figures. But, on the basis of direct cost, the difference between the Kalka Mail and the Rajdhani Express is not so great.”

1.31. The Committee desired to know the reasons for the Railway Board not accepting the results of the study of the economics of the Rajdhani Express conducted by the Research, Designs and Standards Organisation. [The details of the costs of operating this train, worked out by the RDSO, furnished to the Committee by the Ministry of Railways (Railway Board), are indicated in Appendix II]. The Chairman, Railway Board stated:

“We have pointed out the defects. They have advised us about it. We have got our own calculations.”

1.32. The Committee pointed out in this connection the figures of earnings of the Rajdhani Express adopted by the RDSO in its study and those worked out by the Railway Board tallied more or less and desired to know the areas in which the latter had not accepted the study conducted by the former. The Member (Transportation), Railway Board stated:

“In regard to expenditure side, the calculation of the RDSO is not acceptable for the reasons that they have assessed the cost by utilisation of statistical figures which are pertaining both to goods and passenger traffic. If you mix the goods aspect, it vitiates the element of cost to be incurred on the passenger side.”

The Financial Commissioner of Railways stated in this context:

“May I try to explain it? (1) we have not been able to devise a very scientific system in which the exact costing on coaching services and passenger services by specific routes is available. We have come to some general conclusion. Now, we have bifurcated the expenditure between the goods and the coaching services on the whole. We are losing very heavily on passenger services, to the extent of about Rs. 150 crores a year. This analysis does not cover the services rendered by each train on each route. Therefore, whatever figures are being mentioned, we have always to take them with a certain amount of reservation. We should not draw any conclusions from it. If we were to say that Rajdhani Express is more profitable than Kalka Mail, then the management's conclusion was right. If we come to a conclusion that Kalka Mail is more profitable than Rajdhani Express, then why not substitute Rajdhani Express, then why not substitute Rajdhani Express by Kalka Mail? I can assure you that we have not come to

that kind of conclusive picture on which we can take a decision.

We are not alone in this respect. In the world, everywhere the same kind of difficulties in costing of transport capacity, goods and passenger services, is being encountered. We have yet to come to a system by which we can come to a conclusion which holds good for all time. In transport sector, the variables change so often and they are so seasonal. There are causes, direct and indirect, depending upon the density and pattern of traffic at certain times. We have the Air-Conditioned train. It is more popular in summer than in winter. In winter, its utility goes down. We have always to consider all these aspects.

The point which the Railway Board are making today before the Committee is that it is not so much the consideration of earnings on which the Rajdhani Express was introduced. But it was on a consideration of having some technological advancement in the country and not have stagnation.

Another thing that we did was that we have tried to keep the fares of the Rajdhani Express as high as possible. For example, today, the Rajdhani Express First Class fare is higher than even the air fare. The Chair Car fares of Rajdhani Express are higher than even the fares of Delux. So, we have a commercial outlook. But we have not been able to come to a decision merely on a commercial basis whether we should abolish the Rajdhani Express or not."

1.33. In view of the fact that this was only an accounting principle, the Committee desired to know the grounds on which the total dependent and independent costs of running the Rajdhani Express, computed by the RDSO, had been considered to be wrong. The Financial Commissioner replied:

"It is based on the assumption of the occupancy ratio. The calculation of earnings part is the easiest part of the accounting. But to calculate the cost of working a train and distributing expenditure of that area over the number of trains on a particular route is a more difficult task. That is where the RDSO has erred. They have taken a combined figure of goods-cum-passenger unit cost and

applied it to Rajdhani Express. Therefore, the figure gets vitiated."

1.34. At the instance of the Committee, the Ministry of Railways (Railway Board) furnished a statement indicating the reasons for non-acceptance of the economic evaluation of the Rajdhani Express by the Research, Designs and Standards Organisation, which is reproduced in Appendix III.

1.35. Even if train-wise costing could not be done at present, the Committee enquired whether it had not been possible for the Railway Board to ascertain the financial impact of the Howrah and Bombay Rajdhani Services on the total expenditure and earnings on passenger services and see whether the introduction of these two trains had further widened the gulf between the earnings of and the expenditure on the total passenger service. The Financial Commissioner stated:

"I will not be able to answer whether there has been an impact of that order of that particular one train which is bi-weekly service."

In view of the fact that the number of new trains introduced in the recent past was not high, the Committee asked whether at least a portion of the additional losses on passenger services reflected after the introduction of the Rajdhani Express could not be attributed to this train. The witness replied:

"May I answer it in a little historical sense? About two years ago, we were losing Rs. 90—95 crores on passenger services. That was when Rajdhani Express trains were running. Today, we are likely to lose Rs. 150 crores. We are losing more on passenger services because as the total cost goes up, the share on passenger services of the total cost also goes up. In other words, what I wanted to say was that, of the total expenditure that we have to incur, 55 per cent is for goods services and 45 per cent for passenger services. So, as long as 45 per cent of the expenditure is not covered by the passenger earnings our passenger services will lose.

For arriving at a methodology which has resulted in this kind of an analysis of 45 per cent of the expenditure being about adopted for passenger services, two years ago we had a sample survey carried out at as many as 2,000 stations—for arriving at a break-up of the expenditure for different

stations between passenger services and goods services. We compiled the figures and found that it may be 45 per cent or 42 per cent or 40 per cent. But even if it is 40 per cent, our passenger services are going to be a losing proposition for a long time to come, in spite of the fact that we increased our fares so heavily in the year 1974-75. Now, this is a fact which we will have to live with.

The second general conclusion that I would like to bring to the notice of the Committee is that most of our losses on passenger services occur not on the trunk routes but on meter-gauge route and branch routes. Rajdhani is however giving good return as it is running in an area which is very fully occupied."

1.36. Since it was of imperative importance to know the cost of operating a service in the interest of better financial management, irrespective of the initial considerations on which the Rajdhani Express might have been introduced, the Committee desired to know the steps taken by the Railway Board to ensure that the cost of running such passenger services was readily available. The Financial Commissioner stated:

"We have answered this question earlier, both to the P.A.C and the Railway Convention Committee. We are looking forward to some kind of a methodology which will give us an approximately reliable figure by the end of this year."

1.37. The Ministry of Railways (Railway Board) had informed the Railway Convention Committee (*vide* its 5th Report), in May, 1974, that an analysis of the cost of operation of coaching services was on hand and that after its finalisation, it would be possible for the Railway Board to work out the cost of operation of individual passenger trains, including the Rajdhani Express. The Committee, therefore, desired to know the progress made in this regard since May 1974. The Financial Commissioner stated:

"I also answered this question that we are in the process of working out the coaching costs. Unfortunately, we have not been able to come to final conclusions in certain matters. We are trying to find the correct methodology in these matters. Here the point is that the situation keeps on changing so quickly or rapidly that if we give something definite it will only be falsified. For example, take the case of possible increase in the price of coal. Immediately

our cost structure changes or in increase in D.A. too, the cost structure changes. Take for example, movement of foodgrains from Punjab or from imports. There the pattern of movement changes. All this we are trying to do as best as we can. As soon as we are able to see the day light how to proceed and what factors should be given what weights we should be able to do this. I say that we should not only be able to do for Rajdhani but for other services also."

When the Committee pointed out in this connection that the statistical problems of collecting data in regard to variables could easily be solved by selecting a clear accounting period at a given point of time for the calculation of such variable costs, instead of changing the estimates and the base periods periodically, the Financial Commissioner replied:

"This point is well taken. We are trying to re-verify certain things. For example, we have to re-verify in the distribution of costs, or statistical data. Suppose we come up with a factor disclosing that 45 per cent of the total expenditure should be charged to passengers. Now, on the face of it it looks high. If this figure is there it appears to me that the passenger traffic is never going to be a remunerative proposition. Therefore, we are re-checking it. We have carried out specific studies for 2,000 stations out of 6,000 to make them reliable at a point of time. If those figures are revised, we can update the same with reference to the variable factors from year to year."

1.38. The Committee asked whether this did not, therefore, essentially mean that the Railway Board had not been able to obtain the distributable costs at a given point of time. The witness replied:

"This is one of the major problems that we are facing. I suppose that has a bearing on this. And the proportion varies so much. For example in the direct costs, our fuel and labour costs have changed so much that it becomes a difficult factor. If the distributable costs become identifiable, then that would give us a different picture altogether. I am only trying to explain the difficulties but I am not saying that it is an impossible task. We have tried to do this in order to get some guidance from the Board. In the history of all the railways in the world over, we have come up against all kinds of difficulties."

1.39. When asked whether the Railway Board could give some indication as to when this study would be completed, the witness replied:

"It should, I think, be available by the end of this year. This is what we have promised to the Railway Convention Committee."

1.40. Since an air-conditioned Deluxe train had also been introduced between New Delhi and Howrah, the Committee desired to know whether any study of the economics of operating this train had been attempted and, if so, how the profitability of this train compared with that of the Rajdhani Express. In a note, the Ministry of Railways (Railway Board) stated:

"No study of the economics of this train has been attempted so far."

The Financial Commissioner stated, in this context, during evidence:

"Train by train costing we have not been able to do and it is only general kind of comparison that can be done. On the whole perhaps Deluxe would be more profitable than Rajdhani Express, considering its composition."

1.41. The Committee desired to know the financial results of the special catering service provided on the Rajdhani Express. The Member (Transportation) stated:

"There is a marginal profit."

To another question whether better quality of food was served to the passengers travelling by the air-conditioned First Class of the Rajdhani Express, for which a separate tariff had been fixed, the witness replied:

"Rs. 25.00 for tea, dinner and breakfast for the first-class is charged. For the Chair Car Rs. 15.00 is charged for the same. In the Chair Car we serve the food in plate and it is taken to the passengers sitting in the coach. So far as the first-class passenger is concerned, we serve the food on a table and he gets soup etc."

1.42. The Committee enquired into the reasons for the difference in remunerativeness of the Rajdhani services to Howrah and Bombay. The witness replied:

"The Calcutta service is running with 9 coaches twice a week but Bombay service is running with 8 coaches. The 9th coach is added only during busy and holiday seasons. That is the reason for the difference in earnings."

Occupancy Rate

1.43. The reply to Unstarred Question No. 7981, in regard to the average rate of occupancy of the New Delhi—Howrah Rajdhani Express during the period 1970-71 to 1974-75, given in the Lok Sabha on 29th April 1975, was as follows:

Year	A.C. First Class	A.C. Chair Car
1970-71	96%	94%
1971-72	95%	96%
1972-73	95%	93%
1973-74	95%	97%
1974-75	68%	90%

1.44. The Committee desired to know whether the steep fall in the rate of occupancy of the Airconditioned First class could be attributed to the immediate reaction to the increase in the fares effected in September 1974 and whether this could be considered to be only a temporary phenomenon. The Financial Commissioner replied:

"That was probably because of winter months. Now in April-May, the occupancy rate has again gone up."

When the Committee pointed out that the occupancy rate of 68 per cent related to the annual average in 1974-75 and not merely to one or two months, the Member (Transportation) replied:

"Prior to the increase in fares, in September 1974, the occupancy rate was very good, from 80 to 100 per cent. Immediately after that, there was a slump. As was explained, this was due to a combination of factors; changing of the season and also the rise in the fare. But this drop was marked or pronounced only for three months. From the

fourth month, from December 1974 to January 1975, it has been picking up. So far as Howrah-New Delhi Rajdhani train is concerned, it is 80—90 per cent. In respect of A.C. sleeper, it is ranging between 50 to 60 per cent.”

1.45. As regards the trend of occupation in the current year, enquired into by the Committee, the witness stated:

“In the current year, we have done only two months. The average in the year 1974-75 was affected by the drop which occurred from September 1974 onwards. The two months of the current year have shown an increasing trend.”

1.46. In reply to another question whether it would be correct to conclude that the total earnings of the Airconditioned First Class might have increased on account of the increase in fares, which made it even more expensive than air travel, the occupancy rate had, however, gone down, the witness stated:

“You are correct, Sir. I would like to submit that since then we have conducted two reviews and we will again do so in a month or two, but we do not want to reduce the fare just yet as we feel that it would pick up.”

1.47. The Committee asked whether the Railway Board had been induced to take a fresh look at the need to provide airconditioned first class travel which had become more expensive, resulting in consequential fall in occupancy and possible reduction in revenues as well. The Financial Commissioner replied:

“In fact, they have gone up. That again depends upon the occupancy ratio. In the commercial utilisation of that service, if the traffic goes down, the earnings go down. But in the commercial utilisation of that service, if the traffic does not go down, then the earnings go up. Since the last Supplementary Budget was introduced in September 1974, there has been a fall in the earnings. We could not say if it was due to the weather conditions or winter setting in or because the fares had gone up. Looking at the figures of earnings to-day, in April and May, I would not say that we have lost any passenger traffic. In fact, in financial terms we seem to be running ahead of it, even beyond expectation.”

1.48. The Committee desired to know whether, in view of the steep fall in the occupancy of airconditioned first class in the Raj-

dhani Express, the Railway Board should not examine the possibility of substituting this accommodation by a Chair Car. The Member (Transportation) stated in evidence:

"These are special type of coaches fit to run above 120 and 130 km. per hour. We do not have any other coach which we can readily use for replacement. Sir, if you take into account the original estimate, we calculated on the basis of 60 per cent on A.C. sleeper and 80 per cent on Chair Car. It is coming to that."

He added:

"The chair cars which we have got for Rajdhani Express are fit for high speed. The other chair cars are not fit for this; those are run on the AC delux. Some, of course are. We can certainly consider, as suggested, to replace those chair cars which could be fit to run on Rajdhani and substituted for the A.C. sleeper class."

To another question whether there was no reserve stock for the Rajdhani Express, the Chairman, Railway Board replied:

"We do not have reserve stock for the first class, but we have for the chair car. I would like to submit that though there was a drop, there is again this rising trend. There is some effect of air fare also. If tomorrow the air fare goes, up there will again be demand here."

When the Committee pointed out that by reducing the facilities provided for the more affluent class and adding a chair car, more accommodation could be provided for the less affluent sections of passengers, the witness replied:

"You are correct, Sir. We will keep that in mind. I would like to submit that for the foreign tourist traffic, we should like to keep this as an attraction."

In a note subsequently furnished in this regard, the Ministry of Railways (Railway Board) stated:

"At present A.C.C. and A.C. Chair Car accommodation is provided on Rajdhani Expresses. The occupation of these trains is being watched regularly. The occupation of A.C.C. in Rajdhani Expresses since their introduction till 1974 was well patronised. With the hike in A.C.C. passenger fare from September 1974, there has been a slight

fall in occupation. However, the occupation figures of A.C.C. in the summer months of May and June, 1975 indicate that there is an increase in the traffic despite hike in the fare. The position will be watched further before any decision is taken to replace the A.C.C. coach with a Chair Car."

1.49. One of the suggestions made by the Research, Designs and Standards Organisation to improve the profitability of the Rajdhani Express was to improve revenues by providing more accommodation with the addition of 2 to 3 coaches dependent on seasonal needs. Since the Rajdhani Express appeared to be popular with the travelling public, the Committee desired to know the action taken or proposed to be taken on the suggestion to augment the capacity. The Financial Commissioner stated:

"That would depend on the availability of locomotives to which we had referred and also on the finances. If we can get more modified locomotives we would certainly be able to add a bogie or two. Our general feeling at the moment is that we will add second class chairs rather than First Class."

In this context, the Member (Transportation) stated:

"The present Rajdhani Express between Delhi and Howrah is hauled by a diesel locomotive at a speed of 130 km. and if the number of coaches is increased, the speed will go down. When the electrification is done throughout and when a more powerful electric locomotive is utilised and after the necessary trials we hope that we will be able to maintain the same speed and also increase the composition by about three more coaches."

