

COMMITTEE
ON
TRANSPORT POLICY AND COORDINATION

Indian Railway policies before and since
Independence and some of the
present-day problems
and
Railway Rating Policy in some of the
Foreign Countries



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PREFACE

Railway policies have recently been under serious re-consideration in several leading countries of the world, mainly because the rapid development of competing modes of transport, notably road transport, has adversely affected the finances of the railways of these countries. In the early days of their development, because of their virtually monopolistic position, the railways could follow rating policies based upon the 'value of service' principle under which they charged relatively low rates for low valued commodities, such as coal and other minerals, food-grains etc., and comparatively valuable commodities were charged higher rates. And profitability of traffic was reckoned on the aggregate. With the gradual development of other modes of transport, however, the more remunerative types of traffic began to be increasingly diverted from railways. This has given rise to the need for rethinking on railway policies generally in the Western countries. The current trend of thought in some of these countries is that railways should be allowed to revise their rating structure on the basis of cost, giving up the traditional system of basing the charges on the 'value of service' principle. Under the new system, charges on different types and flows of traffic would be based on their 'specific costs'. Further, the railways would be relieved of the financial liability in respect of unremunerative services which may have to be undertaken by them in the overall interests of the community. It is held by the advocates of this policy that in the process of free and unregulated competition among different modes of transport, traffic is expected to be automatically distributed on the basis of costs and special suitability of each mode of transport for carrying the traffic, with the result that different types of traffic would go to the cheapest form of transport, rendering it unnecessary to have any regulatory system of co-ordination between competing agencies.

2. Although the problems of railways in India have not yet assumed a comparable degree of seriousness, the pattern of freight

traffic carried by the railways has been undergoing marked changes in recent years, and there is a growing preponderance of low-rated commodities in the total traffic carried by the railways. This development has taken place mainly under the impact of the successive Five Year Plans, and the trends are likely to get more intensified in future, with consequent repercussion on railway finance.

In this context, a basic question which requires consideration is : should the railway policies in India be revised on the lines being pursued in the West today ? To what extent may the railways now or in the immediate future, have to depart from the existing policies and commitments, and what would be the implications of any major shift in rating policies ? This problem has to be considered against the background of the evolution of railway policies in India.

3. In the pre-Independence period, the railways in India were made up of a number of semi-autonomous administrations including private companies, Princely States etc. besides Government Railways, and these functioned more or less as distinct commercial units. After Independence, the railways became fully integrated under centralised control and management. A uniform system of rates and fares was adopted all over the country and the rating policies were geared to serve the interests of the economy at large. The social obligations of the railways, unconnected with financial results of their operation, came to acquire a greater importance after Independence.

4. There are reasons for believing that certain notable schools of thought may expect Indian Railways to change over to a cost-based rating structure on the analogy of the West. It is, therefore, attempted in Part I of this Paper to explain in some detail the more important policies followed by the railways in India before and since Independence, and to indicate the need for a study of the implications of a change-over to a cost-based rating policy and abolition of the system of cross-subsidisation inherent in the current policy. In any case, the broad policies of economic development followed by India do not in their

entirety conform to the economic philosophy of the Western world. And if certain developments take place in the sphere of transport, the appropriate remedial measures may have to be consistent with India's own ideology.

5. This study, made in the Secretariat of the Committee on Transport Policy and Coordination, deals mainly with problems of freight traffic. It goes without saying that the broad principles of cost-based charges should also be considered in the context of passenger traffic which on the whole is not, at present, a paying proposition.

6. Part II of the Paper summarises the experience of and the present thinking in some of the foreign countries on the subject of cost-based charges in respect of railway freight traffic.

Part I

*Indian Railway policies before and
since Independence and some of the
present-day problems*

POLICY RELATING TO EXTENSION AND MANAGEMENT OF THE RAILWAY SYSTEM

1. The Railway era began in India in the middle of the 19th century and the first railway train commenced running between Bombay and Thana in the year 1853. Between 1853 and 1869 a number of railway lines were constructed by private companies domiciled in Great Britain under contracts with the Government which guaranteed to them fixed interest on the capital invested by them. As the system worked to the detriment of the Indian Exchequer on account of the high cost of construction of railway lines, the Government decided in 1869 to undertake construction of railway lines departmentally. In the next 10 years, all railway lines were constructed in this manner. To speed up expansion of rail communication, it was decided in 1880 to supplement Government construction of railways by resort once again to guaranteeing a return on capital of private companies domiciled in Great Britain, though the terms of guarantee given to the companies formed after 1880 were more favourable to the Government than in the case of those formed prior to 1869.

2. For encouraging construction of Branch and Feeder Lines financed by private companies, attractive 'Branch Line Terms' were offered to them in 1893 under which Government agreed to give to the companies certain rebate from the earnings of the main lines in order to make up a return of 4 per cent per annum on the capital expenditure incurred on the Branch Lines. The 'Branch Line Terms' were further liberalised in 1914. A number of branch lines were constructed under this programme.

A sizeable mileage of railways was constructed by former Indian Princely States. District Boards were another agency for financing feeder railways and they promoted construction of railway lines either by raising capital directly or by giving guarantees to the companies.

3. By 1907, all the major lines which were originally built by companies had been purchased by the Government and the management of some of the purchased lines was entrusted to the Working Companies constituted under fresh contracts. By the end of the year 1920-21, the route mileage of the railways in India rose to 37,029 distributed according to ownership and management as follows :

	Mileage owned	Mileage worked
Government (including Provincial Governments and District Boards)	26,889	8,929
Princely States	4,394	2,889
Private Companies	5,746	25,211
	37,029	37,029

Although a majority of the lines were owned by the Government, the companies were the main agency for their management. In pursuance of the recommendation of the Acworth Committee (1921) that the system of management by companies of British Domicile should not be continued after the termination of their contracts, the Government of India took over in 1924-25 two Railway Companies, namely, the East Indian Railway and the G.I.P. Railway under direct State management. Subsequently by 1944, the Government had taken over all the principal company managed railways. The position regarding ownership and management of railway lines at the end of the year 1947-48 was as follows :

	Mileage owned	Mileage worked
Government (including Provincial Governments and District Boards)	25,345	27,172
Princely States	7,324	5,878
Private Companies	1,315	934
	33,984*	33,984

In 1949-50, with the integration of the Indian States with the Union Government, the railway lines belonging to the former Princely States were merged with the Government railways. This resulted in almost the entire railway system coming under the direct control and management of the Government of India. The integrated railway system was reorganised from 1st April, 1952, and grouped into six administrative Zones which were later split into eight Zones.

While there were about 175 railway administrative units in India in 1920-21 and about 44 in 1947, each vested with considerable discretion in management, after Independence, they were amalgamated into one unified system. The present centralised character of the Indian Railways has been criticised on the ground that the General Managers of the Zonal Railways virtually function as the representatives of the Railway Board without adequate discretionary authority.

GOVERNMENT AND RAILWAY FINANCE

4. The Acworth Committee (1921) had held the view that the railway management had been fettered by a policy "which has constantly restricted the raising of new capital for improvement and development", and that "railway development and, therefore, the economic development of India

*This excludes mileage which was retained in Pakistan after Partition of the country in 1947.

has been starved" for want of finance. The Committee recommended, *inter alia*, that branch lines should, as far as possible, be constructed and worked by the main lines to which they were tributaries and that only if the State was unable or unwilling to provide funds itself, should the formation of separate branch line companies be encouraged.

5. As a result of the recommendations of the Acworth Committee, the Legislative Assembly adopted a Railway Convention in 1924, under which the Railway Budget was separated from the General Budget and the railways were required to make an annual contribution to the General Revenues which was to be the first charge on the net receipts of the railways. The railways were to pay, in addition to the interest on the capital-at-charge of commercial lines, a share in the surplus profits. The interest on the capital-at-charge of and the loss in working strategic lines were to be borne by the General Revenues. Further, a Railway Depreciation Fund was formed to meet the charges on account of depreciation.

6. A Resolution was adopted by Government in February, 1925, an important feature of which was that the Government accepted the responsibility for finding the capital required for the construction or extension of branch lines. But branch or feeder lines required by the local Governments or local Authorities which were not remunerative from the railway point of view, were to be constructed only if the sponsoring authorities undertook to pay the losses in working, and the amount payable to General Revenues. Thus, the acceptance by Government of the wider responsibility for construction of new branch or feeder lines was conditional.

The arrangement provided by the Convention of 1924 continued until 1943 when another convention was provided by a Resolution of the Legislative Assembly in that year. According to the Convention Resolution of 1943, it was decided that, on account of the unstable conditions prevailing during the war, the Separation Convention of 1924, so far as it provided for the contribution and allocation of surpluses to the General Revenues, should remain inoperative until a new Convention was adopted and that the allocation of surpluses between the railways and the General Revenues should be decided each year on an *ad hoc* consideration of their respective needs; the loss, if any, on strategic lines being recovered from General Revenues.

7. The very first Railway Convention Committee to meet in 1949, after the attainment of Independence, made recommendations reflecting a popular and liberal outlook in regard to the policy for construction of new lines. The Convention Committee criticised the then existing arrangement for financing construction of new lines under which all constructions, whether remunerative or otherwise, were financed out of loan capital. The Committee observed that under the arrangement, the railways were unable to

undertake unremunerative projects unless the losses were guaranteed by the sponsoring authorities (as indicated above) and felt that this arrangement acted as an impediment to the expansion of rail transport and could not be allowed to continue if the railways were to fulfil their basic role in the economic development of the country. To quote from the Report of the Convention Committee, 1949 :

“Quite apart from expansion necessary to meet the growing needs of trade and industry and in zones hitherto either not served or inadequately served by rail transport, there are undeveloped areas rich in resources which can be explored and exploited only when a rail link is established. In the majority of these cases no financial justification exists, or can exist, at any rate in the first phase of development. As a result, this nationalised undertaking is compelled by circumstances to play a passive, if not a negative role in the development of the country.”

The Convention Committee accordingly recommended the setting up of a Development Fund to be fed from surplus revenues of the railways. This fund was to be utilised for financing expenditure for railway projects which were considered necessary but were unremunerative, as also for labour welfare and passenger amenities. With the acceptance of these recommendations which were embodied in the Convention Resolution of 1949, the Government agreed to set up a Fund from which could be financed the construction of unremunerative but otherwise justified new lines without the losses having to be guaranteed by the local sponsoring authorities. This was hailed all over the country as one of the just fruits of freedom, and an earnest of the National Government's readiness to provide the much-needed social overheads and underwrite the losses that may be incurred thereby. The following extract from the Railway Budget speech (1950-51) of the then Railway Minister, Shri N. Gopaldaswamy Iyengar, is of interest :

“The institution of a Railway Development Fund is due to the recognition that future railway development could no longer be conditioned by commercial considerations alone and that a system of nationalised railways must perforce fill a positive and complementary role in the general economic development of the country. The obligation of the State to expand rail facilities in undeveloped areas unhampered too much by considerations of the adequacy of the return on the capital invested cannot be escaped. It would be imprudent to finance such unremunerative expansion from loan capital on which a minimum liability equivalent to the dividend payable thereon has of necessity to be immediately assumed.”

The Convention Committee (1949) also recommended that for a period of five years, commencing from 1950-51, the annual dividend payable by the railways to General Revenues shall be at the rate of 4 per cent on the capital and no dividend shall be payable on the capital invested in unremunerative strategic lines.

8. The Convention Committee of 1954, while suggesting no changes in the method of contribution by the railways to General Revenues at a fixed rate of dividend in terms of a percentage on the capital-at-charge, however, recommended that the dividend on the capital-at-charge of new lines should be computed at a lesser rate, *viz.*, the average borrowing rate charged to the commercial departments, and a moratorium should be granted in respect of the dividend payable on the capital invested on the new lines during the period of construction and upto the end of the fifth year of their opening for traffic, the deferred amount being repaid from the sixth year onwards in addition to the current dividend out of the net income of the new lines. The Committee also recommended that the cost of construction of all new lines might be debited to the capital account of the railways from the very beginning and not to the Development Fund, since the Fund was intended to advance finances for new lines only for temporary periods and ultimately the whole or a substantial portion of the cost was in any case to be transferred to capital. All this amounted to further widening of Government's financial responsibility for providing social overheads.

9. The Convention Committee of 1960 recommended that the rate of dividend to be paid by the railways to the General Revenues should be raised from 4 to 4½* per cent during the five years 1961-66. The Committee made a further important recommendation that the capital-at-charge of the Northeast Frontier Railway, other than the clearly strategic portion thereof, should be regarded as unproductive, and till such time as the line became productive or the next Convention reviewed the position, whichever was earlier, the rate of dividend payable on the capital-at-charge should be at the average borrowing rate of Government. Thus, for the first time, it was agreed that the railways could pay dividend at less than normal rate on certain lines, other than purely strategic lines. It was also recommended that the deferred dividend on new lines should be paid from the sixth year onwards only if the net income of the new lines left a surplus after payment of the current dividend. General Revenues thus agreed to assume new obligations, so that, in the task of extending railways to open up underdeveloped and backward areas, the railways were freed of the financial worry of the initial difficult years in respect of a new line and could take a long-term view of the likely remunerativeness of the proposed new line.

* The rate of dividend has been further increased to 4 1/2 per cent from the year 1963-64

In regard to the Development Fund, the Committee was not in favour of curtailment or limiting of expenditure on works met out of the Development Fund and expressed the view that they "see no alternative but to continue this facility to the Railways during the next five years also unless the net surplus is able to meet in full the requirements of the Development Fund."

10. Thus, the policy towards construction of new lines and extension of the railway system underwent a noticeable change after Independence when the railways were integrated as one national undertaking and came to accept the responsibility for financing new projects which might be unremunerative at least in the early stages but were justified in the overall interests of development of the country. The railways' financial obligations towards General Revenues were also lightened to some extent, the underlying idea being avoidance of a too rigid concern with financial viability in the short term and greater emphasis on the development of the country as an important objective.

DEVELOPMENTS IN RAILWAY RATING POLICIES

11. In the very early period of railway development in India, when the railways were owned by private companies, there was no Government regulation of railway freight rates and fares except that the rates and fares were initially fixed with the approval of the Government who could order them to be reduced only in the event of the net profits of the railways exceeding 10 per cent of the capital outlay. According to the Railway Freight Structure Enquiry Committee (1957), in the early period, "Each railway followed its own independent policy in rating, the key-note thereof being high profits with the minimum volume of traffic." In 1868, maxima rates were fixed and the companies were left free to fix their rates within these maxima. No minima rates were, however, fixed, but five classes were prescribed with one separate class each for foodgrains and coal. Nothing was, however, said as to which articles were to be placed in each class.

In 1880, the completion of the Rajputana-Malwa Railway on the metre gauge reduced the distance between Delhi and Bombay and for the first time inter-railway competition emerged, particularly in the movement of grains from Delhi to Bombay as against movement to Calcutta, which led to rate cutting on the railways. In March 1883, the Government issued a circular enunciating the general principles on which railway rates and fares were to be fixed. According to the circular, rates could vary between what the traffic would bear and the cost of carriage. These were the accepted principles of railway rate making followed in the rest of the world at that time. In India also, the classification of goods adopted by railway administrations for the purpose of fixation of rates was broadly in keeping with these principles. The low-rated bulk commodities like minerals, manures, salt etc. were included in the class bearing relatively

low rates, whereas more valuable commodities were placed in the high-rated classes. However, according to the Railway Freight Structure Enquiry Committee (1957), no accurate estimate had been made of the cost of service and it was merely a rough and ready method that was used as a criterion to determine minimum rates.

12. In a Resolution issued in 1887, the Government fixed certain minima as well as maxima rates and fares to prevent cut-throat competition among the various railways. However, no uniformity in the rates charged by the different railways was achieved and competition among them continued. The inter-railway competition affecting commercial interests in some regions in the country adversely, *vis-a-vis* others, was referred to by Mr. Purshotamdas Thakurdas, who was a member of the Acworth Committee, in the course of the deliberations of the Committee.

“In connection with the question of competition between railways, Mr. Purshotamadas Thakurdas quoted from the report of the Bombay Chamber of Commerce for 1897 :

“It is shown in our records that even from stations about equidistant from Calcutta, Bombay railway freights are so adverse to us that, notwithstanding all the advantages of the finest and cheapest harbour in India, and economically and very efficiently worked docks, we have to look on at trade going, what is to us, the wrong way (to Calcutta).”

“He explained that the East Indian Railway got the original traffic and carried it all over its line to Calcutta, and that this competition continues even to this day.”

13. In the early years of this century, with further development of inter-railway competition, disputes commonly occurred between the railways. Inter-railway competition led to manipulation of rates and classifications and this brought about many complications and uncertainties in the matter of finding out the chargeable rates. In 1905, the work of simplifying the goods tariff of the Indian Railways was taken up by the Tariff Simplification Committee set up by the Indian Railway Conference Association. A uniform general classification of goods over all railways, subject to certain exceptions, was evolved by the Committee and notified by the Indian Railway Conference Association in the Tariff of July 1908. The sanction of the Railway Board was made necessary to any changes in the classification of goods or to the classification of additional commodities.

14. However, the basic character of the railway rating system, namely, determination of rates by the companies on an individual basis and independently of each other, continued unaltered. The telescopic schedule rates, even where they existed, were applicable only on distances within the bounds of a railway, with the result that there was discontinuity of mileage when calculating telescopic rates on the traffic passing from one

railway to another. However, coal was an exception insofar as it was subject to telescopic scale of rates on through distances over the entire railway system.