In the context of an immediate solution, the Committee desired to know what would be the approximate reduction in the existing speed of the train, if an additional coach were to be added. The Chairman, Railway Board stated:

"The speed will go down. It may be in the region of 110 km."

He added that the diesel locomotive would not be able to haul an additional coach at the same speed.

1.50. Since it had been stated that the Railway Board would like to retain the Airconditioned First Class in the Rajdhani Express as

a tourist attraction, the Committee pointed out that hardly any foreign tourists appeared to travel by the Rajdhani Express. The Chairman, Railway Board replied:

"All our visiting delegations are sent by us by Rajdhani."

When asked whether the Railway Board was in possession of any statistics in regard to the occupancy of the airconditioned first class accommodation by foreign tourists, the witness replied in the negative. The Ministry of Railways (Railway Board) subsequently furnished to the Committee the following statistics in respect of travel by foreign tourists in the airconditioned sleeper class of the two Rajdhani Express trains and the Deluxe trains, on the basis of a sample survey conducted for the period from 1st January to 30th June, 1975;

	Rajdhani Express						Deluxe trains			
	101 Up.	102 Dn.	151 Dn.	152 Up	25 Dn.	26 Up.	81 Up/ 103 Up.	82 Dn/ 104 Dn.	15 Dn	16 Up
(i) Total No. of ber- ths available	936	936	684	684	2080	1880	2372	1768	936	914
(ii) Total No. of berths utilised	555	584	463	410	1021	1390	1230	1262	604	690
Percentage	59.3	62.3	67.7	59.9	49	73.9	51.9	71.4	64.4	75.5
(iii) Foreign Tourists	..	17	..	17	..	8	8	248	5	20
Percentage	..	1.8	..	2.5	..	0.4	0.3	14	0.5	2.2

1.51. Another note furnished, at the instance of the Committee, by the Ministry of Railways (Railway Board), on the achievements of the Rajdhani Express trains in the sphere of attracting foreign tourists, is reproduced below:

"101 Up/102 Dn. New Delhi-Howrah Rajdhani Express, were introduced with effect from 1-3-1969. The trains run twice a week between New Delhi and Howrah. 151 Dn/152 Up New Delhi-Bombay Central Rajdhani Express was introduced with effect from 17-5-1972. Thee trains run twice a week between New Delhi and Bombay Central. Airconditioned 1st Class and Airconditioned Chair Car

accommodation have been provided on Rajdhani Express trains.

The average occupation in A.C. 1st class and A.C. Chair Cars on these trains during 1969 to June, 1975 is as under:

Year	101 Up/102 Dn Howrah— New Delhi Rajdhani Express		151 Dn/152 Up Bombay— New Delhi Rajdhani Ex- press	
	A.C. sleeper	A.C. Chair Car	A.C. Sleeper	A.C. Chair Car
1969 . .	68 to 100%	67 to 98%
1970 . .	81 to 100%	62 to 100%
1971 . .	79 to 100%	86 to 100%
1972 . .	86 to 100%	93 to 100%	52 to 95% (From May 1972)	54 to 100% (From May 1972)
1973 . .	79 to 100%	88 to 100%	58 to 100%	72 to 100%
1974 . .	44 to 100%	73 to 100%	37 to 99%	71 to 100%
1975 (upto June 1975)	37 to 97%	72 to 100%	*29 to 89%	62 to 100%

*The train remain cancelled from 28th February to 17th April, 1975 due to Vaitrana Bridge being unsafe. From 18th to 30th April, the train made four trips from New Delhi to Bombay and perhaps due to fear about Bridges safety only 21 persons travelled against the accommodation of 72 berths.

These trains were introduced to provide fast and comfortable overnight means of rail transport for the public moving between the Union Capital of India and Calcutta and Bombay. New Delhi-Howrah Rajdhani Expresses take about 16 hrs. and 30 mts. to reach their destinations, while New Delhi-Bombay Rajdhani Expresses take about 18 hrs.

The fares charged for Rajdhani Expresses include catering and reservation charges. A specially designed pantry car has been provided on the trains for the service of evening tea, dinner, morning tea and breakfast to passengers in their seats.

The figures of occupation of these trains indicate that these services have been generally patronised by the travelling public. Only 34 Foreign Tourists travelled in A.C.

of Rajdhani Expresses from 1st January to 30th June, 1975. The Rajdhani Express are bi-weekly services and do not stop at places of tourist interest. Foreign tourists have to plan in advance to travel in Rajdhani Expresses. Therefore, they avail other suitable trains and airlines for their travel according to their convenience, if the Rajdhani Express is not available on the days in their itinerary."

1.52. The Committee desired to know the break-up, by types of passengers, of the occupancy of the Airconditioned First Class and, particularly, the extent to which Government officials travelled by this class of accommodation. The Member (Transportation) replied:

"We can supply you the figures for any particular period you like."

When asked whether he could not give at least a rough idea, the witness replied:

"So far as Rajdhani is concerned, pass holders from Railway are not allowed except the officers of the level of General Manager, etc. By Rajdhani others can travel only by special permission. On other trains the sizeable portion would be higher business class people and Government officers|officials."

1.53. Since the general impression in the mind of the public was that a sizeable portion of the Airconditioned First Class accommodation was utilised on Government account itself, the Committee asked whether this could be considered as a revenue to the Railways. The Financial Commissioner replied:

"It is not entirely correct. For example, let us take the production of steel. Almost 60 per cent of the production of steel is consumed by the Government departments. Does it mean, therefore, that steel should not be used by the Government departments? 25 per cent of coal production is used by the Railways. Does it not add to the economy? **If the Government sector is becoming a dominant sector of consumption, we cannot say that what the Government uses is not adding to the economy. It is a part of the social and economic system that we have.**"

When the Committee pointed out that such a comparison between the utilisation by Government of productive assets like steel and the

non-productive travel by Government officials by Airconditioned First Class, was wrong, the witness replied:

"As far as we are concerned anybody who pays the fare can travel—the cost may be borne by the Government, private or public sector. It does not mean that the economy is not being fully or properly utilised if Government officers or Public Undertaking officers/officials travel."

In view of the fact that, from the social and national point of view, there was a qualitative difference between Government consumption and revenue from outside sources, the Committee asked whether the Railway Board should not view this problem, not merely in its limited perspective, but also from the broader social point of view. The witness replied:

"I would only add if a high Government officer is entitled to go by air, then he can also go by airconditioned coach. There is no difference. The solution would be to deny him the advantage of travelling also by air. It would be the social solution to the problem. But so long as you have a system of speedy movement of Government officers on Government business from one place to another, I do not think that the sale of Railway transport capacity to that kind of a customer is anti-social."

1.54. At the instance of the Committee, the Ministry of Railways (Railway Board) furnished the following break-up of passengers travelling by Airconditioned First Class on the Rajdhani Expresses and Deluxe trains during the period 1st January—30th June 1975:

	Rajdhani Express						Deluxe trains			
	101 Up.	102 Dn.	151 Dn.	152 Up.	25 Dn.	26 Up.	81 Up/ 103 Up.	82 Dn/ 104 Dn.	15 Dn.	16 Up.
	1	2	3	4	5	6	7	8	9	10
(i) Total No. of berths available .	936	936	684	684	2080	1880	2372	1768	936	914
(ii) Total No. of berths utilised .	555	584	463	410	1021	1390	1230	1262	604	690
Percentage .	59.3	62.3	67.4	59.9	49	73.9	51.9	71.4	64.4	75.50

	1	2	3	4	5	6	7	8	9	10
(iii) Total No. of berths utilised by—										
(a) Ministers .	27	18	12	8	26	20	102	70	26	18
Percentage .	2.9	1.9	1.7	1.2	1.2	1.1	4.3	4	2.8	2
(b) M. Ps. and MLAs. .	5	4	8	9	10	12	41	18	8	17
Percentage .	0.5	0.4	1.2	1.3	0.5	0.6	1.7	1	0.8	1.9
(c) Railway Officers	13	17	15	14	200	159	199	197	192	112
Percentage .	1.4	1.8	2.2	2.1	9.6	8.4	8.4	11.1	20.5	12.2
(d) Other Govern- ment officers on duty .	22	15	18	4	15	9	37	22	13	6
Percentage .	2.4	1.6	2.6	0.4	0.7	0.5	1.6	1.3	1.4	0.7
(e) Private account	483	513	410	353	770	1182	843	707	360	517
Percentage .	52.1	54.8	60	52.4	37	62.9	35.6	40	38.4	56.5
(f) Foreign tou- rists .	..	17	..	17	..	8	8	248	5	20
Percentage .		1.8		2.5		0.4	0.3	14	0.5	2.2

1.55. The Committee asked whether in view of the falling trend in Airconditioned First Class travel, after the recent increase in the railway fares, such accommodation was now being provided only on a restricted scale. The Member (Transportation) replied:

“Yes, Sir. We have reduced the number of coaches and frequency. In Frontier Mail running from Bombay to Delhi we have reduced the number of coaches from 2 to one. Daily service, we have reduced to thrice a week. Where the occupancy was less we even discontinued the service. In cases where the demand is higher, we will consider restoration. In cases where the return has been poor we have replaced by two tier or three tier second class.”

1.56. To another question whether the Railway Board has considered the necessity of minimising expenditure on providing affluent airconditioned travel, which, in any case, appeared to be unremune-

native and providing more accommodation on various trains for the less affluent passengers, the Member (Transportation) replied:

"Now, my reply to that point would be, as I submitted firstly, little while ago, we have conducted a review and we have cut down air-conditioned accommodation on those trains on which it was not being fully utilised. Secondly, we are not constructing any new air-conditioned coaches on additional account for the present. The programme of construction which we have got is on replacement account. We are not increasing the ACC First Class sleeper coaches. But, we are constructing new types of coaches, as we have done recently on the ACC Deluxe trains, the A.C. two tier sleepers. We call these as A.C two tier sleepers and charge first class fare. We want to build more air conditioned coaches of a popular type, that is, either chair car or two tier sleepers which carry more accommodation. Here, I would like to mention that the new two tier air conditioned sleepers which we have introduced on these vestibuled trains carry 48 berths. They have cushioned berths. Beddings are also available on payment. The ordinary first class sleeper coaches carry 24 berths. So, it means double the accommodation. This is giving considerable consumer satisfaction. We are proposing to build more of these air conditioned two tier sleeper coaches replacing the existing conventional coaches, which as you said, apart from poor patronage, is not a paying proposition."

1.57. The Committee desired to know whether any concession in fares was being allowed to students travelling by the Rajdhani Express. The Chairman, Railway Board stated:

"It is for fare passengers as far as possible; ~~other~~ trains are available for them and they can travel. Why should they have concession on Rajdhani Express."

He added:

"We have given higher fare because of the value of time. If people value time, they go by Rajdhani Express and pay this extra fare."

Prospects for the future

1.58. Since the introduction of the Rajdhani Express trains represented a technical break-through for the Railways, the Committee

desired to know whether the Railways had contemplated any further programmes for connecting other State capitals with Delhi by similar fast trains. The Chairman, Railway Board stated in evidence:

"In the short-term we are not thinking for the time being of introducing any more Rajdhani. The route should be doubled throughout. There is no idea of having a Rajdhani on the north-south route because that route is not totally doubled throughout from Delhi to Madras."

When the Committee pointed out in this connection that Japan had made tremendous progress in regard to introducing fast trains, the witness replied:

"Japan is a different story altogether because they have gone to 260 or 300 km., but theirs is a totally different track. That is a very expensive proposition—a highly expensive proposition. As I said, there have been demands by people for having a Rajdhani on the Madras route. We cannot think about until the entire route from the North to the South is totally doubled."

1.59. The Committee desired to know when this doubling programme was expected to be completed. The witness replied:

"That, I think, will take another 7-8 years."

In reply to another question whether the Railway Board had prepared a feasibility study of doubling from the commercial point of view so as to ascertain the gains that would accrue from doubling the trunk route to the South, the witness stated:

"Doubling in the long run of all the trunk routes is required both from the passenger and freight traffic point of view apart from having a Rajdhani. For the speedy economic development of the country, the track has got to be doubled. We have been progressively doubling these routes and we have been trying to cover all the States and there is partial doubling and full doubling done over the course of years as the traffic has grown."

1.60. The Committee desired to know the reasons for having to wait for as long as seven to eight years before the doubling of the

Southern trunk route could be completed. The Chairman, Railway Board stated:

"We have taken about 12 years now to double the Delhi-Bombay route."

In this connection, the Member (Transportation) added:

"In the Third and Fourth Plans we have doubled all the sections except the ghats. The hilly terrain on the Itarsi-Amla-Nagpur section is a very difficult terrain for construction as well as from the expenditure point of view. Then there are certain long bridges which are single on this section and which are yet to be doubled. It is only the hard core and the very expensive portions which have not yet been doubled."

1.61. The Committee asked whether the Railways had any plans to introduce fast trains, other than Rajdhani, in other sectors like Rajasthan, where the average speed of trains was only 25 kms. per hour on the metre gauge; so that the technological break-through achieved by the Rajadhani Express trains would not turn out to be a mere showmanship. The Chairman, Railway Board replied:

"On the metre gauge we had at one time thought of improving the track so as to have a higher speed of 110 km., but that again would have been on the trunk routes. But our ultimate aim is conversion into broad gauge because of the growing traffic density. So, basically if we had more resources, we could do this programme faster."

He added:

"Rajadhani's strength is limited to 9 coaches with the speed of 130 km. If we could electrify the route, then we can put one or two coaches more. But, basically, in order to improve the basic transport demand of this country, which is to have more and more coaches particularly on the existing popular trains, there should be dieselisation of the passenger services so that the number of coaches can be more and the average running time can be improved. But today we do not have even enough diesel locomotives to be put on the passenger services. So, due to this growing demand, we are doubling the track as and when we get along and as time goes on—this is happening all over

the country, you know, for the last five to six years. We have for instance dieselised the Srinagar Express and added 4 coaches. We have dieselised the Dakshin Express and added four coaches. On the non-electrified routes, gradually, we are replacing the steam locomotives by the diesel."

1.62. When the Committee pointed out in this context that the crux of the problem appeared to be the need to provide sufficient accommodation for the travelling public, the Member (Transportation) replied:

"We agree with you but the travel habit is growing so much that it is not possible to increase the passenger train services to keep pace. After all we can increase passenger travel only if there is terminal capacity. All our major terminals like Delhi, New Delhi, Bombay VT, Calcutta-Sealdah, etc. have reached a stage when they cannot handle more trains. We will have to do planning in the current plan to develop new terminals or wherever possible to increase the size of the terminal. For instance, to have a third terminal at Delhi will cost us Rs 60 crores."

1.63. The Committee desired to know whether a final decision had been taken on the question of establishing a third Railway terminal in the Delhi area. The witness stated:

"The third terminal will cost us Rs. 60 crores. I doubt whether we will be able to find money in the current Plan. One of the things which we are trying to do is to find out sites and set up satellite terminals which will relieve the burden on the main terminals. We are also trying to shift the goods traffic from those existing passenger terminals, over a distance away and convert that area where goods traffic is being dealt with into facilities for passenger traffic."