15. A feature of the railway rating system in this early period was that it specially assisted import and export traffic as against internal movements insofar as rates from and to port towns were lower than between inland stations. This had the effect of concentrating industries near ports to the neglect of the inland areas. The Industrial Commission (1916-1918) recommended in its report that internal traffic "should be rated as nearly as possible on an equality with traffic of the same class and over similar distances to and from the ports," particularly so "in the case of raw materials to and from an Indian manufacturing centre."* The Report also mentioned that "the power of control possessed by the Railway Department over the railways is limited by contracts in the case of company lines; and so long as these subsist, the only action which the department can take is by way of argument or influence."

16. During the inter-War period, particularly after 1923, inter-railway competition was further intensified and the railways were anxious to help in the promotion of industry in their own territory in preference to territories served by other railways. Special rates were freely quoted to capture traffic for a particular line. The Report of the Indian Tariff Board (1929) on Heavy Chemical Industry under the Chairmanship of Dr. John Mathai, referred to the wide discretion enjoyed by the Railway Administration in manipulating railway rates and urged the need for introducing telescopic rates on a continuous mileage system on the railways.

17. There were some further attempts at revision of the railway freight structure in 1936. A revised classification was introduced from May, 1936 as a result of the effort of the Indian Railway Conference Association. The report of the Railway Freight Structure Enquiry Committee (1957) referred as follows to the limited achievement of this measure :

"The revised classification removed some of the anomalies and by the interpolation of six more classes, permitted a wider range for re-grouping. . . . Nothing, however, was done to rationalise the freight structure as such and the major defects inherent in the individualistic system of working of railways were left untouched. For instance, there were exceptional class rates, i.e., classifications, higher or lower than the standard class, which were prescribed for particular commodities in local booking and in through booking up to the junction with the Foreign Railway. There were also 'adjusted class rates' lower than the class rates, quoted between particular points and applying to all commodities falling in the particular class indiscriminately."

*It would be interesting to mention that during the last three or four years the Indian Railways have been allowing concessions in freight rates on goods which are intended for export and are moved to the ports.

18. In 1945, on the recommendation of the Sub-Committee of the Indian Railway Conference Association, a Special Officer, Mr. K. L. Crawford, was appointed to prepare a scheme to revise the railway rate structure on the basis of telescopic class rates on continuous mileage system. The following observation made by Mr. Crawford in a monograph prepared by him and issued by the Railway Board in 1947, sums up the basic change contemplated at this time in the approach to railway rating.

“.....Up to quite recently many of them (railway administrations) were under company management and all of them operated as distinct commercial entities. Consequently the rating policy of each railway was greatly influenced by its own individual interests, and the development of trade and industry on a countrywide basis under a coordinated railway rating policy formulated and directed from the Centre was, by and large, never attempted.”.....
“However, leaving the past behind us let us look to the future; to a period in which railway operation is to be guided more generally by the Central Government and railway policy adopted more closely to the changed conditions of agriculture, trade and industry, with the emphasis on the national importance of their full and proper development.”

Mr. Crawford presented a series of reports on railway rating between 1945 and 1948. The main principle behind the reforms recommended by Mr. Crawford was that the telescopic rates should be applied on the railways on a continuous mileage basis, irrespective of the boundaries of individual railway units.

19. A reference to the impending changes in the railway rates structure was made as follows by Mr. Asaf Ali, Railway Member in the Interim National Government, in his Railway Budget Speech for 1946-47..

“The acquisition by the Government of all the major Indian railways clearly renders desirable and possible a thorough revision of the railway rates structure:..... In the past the rating structure was affected by the fact that each railway, company owned and managed or otherwise, functioned as a commercial concern limited only by the statutory maxima and minima, and there has grown up a rating system of extreme complexity.. It will probably bring home to the House the extent of this complexity if I mention that the unravelling of the system involves the detailed study and correlation of between 10 and 20 thousand rates..... It is hoped, therefore, before long to produce a revised system of rating which will eliminate the shortcomings of previous practice in unhealthy competition between railways which produced uneconomic and complicated rating and routing.....and to eliminate anomalies and simplify procedure to the greatest possible extent.....”

POST-INDEPENDENCE RATING POLICY

20. A basic change was introduced in the railway rating policy after independence in 1948, which followed essentially from the fact that the railway system in the country had been integrated as one system under one control. To quote from the Report of the Railway Freight Structure Enquiry Committee (1957) :

“The attainment of national Independence radically altered the approach to the problem of railway freight structure. The individualistic line so far followed by railways as a result of their separate financial entities had to be replaced by a national policy, calling for uniformity of practice to the largest extent feasible. The urgent need felt at that time was to evolve a standard rates structure without much delay.”

The railway freight structure was revised from 1st October, 1948, and the freight rates were fixed on a continuous mileage basis over the entire railway system and on telescopic principle, i.e., rates tapering with increase in the distance of haulage. The large number of station-to-station rates were withdrawn, and railways could no longer quote reduced station-to-station rates as freely as in the past and were required to obtain the assent of the Railway Board to any such reduction.

21. The old railways used to follow the practice of inflating the mileage for the purpose of fixing charges over certain high gradient sections, in order to reduce losses resulting from increased cost of operation over these sections. When the railway freight structure was revised in 1948, the practice of charging inflated mileages was given up in certain cases with a view to extending the benefits of uniform and standard rates and fares, though in some other cases inflated mileage is still applicable.

22. With the changes introduced in the railway rate structure in 1948, the process of integration of the railway system was complete. “After practically a century of experiments and differing practices, the freight structure of Indian Railways was assimilated and a great step forward was taken in evolving a rationalised freight structure to serve the interests of the community as a whole.”* There were some further changes made in the railway rate structure in 1958 consequent on the report of the Railway Freight Structure Enquiry Committee (1957). One of the recommendations of the Committee was that the Zonal Railway administrations should have the power to quote station-to-station rates and grant concession up to a percentage below the standard rate. This recommendation was not, however, fully accepted and the Zonal Railways were not given the discretion to quote reduced rates on their own authority. The Zonal Railways were allowed to quote special rates up to about 40 per cent below the standard rate but only with the prior approval of the Railway Board. They

*Railway Freight Structure Enquiry Committee Report, 1957.

could not, of course, quote rates higher than the standard rates. Had this recommendation of the Railway Freight Structure Enquiry Committee been fully accepted, it would perhaps have introduced an element of elasticity in the present rating structure and given the Zonal Railway administrations some authority to adjust the rates in different areas according to the requirements of the changing situation.

23. In line with the new outlook of unity and equality, a significant change was sought to be introduced in the railway accounting procedure in 1952 which, apart from its other implications, was an illustration of the fact that the Government considered the railways as one undertaking and did not attach much importance to the identity of the railway zones as commercial and financial units. It was decided in 1952 that as Zonal Railways were not independent financial entities and had been integrated to form a unitary Indian Railway system, it was not necessary to continue apportioning the earnings and costs between various Zonal Railways, and the system of accounting which was in vogue earlier was done away with. The earnings for each railway were not booked in the accounts of the Railways on the basis of work done and transportation service rendered, or in other words, in the case of traffic carried over more than one zone, the entire credit for the revenue was given to the originating zone. The change in railway accounting procedure was, however, abandoned in 1953 on the recommendation of a Departmental Committee. The step taken in 1952 is, however, an evidence of the fact that the entire railway system in the country had come to be recognized as one unit. It will be interesting to mention that Shri Lal Bahadur Shastri, the then Minister of Railways and Transport, observed during the debate on Railway Budget in the Lok Sabha on the 5th March, 1954 that ".....it was not the intention that each Zone should necessarily pay its own way financially. Consequent on regrouping, all the Zones were treated as one single system."

24. It may be mentioned that the basic principle of railway rating in India has all along been one of charging on the 'value of service' basis. Although, as mentioned earlier, in a circular issued by the Government in 1883, it was laid down that 'value of service' was to provide the ceiling and the 'cost of service' the floor in determining railway rates, the cost of service principle was never strictly enforced. 'Cost of service' principle, however, did figure to some extent in the fixation of minimum rates, though it is possible that in fixing these rates only some sort of an average cost might have been made use of. Even as late as 1945, K. L. Crawford in his report on rating stated that it was not necessary that the telescopic rates should be able to cover all the costs on particular movements of traffic and that 'the principle that the railways are not to be involved in any loss of revenue' should be applicable only to final net results and not applied to each and every movement of traffic. The Railway Freight Structure

Enquiry Committee. (1957) referred to the principles that should govern rating in India in the following words:

"In the present transport situation in this country, the value of service principle plays a more important part than the cost of service in all forms of transportation. The direct cost of service is an indication that generally freight rate should not be below this cost. It, therefore, regulates the minimum and does not indicate the actual freight which should in addition include a portion of the fixed charges worked out on ordinary commercial principles. In our opinion, the time has come when Indian Railways must make a sustained effort to ascertain, as far as possible, the direct cost of service and take note of this in determining the appropriate rates for individual commodities. They should not generally be carried at below the direct cost of service."

It thus appears that, though in a general way, cost was expected to be taken into account as furnishing the floor to the rates, it did not at any time constitute an important element in the determination of railway rates.