The Committee observed that even though the question of having a third terminal for Delhi had been debated a long time ago in Parliament and certain decisions had been taken, much progress had not been made in this regard and the delay had resulted in escalation of the cost of the project and asked whether this was not indicative of defective planning. The Member (Transportation) replied:

"May I submit that the planning for increasing the terminal capacity in Bombay, in Howrah, has been completed. Plans

have been drawn up. Blue prints are there. It is only a question of finding money. In so far as Delhi is concerned a programme was drawn up and site was also found. Two sites were under consideration, one in Brar Square and one at Nizamuddin. The plans were prepared for Nizamuddin. But, owing to certain objections that the historical monuments and other buildings in that area would get obliterated and would be spoilt, we gave up the Nizamuddin area. We are now trying to find another site for the third terminal. But, I do not know whether the cost factor will enable us."

The Chairman, Railway Board added:

"Cost factor will be very high. It will be very difficult to undertake. In regard to New Delhi, this is our main problem. It is all right saying that you can do it. But, money is the problem. After all, Nizamuddin site was a good site. But, then, the Urban Arts Commission said 'You are going to affect the monuments; Don't have it there'. I can tell you that. We can utilise this Rs. 60 crores to provide more facilities in New Delhi provided that the goods facilities are shifted to Tughlakabad. But, the point is that, politically and administratively, it is very difficult to get these decisions."

In reply to another question whether East Patel Nagar had not been selected earlier for establishing the third terminal, the witness replied:

"It was only a palliative. There is not enough room there. There is not enough land there."

1.64. The Committee enquired into the reasons for frequently changing the location of the third terminal. The Chairman, Railway Board replied:

"East Patel Nagar and other places were only palliatives. We were only trying to do patch-work, as we have done at Nizamuddin and as we have done at Sarai Rohilla. It was only a patch-work. We just did not have the money for a major terminal. The same thing applies to Bombay; the same thing applies to Calcutta. It is no use trying to get into a major terminal unless we can see the end of the job. If we take up this work, we should be assured that in three years time, we will get the money. Otherwise, it

is no use starting the work, doing it in ten years time and not having any use for it in between."

1.65. In regard to the expansion of the terminal at Sealdah, where the construction activity had been in progress for quite a long time, the Committee desired to know when this was likely to be completed, so that the problems proliferating in the area in the most alarming manner could be solved. The Chairman, Railway Board replied:

"The new station buildings at Sealdah will be completed within about a year, I think so."

When asked as to when the entire Sealdah complex would be ready, the witness replied:

"I do not know exactly about the complex. I think the State Government is not having the money at the moment to go into the complex area and fly under and all that."

A note subsequently furnished by the Ministry of Railways (Railway Board) on the construction of a new terminal at Sealdah is reproduced below:

"The work of remodelling Sealdah Station yard was taken up in 1960-61 in 3 phases of which construction of a new station building forms a part of phase II. This work has been sanctioned at a cost of Rs. 1.05 crores and the salient features of the work are as under:

- (i) Raising of platforms Nos. 10 to 13 and pucca pavements of platform of 2, 3, 6, 7 and 9 to 13.
- (ii) Provision of IRS type shed.
- (iii) Construction of RMS pay and cash office.
- (iv) Construction of new Sealdah Station building.
- (v) Provision of cab road.
- (vi) Provision of cover passage between main station and South Station.

Except the completion of the new station building all other items of work have been completed and brought into use.

The construction of new station building involves:

1. Dismantling of north and main concourse in stages with-

out causing much inconvenience to the travelling public including diversion of sewer lines and other services.

2. Pile foundation of work of new station building in stages.

3. Construction of new station building is in stages.

At present the station building is being constructed providing for ground, mezzanine and first floor. Provision has also been made in the foundation and structural grid of the building so that the station building may rise to seven storeys in future. The work is in progress and is expected to be completed by June 1976."

1.66. At the instance of the Committee, the Ministry of Railways (Railway Board) also furnished another note on the steps taken to relieve congestion at major Railway terminals in the country, which is reproduced in Appendix IV.

1.67. Between New Delhi and Howrah, while the Rajdhani Express operates twice a week, an airconditioned Deluxe service is also provided on the remaining five days. The Committee desired to know the position in this regard on the Delhi-Bombay route. The Member (Transportation) stated:

"On 5 days there is AC Deluxe. For 2 days, there is Rajdhani. The days not covered by the Deluxe are covered by the Paschim Express which is non-airconditioned and runs on the same 2 days as Rajdhani."

1.68. As regards the position on the Delhi-Madras route, enquired into by the Committee, the witness stated:

"The GT Express is converted into AC Deluxe twice a week. There is the Dakshin Express which goes upto Kazipet and gets split into two. One half goes to Secunderabad and the other half goes to Madras."

1.69. The Committee asked whether the Railway Board was not depriving the second class passengers, bound for destinations in the South, of accommodation by converting the Grant Trunk Express into a Deluxe train twice a week. The witness replied:

"It is true that second class ordinary accommodation becomes less to that extent, but for passengers going from Delhi to Cochin or Mangalore, we have introduced the Jayanti

Janata three times a week, which consists entirely of non-airconditioned second class coaches."

1.70. When asked whether it was not possible to provide Jayanti Janata Express trains on a larger scale, the witness replied:

"That is what we are doing. We started the Jayanti Janata twice a week. Now we have increased it to thrice a week. We have introduced one train from Secunderabad to Delhi. We have introduced one train from Delhi to Samastipur. We could not take it to Howrah for want of terminal capacity. So far as Delhi-Madras is concerned, as soon as the remaining portions are doubled, we will certainly increase the intensity of the second class corridor Janata."

1.71. In reply to another question whether the Railway Board had any idea of running such trains to Calcutta and Bombay, the witness stated:

"The difficult is lack of terminal capacity. There is no platform to accommodate the trains. If we try to force the trains within the limited space, unpunctuality takes place."

When asked whether it would not be technically feasible to divert such a train over the Vivekanand Bridge to Sealdah or Part Circus, the Chairman, Railway Board replied:

"There again we have to develop capacity for maintaining the rakes, for providing platforms, etc."

The Member (Transportation) added:

"Just as we are developing Nizamuddin in Delhi, we will ask the General Manager, Eastern Railway to find a place in the Calcutta area like Ballygunge, where they can provide more terminal facilities."

1.72. The Committee desired to know the extent to which the speed of the Rajdhani Express trains could be improved further.

The Chairman, Railway Board stated:

"As I mentioned earlier, the problem with the special trains is really of getting maximum load on it. Now, we are running the Frontier Mail and other trains with a maximum of 17 bogies and with the maximum speed of 100 km. If we reduce the bogies let us say to 14, we can get 110 km. speed. But look at the lowest capacity for the passengers."

As regards further increasing the speed of the Rajdhani Express, the witness stated:

"If Rajdhani Express with the electric locomotive is run and if you do not add the two bogies, I should think that we should be able to go up to 160 km. With the electric locomotives that we have, if we want to go to a high speed, it means a lot of money over it. To go to a speed of 200 km. would mean very expensive systems which we cannot afford at this particular point of time because in other countries they have a totally different system for the 260 to 300 km. speed. They have a completely separate line."

When the Committee pointed out that a speed of 120 or 130 kms. per hour was still only a primitive stage of development when compared with the speeds achieved by foreign Railways, the witness replied:

"I agree with you. But, we are not able to get the resources to be able to keep that normal passenger traffic and to have the growth of goods traffic on our trunk routes. If we want to develop that, we should have more marshalling sheds with electrification. Imagine this. If we get the resources, even if we want to have a higher speed, I think it would be questionable. I may tell you another thing. Take the Tokado-Shigatsu line. They have a super-suburban service between Tokyo and Osaka because that serves cities and towns where the total population amounts to something like 20 million people. We do not have any concentration of population of that order. For example between Lucknow and Delhi, we do not have that kind of population. We do not have sufficient traffic to be able to run the services throughout the day at very high speeds. Imagine one running service between here and Lucknow or between here and Agra. The traffic density will not be able to justify that very high cost of systems on such routes."

1.73. The Committee asked whether it should not be the endeavour of Indian Railways to emulate the achievements of foreign railways and run a larger number of fast trains. The Chairman, Railway Board replied:

"If we get more resources, we shall certainly look towards that. For the last ten years we find that in the advanced

economies, there is a tendency for the rail traffic to go higher and higher. So, thinking of 300 to 400 km. is not at all there now. There is an insipid trend to go back to lower levels. So, the whole business is going to be so costly that it is better not to think in terms of something which is roundabout 300 km. or even less than 200 km. Then to try and put all this money into it in the long run will be very very expensive for any kind of economy."

1.74. The Committee are glad that the Rajdhani Express service has, by and large, won wide appreciation from the travelling public. To the extent that they furnish a 'super-fast' service, by our Indian standard, between Howrah & Delhi and between Delhi & Bombay, and as the show-piece, as it were, of the Indian Railways and a testimony to their technological breakthrough towards quality transport facilities, the introduction of these trains has been welcome. The Railway Board cannot rest content, however, with operating a couple of such prestigious trains, which cater necessarily to the comparatively affluent class of passengers, when the needs of the larger multitude of less fortunate passengers remain unfulfilled. If after nearly three decades of independence and four Five Year Plans, the overwhelming majority of our railway passengers find themselves forced to travel at slow speed, often also in great discomfort, it is clear that the Indian Railways have still a lot of leeway to make up.

1.75. It appears that on account of various constraints such as the absence of adequate terminal facilities, slow pace of doubling of track, non-availability of locomotives in sufficient numbers, capable of hauling economically a larger number of coaches at higher speeds, etc., the Railways have been unable to keep pace with the ever-growing demands of the travelling public. Consequently the problems of insufficiency and congestion in the existing passenger services continue to plague the Railways. Thus, a slightly paradoxical situation has ensued with the Rajdhani Express at one end of the spectrum, capable of achieving speeds upto 160 kilometres per hour, and trains consisting of outdated coaches hauled at speeds as low as 25 kilometres per hour at the other end. Besides, with greater emphasis being laid on increasing freight earnings and perhaps also on account of the increasing losses incurred on passenger services, there appears to be a tendency to relegate such services to a secondary place. Unless the Railways fulfil their larger social commitments and cater to the needs of the great multitude of passengers, the achievements of such trains as Rajdhani Express

would be little more than easy showmanship fundamentally unrelated to the broader national interest.

1.76. The Committee have learnt that having introduced two such trains which have brought two metropolitan cities closer to the capital, the Railway Board is not contemplating the introduction of similar attractive trains for connecting other State capital with Delhi, on account of the absence of a double line throughout the relevant routes. Similarly, the more popular Jayanti Janata Express trains, that provide faster, non-airconditioned second class travel from Delhi to Cochin and Mangalore, to Secunderabad and to Samastipur, are not likely to be extended to other cities, owing to the non-completion of the doubling of the track and the lack of terminal capacity at the destination stations. By the conversion of the Grand Trunk Express (Delhi-Madras) into an airconditioned deluxe train twice a week, a peculiar position prevails on the Southern trunk route, in which the weaker sections of the passengers have been deprived of ordinary second class accommodation in the days the Deluxe operates. It would, thus, appear that faster and more comfortable rail travel is available today to a minority of better-placed passengers, while for the overwhelming majority, rail travel still remains none-too-happy an experience.

1.77. This is a state of affairs that needs to be remedied as soon as possible. While the Committee are not unaware of the constraints under which the Indian Railways operate, they are of the view that at least some of the difficulties are by no means insurmountable. It is distressing, for instance, to learn that though there is no dispute over the gains that would accrue to the Railways in particular and the nation at large by the speedy doubling of the North-South Trunk route, this doubling programme would take another seven to eight years to be completed. What is even more distressing is the indifference in this matter on the part of the Railway Board. The Committee had the misfortune to find the Board almost deriving comfort from the fact that since the doubling of the Bombay-Delhi route had taken twelve years, their performance in the matter of doubling the Delhi-Madras route was not a matter for undue concern.

1.78. The position in regard to augmentation of terminal capacity at major metropolitan cities in the country is no better either. Though a number of work studies and traffic-cum-engineering surveys have been carried out in various metropolitan areas, specific steps for increasing the terminal capacity from a long range

point of view are yet to be taken in a concrete manner and many of the surveys remain reports on paper. Even the site for the location of a third terminal in the Delhi area is yet to be finalised. Similarly, in the Calcutta area, where the problems have accumulated excruciatingly, the second phase of the work of remodelling the Sealdah station yard and constructing a new station building, work on which commenced as early as 1960-61, is expected now to be completed, after more than 15 years, by June 1976, but the fate of the rest of the scheme regarding the Sealdah complex remains hanging in mid-air, mainly perhaps on account of the non-availability of funds with the State Government. Surveys for the remodelling of the Bombay VT main line and suburban station and for the provision of another terminal in the Parel-Dadar area as well as for providing additional terminal facilities in the Bombay Central Yard and at Madras Egmore are still only 'under examination'. In the absence of timely progress, the cost of the projects undoubtedly escalates and the demands of passenger and goods traffic continue to far outstrip availability. Temporary palliatives and ad hoc solutions, too often at considerable cost, further tarnish the picture.

1.79. One immediate solution that suggests itself to the Committee for alleviating the problem of congestion in some of the existing mail and express trains is the provision of more accommodation for the non-affluent class of passengers by minimising the expenditure on providing airconditioned first class accommodation which, in any case, has proved unremunerative in recent times after the September 1974 hike in rail fares. A recent sample survey of the occupancy rate of airconditioned first class in some of the 'prestigious' trains such as the Deluxe and the Rajdhani by different categories of passengers reveals an intriguing picture. During the period January 1—June 30, 1975, the average occupancy of airconditioned first class on the Deluxe trains to and from Madras was respectively 75.5 per cent and 64.4 per cent. Of this, on the down direction from Madras to Delhi, while 2.8 per cent and 0.8 per cent of the berths were occupied respectively by Ministers and Members of Parliament and Legislative Assemblies, Railway Officers accounted for as high an occupancy as 20.5 per cent and other Government officers travelling on duty 1.4 per cent. Occupancy on non-Government account and by foreign tourists was only 38.4 per cent and 0.5 per cent respectively. The position was no better on the up direction towards Madras, the corresponding figures being respectively 2 per cent, 1.09 per cent, 12.2 per cent, 0.7 per cent, 56.5 per cent and 2.2 per cent. Similarly, on the Deluxe trains to and from Bombay, occupancy on

Government account was only 62.9 per cent and 37 per cent, with as many as 159 berths and 200 berths out of a total utilisation of 1390 and 1021 berths being occupied respectively on the up and down trains by railway officers. The Deluxe trains to and from Calcutta tell a similar tale of distress with only 35.6 per cent and 40 per cent of the total utilised berths being occupied on private account while Railway officers account for 8.4 per cent and 11.1 per cent of the occupancy.

1.80. It is apparent that a large portion of the available airconditioned first class accommodation is utilised on Railway and Government accounts, with the public exchequer bearing the cost, without any readily quantifiable corresponding benefits. Government would, therefore, do well to review the need for providing such a costly mode of travel to a small minority of public servants and evaluate the feasibility of reducing airconditioned first class accommodation on trains, if not eliminating them altogether, so that the accommodation so released can be utilised to fulfil the more pressing social objective of providing additional accommodation for the weaker sections of the travelling public. The Committee note that certain steps such as a reduction in the frequency of airconditioned first class coaches or their discontinuance on some of the trains, discontinuance of the construction of new airconditioned first class coaches on additional account, introduction of the new two-tier airconditioned sleeper coaches, etc. have now been taken by the Railway Board. These steps by themselves would not solve the problem unless there is some fundamental rethinking on the part of the Railway Board and the Government. Travel by the new two-tier airconditioned sleeper coaches, for instance, is still beyond the reach of the common man, and the operation of such coaches, not in lieu of but in addition to the airconditioned first class on the Deluxe trains, would only further widen the gulf between the haves and the have-nots. It would also be of interest to analyse the extent to which the capacity in these new coaches are being utilised on non-Government account and on Government account, either by officers travelling on duty or by those travelling on Leave Travel Concessions, with Government bearing the bulk of the cost of travel. The Committee would also like to be informed of the economics and occupancy of these new coaches.