WAGE POLICY

25. When the railways were managed by different independent agencies, viz., private companies, Princely States, and the Government, there was no uniformity in the scales of wages on different railway undertakings and persons occupying similar positions on different railways were recipients of remuneration on totally different scales. As in the case of railway freight rates, after Independence, complete uniformity was introduced in the scales of pay of railwaymen all over the country irrespective of the financial status of the Zonal Railways on which they were employed. This development, though in keeping with the policy of securing maximum equality and standardization, led to an overall increase in the wage bill and affected the costs of operation of the railways.

26. It would be evident from the above review that changes of far-reaching character were brought about in the railway policies in India after Independence with the integration of the entire railway system as one national unit. After almost hundred years of divergent policies, Government accepted certain objectives for the railways which included, among others, a uniform rate structure over the entire length and breadth of the country based on the telescopic principle and uniform scales of pay for all railwaymen. Further, the railways accepted financial and commercial policies which would subserve the requirements of the economy of the country as a whole, rather than be determined strictly by the requirements of railways' own commercial interests. Later, with the introduction of the Five Year Plans, railways being the principal means of transport in the country, came to be relied upon for furthering economic and social policies laid down in the Plans.

UNREMUNERATIVE SERVICES OPERATED BY THE RAILWAYS

27. Like most railways the world over, an essential feature of the Indian Government Railways has been cross-subsidisation of services, *i.e.*, operating at a loss certain services and counter-balancing these losses with profits on other remunerative services. It will be of interest to mention the more important of these unremunerative services, since any departure from the existing commercial practices of the railways may have important repercussions on the future of these services :

- (a) The metre gauge railway system as a whole forms 42.7 per cent of the total railway route mileage in the country. Apart from some branch lines, it is generally a continuous system extending from one end of the country to the other. The metre gauge system is, on the whole, financially unremunerative and is being virtually subsidised by the rest of the railway system. Undoubtedly some of the metre gauge sections are viable and to that extent the remaining system is even less viable.
- (b) About 2,750 miles of Government owned narrow gauge lines which are operated as integral part of the railway system are also operated at a loss. The following figures indicate the operating ratio (ratio of expenditure to earnings) on the narrow gauge lines of this category separately in respect of goods and passenger traffic during recent years :

Year	Coaching	Goods
1958-59	174.3	213.2
1959-60	165.6	206.1
1960-61	171.7	181.9
1961-62	180.2	175.3

The high operating ratios on both coaching and goods traffic show that expenditure has been far in excess of the earnings.

- (c) A number of narrow gauge Light Railways owned and managed by private companies and certain other lines which are owned by District Boards or companies, but worked by the Government, are operated on a subsidised basis.
- (d) There are a number of railway sections and branch lines even on the broad gauge system which run at a loss and are internally subsidised by the railways as a whole.
- (e) The railway rates are specially low over long distances and in the case of certain essential and low valued commodities like coal, the rates, notwithstanding certain recent increases, do not even recover costs of haulage beyond certain distances, especially since coal freight is subject to a ceiling charge whatever the distance over which the coal is hauled.
- (f) The railway passenger services as a whole, and particularly the suburban services, are unremunerative. It may be mentioned

that in working out the cost of the Electrical Multiple Unit Services (E.M.U.), the interest on the capital-at-charge is not taken into account. On the basis of a special study undertaken by the railways some time back at Bombay on the Central and Western Railways, it was found that the E.M.U. services involved a loss of Rs. 30 lakhs per year, without taking into account the interest charges. Assuming the same proportion of interest charges as for the railways as a whole, the loss was estimated at about Rs. 1 crore.

Thus, in fact, whatever net earnings accrue to the railways come only from freight traffic and that also mainly on the Broad Gauge system.

The railways are also expected to meet the defence requirements in times of emergency, in addition to the normal civil requirements. In this connection, the following observation is of interest :

“The achievement in the transport of goods during the year is additional to the emergency movements of defence material and personnel, which the railways effected, at a very short notice with practically no interruption to, or curtailment of the normal passenger service or the flow of civil supplies. During the peak months of the emergency, the Northeast Frontier Railway, transported 65 per cent more traffic than in normal times.”*

28. The following extract from a Memorandum supplied by the Railway Board to the Committee on Transport Policy and Coordination sums up the effect upon railway policies of the consolidation of separate railway undertakings which existed in the period prior to Independence, into a centralised railway administration.

“When the major Railway systems of the country were managed and worked by private companies or Indian State Governments, it was generally the endeavour of these units of Railway Administration to meet fully their liability and to be self supporting, although under the terms of their agreements with the Secretary of State, the companies were guaranteed a specified minimum return on the capital invested. This was consistent with the flexibility then allowed in working of these units. For instance, the companies could adopt their own wages and salaries and could quote suitable rates within the authorised maxima and minima. The Indian States had also similar freedom.

“With the taking over of these Railway units for direct management by the Government in order to serve the community better, standardisation of wages and salaries and of rates charged has followed, and it has removed very considerably the flexibility in the working of the individual units which previously existed.”

*“Capital”, Calcutta, dated the 25th July, 1963, page 129.

CHANGES IN THE PATTERN OF TRAFFIC IN RECENT YEARS AND ITS BEARING ON RAILWAY FINANCE.

29. Certain recent developments which are referred to hereafter have thrown up the problem as to how far it may be necessary to reconsider some of the basic railway policies with a view to rationalising them to the maximum extent possible.

30. The pattern of traffic carried by the railways has undergone significant changes in recent years. The proportion of low-rated commodities in the total traffic carried on the railways has been increasing and is likely to increase further in future years. These changes in the pattern of traffic have, it appears, resulted mainly from the impact of the Five Year Plans which lay stress on development of basic and heavy industries, and the railways are specially expected to provide adequately for traffic in raw materials etc. connected with these industries. Specific quantities of such traffics are assigned to the railways in terms of the traffic targets which are laid down in the Plans. The growing proportion of low-rated traffic may also be due to the diversion, to some extent, of high-rated traffic to road transport. In the opinion of the railways, such diversion has, in fact, taken place and is assisted by the present rate structure; but it may, in part, be on account of the inability of the railways to meet the service needs of traffic which though more remunerative can be accorded by them only lesser priority.

31. The Preliminary Report of the Committee on Transport Policy & Coordination analysed the broad trends in regard to the movement of low-rated and high-rated commodities on the Indian Railways during the years 1955-56 to 1958-59 on the basis of the data published in the Annual Reports of the railways. According to the Preliminary Report, "the pattern of traffic on the Indian Railways has been undergoing significant changes over the last few years and that the share of comparatively low-rated commodities in the total freight traffic carried by the railways has had a tendency to increase and is likely to increase further in the coming years" (Chapter VIII para 15). The figures of originating tonnage in respect of low-rated and high-rated commodities and their relative proportions in the total revenue earning traffic for more recent years *i.e.*, covering the periods upto 1961-62 are given in the statement at Appendix 1. The statement at Appendix 2 shows the changes in the pattern of low-rated and high-rated traffic on individual Zonal Railways. It will be seen that the percentage of traffic in low-rated commodities to the total revenue earning traffic has steadily gone up on the railways from 63.2 per cent in 1956-57 to 72.8 per cent in 1961-62. It is also significant that on several Zonal Railways while the total traffic increased in recent years, the quantum of high-rated traffic registered substantial decline not merely relatively to the total but also in absolute terms. The statement at Appendix 3 shows the trends in the average lead of traffic for various commodities (for which data are available) during the six years ending 1961-62. Over the six year period, the lead of freight

traffic on the whole has increased by 9.9 per cent, but that of coal and foodgrains which are low-rated commodities has gone up by 10.8 and 31.0 per cent respectively. It is thus apparent that both in terms of tonnage originating as well as lead of traffic, the proportion of low-rated traffic carried by the railways is on the increase.

In this context, it will be relevant to quote the following from the Railway Budget speech (1961-62) of Shri Jagjivan Ram, the then Minister of Railways :

“There is a tendency towards a progressive growth in the volume of traffic in low-rated goods, mostly industrial raw materials. Making every allowance for the consideration that some commodities are best carried by rail, while for others road transport may be suitable, the increasing preponderance of low-rated commodities assigned to the Railways calls for detailed examination, with a view to see what adjustments are required.”*

32. The successive Reviews of Performance of the Indian Railways published annually by the Railway Board along with the Railway Budget papers bear evidence to the persisting changes in the pattern of traffic on the railways. To quote from the latest Review (1963) :

“The percentage of tonnage originating of coal for users other than the Railways, ores, marble and stone, including limestone and dolomite, to the total tonnage of revenue earning commodities, which remained at about 37 per cent during the First Plan, rose to 45.4 per cent at the end of the Second Plan and further increased to 47.9 per cent in the first year of the Third Plan.”

The Review mentions the likelihood of traffic in coal, raw materials for steel plants and export ores accounting for over 50 per cent of the revenue earning traffic by the end of the Third Plan.

33. The following observation made by the Chairman, Railway Board, in an article which appeared in the Indian Railways Annual Number 1963, is also of interest in this context :

“A feature of the mounting rail traffic is the increasing preponderance of low-rated commodities. . . . With the heavy increases in the movement of coal, raw materials for steel plants and export ores, this percentage is bound to increase further in the years to come. This will necessarily mean—and this is of significant portent—that the rate of increase in earnings will by no means be commensurate with the increase in the volume of traffic. Coal which is carried at a specially low level rate will alone account for 37 per cent of the total originating tonnage in 1965-66.”

*According to a Press report, Shri S. V. Ramaswami, Deputy Minister, Railways said in the course of a very recent speech that “the godown to godown delivery effected by the road transport system had enabled it to attract a large portion of the cargo which was formerly being transported by rail.”

34. According to certain calculations made by the Perspective Planning Division of the Planning Commission in a paper entitled "Transport Planning: Advance action for the Fourth Plan (August 1962)", it has been estimated that of the total long distance traffic originating in the country, 92 per cent is handled by the railways (1960-61), the remaining 8 per cent going to the other means of transport. As against this, the railways' share of total traffic in 1975-76 will be about 70 per cent. It has been further estimated that "traffic in finished products and miscellaneous commodities will be shared both by Railways and motor transport, the latter receiving a progressively increasing proportion of such traffic in successive Plan periods."

35. It may be argued that low-rated traffic may not be necessarily unremunerative. Thus, for instance, the haulage of low-rated raw materials to steel plants over short to medium distances is not necessarily unremunerative; as will be seen from the financial results of the Eastern and the South Eastern Railways which rely on these commodities and public coal (also low-rated) for a good proportion of their revenue, but are in a position to make intensive use of available facilities. These two railways are more profitable than most of the other Zonal Railways. Even the low-rated traffic which generally comprises bulky and heavy materials like coal, ores etc. may be more paying to the railways if, for instance, its movement is organised in full train loads moving at fast speed. Thus, to ensure the remunerativeness of low-rated traffic, the railways may have to adapt themselves to the special requirements of this traffic, as far as possible.

36. A feature of the railway freight traffic in India is that the density of traffic varies widely over different parts of the railway system. According to an analysis* made by the Economic Advisor to the Railway Board, as much as 58 per cent of the freight traffic is carried over only 15 per cent of the total railway system; while the remaining route length of some 85 per cent carries less than half the total traffic. The high density of traffic is mainly on trunk routes, such as between Howrah and Kanpur, Nagpur and Bombay, Bombay and Allahabad, Vizianagram and Madras. On a large part of the railway system, the density of traffic is low.

37. The transport situation in the country has, for some time, been characterised by undoubted shortage and the impact of competition might not have been felt fully by the railways on this account. It is possible that in the years to come, with the expansion particularly of road transport facilities, the railways will face greater competition. The impact of such competition may possibly be felt earlier in the areas where the density of railway traffic is low. The railways will then have to consider measures to adjust themselves to the changing situation. Pending investigations of a detailed character, which would take ample time, it is difficult to make any reliable estimates of the likely total growth of traffic during future Plan

*Indian Railways Annual Number, 1963.

periods, its regional pattern and distribution into relevant categories, as also the possible allocation of such categories of traffic between railways and other modes of transport. It may be presumed, however, that changes in the pattern of railway traffic are likely to be further accentuated in future to the detriment of railway finances.

THE IMPLICATIONS OF ADOPTING COST-BASED RATING POLICY

38. As mentioned earlier, in certain foreign countries, it is being recognised that, in order to meet the problem of growing competition from other means of transport, the railways should adopt cost-based rates for particular movements of traffic. It is argued that in the face of competition, the railways can hope to maintain profitability of their operation only to the extent that they know their costs in detail and price their individual services accordingly.

39. A further argument may be advanced that in a planned economy like India, it is necessary to ensure that the national resources are utilised most economically and that a cost-based railway rating system would help to further this objective. Under a system of cost-based rating, there would be no room for cross-subsidisation of services. If certain unremunerative services are required to be maintained for reasons of Government policy, it would be known how much it costs to operate these services.

It may also be argued that if the railways are relieved of the present system of pervasive and uncalculated subsidy, they are likely to be in a better financial health and may even yield a larger share of profit for the General Revenues. This would, moreover, enable the General Exchequer to finance payment of direct subsidies in specific cases where subsidisation may be considered to be justified under future Government policy.

40. However, in the first place, the complexities involved in formulating cost-based rates have to be recognized. As will be evident from Part II, no country has yet been able to evolve a clear or definite picture of cost-based rates. The experience of France, which is practically the only country which has made elaborate cost studies so far, shows how difficult is the problem of working out specific costs in conformity with essential standards. According to their experience, numerous factors are responsible for variations in cost on the same route even for an equally chargeable distance and the same load. Then again hardly any country has yet been able to relieve the railways of their social service obligations. As stated in Part II, the experience of the European Economic Community has been that the railways "are so loaded with obligations that it is hard to see their complete elimination."

41. It has thus to be recognized that even after detailed rail cost studies are taken up in India on a sustained basis, it will take several years to get any substantial results from these studies. The value of making these studies was underlined by the Railway Freight Structure Enquiry Committee in their

Report (1957). However, even a decision as to whether and how far Indian Railways should adopt costing as a basis of charging can possibly be taken only after some substantial progress has been made with these studies.

42. As a corollary to the policy of cost-based rating, the railways will be absolved of all those commitments referred to earlier, which have devolved on them particularly since Independence and which they are expected to fulfil as a national undertaking. The railways will be free to fix fares and freights on different types of traffic, and in different regions on the basis of their respective costs, and under such a scheme of things, each flow of traffic will be expected to be self-supporting. There will thus be variations in the rates of charges on the same type of traffic carried over comparable distance but in different regions. The railways will also be free to give up traffics and services according to their degree of remunerativeness. They will be absolved of the 'Common Carrier' obligation, peculiar to the railways, under which normally they cannot refuse any traffic offered. They will also have to be freed from the obligation to fix a higher priority to specified traffics, irrespective of their profitability.

43. The effects of the adoption of a cost-based rating policy will require to be studied particularly with reference to two distinct phases of India's economic development. Prior to the Five Year Plans, industries came to be located in the different regions of the country depending upon the then available transport facilities and the railway rating structure then in operation. Since the initiation of planning, the industrial development has taken shape with reference to the policies relating to location of industries, regional development, etc. as laid down in the Plans. It would, therefore, be necessary to undertake studies separately to examine how the adoption of cost-based rating will affect first, the economics of the industries which established themselves before the Plans and secondly, those which came into being as a result of the Plan policies.

44. Further, it would be necessary to examine the various implications of the General Exchequer accepting the responsibility of paying direct subsidies, if the railways are required to perform certain unremunerative services in the interest of the community at large.

45. Any fundamental change in the rating policy, could be contemplated only after completing the examination of all the relevant aspects of the matter. Meanwhile, it would perhaps have to be a process of continuous adjustment within the framework of the existing rating structure with a view to enabling the railways to safeguard their financial interests.

APPENDIX 1

Trends in low-rated and high-rated commodities and their relative proportion in the total revenue earning traffic on the Indian Railways

Years	Low-rated traffic			High-rated traffic			Total revenue earning traffic
	Tons originating	Percentage to total traffic	Proportion of earnings from low-rated traffic to total freight earnings	Tons originating	Percentage to total traffic	Proportion of earnings from high-rated traffic to total freight earnings	
1	2	3	4	5	6	7	8
	Million tons			Million tons			Million tons
1956-57 ..	61.3	63.2	39.6	35.7	36.8	60.4	97.0
1957-58 ..	67.3	66.9	43.7	33.3	33.1	56.3	100.6
1958-59 ..	69.8	68.7	46.7	31.8	31.3	53.3	101.6
1959-60 ..	76.2	69.9	47.2	32.8	30.1	52.8	109.0
1960-61 ..	84.0	71.3	48.1	33.9	28.7	51.9	117.9
1961-62 ..	90.0	72.8	49.3	33.6	27.2	50.7	123.6

NOTE:—As in the Preliminary Report, the low-rated group of commodities is assumed to include those coming in classes up to 40 per cent of scale-A of the railway tariff schedule; the principal among these being, coal, limestone, salt, foodgrains, fruits and vegetables, sugarcane, wood etc. All other commodities i.e. those in classes above 40 per cent of scale-A and those in scale-B have been categorised as high-rated.