1.81. Yet another accepted programme for improving the basis transport demands of the country which has been rather tardy in implementation is the dieselisation of the passenger services so that the number of coaches on a train can be increased without detri-

ment to the average running time. The Committee find from paragraph 9 of the Report of the Comptroller and Auditor General of India for the year 1972-73, Union Government (Railways) that full production of diesel locomotives by the Diesel Locomotive Works at Varanasi has not yet been attained despite the lapse of nearly a decade since the unit commenced production. The Audit Report points out that as against the production target of 307 diesel locomotives envisaged by 1967 in the abstract estimate for the project, only 116 broad gauge diesel locomotives had been produced by 1966-67. Similarly, though, as per the project report, 941 broad gauge locomotives or equivalent should have been manufactured during 1963-64 to 1971-72, the actual outturn was only 427 broad gauge locomotives and 80 metre gauge locomotives. Till the end of 1973-74, 549 broad gauge locomotives and 148 metre gauge locomotives had been produced by the unit. Consequently, there are not enough diesel locomotives to be put on the passenger services. In the meantime, the prices of petroleum products have also increased manifold, necessitating a rethinking over the dieselisation programme.

1.82. Unfortunately, the electrification programmes of the Railways, which could facilitate the cheaper and quicker movement of passenger and goods traffic, have also not made much headway on account of difficulties in finding the necessary financial resources for these programmes which are essentially highly capital intensive. The Committee have been informed that, on account of the financial constraints, acceleration of the pace of electrification 'does not seem to be in sight'. In addition to the Railways' own financial constraints, the dearth of electric power has also affected the electrification programmes. The Indian Railways, therefore, appear to be placed in an unenviable position and with these constraints in operation, it is unlikely that the problems of congestion in, and slow speeds of, passenger trains would be satisfactorily solved in the near future. This, in the opinion of the Committee, is an unhappy situation which needs to be gone into immediately so as to devise suitable remedial measures. The Committee urge Government to review the situation and take effective steps to retrieve the situation.

1.83. In view of the fact that the electrification programmes of the Railways are also vitally dependent on the power generation schemes of the State Governments with their own financial constraints and limitations, the Committee feel that an integrated approach to the entire problem would be necessary if these programmes are to be given effect to. The Committee learn that the

Railways have drawn up some proposals for establishing their own power stations and that site studies and preparation of feasibility reports in this regard have already been completed and are awaiting approval and allocation of funds by the Planning Commission. The Committee consider that it would be desirable to establish real co-ordination for this purpose between the Central and the State Governments and a pooling together of the available resources. Such a step would ensure that our scarce resources are not expended in avoidable duplication of effort. Government should also examine the feasibility of providing institutional finance to meet any shortfalls in the provision of the requisite funds for the joint venture which should give an added impetus for the speedier implementation of projects of vital importance. The Committee attach considerable importance to this recommendation and desire that the Planning Commission should process it early and initiate the necessary follow-up action.

1.84. Viewed against this broader background, the running of the Rajdhani Express trains howsoever attractive and important it may be, is open to question. Though it has been claimed by the Railway Board that the Rajdhani Express has a role to play in the sphere of tourism, the Committee find that apart from a few visiting foreign delegations who are sent by the Railway Board by this prestigious train, only 17 foreign tourists had travelled by the air-conditioned first class by the Rajdhani to Bombay and another 17 to Calcutta during the six months from January 1 to June 30, 1975. It has also been admitted by the Railway Board that as the Rajdhani Express do not stop at places of tourist interest and foreign tourists have to plan in advance to travel by these bi-weekly services, they prefer to avail of other suitable trains or air services. The Committee are also of the view that a misplaced emphasis in this regard is perhaps being placed by the Railway Board as well as the Department of Tourism. It is well known that quite a large number of foreign tourists, particularly the young among them, wishing to have a taste of India's natural beauty and her ancient culture prefer cheaper modes of travel and reasonable accommodation and food tariffs. Besides, the more affluent tourists, spanning the globe with their tight schedules and itineraries generally prefer the faster air travel. It would, therefore, be worthwhile for the Railway Board to review critically the pattern of travel by foreign tourists within India and to assess whether, in a country like ours, it is proper to place excessive emphasis on luxurious rail travel for 'attracting' foreign tourists. The Committee would like to know what is being done in this regard.

1.85. The Railway Board have tried to justify the introduction of the Rajdhani Express trains on grounds of financial remunerativeness as well. The Committee are aware that this 'prestige symbol' has caught the fancy of the better-placed passengers who can afford to pay for the comforts the train provides. The earnings of the two Rajdhani Express trains have also exceeded the direct expenses in all the years of their operation. This, however, presents only a partial picture of the economics of the matter. The earnings from Rajdhani have been compared only with the readily identifiable direct costs of operation without taking into account the indirect, distributable elements of cost such as provision and maintenance of permanent way, signal and telecommunication, other equipments and facilities, cost of train passing staff, coaching yard staff and overheads which are common with other services. The Committee have been informed that it had not been possible so far to estimate the cost of these distributable items of expenditure in the absence of a scientific system for the assessment of the unit cost of coaching services. Even before the introduction of the Rajdhani Express, only an estimate of the out of pocket expenses or direct costs of running the train had been made to determine its financial remunerativeness. In the circumstances, the Committee feel that it would be incorrect to accept at its face value the incomplete financial justification of the Rajdhani Express furnished by the Railway Board.

1.86. The Committee are of the view that in addition to the direct and indirect costs of operation of the Rajdhani Service, it would also be necessary to take into account the social cost of running the service. Admittedly, on the days the Rajdhani operates, there is a loss of nearly three paths of goods trains on an average on the Delhi-Howrah route, besides an increase in the detention to goods trains (including the Super Express goods trains) and other passenger trains on the route, with consequent loss of earnings not perhaps susceptible of precise quantification. The Committee concede that these losses are only notional to some extent, and that it is perhaps inevitable for a fast train to displace slower trains running on the same route. It cannot, however, be denied that there has been a certain loss to the nation as a whole by the defentions and displacement of trains goods as well as passenger. It is, therefore, a moot point whether the running of a luxury service, consisting of just six airconditioned passenger coaches (one first class coach and five second class chair cars), could be considered justifiable from an overall national point of view. The Committee would have been happier if the Railway Board had succeeded in introducing similar

fast trains, though with reduced comforts, to cater to a larger number of less affluent passengers, so that the benefits of the technological breakthrough on the Railways were made available to larger sections of the community.

1.87. According to a study of the economics of the Delhi-Howrah Rajdhani Service undertaken by the Research, Designs and Standards Organisation of the Railways, (which, however, has not been accepted by the Railway Board), the total cost of running the train during 1971-72 was Rs. 84.07 lakhs while the gross earnings (including cost of meals) were Rs. 76.08 lakhs. The Committee find that this study is not a very accurate indicator of the true economics of the train in view of the fact that on account of the non-availability of separate unit cost of passenger services, the combined figures of goods-cum-passenger unit cost have been adopted in the study, thereby vitiating the figures to some extent. However, in the absence of more accurate data in this regard, the RDSO study at least suggests that the Rajdhani service is, perhaps, not as remunerative as it is made out to be. The Committee emphasise the importance of knowing the total cost of operating a service from the point of view of better financial management and, therefore, desire that the Railway Board should compute as early as possible the total cost of the Rajdhani service and reassess its financial remunerativeness on a more scientific basis.

1.88. The Committee have learnt in this connection that a methodology for determining, in a reliable manner, the variable, distributable costs of trains operations, which would facilitate the introduction of train-wise costing on the Railways, was likely to be evolved by the end of 1975. The Committee trust that the various difficulties earlier encountered in working out separately the costs of goods and passenger operations would have been overcome by now and would like to be apprised of the findings. The total cost of operating not only the Rajdhani service but the Deluxe service and the Kalka Mail between Howrah and Delhi should also be worked out expeditiously and intimated.

1.89. Pending the economic reappraisal of the Rajdhani service suggested above, the Committee feel that it should also be possible to effect certain economics and increase earnings by (a) the replacement of the air conditioned first class coach either by a chair car or by a two-tier airconditioned sleeper coach so as to provide accommodation to a large number of passengers, (b) augmentation of the existing capacity of the train by at least an additional chair car and (c) switching over to electric traction from diesel as early as pos-

sible. The Committee find that during the period from 1973 to 1975 (upto June), the occupancy of airconditioned first class in the Delhi-Howrah Rajdhani ranged respectively from 79 to 100 per cent, 44 to 100 per cent and 37 to 87 per cent. On the other hand, the occupancy of the airconditioned chair car during the same period ranged from 88 to 100 per cent, 73 to 100 per cent and 72 to 100 per cent respectively. Though the total earnings from airconditioned first class might have increased on account of the increase in fares which has made travel by this accommodation even more expensive than air travel, the occupancy rate has decreased drastically. The Committee would urge the Railway Board to take a fresh look at the need for providing such opulent accommodation on the Rajdhani which could, perhaps, be substituted either by a two-tier AC sleeper coach or a chair car which would cater to a larger number of passengers.

1.90. As regards the suggestion of augmenting the existing capacity of the train by providing at least an additional chair car, the Committee have been informed that the speed of the train would be reduced from 130 km. to about 110 km. by such addition, and that it should be possible to haul three more coaches and also maintain the same speed only when the entire route is electrified and a more powerful electric locomotive is utilised to haul the train. However, in the context of an immediate solution to the problem of congestion in passenger services, and for a better utilisation of the available resources, the Railway Board should consider how far the augmentation of the capacity of the Rajdhani by an extra chair car may not, perhaps, through some rationalisation, affect the running time too badly. Such a step, besides increasing the direct earnings of the service, would result in certain tangible benefits in the sphere of goods movement as well by reducing detentions en route, particularly to the super express goods trains and improving wagon turn-round and availability.

1.91. Substitution of the diesel locomotive which hauls the Rajdhani Express at present between Howrah and Delhi by an electric locomotive assumes particular significance in the context of the present energy crisis and the high cost of diesel traction. Though 85 per cent of the Howrah-Delhi route (upto Tundla) is already electrified the Railway Board, at the time of introduction of the Rajdhani Express, appear to have preferred to modify a diesel locomotive for attaining the high speed of 130 km. at a cost of Rs. 45,000, mainly with the objective of eliminating dual traction and a change of locomotive in between, which, according to them, would have affected the

running time of the train. The Committee also note the opinion expressed by the Research, Designs and Standards Organisation that it would be undesirable to have dual traction for the service which would affect the utilisation of electric and diesel locomotives, particularly the latter and also affect the overall running time. The Committee have been informed that an electric locomotive capable of speeds upto 160 km. has been designed and that after the completion of necessary proving trials which have been programmed to coincide with the electrification of the entire Delhi-Howrah route to be completed a year hence, it would be possible to switch over to electric traction for the Rajdhani Express. The Committee can only express the hope that this schedule would be adhered to, so that the direct expenditure on fuel can be reduced and the payload capacity of the train increased as early as possible.

1.92. The Committee find from the Economic Appraisal of the Delhi-Howrah service by the Research, Designs and Standards Organisation that modifications and trials on a WAM2 electric locomotive to suit the high speed of the Rajdhani Express are in progress. Although work on this locomotive is in progress, the RDSO study has opined that the WAM4 locomotive is to be preferred for the Rajdhani service, especially in view of its capability of hauling a heavier payload. The study goes on to observe that even the switch over to a modified FAM4 locomotive, with maximum speed restricted to 120 kms. per hour would be quite advantageous as compared to the present arrangement. The Committee would like to know the specific steps taken by the Railway Board in pursuance of these observations and the reasons for selecting the WAM2 locomotive in preference to the WAM4.

1.93. Now that a long-overdue technological breakthrough has been achieved on the Railways and considerable sums have been expended in effecting improvements to rolling stock, track standards and maintenance, signalling and telecommunication, etc., the Committee are of the view that the Railway Board should endeavour to make available, to the maximum extent possible, the benefits of present-day technological progress to a larger cross-section of the travelling public. As has been pointed out in paragraph 1.76, the Railway Board have no immediate plans for connecting other State capitals with Delhi by similar fast trains. Such further programmes should soon come on to the agenda. The Committee, meanwhile, would urge the Railway Board to consider the running of fast trains with cheaper accommodation to cater to the less affluent class of passengers rather than going in for more luxury trains of the Rajdhani type, which, in

any case, would benefit only a select minority. For this purpose, a long-range perspective plan should be drawn up, in place of what appears to be an ad hoc approach as at present. Clear-cut priorities for future investment both in respect of passenger and goods movement should also be laid down. The Committee trust that our Railways, realising that Rajdhani and similar runnings, while by no means unwelcome, cater to limited and privileged sections of the travelling public, will leave no stone unturned till a truly people-oriented railway service is made available to all.

NEW DELHI;
January 15, 1976/Pausa 25, 1897 (S)

H. N. MUKERJEE,
Chairman,
Public Accounts Committee.

APPENDIX I

(Vide Paragraph 1.10)

*Statement showing the chartered line capacity and the actual utilisation on Howrah—
New Delhi route as on 31-3-1968.*

Name of section	Chartered capacity as on 31-3-68	No. of train services during 1967-68				
		Sub.	Pass.	Goods	Deptt.	Total
1	2	3	4	5	6	7
Howrah—Belur	Up 199 } Dn 196 f	80	24	15.5	1	120.5
Belur—Saktigah	Up 91 } Dn 89 f	14	8	29.5	1	52.5
Saktigah—Burdwan	Up 165 } Dn 170 f	22	25	39	1	87.0
Burdwan—Khana	144	..	29	44	1	74.0
Khana—Andal	128	..	22	32	1	55.0
Andal—Asansol	108	..	22	45	1	68.0
Asansol—Sitarampur	116	..	24	37.5	2	63.5
Sitarampur—Chhota Ambana } Chhota Ambana—Pradhankanta }	70	..	12	32.5	1	45.5
Pradhankanta—Dhanbad	52	..	12	27.5	1	40.5
Dhanbad—Gomoh	57	..	9	40.0	1	50.0
Gomoh—Gaya	53	..	12	36.5	1	49.5
Gaya—Sonmagar	59	..	9	31.5	1	41.5
Sonmagar—Dehri on Sone	77	..	11	43.0	1	55.0
Dehri on Sone—Mughalsarai	76	..	10	40.0	1	51.0
Mughalsarai—Ghunar	53	1	10	22.9	0.5	33.4
Ghunar—Mirzapur	59	..	11	21.8	0.5	33.3
Mirzapur—Borohat	60	..	11	22.7	0.5	34.2
Borohat—Naini/Chhoki	59	..	11	21.8	0.5	33.3
Naini/Chhoki—Allahabad	58	..	17	20.1	0.5	37.6
Allahabad—Manzuri	50	..	9	18.7	0.5	28.2

1	2	3	4	5	6	7
Manauri— Fatehpur . . .	49	..	9	17'5	0'5	27'0
Fatehpur— Chakeri . . .	50	..	10	17'5	0'5	28'00
Chakeri— Kanpur/Juhi . .	51	..	10	18'3	0'5	28'8
Kanpur— Etawah	47	..	12	16'9	0'5	29'4
Etawah— Shikohabad . . .	47	..	12	16 0	0'5	28 5
Shikohabad— Tundla . . .	50	..	15	16'3	0'5	31'8
Tundla— Barhan	39	..	13	10'1	0'5	23'6
Barhan— Aligarh	36	..	11	9'7	0'5	21'2
Aligarh— Dankaur	34	..	11	7 8	0'5	19'3
Dankaur— Ghaziabad . . .	35	..	12	7'8	0'5	20'3
Ghaziabad— Sahibabad . .	73	..	38 5	21'1	0'1	59'7
Sahibabad— Tilak Bridge .	22	..	4	11'6	0'3	15'9
Tilak Bridge— New Delhi .	63	..	2	17'8	0'1	46'9

Statement showing the chartered line capacity and the actual utilisation on Howrah—New Delhi route as on 31-3-1970

Name of the section	Chartered capacity as on 31-3-1970	No. of train services during 1969-70				
		Sub.	Pass.	Goods	Deptt.	Total
1	2	3	4	5	6	7
Howrah—Belur	201	90	22	15'5	1	128'5
Belur—Saktigarh	89	15	11	28 5	1	55 5
Saktigarh—Burdwan . . .	165	27	23	38'0	1	89'0
Burdwan—Khana	144	..	28	36'0	1	65'0
Khana—Andal	128	..	21	33'5	1	55'5
Andal—Asansol	103	..	20	45'5	1	66'5
Asansol—Sitarampur . . .	113	..	23	38'0	2	63'0
Sitarampur—Chhota Ambana .	100	..	11	32'5	1	44'5
Chhota Ambana—Pradhankanta	71	..	11	25'5	1	37'5
Pradhankanta—Dhanbad . .	50	..	11	28'5	1	40'5
Dhanbad—Gomoh	56	..	8	42'5	1	51'5

1	2	3	4	5	6	7
Gomoh—Gaya . . .	50	..	11	36·5	0·5	48·0
Gaya—Sonmagar . . .	59	..	8	33·6	1	42·6
Sonmagar—Delhi on Sone	77	..	10	42·6	1	53·6
Delhi on Sone—Mughalsarai .	76	..	8	42·6	1	51·6
Mughalsarai—Chunar . . .	53	..	10	28·0	0·5	38·5
Chunar—Mirzapur . . .	59	..	11	27·0	0·5	38·5
Mirzapur—Birohe . . .	60	..	11	27·1	0·5	38·6
Birohe—Naini/Chhooki . . .	59	..	11	27·1	0·5	38·6
Naini/Chhooki—Allahabad .	58	..	17	24·6	0·5	42·1
Allahabad—Minauri . . .	50	..	9	23·4	0·5	32·9
Minauri—Fatehpur . . .	49	..	9	23·2	0·5	32·7
Fatehpur—Chakeri . . .	50	..	10	23·2	0·5	33·7
Chakeri—Kanpur/Juhi . . .	51	..	10	23·1	0·5	33·6
Kanpur—Etawah . . .	47	..	12	21·4	0·5	33·9
Etawah—Shikohabad . . .	47	..	12	20·9	0·5	33·4
Shikohabad—Tundla . . .	50	..	14	20·8	0·5	35·3
Tundla—Barhan . . .	39	..	13	14·4	0·5	27·9
Barhan—Aligarh . . .	36	..	11	14·0	0·5	25·5
Aligarh—Dankaur . . .	34	..	11	11·5	0·5	23·0
Dankaur—Ghaziabad . . .	35	..	12	11·3	0·5	23·8
Ghaziabad—Shidabad . . .	63	..	40·5	21·9	0·6	63·0
Shidabad—Tilak Bridge . . .	22	..	6·5	11·3	0·6	18·4
Tilak Bridge—New Delhi . . .	63	..	33	16·4	..	49·4

APPENDIX II

(Vide paragraph 1.31)

Statement I

*Statement Showing the details of the costs of Operating the Rajdhani Express
(Annual Cost of Coaches (Excluding Air-conditioning)).*

6 A.C. Chair Cars, 2 A.C. Sleeper Coaches, 2 Pantry Cars and 4 Power Cars have been provided for Rajdhani Express Service.

Capital Costs. (Data furnished by I.C.F.)

Cost of 6 A.C. Chair Cars @Rs. 4,20,421.00 per car	Rs. 25,22,526.00
Cost of 2 A.C. Sleeper Cars @ Rs. 3,76,024.00 per car	Rs. 7,52,048.00
Cost of 2 Pantry Cars @ Rs. 3,35,222.00 per car	Rs. 16,70,444.00
Cost of 4 Power Cars @ 3,02,418.00 per car	Rs. 12,09,672.00
Total cost of coaches	Rs. 51,54,690.00

Annual Costs.

Interest @ 6 % on Capital Cost	Rs. 3,09,281.40
Depreciation— ? Rs. 0.0126 on the residual value (10 % less than the capital cost) Rs. 46,39,221.00, taking life of coaches as 30 years.	Rs. 58,454.20
Cost of POH of the Rajdhani rake at Perambur, during 1971-72 (supplied by CME/S. Rly).	Rs. 5,88,872.00
Cost of IOH of the Rajdhani rake at Lilluah, during 1971-72 (supplied by Dy. CME/E. Rly. Lilluah).	Rs. 2,67,300.00
Cost of running repairs at Howrah (Data furnished by DS/HWH & COS/E. Rly.)	Rs. 1,80,190.00
Staff	Rs. 2,10,510.00
Stores	Rs. 16,260.00
Cost of running repairs at New Delhi (Data furnished by DS/NDLS)	Rs. 32,38.00
Staff	Rs. 16,63,265.60
Stores	Rs. 16,63,265.60
Total Annual Cost on account of Interest, maintenance and depreciation on account of coaches	Rs. 16,63,265.60

Statement II

Annual Cost on Account of Generating Equipment and Air-conditioning of Coaches.

Capital Costs. (Data furnished by I.C.F. Perambur)

Cost of Air-conditioning on 6 A. C. Chair cars @Rs. 4,81,022.00 per car.	Rs. 28,86,132.00
Cost of Air-conditioning on 2 A.C. Sleeper Cars. @Rs. 3,13,327.00 per car.	Rs. 6,26,554.00

Cost of Air-conditioning and other electrical equipment in 2 Pantry Cars @Rs. 5,09,890.00 per car.	Rs. 10,19,680.00
Cost of Generating equipment in 4 Power Cars @Rs. 7,85,256.00 per car.	Rs. 31,41,024.00
Total capital cost of air-conditioning, generating equipment and other electric fittings.	Rs. 76,73,490.00
<i>Annual Costs.</i>	
Interest @ 6% on capital cost	Rs. 4,60,409.40
Maintenance including spares and staff (Data furnished by I.C.F., Perambu.)	Rs. 1,39,694.00
Operating cost (including staff & stores) (Furnished by the Elec. Directorate of RDSO)	Rs. 2,37,310.00
Depreciation @Rs. 0.0593 on the residual value of Rs. 40,79,219.40 (being 10% less than the <i>capital cost of air-conditioning</i>) taking life of assets as 12 years.	Rs. 2,41,897.70
Depreciation @Rs. 0.0430 on the residual value (being 10% less than the <i>Capital cost of generating equipment</i>) taking life of assets as 15 years.	Rs. 1,21,557.00
Total annual cost on account of interest, maintenance and depreciation for the air-conditioning, generating and other electric equipments and the operating cost of these.	Rs. 12,01,368.10

Statements III

Annual Cost on account of Locomotives required for this service.

	Eastern Railway	Northern Rly.
Average kms. earned per passenger locomotive per annum (From the Supplement to the Rly. Board Report 1 71-72)	$524 \times 365 = 191260$	$705 \times 365 = 257325$
Total kms. run by Rajdhani Express per annum.	$668 \times 208 = 138944$	$777 \times 208 = 161616$
Bare requirement of locos for this service.	$\frac{138944}{191260} = 0.72$	$\frac{161616}{257325} = 0.62$
Total bare requirement of locos for this service.	$= 0.72 + 0.62 = 1.34$	
Spares @ 18.93 % for repairs etc.	$= 0.25$	

* Total locomotives required for this service = 1.59 or 1.6

<i>Capital Costs (Supplied by Motive Power Directorate of RDSO)</i>	
Cost of 1.6 WDM2/WDM4 locomotives @Rs. 25,54,160.00 per loco	Rs. 40,86,656.00
Cost incurred in making WDM2/WDM locos fit for high speed running	Rs. 45,000.00
Total :	Rs. 41,31,656.00

Annual Cost.

Interest @ 6% on capital cost	Rs. 2,47,899.36
Maintenance cost (supplied by Motive Power Directorate of RDSO)	Rs. 2,89,875.00
Depreciation—@Rs. 0.0126 on the residual value of Rs. 37,18,491 (being 10 % less than the Capital cost) taking life of locomotive as 30 years.	Rs. 46,852.98
Cost of operation (fuel & lubricant) (Supplied by Motive Power Directorate of RDSO)	Rs. 13,57,864.43
Total annual working cost on account of locomotives	Rs. 18,42,491.77

* Rajdhani Express engines are used in a link with other Mail trains.

Statement IV*Cost of Running Staff***I. Drivers.**

Drivers in grade Rs. 335—425 are employed exclusively on this service on the Northern and Eastern Railways as under:—

Northern Railway	4
Eastern Railway	4
Total :	8

(i) Annual cost of a driver in Gr. Rs. 335—425 excluding CCA and running allowance @ Rs. 836.30 × 12)	Rs. 10,035.60
(ii) Annual cost of 8 Drivers	Rs. 80,284.00
CCA @ 6 % payable to 4 N. Rly. drivers based at Kanpur, per year (30 × 4 × 12) :	Rs. 1,440.00
(iii) Running allowance payable to Drivers (The drivers are paid a special running allowance @ 50 % of the actual mileage earned in addition to the mileage allowance normally earned @ Rs. 7.90 per 100 km.	Rs. 35,616.36
Total annual cost of Drivers (i)+(ii)+(iii)	Rs. 1,17,341.16(A)

II. Guards.

On the Northern Railway, two Guards in Scale Rs. 205—280 based at Kanpur, are exclusively ear-marked for working Rajdhani Express. On the Eastern Railway, one of the Guards in Scale Rs. 205—280 based at Mughalsarai works the train between Howrah-Mughalsarai. This Guard works other trains also according to link so the entire cost of two Guards for the Northern Railway portion and one Guard on proportionate basis over Eastern Railway has been taken. Two Guards based at Kanpur are also entitled to 6% CCA and special running allowance @ 50 % of the actual mileage allowance earned.

(i) Cost of 2 Northern Railway Guards per year excluding CCA & Running Allowance @ Rs. 637.15 per month	Rs. 15,291.60
(ii) CCA @ 6 % payable to 2 N. Railway Guards	Rs. 504.00
(iii) Total running allowance payable to N. Railway Guards	Rs. 13,942.65

(iv) Cost of a Guard (@Rs. 637.15 per month) per hour over E. Railway portion (taking 231 hours as normal working hours p.m.) (637.15 + 231)	=Rs.	2.75
(v) Total hours a Guard is engaged, over Eastern Railway, for working Rajdhani EXPRESS (including outstation rest) p.a.	=Rs.	1,802 hrs.
(vi) Cost of Guards over E. Railway portion per year, excluding running allowance (2.75 × 1802).	=Rs.	4,955.50
(vii) Running allowance payable, per year to Guards working this train over Eastern Railway @Rs. 5.70 per 100 km. $\left(\frac{661 \times 208}{100} \right) \times 5.70$	=Rs.	6,836.80
(viii) Total Cost of Guards per year	=Rs.	41,530.55 (B)
Total cost of running staff (A + B)	=Rs.	1,58,871.71

Statement V

Cost on Account of Signalling, Inter-communication and Public Address equipment on the Train.

SIGNALLING

Capital Cost.

Cost of signalling works on the route for introduction of Rajdhani Express (Furnished by S&T Directorate of RDSO) . =Rs. 13,00,000.00

Annual Costs.

Interest @ 6% on the Capital cost of improvements in signalling . =Rs. 78,000.00

Cost of maintenance, repairs and depreciation of signalling equipments (Furnished by S&T Directorate of RDSO) . =Rs. 22,955.00

Total annual cost on account of interest, maintenance and depreciation to signalling equipment on Rajdhani Route . =Rs. 1,00,955.00

Since the improvements in signalling on this route also benefit or are likely to benefit other services on this route in the context of increase in speed of trains, the annual cost of improvements in signalling has been apportioned to Rajdhani Express on a proportionate 'Train Km.' basis.

Total annual 'Train Km.' over New Delhi-Howrah route . =Rs. 3,42,82,625.

On this basis, the cost of improvements in signalling per 'Train Km.' works out to . =Rs. 0.44

Annual cost of improvements in signalling apportioned to Rajdhani Express . =Rs. 1322.46 (A)

INTER-COMMUNICATION & PUBLIC ADDRESS EQUIPMENT

Capital Cost. (Furnished by I.C.F., Perambur)

Cost of 'Public Address System' in coaches and Inter-communication equipment between Guard and Driver. . =Rs. 52,520.00

Annual Cost.]

Interest on Capital @ 5 %	Rs.	3,151.20
Cost of maintenance of Inter-communication equipment and 'Public Address System' including cost of staff. (Furnished by S&T Directorate of RWSO)	Rs.	4,528.80
Depreciation @ Rs. 0.0530 on the residual value (being 10% less than the capital cost).	Rs.	2,409.56
Total annual cost on account of interest, maintenance and depreciation on account of 'Public Address System' and Inter-Communication on equipment.	Rs.	10,089.56 (B)

TELE-COMMUNICATION MAINTENANCE STAFF AT HOWRAH

(Furnished by DS/Howrah).

One Tele-communication Maintainer in scale Rs. 110-180 is posted at Howrah exclusively for this train.

Cost of a Tele-Communication Maintainer @ Rs. 443.00 p.m. for one year Rs. 5,31,6.00 (C)

Total Annual Cost on account of improvements in Signalling, Inter-communication Equipment and 'Public Address System' (A+B+C) Rs. 16,728.02

Statement VI**Annual Cost of Catering.***

Cost of materials consumed.	Rs.	3,60,825.31
Contingency and Labour cost.	Rs.	37,936.45
Cost of replacement of Crockery, Cutlery, etc. during the year	Rs.	26,228.04
Freight handling	Rs.	12,107.77
Cost of fuel	Rs.	7,390.76
Total	Rs.	4,44,488.33

Annual Cost of Catering Staff.

Train Supdt. in	(Gr. Rs. 370-475)—One.	} Rs. 74,546.26.
Catering Manager	(Gr. „ 150-240)—One.	
Cook	(Gr. „ 110-180)—One.	
Cook	(Gr. „ 105-135)—One.	
Cook	(Gr. „ 75-110)—One.	
Khit	(Gr. „ 75-89)—Twelve	
Cost of overall supervision	Rs.	8,873.00
Total annual cost on account of catering	Rs.	5,27,907.59

*Furnished by CCS/E. Rly.

Statement VII

*Cost of Commercial Staff at New Delhi and Howrah

1. Reservation Clerk

1.1 One Reservation Clerk in scale Rs. 150—240 works at New Delhi and Howrah each on III A. C. Chair Car Counter of Rajdhani Express and De-Luxe Express between New Delhi-Howrah. The ration of engagement on the basis of total available seats (daily average) is 2:3 for Rajdhani and De-Luxe respectively.