APPENDIX 2

Trends in the pattern of low-rated and high-rated traffic on individual Zonal Railways

(In lakh tons)

Name of Zonal Railway	1956-57		1961-62	
	Low-rated traffic	High-rated traffic	Low-rated traffic	High-rated traffic
1	2	3	4	5
1. Central	55.59 (40.57)	81.43 (59.43)	95.61 (62.74)	56.78 (37.26)
2. Eastern	177.08 (74.90)	59.34 (25.10)	251.40 (79.34)	65.48 (20.66)
3. Northern	73.80 (63.32)	42.74 (36.68)	69.35 (66.18)	35.44 (33.82)
4. North Eastern	28.89* (58.89)	20.17* (41.11)	30.64 (57.69)	22.47 (42.31)
5. Northeast Frontier	9.84* (39.61)	15.00* (60.39)	12.16 (41.29)	17.29 (58.71)
6. Southern	55.51 (59.72)	37.41 (40.38)	81.77 (68.66)	37.32 (31.34)
7. South Eastern	146.90 (72.45)	55.87 (25.55)	265.95 (83.85)	51.26 (16.15)
8. Western	59.91 (54.24)	50.53 (45.76)	93.19 (64.89)	50.41 (35.11)

*These figures relate to the year 1958-59.

NOTE:—Figures in brackets represent percentage to total traffic.

APPENDIX 3

Trends in the average lead of traffic on the Indian Railways

(In Miles)

Years	Coal for public including non-Govt. Railways	Grains	Oil-seeds	Other revenue traffic	Total revenue traffic	Total coal (including non-revenue traffic)	Total revenue & non-revenue traffic
1	2	3	4	5	6	7	8
1956-57 ..	361	384	352	336	347	365	321
1957-58 ..	436	435	406	347	384	382	341
1958-59 ..	443	457	460	349	388	422	346
1959-60 ..	436	475	433	351	387	419	348
1960-61 ..	412	472	477	342	375	421	349
1961-62 ..	400	500	515	345	376	406	353

Part II

Railway rating policy in some of the foreign countries

INTRODUCTION

A study of the evolution of railway rating policy in most of the foreign countries shows that there is a definite similarity in features of the broad tariff policy. Since the earliest days of railway development, railways enjoyed for a long time a virtual monopoly and had adopted a rating policy the chief characteristic of which was 'charging what the traffic will bear'. To quote Sir William Acworth, "the real meaning of the phrase 'charging what the traffic will bear' is that railway charges for different categories of traffic are fixed, not according to the estimated cost of service, but roughly on the principle of equality of sacrifice by the payer. So regarded, 'what the traffic will bear' is a principle, not of extortion, but of equitable concession to the weaker members of the community." Commodities of high value were charged a rate high enough roughly to compensate for the low rate charged to low-value commodities. The requirements of national development led the railways, sometimes on the intervention of Government, to grant low rates to raw materials and other low-valued commodities. The tapering of rates with distance facilitated long haul movements. While the costs of performing the services were an important factor for the over-all profitability of the railways, they did not constitute an important element in the pricing of railway services in respect of each commodity.

The policy of differential pricing may be appropriate so long as the railways enjoy virtual monopoly in the field of transportation. The recent appearance of a variety of modes of transport, particularly road transport, in active competition for the provision of transportation service has brought about a fundamental change in the approach to the railway pricing system. Under competitive environment, increasing reliance is sought to be placed upon allowing free choice of shippers and market offerings of carriers. Cost-based rates for particular movements of traffic are set to meet specific competitive situations. This would enable the railways to secure the kind of traffic for which they have an inherent cost advantage and relinquish the traffic which might better be transported by other carriers. Thus co-ordination among the various modes of transport may in effect be achieved without the initiative of a transport coordinating agency, though according to an expert view, 'there is a mandatory element about co-ordination which demands that it should be established by a body superior to those to be coordinated'.

The cost-related rate policies, however, have certain limitations. It is argued that competition in transportation does not ensure that rates charged by carriers will necessarily tend to be closely related to the costs of providing the service. It is only when theoretically competition is perfect, rates are properly related to costs. But according to John Doyle, "transportation competition is anything but perfect and it cannot be perfect. Both experience and logical analysis of the effect of transportation conditions on rates support the conclusion that imperfect competition often distorts the relationships

between rates and costs. This is a fundamental reason why, in the interest of efficient allocation of economic resources, transportation competition must be harnessed or regulated. Another reason why transportation competition must be controlled, if the industry is to achieve maximum economic performance, is to encourage desirable physical coordination of transportation facilities.”*

In the context of relationship between cost and rate making, it will be seen that determination of costs appropriate for a particular rate decision is rather difficult because the cost price of transportation varies according to train services even for an equally chargeable distance and the same load. The French Railways had to face a similar problem when they decided to introduce cost-based rates in 1947. Their experience is embodied in a study of the French Railways made on behalf of the Canadian Royal Commission on Transportation.† According to this study, many factors are responsible for variation of expenditures on the actual route, viz., stations, classification, yards, grade of line, line equipment, distance covered respectively by local trains and through trains. How complex is the problem of railway cost studies appears from the words of William J. Baumol, writing in the ‘Journal of Business’ of the University of Chicago (1962): “The determination of the relevant incremental costs appropriate for a particular pricing decision is not simple but must reflect complex railroad cost conditions that arise from persistent excess capacity, irrelevant fixed cost elements and such inter-related dynamic factors as changing volume, changing labour and material costs, technological innovations and improved operating techniques The relevant incremental costs are a function principally of the prospective volume in relation to present volume and unutilised capacity in existing plant and organisation.”

It is thus possible to over-emphasise the validity of cost-based rate policy. At any rate it may be expected to encounter considerable opposition from groups whose economic interests are likely to be adversely affected by its adoption. It may not find enough support specially in the case of movement of bulk commodities and traffic like coal, industrial raw materials, food-grains etc. which generally move in large quantities over considerable distances and may thus be taken to be quite appropriate for railways. Such a policy may in any case lead to undesirable increase in the prices of such commodities, which may not be in the national interest. It is interesting to note that “none of the six Railway Administrations of the European Economic Community pursue cost-based rates to their ultimate conclusion, and most of them are so loaded with obligations that it is hard to see their complete elimination, even though the method of financing them may change—to direct subsidy.”

* Report of the Special Study Group on Transportation Policies in the United States of America (1961).

† Royal Commission on Transportation (July 1962) Vol. III—“Summaries and Extracts from Studies of the French Railways” by R. Fortier.

With all railway systems, the obligations towards national economy play a particular role. The general view held, in regard to 'public service obligations' imposed on railways, is that where for social, political or other reasons, any particular traffic is carried at a loss, the State will have to compensate the railways for the losses incurred and this kind of subsidisation should be borne by society as a whole and it ought not to be met out of higher charges to other transport users.

A review of the latest thinking on the problem of railway rating policy in some of the foreign countries is presented in the following pages.

EUROPEAN ECONOMIC COMMUNITY

Articles 3 and 74 of the Treaty of Rome (1954) establishing the European Economic Community (E.E.C.) provide for the introduction of a common transport policy. The aim of a common policy in transport is to have freedom of movement for transport services within the Community. The existing transportation situation, however, varies widely within the Community, both as regards relationships between the three traditional modes of transport namely, the railways, road and waterways, and the principles adopted in the various national transport policies.

A number of studies have been undertaken by various bodies under the aegis of the European Conference of Ministers of Transport for drawing up a common transport policy. A study was carried out by the International Union of Railways (U.I.C.) regarding the financial position of the railways of the six E.E.C. countries. The U.I.C. has claimed in its memorandum (July, 1961) that most of the views expressed and conclusions reached, are valid in any country with a basically competitive economy, but are not applicable in those countries where the coordination of transport is planned deliberately. Railways are accepted as having the character of a public utility, forming part of the basic national economic framework. It recognises that different means of transport have their own characteristics, but contends that analysis of these characteristics shows that railways still have great potentialities from a technical angle both as to the capacity and to the quality of the service they can offer.

Although the formal relationship between railways and the State may vary from country to country, the report emphasises the general principle that it is the function of the Government to govern. This function is defined as ensuring good order and safety; the rational adaptation of the railways to present-day circumstances; and conformity to the requirements of healthy competition, particularly where the public interest is concerned. So far as the exercise of its function is concerned, the opinion of the U.I.C. is that the State should make the minimum use of its powers, particularly where the free play of economic forces is sufficient by itself. The U.I.C. stresses the need for a general transport policy designed to secure the objectives (a) that the transport system in capacity and in quality should be able to meet present and future needs of the users; (b) that artificial solutions should be avoided enabling the respective means of transport to convey the traffic for which it is best adapted; (c) that free choice of the means of transport should be allowed to the user (including the provision of his own transport) subject to the proviso that he must pay an equitable price for the costs incurred by the Community as a result of his choice, and (d) that the business of a public carrier should be profitable.

It is held that actions on the part of railways will not be fully effective unless the public authorities allow them the means to do all that they should themselves do towards achieving financial equilibrium, including

provision for depreciation and the establishment of necessary reserves. The means envisaged are generally to ensure, as far as possible, that the railways be permitted to act like an industrial or commercial undertaking and, in consequence, to avoid making the railways instruments of social or economic policy. These requirements are taken to include management autonomy, with maximum commercial flexibility in fixing the levels of fares and charges and in undertaking expenditure, and wide freedom to reduce the size of their systems and to concentrate their services. For the avoidance of using the railways for purpose of social policy, 'normalisation of accounts' is recommended. In effect, this is a system of commercial costing so that unremunerative expenditure might be eliminated, or charged specifically to the Government. Items which should be charged to the Government are compensation for being required to maintain unremunerative facilities, 'social needs' rates and charges, special rates to assist industry, or very low rates in favour of particular categories of users. In view of the U.I.C., it is the duty of the Government to inform public opinion of the necessity for these reforms. The report adds: "the public should be made aware of the fact that the railways are a commercial undertaking serving the community, an undertaking which, while not having maximum profits as an objective, must not be called upon to assume too heavy burdens likely to undermine its profit-earning capacity."