1.2 Cost of a Reservation Clerk in Gr. 150—240 Rs. 6,768.00PA

Taking 313 working days in a year the cost per day works out
to Rs. 21.62

1.3 Total No. of man days utilised for Rajdhani work. $2 \times 365 = 146$ days
5

1.4 Annual cost of 2 Reservation Clerks (one at New Delhi and one at Howrah) ($21.62 \times 146 \times 2$) Rs. 6,313.04(A)

2. Commercial staff for booking and handling of luggage:

2.1 At New Delhi.

101 UP	Grade	No. of staff	No. of hours worked	Total no. of trips per year	Total man-hrs. utilised	Total man days.
	Rs. 205—280	3	3	104	312	39
	Rs. 150—240	4	4	104	416	52
	Rs. 110—200	5	5	104	520	65
	Rs. 70—85	18	18	104	1872	234

102 Dn.

	Rs. 205—280	2	3	104	312	39
	Rs. 150—240	2	3	104	312	39
	Rs. 110—180	4	6	104	624	78
	Rs. 85—110	1	1.5	104	156	19.5
	Rs. 70—85	12	18	104	1872	234

Grade	Total cost per year	Cost per day	Mandays on Rajdhani/ac.	Total cost for Rajdhani.
Rs. 205—280	Rs. 8,280.00	Rs. 26.45	78	Rs. 2,063.10
Rs. 150—240	Rs. 6,768.00	Rs. 21.62	91	Rs. 2,367.42
Rs. 110—200	Rs. 5,964.00	Rs. 19.05	143	Rs. 2,724.65
Rs. 85—110	Rs. 3,684.00	Rs. 11.14	19.5	Rs. 217.23
Rs. 70—85	Rs. 3,348.00	Rs. 10.69	468	Rs. 5,002.92

Annual cost of luggage Booking Staff at N. Delhi Rs. 11,975.32 (B)

*Data furnished by CRS/NDLS, CPO/NDLS & CPC/HWH.

2.2 At Howrah.

Grade	No. of staff	Total no of hrs. worked @ 1.25 hrs. each.	Total trips.	Total Mandays.
Rs. 150—240	2	2.50 hrs.	208	65
Rs. 110—200	6	7.50 „	208	195
Rs. 70—85	10	12.50 „	208	325

Grade	Total cost per year	Cost per day	Man days on Rajdhani/A/c.	Total cost for Rajdhani
Rs. 150—240	Rs. 6,768.00	Rs. 21.62	65	Rs. 1,405.30
Rs. 110—200	Rs. 5,964.00	Rs. 19.05	195	Rs. 3,714.75
Rs. 70—85	Rs. 3,348.00	Rs. 10.69	325	Rs. 3,474.25

Annual cost of luggage Booking Staff at Howrah.

Rs. 78,594—30(C)

Total annual cost of Commercial staff for Reservation and Booking
and handling luggage by Rajdhani Express at New Delhi and
Howrah (A)+(B)+(C)

Rs. 26,882.66 ■

1. A study of the effect of Rajdhani Express on goods train operation was made by a sample survey of the control charts of all the Control Offices on the Howrah-New Delhi route for a period of 12 days spread over the six busy months from November, 1971 to March, 1972. The total detentions suffered by goods trains between Howrah and New Delhi for giving precedence to Rajdhani Express were then estimated for the year 1971-72 on a proportionate basis and totalled 3721 hrs.

1.1. In addition to the trains detained enroute, some trains had to be held back in the yards for giving a clear passage to Rajdhani Express. As it was not possible to work out the extent of such detentions precisely for a period of one year, the same have been assumed to be equal to 25 per cent of the total detentions suffered by the trains enroute.

2. The cost of detentions due to factors enumerated above are calculated below :-

2.1 Total detention suffered by goods trains enroute . 3721 hrs.

2.2 Total detention suffered by goods trains in yards, taken as 25% of 2.1 above 930 hrs.

Cost of detention to Locomotives

2.3 Total locomotive hours lost annually (2.1 + 2.2) 4651 hrs.

2.4 Locomotive hrs. lost per day $\frac{4651}{365}$ 12.8 hrs.

2.5 Taking 19 hrs. as the average loco hrs. per engine day in use, the number of additional locomotives employed, works out to $12.8 \div 19$ 0.67 locos

2.6 Adding 18.93% of 2.5 above, as the number of locos to be kept as spares for repair etc.—the net figure of additional locos to be employed works out to . 0.79 locos

2.7 Cost of 0.79 WAG4 locomotive @ 19,00,000 . . Rs. 15,01,000

2.8 Interest @6% per annum on the cost of one loco . Rs. 90,060

2.9 Cost of maintenance @ Rs. 57,000 per loco per annum Rs. 45,030

2.10 Cost of depreciation, taking life of asset as 35 years . Rs. 11,850

2.11 Total annual cost of detention to locos . . . Rs. 1,46,940

2.12 In addition to the cost of locomotive, additional cost is incurred due to energy consumed during the period of detention. Energy consumption during the idle period has been taken as 10% of the energy consumption per train engine hour.

Total detention of trains.	Electric Traction	Diesel Traction
Eastern Railway	2912 hrs.	—
Northern Railway	1159 hrs.	580 hrs.
Cost of energy consumed:	(1) Cost of electric current consumed per train engine hour	(2) Cost of electric current consumed per idle hour being 10% of col. (1)
Eastern Railway	Rs. 59.89	Rs. 5.98.
Northern Railway	Rs. 86.28	Rs. 8.62.

	(3) Cost of diesel fuel consumed per train engine hour.	(4) Cost of Diesel fuel consumed per idle hour being 10% of col. (3).
Northern Railway	Rs. 88.75	Rs. 8.87.

Additional cost incurred due to fuel/electric current consumed during the period of detention :

	Electric traction	Diesel traction	Total
Eastern Railway	Rs. 17,413.76	—	Rs. 17,413.76
Northern Railway	Rs. 9,990.58	Rs. 5,114.60	Rs. 15,135.18
			<u>Rs. 32,548.94</u>
2.13	Total cost of detention to locomotives (2.11 + 2.12)		Rs. 1,79,488.94
	<i>Cost of detention to Wagons</i>		
2.14	Total train hours lost in a year (2.1 + 2.2)		4651 hrs.
	4651		
2.15	Train hours lost per day		12.8 hrs.
	365		
2.16	Taking 69 wagons as the average load of a goods train, the additional No. of wagons utilised		12.8 × 69
			<u>24</u>
			= 36.8 or 37 wagons
2.17	Cost of a 4-wheeler wagon		Rs. 16,000.00
2.18	Cost of 37 additional wagons		Rs. 9,52,000.00
2.19	Interest on capital cost of wagons @ 6% per annum		Rs. 35,520.00
2.20	Cost of maintenance & repair per wagon per annum		Rs. 529.66
2.21	Total cost of maintenance and repair of 37 wagons		Rs. 19,597.42
2.22	Cost of depreciation of 37 wagons @ Rs. 0.065 per rupee on the residual value taking 40 years as life of rolling stock		Rs. 3,463.20
2.23	Total additional cost on account of detention to wagons (2.19 + 2.21 + 2.22)		Rs. 58,580.62
2.24	Total cost of detention to goods trains (2.13 + 2.23)		Rs. 2,38,069.56

Statement IX

SECURITY PATROLLING & LOOK-OUT MEN AT LEVEL CROSSINGS

Annual cost of provision of look-out men at Level Crossings of restricted visibility and security patrolling ahead of Rajdhani Express—

Over Eastern Railway	Rs. 1,84,000	(Supplied by C.E. Eastern Railway).
Over Northern Railway	Rs. 2,18,000	(On a proportionate track km. basis).
Total annual cost	Rs. 4,02,000·00	

Statement X

INDEPENDENT COSTS

I. Traffic Department

Cost per train km. on account of traffic Deptt. staff, etc. (Including General Administration but excluding Commercial staff and running staff)

E. Rly. Rs. 1·50
N. Rly. Rs. 1·23

Annual cost for Traffic Deptt on Rajdhani Express account

E. Rly. Rs. 2,06,232·00
N. Rly. Rs. 2,00,578·55

(From the Supp. to the Rly. Board Annual Report—Statement No. 30) (A)

Total: Rs. 4,06,810·55

II. Track and Bridges

Cost of maintenance and repairs and General Administration, per train km.

E. Rly. Rs. 1·12
N. Rly. Rs. 0·87

Annual cost of maintenance, repairs and General Administration on account of Rajdhani Express (From the Suppl. to the Rly. Board Annual Report—Statement No. 30)

E. Rly. Rs. 1,53,986·00
N. Rly. Rs. 1,41,872·00

(B) Total: Rs. 2,95,858·00

III. Signal & Telecommunication

Cost of maintenance, repairs and General Administration, per train, km.

E. Rly. Rs. 60·65P.
N. Rly. Rs. 99·78P.

Annual cost of maintenance, repairs, depreciation and General Administration on account of S&T Department.

E. Rly. Rs. 85,531·00
N. Rly. Rs. 90,149·00

(From the Suppl. to the Rly. Board, Annual Report—Statement No. 30) (C)

Total: Rs. 1,75,680·00

V. Cost of provision (Interest & Depreciation of Track & Signalling :—

(From the Statement of Unit Costs published by the Rly. Bd. Statistical Dte.

E. Rly. DRF—1·0407
Interest 1·7985
2·83922

Line Haul (movement) service cost of tracks signalling per train km.

N. Rly. DRF 0·97712
Interest 1·78832
2·76544

Annual cost of provision of track & Signalling	E. Rly. $138944 \times 2 \cdot 83922$	Rs. 3,94,492·58
	N. Rly. $16161 \times 2 \cdot 76545$	Rs. 4,46,939·35

(D) Total: 8,41,432·93

General Administration

Total Annual cost of General Administration except, Traffic, Civil Engg. and S&T Departments.	E. Rly. Rs. 11,85,38,000
	N. Rly. Rs. 9,12,51,000

Cost per train km. on account of General Administrations	Rs. 20,97,89,000
Annual cost of General Administration on Rajdhani Express account.	E. Rly. Rs. 2·58
	N. Rly. Rs. 1·52
	E. Rly. Rs. 3,63,841·00
	N. Rly. Rs. 2,45,656·00

(E) Total: Rs. 6,09,497·00

Total independent cost (A+B+C+D+E) Rs. 23,29,278·48

Statement XI

TOTAL ANNUAL EXPENDITURE ON RAJDHANI SERVICE

I. Dependent Costs

Cost on Account of interest, maintenance and depreciation of coaches (Statement I) Rs. 16,63,265·60

Cost on account of interest, maintenance and depreciation for the airconditioning, generating and other elec. equipment and their working expenses. (Statement II) Rs. 12,01,368·10

Total working cost of locomotive including interest, maintenance and depreciation. (Statement III) Rs. 18,42,491·77

Annual cost of running staff operating Rajdhani Express. (Statement IV) Rs. 1,58,871·71

Total cost on account of maintenance, depreciation etc. of S&T equipment on Rajdhani Account. (Statement V) Rs. 16,728·02

Total annual cost of catering on Rajdhani service. (Statement VI) Rs. 5,27,907·59

Annual cost of Commercial staff at New Delhi and Howrah (Statement VII) Rs. 26,882·66

Annual cost of detention to goods trains on account of Rajdhani Express. (Statement VIII) Rs. 2,38,069·56

Cost of Security patrolling & look-out men at Level Crossings. (Statement IX) Rs. 4,02,000·00

Total dependent costs Rs. 60,77,585·01(A)

II. Independent Costs (Statement X)

Annual cost of Traffic Deptt. on Rajdhani account Rs. 4,06,810·55

Annual cost of maintenance, repairs and General Administration for track and Bridges on Rajdhani account Rs. 2,95,858·00

Annual cost of maintenance, repairs and General Administration of S&T Deptt. on Rajdhani account Rs. 1,75,680.00

Annual cost of provision of track & Signalling Rs. 8,41,432.93

Annual cost of General Administration on Rajdhani account (except for Traffic, S&T and Civil Engineering Departments) Rs. 6,09,497.00

Total independent costs Rs. 23,29,278.48(B)

Grand Total Annual Expenses (A+B) Rs. 6,77,585.01

Rs. 23,29,278.48

Rs. 84,06,863.49

Statement XII

ESTIMATION OF EARNINGS FOR RAJDHANI EXPRESS DURING 1971-72.

Method I

A. Estimated revenue earned (excluding passenger tax and catering charges) as per answer to unstarred Parliamentary Question No. 312 answered on 30-3-73. Rs. 72,02,000.00

B. Catering charges

(i) For 3561 AC Sleeper passengers (Annex. I) @ Rs. 15.00 per passenger Rs. 53,415.00

(ii) For 67514 AC chair Car passengers (Annex. I) @ Rs. 8.00 per passenger Rs. 5,40,112.00

Total catering charges Rs. 5,93,527.00

Total earnings (excl. passenger tax) (A+B) Rs. 77,95,527.00

Method II

Gross Fare collected (Excluding Passenger Tax)

(i) From 1-4-71 to 1-7-71

Class	Rate	No. of Passengers	Fare collected
I.A.C.C.	Rs. 300.00	908	Rs. 2,27,400.00
III AC Chair Car	Rs. 100.00	17,282	Rs. 17,28,200.00

(ii) From 2-7-71 to 15-11-71

I.A.C.C.	Rs. 307.00	1,291	Rs. 3,96,337.00
III AC Chair Car	Rs. 100.00	24,103	Rs. 24,58,506.00

(Mi) From 25-11-71 to 31-3-72

I. A.C.G.	Rs. 307'00	1,362	Rs. 4,18,134'00
III AC Chair Car	Rs. 102'00	26,129	Rs. 26,65,158'00
			Rs. 79,38,735'00
Less 5% for Child Ticket, intermediate passengers, cancellation			Rs. 3,96,937'00
Total estimated earning from passenger ticket			Rs. 75,41,798'00
Excess Fare Charges			Rs. 32,385'00
Luggage earnings			Rs. 38,751'00
Total Earnings (excl. passenger tax)			Rs. 76,12,934'00

Methods III

Based generally on figures furnished by CCS's, Northern and Eastern Railways.

A. New Delhi-Howrah

Class	No. of pass.	Fare collected (excl. passenger tax)
I A.C.G.	1,805	Rs. 4,99,275'00
III AC Chair car (New Delhi/Kanpur/Howrah)	32,367	Rs. 30,53,602'00
III AC Chair Car. (Kanpur-Howrah)	774	Rs. 65,436'00
Total		Rs. 36,18,313'00(A)

B. Howrah-New Delhi

(The figures given by the Eastern Railway were inclusive of passenger tax. Following figures have been adopted after suitable correction).

Class	No. of pass.	Fare collected (excl. passenger tax)
I A.C.C. Sleeper	1,754	Rs. 5,26,295'70
III A.C. Chair Car	32,777	Rs. 32,62,707'80
III AC Chair Car	720	Rs. 56,826'00
III AC Chair Car* (Kanpur-New Delhi)	750	Rs. 33,000'00
Total		Rs. 38,78,829'50
Total earning from passenger fares		Rs. 74,97,142'50
Excess fare charges		Rs. 32,385'00
Luggage earnings		Rs. 38,751'00
Total earnings		Rs. 75,68,278'50

(* Estimated-Not furnished by Eastern Railway)

Under the present commercial accounting practice, there is no procedure for maintaining meticulous accounts of the earning by any particular train (not even the Rajdhani Express), taking note of all refunds, cancellations, earnings from intermediate passengers, etc. Hence the need for arriving at an estimation. An attempt has been made above to work out on three different methods and in the light of the results arrived at, the following is considered a fairly reasonable estimate of earnings for 1971-72 :—

AOC Sleeper Passengers	Rs. 10.32 lakhs
AOC Chair Car passengers	Rs. 65.05 lakhs
Excess fare	Rs. 0.32 lakhs
Luggage charges, etc.	Rs. 0.39 lakhs
Total	Rs. 76.08 lakhs

APPENDIX III

(Vide Paragraph 1.33)

Brief reasons for non-acceptance of economic evaluation (May 1974) of Rajdhani Express-New-Delhi-Howrah by R.D.S.O.