The fundamental recommendation is that a general transport policy should be adopted, with the object of achieving "the optimum transport system", and considerable attention is given to the requirements of either an authoritarian approach or of completely un-restricted competition—though the latter is looked upon as impracticable. These pre-requisites are defined as the need for equality in basic conditions: a proper structure of rates and fares as the basis of a rational choice by the user, and consideration for the needs of the community. The U.I.C., however, admits that these problems present considerable practical difficulties. Included amongst them are, in the first place, certain basic differences in regard to structure as well as between the techniques applied by the different means of transport. Other difficulties arise from the obligations of a public service, which come within the framework of the public interest. The U.I.C. have observed that "the States can introduce the maximum possible equality into the basic conditions, by showing no hesitation in making provision, at their own cost or that of the public, for the refunds and compensation needed to cover abnormal charges and obligations. Once the compensation and refunds, under the heading of normalisation of accounts, have been fixed, the financial equilibrium of these undertakings must be achieved without the payment of any subsidy."

The U.I.C. are of the opinion that the rates and fares, taken as a whole, must ensure the overall financial equilibrium of each carrier, it being understood that the individual rates and fares must each provide some contribution towards such financial equilibrium and, therefore, be higher than or

at the minimum equal to the marginal cost of the service; in this way it is possible for normal and fair commercial activities to be pursued. The adjustment of rates and fares requires a knowledge of transport costs, as well as of the manner of calculating them correctly. It is, therefore, necessary :

- “(a) to abandon, to a large extent, the existing arrangements under which the railways apply rates and fares which are still based, in too many cases, on the conditions which applied when they held a monopoly and below which road often fixes its charges with the principal objects of competing with rail;
- (b) to grant to the railways the right to apply flexible rates and fares, which is, moreover, implicit in the possibilities of taking the commercial action which is deemed to be desirable. By basing on costs, it is possible, on the one hand, to ‘destandardise’ railway tariffs and, on the other hand, to conclude ‘special agreements’ with users, at least in the same way as the other means of transport.”

A Memorandum entitled *The General Lines of the Common Transport Policy*, prepared by the Secretariat of the European Economic Community Commission (April 1961) has also referred to the question of public service obligations which fall most heavily on railways in the E.E.C. countries. These have been grouped under the following three heads :—

- (i) obligations to operate;
- (ii) obligations to carry; and
- (iii) obligations in regard to rates.

It is admitted, that these obligations were entirely justified when railways enjoyed a monopoly. But as things are today, “these obligations have largely lost their *raison d’être* in consequence of the development of other forms of transport.” This applies in particular to the obligation to operate, since numerous alternative means of transport are available to users on most traffic routes. It is suggested in the Memorandum that this obligation ought to be maintained only in cases where it would not be sufficiently in the interest of transport undertakings to provide certain services though these are indispensable in the public interest. The railways can be given the right to close down gradually lines, installations and services run at a loss. This would make for a sounder financial position, while allowing the use of other means of transport better suited to the traffic involved.

The obligations in regard to rates are many and complex, they concern the structure and level of rates, their countrywide and round-the-year standardisation and publication. Besides entailing rate inflexibility, these obligations clearly upset the equilibrium of the market insofar as they are imposed upon the different means of transport in different ways. Subject

to the exigencies of the general economic policy, such obligations under the first two heads are likely to be, if not eliminated, at least made more flexible, by granting to the undertakings, in railways especially, which do not enjoy it, freedom to fix their rates within limits which will be determined having regard to costs.

With regard to the obligation to carry, its impact on the financial situation of the undertakings concerned will be less serious if the latter are free to change their rates according to the competitive situation, as well as to seasonal traffic fluctuations and other factors with a bearing on costs.

It is understood that the proposals for establishing a common transport policy in the E.E.C. have been drawn up by the Common Market Commission for discussion by the Council of Ministers. The Commission has proposed a rate-bracket system of maximum and minimum rates for surface transport based on cost calculations under which, at least initially, the minimum rates would be between 70 and 90 per cent of the maximum rates. The tariffs will have to be published officially in the member States and eventually uniform cost criteria should be drawn up for calculating the brackets. The Commission has also proposed that 'public service obligations' imposed by member Governments on some forms of transport, specially, railways, should be kept to a minimum. To off-set the costs of public service obligations considered indispensable, the Commission has proposed compulsory compensation for transport organisations.

It is difficult to assess the extent to which the development of common transport policy will be in accordance with the general policies at present being followed by the individual member-countries. A brief description of certain aspects of transport policy now in force in West Germany and France may provide the necessary background to a study of the problems of common policy in transport. It is, however, expected that the introduction of uniform system of transport for the community may "lead to severe transitional difficulties both in the transport sector and sectors dependent on it, if national policies have to be radically changed."

WEST GERMANY*

Under the terms of the German Basic Law covering railways, "Rate Policy of the public railways while safeguarding the economic situation of the railways concerned, must aim at the creation of uniform rates for the railways as a whole, and the adjustment of them to the needs of the general welfare, particularly in regard to regions that are economically weak or properly served by transport." The railways draw up rates themselves, but these must be approved by the Federal Minister of Transport acting in agreement with the Economic Minister. If the general price level is likely to be affected, then Parliament itself must give its approval. Modifications can be made by the Minister on grounds of the general economic good and unfair competition.

The German Federal Railways must publish their rates and apply them equally to all users in all regions (except where special subsidised rates are allowed); so it is not open to them to conclude secret contracts. Reduction must be published and granted to all in similar conditions. Within these general principles, the Federal Railways fix their rates for goods on a value and capacity or weight basis, with a distance taper, but this standard rate structure is not as important as the special rates that are granted—there are over 200 of them—to cover particular goods and regions; in 1959 only 26 per cent of traffic went at the regular rates; the rest by special rates. Considerable flexibility is available to the Federal Railways within the value—weight—distance classification; it has allowed the Federal Railways to be more competitive and encouraged traffics suitable to them, but it has also been the method by which subsidised rates have been granted to aid particular regions and sectors.

The Federal Government is committed to a policy of coordination based on competition. The German Federal Railways (DB) are in theory supposed to be managed like a company in accordance with commercial principles, so that receipts should cover expenses, including the necessary reserves; attempts being made to achieve the rate of interest appropriate to their own capital. It is in this framework that they have to perform their task for the general good. Thus, the Federal Railways are required to act commercially, and yet at the same time serve the general good. The concept of 'public service' means in practice that "the transport system should be used as part of location policy to help backward areas, agricultural policy or other sectors of the economy that need subsidising, as well as providing unprofitable services and granting specially reduced fares where this is considered socially desirable." The railways have been the chief instrument in the implementation of these policies, as road and water transport sectors being not nationalised cannot generally be expected to bear such burdens. There is a provision in the Law governing the railways for the normalisation of the DB's accounts, *i.e.*, it provides that compensation shall be paid to the railways if a rate reduction is imposed or if they are compelled to

*The German Federal Railways (D.B.) are nationalised.

continue an unprofitable service. The subsidy is not paid if the DB makes a profit.

It has been proposed that the Federal Railways should be allowed a greater freedom to adapt their prices to the market situation, but such suggestions have led to considerable opposition from various quarters—from the other modes of transport and from various regional and trade bodies, 'the former fearing that their livelihood would directly be endangered, the latter afraid, lest freedom for the Federal Railways to charge according to the market situation would mean that the outer provinces would find transport dearer than in the great centres, that the smaller business would be charged more than the larger'. The Minister has accepted these representations and has, therefore, proceeded cautiously in the direction of granting greater rate freedom. The Federal Railways, as mentioned above, can qualify for compensation in certain circumstances, but they have received no more freedom except that the approval of the Minister no longer depends on whether the new rates are suitable taking into account the needs of the other forms of transport.

It is understood that West Germany has not welcomed the application of the general rules of the Rome Treaty on competition, but has stressed the importance of the special aspects of transport and the consequent need for regulation. The Government supports the proposals for entry and rate control, but is not willing to admit that transport does not have a part to play in regional and agricultural policies.

In this connection, it would be interesting to note the following opinion expressed by the Adviser to the German Federal Ministry of Transport, Mr. Stoltenhoff, while inaugurating a seminar* on 'Modern Traffic Problems' organised by the German Institute for the Developing Countries at Bonn in June, 1962 :

"In my opinion it would be wrong if you orientated the development of your transport system along those lines which, in my country and in other industrial nations, have an historical basis. In our country technical progress itself determined the gradual development and use of the means of transport. The present-day strongly competitive position of the common carriers does not always correspond to the ideal of a national economy. You have, however, the opportunity to develop the traffic system in your countries solely according to principles dictated by the national economy. Because you are not handicapped by historical realities you can give preference to those means of transport which are most suitable from both the geographical point of view and that of transport economy and transport policy."