I. Direct Costs	Basis assumed in R.D.S.O. study	Brief reasons for non-acceptance
(a) Annual cost of coaches Annex. II	All the coaches in excess of bare requirement are treated as spare exclusively for Rajdhani Express.	This is not correct except one pantry car, the rest of the coaches are pooled with the deluxe train coaches.
(b) Annual cost of generating Equipment and air-conditioning of coaches. (Annex. III)		
(c) Annual cost of locomotives (Annex. iv) number of locomotives	Assessed on a statistical basis of average KM earned per passenger loco.	One loco is earmarked and in addition only the normal spare percentage should be added.
Capital cost of locomotives	Present day cost (Rs. 25.54 lakhs taken into account.	Capital cost of actual loco utilised was Rs. 13.54 lakhs.
Fuel & lubricants	Assessed on statistical basis Consumption per engine KM of diesel hauled passenger services on the Northern Rly.	Will not be correct the loads of diesel hauled other passenger trains are much more than Rajdhani Express Moreover actual consumption figures for these trains were available.
(d) Cost of detention to goods train en route and in yards (Annex. ix)	4651 Hrs. Lost	These theoretical calculations may no reflect the true operating conditions in that such detentions are inherent in the operation of different types of services with speed difference on any particular section. In fact goods train operation has not been materially affected by the running of the Rajdhani Express.
(e) Security patrolling and lookout men at level crossings (Annex. x)	Rs. 4.02 lakhs. Based on figures obtained from Eastern Rly. and proportionate amount derived for Northern Rly.	Expenditure on these men in Eastern Rly. during 1971-72 was only Rs. 49,047. On the Northern Rly. no additional expenditure was incurred.

II. *Independent costs* (Annex. xi)

- | | | | |
|---------------------------------------|---|--|--|
| (a) Traffic Department | Cost per train KM (derived from Statement of expenses). | This unit cost is for goods and coaching trains, combined. | |
| (b) Track & bridges | Do. | Here also the statistical figures apply to both coaching and goods trains. The maintenance expenditure on track and bridges have a relation to the gross tonnes moved which are generally heavy for goods trains. By relating the expenses to train KM, undue weightage is given to coaching trains. | |
| (c) Signal & telecommunication | Do. | This is also a combined cost for goods & coaching services. | |
| (d) Provision of track and signalling | Based on unit costs. | | The unit costs utilised pertains to goods services only. Moreover the unit is per 1000 GTKM whereas it has been wrongly related to train kilometres. |
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APPENDIX IV

(Vide Paragraph 1.66)

Note on the steps taken to relieve congestion at major terminals in the country

REPLY (a): Most of our terminals particularly in Metropolitan Cities and State Capitals are space bound. With the introduction of more and more long distance as well as short distance and suburban trains, acute difficulties are experienced in the matter of servicing and stabling facilities for the coaching stock, provision of longer and additional platforms, passenger amenities, circulating area, etc. at the major terminals. Engineering-cum-Traffic Surveys were, therefore, sanctioned and action taken to provide facilities at important terminal yards within the limited funds made available to the Ministry of Railways. The following is the position of the various works undertaken/proposed to be undertaken:

1. CALCUTTA AREA:

- (i) *Howrah (E. Railway)*: A techno-economic Survey was conducted to assess the requirement of facilities needed to match the present and future requirements. It was seen that it is necessary to provide a new suburban terminal so that the suburban and non-suburban traffic could be segregated. The capacity thus released in the existing terminal where both suburban and non-suburban traffic is dealt with could be utilised for the anticipated increase in non-suburban traffic. The new terminal will have six platform lines with two platform faces for each line. The entire scheme is estimated to cost Rs. 11.44 crores. Phase I of the work which includes shifting of the General Stores and Signalling Workshop from Howrah to Belur and shifting of the Belur Scrap Yard to Dankuni has been included in the Budget for 1974-75 at a cost of Rs. 1.48 crores. The area so released will be used for the development of the new terminal. However, due to inadequacy of resources under DF, it has not been possible to make any worthwhile progress on this work.
- (ii) *Sealdah Terminal*: Engineerings-cum-Traffic survey for providing additional terminal facilities at Sealdah is in progress.

- (iii) *Howrah (South Eastern Railway) Terminal*: An engineering-cum-traffic survey for a subsidiary passenger-cum-suburban terminal for S.E. Rly. at Padmapukur near Howrah has already been completed and the report is under finalisation.

2. DELHI AREA

- (i) *Third Terminal*: There is pressing demand for introduction of additional trains from Delhi area. The existing two main passenger terminals at Delhi Main and New Delhi which deal with 144 and 81 trains respectively are no longer in a position to handle additional trains. The need for developing a new terminal has therefore been keenly felt.

The Draft Regional Plan for the National Capital Region prepared by the Town & Country Planning Organisation in collaboration with other Government bodies suggested provision of 4 new passenger terminals in Delhi Area viz., at Sarai Rohilla, Azadpur, Shahdara and Nizamuddin. The Metropolitan Transport Organisation of the Railways which also studied the problem, investigated the probable sites for the third terminal—Sarai Rohilla, Shahdara and Azadpur were ruled out as they do not have sufficient land for development of third terminal and were also not considered suitable from the point of view of the Railways and also that of the users. Another site at Patel Nagar was also not found suitable on the same considerations. The site at Nizamuddin was examined in detail and was considered to be most suitable but was not acceptable as it would have spoiled the environment, around the historical monuments in the area.

The site now under consideration for the third terminal is the one at Brar Square. The land at this site falls inside the Cantonment area and negotiations are in progress with the Defence authorities for transfer of this land to the Railways.

- (ii) *Interim proposals for handling additional trains*: As the provision of the third terminal was anticipated to take some time, the Northern Railway was asked to investigate the possibility of providing additional terminal facilities at New Delhi, Nizamuddin, Delhi Main and Shahdara sta-

tions by providing extra platforms, washing lines and stabling facilities so that the immediate requirements of the traffic could be met:

- (a) *New Delhi*: A detailed survey for providing second entry from the North side for New Delhi station and also for providing additional platforms and other terminal facilities has been carried out by the Northern Railway. The survey report is currently under consideration.
- (b) *Hazrat Nizamuddin*: In 1973, some minor works were undertaken at this station at a cost of Rs. 11 lakhs to give some relief to New Delhi station. It is now proposed to provide additional facilities at Nizamuddin as New Delhi station is experiencing difficulties in the maintenance of rakes. Works estimated to cost Rs. 23.12 lakhs have been sanctioned recently at this station which would enable introduction of three additional daily trains starting and terminating at this station.
- (c) *Delhi Main*: A survey for shifting the goods shed from Delhi Main station and for providing the second entry from the northern side is in progress and a decision in this respect will be taken after the report is received and examined.
- (d) The possibility of developing terminal facilities at Shahdara is being examined by the Survey Team as a part of the Shahdara-Saharanpur new B.G. line.

3. BOMBAY AREA:

- (i) *Bombay V.T.*: A survey for remodelling of Bombay VT main line and suburban station and provision of another terminal in Parel-Dadar area has been completed and the report has been examined. For meeting the immediate requirements of traffic, the work of providing additional platform at Bombay VT and remodelling of Mazgaon Yard was included in the Budget for 1974-75 at a cost of Rs. 133.00 lakhs.
- (ii) *Bombay Central*: A traffic-cum-engineering survey for additional facilities in Bombay Central Yard has been carried out and the survey report is under examination.

4. MADRAS AREA:

- (i) *Madras Central*: A traffic-cum-engineering survey for providing additional terminal facilities at Madras area was undertaken and the survey team have recommended various works at Madras Central at a cost of Rs. 9.34 crores. The works are recommended are:

1. 3 additional platform lines,
2. stabling lines,
3. washing-cum-pit lines,
4. centralised parcel office,
5. sick lines,
6. parking circulating area etc.

As Phase I of the work, the acquisition of land on the western side of Buckingham Canal has been provided in the Budget and the land acquisition proceedings are in progress.

- (ii) *Madras Egmore*: The survey report for providing additional terminal facilities at Madras Egmore has been received and is under examination.

5. PATNA:

A techno-economic survey for provision of additional coaching facilities at Patna was conducted. Phase I of the scheme which includes provision of washing lines with pits, platforms and some other facilities has been included in the Budget for 1974-75 at a cost of Rs. 55 lakhs.

6. HYDERABAD/SECUNDERABAD AREA:

The existing facilities at the two terminals—Hyderabad and Secunderabad was found to be inadequate to handle the traffic, which at the end of the 5th Plan was expected to increase by more than 50 per cent. A survey was therefore undertaken in 1970-71 for augmenting the terminal capacity at these stations. The Survey Team recommended that Hyderabad should be developed as a Centralised passenger station to deal with passenger and parcel traffic and Secunderabad as a way-side station to pass BG traffic. The terminal facilities for BG traffic both at Hyderabad and Secunderabad area were included in the Budget for 1974-75 at a cost of Rs. 41.69 lakhs. Acquisition of land at Sanatnagar where the goods yard is to be shifted is in progress.

Provision of additional facilities for MG at Secunderabad (Phase I) was also included in the Budget of 1973-74 at a cost of Rs. 56.78 lakhs.

7. COCHIN AREA:

In order to assess the requirement of terminal facilities in Cochin area consequent to conversion of Ernakulam-Alwaye section to B.G. and doubling of Shoranur-Alwaye section, a work study was ordered. The report on the work study is under finalisation by the Railway and is expected shortly.

8. BANGALORE AREA:

A work study-cum-traffic survey for terminal facilities in Bangalore area has been completed taking into account the various works in progress in this area like Guntakal-Bangalore conversion to BG and Krishnarajapuram-Bangalore City doubling project. The survey team has recommended provision of additional facilities at Baiyappanahalli, Bangalore City and Bangalore Cantonment yards at cost of Rs. 37 lakhs. The survey report is under examination.

9. COIMBATORE AREA:

An engineering-cum-traffic survey for provision of terminal facilities is in progress.

10. DHANBAD:

A scheme for development of additional coaching facilities has been approved at an estimated cost of Rs. 46.60 lakhs.

APPENDIX V

Summary of Conclusions/Recommendations

S No. Para No.		Ministry/Deptt. concerned	Conclusions/Recommendations
1	2	3	4
1	1.74	Ministry of Railways	The Committee are glad that the Rajdhani Express service has, by and large, won wide appreciation from the travelling public. To the extent that they furnish a 'super-fast' service, by our Indian standards, between Howrah & Delhi and between Delhi & Bombay, and as the show-piece, as it were, of the Indian Railways and a testimony to their technological breakthrough towards quality transport facilities, the introduction of these trains has been welcome. The Railway Board cannot rest content, however, with operating a couple of such prestigious trains, which cater necessarily to the comparatively affluent class of passengers, when the needs of the larger multitude of less fortunate passengers remain unfulfilled. If after nearly three decades of independence and four Five Year Plans, the overwhelming majority of our railway passengers find themselves forced to travel at slow speed, often also in great discomfort, it is clear that the Indian Railways have still a lot of leeway to make up.

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Do.

It appears that on account of various constraints such as the absence of adequate terminal facilities, slow pace of doubling of track, non-availability of locomotives in sufficient numbers, capable of hauling economically a larger number of coaches at higher speeds, etc., the Railways have been unable to keep pace with the ever-growing demands of the travelling public. Consequently the problems of insufficiency and congestion in the existing passenger services continue to plague the Railways. Thus, a slightly paradoxical situation has ensued with the Rajdhani Express at one end of the spectrum, capable soon of achieving speeds upto 160 kilometres per hour, and trains consisting outdated coaches hauled at speeds as low as 25 kilometres per hour at the other end. Besides, with greater emphasis being laid on increasing freight earnings and perhaps also on account of the increasing losses incurred on passenger services, there appears to be a tendency to relegate such services to a secondary place. Unless the Railways fulfil their larger social commitments and cater to the needs of the great multitude of passengers, the achievements of such trains as Rajdhani Express would be little more than easy showmanship fundamentally unrelated to the broader national interest.

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Do.

The Committee have learnt that having introduced two such trains which have brought two metropolitan cities closer to the capital, the Railway Board is not contemplating the introduction of similar attractive trains for connecting other State capitals with Delhi, on account of the absence of a double line throughout the relevant

routes. Similarly, the more popular Jayanti Janata Express trains, that provide faster, non-airconditioned second class travel from Delhi to Cochin and Mangalore, to Secunderabad and to Samastipur, are not likely to be extended to other cities, owing to the non-completion of the doubling of the track and the lack of terminal capacity at the destination stations. By the conversion of the Grant Trunk Express (Delhi-Madras) into an airconditioned deluxe train twice a week, a peculiar position prevails on the Southern trunk route, in which the weaker sections of the passengers have been deprived of ordinary second class accommodation on the days the Deluxe operates. It would, thus, appear that faster and more comfortable rail travel is available today to a minority of better-placed passengers, while for the overwhelming majority, rail travel still remains non-too-happy an experience.

This is a state of affairs that needs to be remedied as soon as possible. While the Committee are not unaware of the constraints under which the Indian Railways operate, they are of the view that at least some of the difficulties are by no means insurmountable. It is distressing, for instance, to learn that though there is no dispute over the gains that would accrue to the Railways in particular and the nation at large by the speedy doubling of the North-South Trunk route, this doubling programme would take another seven to eight years to be completed. What is even more distressing is the indifference in this

matter on the part of the Railway Board. The Committee had the misfortune to find the Board almost deriving comfort from the fact that since the doubling of the Bombay-Delhi route had taken twelve years, their performance in the matter of doubling the Delhi-Madras route was not a matter for undue concern.

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1.78

Ministry of Railways

The position in regard to augmentation of terminal capacity at major metropolitan cities in the country is no better either. Though a number of work studies and traffic-cum-engineering surveys have been carried out in various metropolitan areas, specific steps for increasing the terminal capacity from a long range point of view are yet to be taken in a concrete manner and many of the surveys remain reports on paper. Even the site for the location of a third terminal in the Delhi area is yet to be finalised. Similarly, in the Calcutta area, where the problems have accumulated excruciatingly, the second phase of the work of remodelling the Sealdah station yard and constructing a new station building, work on which commenced as early as 1960-61, is expected now to be completed, after more than 15 years, by June, 1976, but the fate of the rest of the scheme regarding the Sealdah complex remains hanging in mid-air, mainly perhaps on account of the non-availability of funds with the State Government. Surveys for the remodelling of the Bombay VT main line and suburban station and for the provision of another terminal in the Parel-Dadar area as well as for providing additional terminal facilities in the Bombay Central Yard and at Madras Egmore are still only 'under examination'. In the absence of timely progress, the cost of the projects undoubtedly escalates and the demands of passenger

1	2	3	4
			and goods traffic continue to far outstrip availability. Temporary palliatives and <i>ad hoc</i> solutions, too often at considerable cost, further tarnish the picture.
6	1.79	Ministry of Railways	<p>One immediate solution that suggests itself to the Committee for alleviating the problem of congestion in some of the existing mail and express trains is the provision of more accommodation for the non-affluent class of passengers by minimising the expenditure on providing airconditioned first class accommodation which, in any case, has proved unremunerative in recent times after the September 1974 hike in rail fares. A recent sample survey of the occupancy rate of airconditioned first class in some of the 'prestigious' trains such as the Deluxe and the Rajdhani by different categories of passengers reveals an intriguing picture. During the period January 1 to June 30, 1975, the average occupancy of airconditioned first class on the Deluxe trains to and from Madras was respectively 75.5 per cent and 64.4 per cent. Of this, on the down direction from Madras to Delhi, while 2.8 per cent and 0.8 per cent of the berths were occupied respectively by Ministers and Members of Parliament and Legislative Assemblies, Railway Officers accounted for as high an occupancy as 20.5 per cent and other Government officers travelling on duty 1.4 per cent. Occupancy on non-Govt. account and by foreign tourists was only 38.4 per cent and 0.5 per cent respectively. The position was no better on the up direction towards Madras, the corresponding figures being respectively 2 per cent, 1.9 per cent, 12.2 per cent,</p>

0.7 per cent, 56.5 per cent and 2.2 per cent. Similarly, on the Deluxe trains to and from Bombay, occupancy on non-Govt. account was only 62.9 per cent and 37 per cent, with as many as 159 berths and 200 berths out of a total utilisation of 1390 and 1021 berths being occupied respectively on the up and down trains by railway officers. The Deluxe trains to and from Calcutta tell a similar tale of distress with only 35.6 per cent and 40 per cent of the total utilised berths being occupied on private account while Railway Officers account for 8.4 per cent and 11.1 per cent of the occupancy.

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1.80

Ministry of Railways

It is apparent that a large portion of the available airconditioned first class accommodation is utilised on Railway and Government accounts, with the public exchequer bearing the cost, without any readily quantifiable corresponding benefits. Government would, therefore, do well to review the need for providing such a costly mode of travel to a small minority of public servants and evaluate the feasibility of reducing airconditioned first class accommodation on trains, if not eliminating them altogether, so that the accommodation so released can be utilised to fulfil the more pressing social objective of providing additional accommodation for the weaker sections of the travelling public. The Committee note that certain steps such as a reduction in the frequency of airconditioned first class coaches or their discontinuance on some of the trains, discontinuance of the construction of new airconditioned first class coaches on additional account, introduction of the new two-tier airconditioned sleeper coaches, etc. have now been taken by the Railway Board. These steps

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by themselves would not solve the problem unless there is some fundamental rethinking on the part of the Railway Board and the Government. Travel by the new two-tier airconditioned sleeper coaches, for instance, is still beyond the reach of the common man, and the operation of such coaches, not in lieu of but in addition to the airconditioned first class on the Deluxe trains, would only further widen the gulf between the haves and the have-nots. It would also be of interest to analyse the extent to which the capacity in these new coaches are being utilised on non-Govt. account and on Government account, either by officers travelling on duty or by those travelling on Leave Travel Concessions, with Government bearing the bulk of the cost of travel. The Committee would also like to be informed of the economics and occupancy of these new coaches.

84

8 1.81 Ministry of Railways

Yet another accepted programme for improving the basic transport demands of the country which has been rather tardy in implementation is the diesellisation of the passenger services so that the number of coaches on a train can be increased without detriment to the average running time. The Committee find from paragraph 9 of the Report of the Comptroller and Auditor General of India for the year 1972-73. Union Government (Railways) that full production of diesel locomotives by the Diesel Locomotive Works at Varanasi has not yet been attained despite the lapse of nearly a decade since the unit commenced production. The Audit Report points out that as against the production target of 307 diesel locomotives en-

visaged by 1967 in the abstract estimate for the project only 116 broad gauge diesel locomotives had been produced by 1966-67. Similarly, though, as per the project report, 941 broad gauge locomotives or equivalent should have been manufactured during 1963-64 to 1971-72, the actual outturn was only 427 broad gauge locomotives and 80 metre gauge locomotives. Till the end of 1973-74, 549 broad gauge locomotives and 148 metre gauge locomotives had been produced by the unit. Consequently, there are not enough diesel locomotives to be put on the passenger services. In the meantime, the prices of petroleum products have also increased manifold, necessitating a rethinking over the dieselisation programme.

Unfortunately, the electrification programmes of the Railways, which could facilitate the cheaper and quicker movement of passenger and goods traffic, have also not made much headway on account of difficulties in finding the necessary financial resources for these programmes which are essentially highly capital intensive. The Committee have been informed that, on account of the financial constraints acceleration of the pace of electrification 'does not seem to be in sight'. In addition to the Railways' own financial constraints the dearth of electric power has also affected the electrification programmes. The Indian Railways therefore appear to be placed in an unenviable position and with these constraints in operation it is unlikely that the problems of congestion in, and slow speeds of, passenger trains would be satisfactorily solved in the near future. This, in the opinion of the Committee, is an unhappy situa-

tion which needs to be gone into immediately so as to devise suitable remedial measures. The Committee urge Government to review the situation and take effective steps to retrieve the situation.

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1.83

Ministry of Railways

In view of the fact that the electrification programmes of the Railways are also vitally dependent on the power generation schemes of the State Governments with their own financial constraints and limitations, the Committee feel that an integrated approach to the entire problem would be necessary if these programmes are to be given effect to. The Committee learn that the Railways have drawn up some proposals for establishing their own power stations and that site studies and preparation of feasibility reports in this regard have already been completed and are awaiting approval and allocation of funds by the Planning Commission. The Committee consider that it would be desirable to establish real co-ordination for this purpose between the Central and the State Governments and a pooling together of the available resources. Such a step would ensure that our scarce resources are not expended in avoidable duplication of effort. Government should also examine the feasibility of providing institutional finance to meet any short-falls in the provision of the requisite funds for the joint venture which should give an added impetus for the speedier implementation of projects of vital importance. The Committee attach considerable importance to this recommendation and desire that the

Planning Commission should process it early and initiate the necessary follow-up action.

11 1.84 M/o Rlys. Deptt. of Tourism

Viewed against this broader background, the running of the Rajdhani Express trains however attractive and important it may be, is open to question. Though it has been claimed by the Railway Board that the Rajdhani Express has a role to play in the sphere of tourism, the Committee find that apart from a few visiting foreign delegations who are sent by the Railway Board by this prestigious train, only 17 foreign tourists had travelled by the airconditioned first class by the Rajdhani to Bombay and another 17 to Calcutta during the six months from January 1 to June 30, 1975. It has also been admitted by the Railway Board that as the Rajdhani Expresses do not stop at places of tourist interest and foreign tourists have to plan in advance to travel by these bi-weekly services, they prefer to avail of other suitable trains or air services. The Committee are also of the view that a misplaced emphasis in this regard is perhaps being placed by the Railway Board as well as the Department of Tourism. It is well known that quite a large number of foreign tourists, particularly the young among them, wishing to have a taste of India's natural beauty and her ancient culture prefer cheaper modes of travel and reasonable accommodation and food tariffs. Besides, the more affluent tourists, spanning the globe with their tight schedules and itineraries generally prefer the faster air travel. It would, therefore, be worthwhile for the Railway Board to review critically the pattern of travel by foreign tourists within India and to assess whether, in a country like ours it is proper to place exces-

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sive emphasis on luxurious rail travel for 'attracting' foreign tourists. The Committee would like to know what is being done in this regard.

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Ministry of Railways

The Railway Board have tried to justify the introduction of the Rajdhani Express trains on grounds of financial remunerativeness as well. The Committee are aware that this 'prestige symbol' has caught the fancy of the better-placed passengers who can afford to pay for the comforts the train provides. The earnings of the two Rajdhani Express trains have also exceeded the direct expenses in all the years of their operation. This, however, presents only a partial picture of the economics of the matter. The earnings from Rajdhani have been compared only with the readily identifiable direct costs of operation without taking into account the indirect, distributable elements of cost such as provision and maintenance of permanent way, signal and telecommunication, other equipments and facilities, cost of train passing staff, coaching yard staff and over-heads which are common with other services. The Committee have been informed that it had not been possible so far to estimate the cost of these distributable items of expenditure in the absence of a scientific system for the assessment of the unit cost of coaching services. Even before the introduction of the Rajdhani Express, only an estimate of the out of pocket expenses or direct costs of running the train had been made to determine its financial remuneration.

rateness. In the circumstances, the Committee feel that it would be incorrect to accept at its face value the incomplete financial justification of the Rajdhani Express furnished by the Railway Board.

The Committee are of the view that in addition to the direct and indirect costs of operation of the Rajdhani Service, it would also be necessary to take into account the social cost of running the service. Admittedly, on the days the Rajdhani operates, there is a loss of nearly three paths of goods trains on an average on the Delhi-Howrah route, besides an increase in the detention to goods trains (including the Super Express goods trains) and other passenger trains on the route, with consequent loss of earnings not perhaps susceptible of precise quantification. The Committee concede that these losses are only notional to some extent, and that it is perhaps inevitable for a fast train to displace slower trains running on the same route. It cannot, however, be denied that there has been a certain loss to the nation as a whole by the detentions and displacement of trains, goods as well as passenger. It is, therefore, a moot point whether the running of a luxury service, consisting of just six airconditioned passenger coaches (one first class coach and five second class chair cars), could be considered justifiable from an overall national point of view. The Committee would have been happier if the Railway Board had succeeded in introducing similar fast trains, though with reduced comforts, to cater to a larger number of less affluent passengers, so that the benefits of the technological breakthrough on the Railways were made available to larger sections of the community.

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14	1.87	Ministry of Railways	<p>According to a study of the economics of the Delhi-Howrah Rajdhani Service undertaken by the Research, Designs and Standards Organisation of the Railways, (which, however, has not been accepted by the Railway Board), the total cost of running the train during 1971-72 was Rs. 84.07 lakhs while the gross earnings (including cost of meals) were Rs. 76.08 lakhs. The Committee find that this study is not a very accurate indicator of the true economics of the train in view of the fact that on account of the non-availability of separate unit cost of passenger services, the combined figures of goods-cum-passenger unit cost have been adopted in the study, thereby vitiating the figures to some extent. However, in the absence of more accurate data in this regard, the RDSO study at least suggests that the Rajdhani service is, perhaps, not as remunerative as it is made out to be. The Committee emphasise the importance of knowing the total cost of operating a service from the point of view of better financial management and, therefore, desire that the Railway Board should compute as early as possible the total cost of the Rajdhani service and reassess its financial remunerativeness on a more scientific basis.</p>
15	1.88	—do—	<p>The Committee have learnt in this connection that a methodology for determining, in a reliable manner, the variable, distributable costs of train operations, which would facilitate the introduction of train-wise costing on the Railways, was likely to be evolved by</p>

the end of 1975. The Committee trust that the various difficulties earlier encountered in working out separately the costs of goods and passenger operations would have been overcome by now and would like to be apprised of the findings. The total cost of operating not only the Rajdhani service but the Deluxe service and the Kalka Mail between Howrah and Delhi should also be worked out expeditiously and intimated.

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1.89

Ministry of Railways

Pending the economic reappraisal of the Rajdhani service suggested above, the Committee feel that it should also be possible to effect certain economies and increase earnings by (a) the replacement of the airconditioned first class coach either by a chair car or by a two-tier airconditioned sleeper coach so as to provide accommodation to a larger number of passengers, (b) augmentation of the existing capacity of the train by at least an additional chair car and (c) switching over to electric traction from diesel as early as possible. The Committee find that during the period from 1973 to 1975 (upto June), the occupancy of airconditioned first class in the Delhi-Howrah Rajdhani ranged respectively from 79 to 100 per cent, 44 to 100 per cent and 37 to 87 per cent. On the other hand, the occupancy of the airconditioned chair car during the same period ranged from 88 to 100 per cent, 73 to 100 per cent and 72 to 100 per cent respectively. Though the total earnings from airconditioned first class might have increased on account of the increase in fares which has made travel by this accommodation even more expensive than air travel, the occupancy rate has decreased drasti-

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cally. The Committee would urge the Railway Board to take a fresh look at the need for providing such opulent accommodation on the Rajdhani which could, perhaps, be substituted either by a two-tier AC sleeper coach or a chair car which would cater to a larger number of passengers.

17

1.90

Ministry of Railways

As regards the suggestion of augmenting the existing capacity of the train by providing at least an additional chair car, the Committee have been informed that the speed of the train would be reduced from 130 km. to about 110 km. by such addition, and that it should be possible to haul three more coaches and also maintain the same speed only when the entire route is electrified and a more powerful electric locomotive is utilised to haul the train. However, in the context of an immediate solution to the problem of congestion in passenger services, and for a better utilisation of the available resources, the Railway Board should consider how far the augmentation of the capacity of the Rajdhani by an extra chair car may not, perhaps, through some rationalisation, affect the running time too badly. Such a step, besides increasing the direct earnings of the service, would result in certain tangible benefits in the sphere of goods movement as well by reducing detentions en route, particularly to the super express goods trains and improving wagon turn-round and availability.

Substitution of the diesel locomotive which hauls the Rajdhani Express at present between Howrah and Delhi by an electric locomotive assumes particular significance in the context of the present energy crisis and the high cost of diesel traction. Though 85 per cent of the Howrah-Delhi route (upto Tundla) is already electrified, the Railway Board, at the time of introduction of the Rajdhani Express, appear to have preferred to modify a diesel locomotive for attaining the high speed of 130 km. at a cost of Rs. 45,000, mainly with the objective of eliminating dual traction and a change of locomotive in between, which, according to them, would have affected the running time of the train. The Committee also note the opinion expressed by the Research, Designs and Standards Organisation that it would be undesirable to have dual traction for the service which would affect the utilisation of electric and diesel locomotives, particularly the latter and also affect the overall running time. The Committee have been informed that an electric locomotive capable of speeds upto 160 km. has been designed and that after the completion of necessary proving trials which have been programmed to coincide with the electrification of the entire Delhi-Howrah route, to be completed a year hence, it would be possible to switch over to electric traction for the Rajdhani Express. The Committee can only express the hope that this schedule would be adhered to so, so that the direct expenditure on fuel can be reduced and the payload capacity of the train increased as early as possible.

The Committee find from the Economic Appraisal of the Delhi-Howrah service by the Research, Designs and Standards Organisa-

tion that modifications and trials on a WAM2 electric locomotives to suit the high speed of the Rajdhani Express are in progress. Although work on this locomotive is in progress, the RDSO study has opined that the WAM4 locomotive is to be preferred for the Rajdhani service, especially in view of its capability of hauling a heavier payload. The study goes on to observe that even the switch over to a modified WAM4 locomotive, with maximum speed restricted to 120 kms. per hour would be quite advantageous as compared to the present arrangement. The Committee would like to know the specific steps taken by the Railway Board in pursuance of these observations and the reasons for selecting the WAM2 locomotive in preference to the WAM4.

Now that a long-overdue technological breakthrough has been achieved on the Railways and considerable sums have been expended in effecting improvements to rolling stock, track standards and maintenance, signalling and telecommunication, etc., the Committee are of the view that the Railway Board should endeavour to make available, to the maximum extent possible, the benefits of present-day technological progress to a larger cross-section of the travelling public. As has been pointed out in paragraph 1.76, the Railway Board have no immediate plans for connecting other State capitals with Delhi by similar fast trains. Such further programmes should

soon come on to the agenda. The Committee, meanwhile, would urge the Railway Board to consider the running of fast trains with cheaper accommodation to cater to the less affluent class of passengers rather than going in for more luxury trains of the Rajdhani type, which, in any case, would benefit only a select minority. For this purpose, a long-range perspective plan should be drawn up, in place of what appears to be an *ad hoc* approach as at present. Clear-cut priorities for future investment both in respect of passenger and goods movement should also be laid down. The Committee trust that our Railways, realising that Rajdhani and similar runnings, while by no means unwelcome, cater to limited and privileged sections of the travelling public, will leave no stone unturned till a truly people-oriented railway service is made available to all.

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