*Among the countries which took part in the Seminar were Afghanistan, Iran, Iraq, Saudi Arabia, the United Arab Republic, Sudan and Ethiopia.

FRANCE*

The general policy of the French transport legislation is the coordination and harmonisation of the means of transport, in particular road and rail. The French policies bear a close resemblance to the German model. The general aim in both countries is to secure a desirable distribution of traffic and both have pursued it within a restrictive frame-work, which in particular, has not allowed public road goods transport to develop freely, nor the French and German Federal railways to act commercially, to any great extent. The French have laid more stress on the importance of the rate schedules to effective coordination.

The French Railways (S.N.C.F.) have made some progress in the post-war period towards a cost-based rate structure and has received some small measure of commercial freedom, even if it has, like the German Federal Railways been subject to public-service obligations and the requirements of social and regional policies which have severely limited the range of manoeuvre. The French Railways began in 1947 to move away from *ad valorem* rate structure towards a cost-based one. Provision was, however, made that charges should not be too high as a result of the application of new principles.

In 1949, the French law provided that rates must be made to reflect differences in costs, as between various routes. As first step in this, rate revision was accomplished in 1951 by applying 'Station Indexes'. An index number was assigned to each station varying with the traffic volume it handled. This indexing was based on the observation that, in most cases, routes connecting important stations have more traffic and lower unit costs than routes connecting unimportant stations. Thus, the index served to reduce or increase the rate to reflect the high or low cost of the route employed. The impact of this measure of relative costs of different routes was greatest on the traffic already high-rated (hence most exposed to competition).

Since 1956, the SNCF have been putting the finishing touches on a more refined solution to the problem whereby rates would be made to vary according to the relative costs of each section of line over which a given shipment will move. This change was proposed in the tariff reform submitted for Ministerial approval in January, 1962. To establish this system it was first necessary to ascertain the basic costs of movements on each section of line of the SNCF. The purpose of this cost study of course, was not to determine costs in any absolute sense—but only cost relationships between different sections of line, so the rates could be varied to reflect cost differences. Thus, for this study only the marginal costs had to be included in the calculations. But, to establish an equitable relationship

*The French Railways (S. N. C. F.) are nationalised.

between costs of electrified and non-electrified lines, capital charges on overhead electrical installations were added to marginal costs.

In calculating costs of one section of line, compared with another, only permanent and geographical factors were taken into account. Temporary factors, such as the particularly high efficiency of a certain type of motive power in a given area, were not considered. Also, in making these calculations, they were made only on a basis of diesel or electric traction (although present operation might be by steam). In other words, the SNCF was "costing ahead in this study, not applying historical costs".

Rate reform has not stopped with this rationalisation of distances, but also included changes in the "shape" of the various rate scales in use. The most recent studies of costs have also entered into the changed shape of the rate scales, since these studies indicated that the old scales have failed to cover costs for short distances and have been more profitable than desirable for the longer hauls. Finally, the desirability has been recognised of reducing the spread but only to a moderate degree, at this stage of the differences in rates scales which are attributable to the kind of freight being hauled.

The new tariff reform is, thus a most complex operation. It is sought to develop greater realism in transport pricing (1) by differentiation according to the character of the route employed, (2) by applying suitable 'taper' in charges for longer hauls, and (3) by changes in that part of the charge which reflects the nature of the freight being hauled.

Many questions arise as to foreseeable consequences of this tariff revision. The first of these questions is the effect the revision may have on the allocation of economic activities in various sections of the country. Some have feared that the new rate formula may interfere with industrial decentralisation, by overcharging movement on secondary lines. "The French appear to consider that a close control and high degree of organisation are necessary for the transport market; and for that reason they are unwilling to let coordination based on free pricing—necessarily cost-based for commercial undertakings—to take its course. The French have been very cautious in moving towards cost-based rail rates and they are presumably far from it, as the variations contained in new scales are certainly not as wide as actual cost spreads".*

*Modern Transport, March 16, 1963.

UNITED KINGDOM

From 1850 to the middle of nineteen-twenties, no carrier other than railway was moving any significant volume of traffic, either passenger or freight, in inland transport. The regulation of rates and facilities which had developed by the end of the 19th century was required as much to avoid the consequences of competition between a few large railway companies, as to protect the public from the elements of monopoly which the railways enjoyed as a class. "The classification of merchandise by value raised contributions to railway revenues from the goods which could best bear it." Rates were charged on mileage. The scales were applied uniformly over the whole of the country. The loss was avoided by allowing the railways to make up for traffics the cost of which was higher than the average, from the revenues earned from those which could be carried more cheaply. This system, satisfactory to all parties, became in Great Britain a part of the law. After the First World War, the Rates Advisory Committee which was set up to suggest the rate principles for the newly constituted amalgamated companies concluded that the "old system was giving general satisfaction to the trading community as a whole". The new rates, therefore, in the Act of 1921, were fixed on a uniform basis and on continuous mileage as for one railway throughout.

Under the Railways Act, 1921, railway passenger and merchandise charges were fixed by the Railway Rates Tribunal. The 'standard charges' for merchandise were related more to the value of the merchandise carried than to the cost of carriage. The Transport Act, 1947 provided that charges to be made for certain services and facilities should be fixed by the 'charges scheme' which the British Transport Commission had to prepare and submit to the Transport Tribunal (succeeding the earlier Tribunal) for confirmation. The Transport Act, 1953, limited those services and facilities which were to be subject to the charges schemes, provided that the schemes should fix maximum charges only, and removed all restrictions upon the Commission's discretion to charge what they liked within the maxima laid down in the scheme. The British Transport Commission (Railway Merchandise) Charges Scheme, 1957, is designed to enable the railways to recover the cost of each traffic movement. The maximum charges authorised bear no relation to the value of the merchandise carried but are based on the 'loadability' of the consignment, its weight and the distance over which it is carried. It will be seen that the charges (where they are maxima) consist of a high initial charge per ton covering terminal charges and carriage for the first ten miles, with a comparatively low rate per ton mile thereafter.

The main advantage given by the new charges schemes to the railways in their competition with road hauliers is that only maximum charges have to be published, whereas previously all rates were published and road hauliers

*The British Railways are nationalised.

were thus made aware of which rate they had to undercut. The British Railways can now make what agreements they wish with traders, and the charges contained in such agreements are not known; nor are the commodities to which the agreements relate. It is not, therefore, possible to state what categories of freight traffic have been most affected by this policy. From the latest figures available, however, it would seem that the charging policies of the railways are enabling them just about to hold their own in the field of merchandise, and to do rather better in parcels traffic, in both of which the competition of road haulage is likely to be most severe.

As mentioned earlier, the charges which the railways make are not known. It is the stated policy of the British Transport authority to recover from each movement the direct costs attributable to it and, additionally, some contribution to indirect costs. But in view of the difficulties of costing individual traffics—and especially in the light of the scanty information available about traffic costs, which Dr. Beeching is working hard to remedy—there may be doubts about the success of this policy in practice.

The chief measures in the Transport Act 1962 which are expected to improve the railways' competitive position in relation to road transport are the following :

- (a) The railways have been freed from the obligation to provide 'reasonable facilities' and are thus able to refuse to carry goods which they regard as unsuitable or unprofitable. Thus they have been freed from their obligation as 'Common Carriers';
- (b) they have been freed from existing statutory terms and conditions of carriage, and are therefore entitled to accept traffic on such terms as they think fit; and
- (c) there is no control over their freight charges, or their passenger fares outside the London area.

As regards uneconomic services under the new legislation, the railways have no longer a statutory duty to have regard to the needs of the public, agriculture, commerce and industry. This in itself gives them some freedom. Within this broad framework, two aspects are important :

- (a) What happens about the withdrawal of uneconomic services; and
- (b) Are the railways to be compensated for running certain services as 'social' services, and if so, how?

On the first of these, the British Railways Board are free to withdraw freight services to any extent they desire, but proposals for total withdrawals of passenger services must go through the procedure laid down for the Transport Users' Consultative Committee. The Minister can give directions to the Railways Board to keep passenger services open where the Committee establish to his satisfaction that there would otherwise be social hardship. On the second question, that of payment for such services, there would not be a

direct subsidy for a specific line or service. But the cost of keeping open lines which had been the subject of a direction would be covered by :

- (a) taking account of the cost in the total subsidies paid to the railways; and
- (b) taking account of the cost in setting financial 'targets' under the procedure outlined in Comnd. 1337. (White Paper on Financial Performance of Nationalised Industries).

The new arrangements meet various criticisms or recommendations of the Select Committee on Nationalised Industries (1960) to the extent that :

- (a) the railways can go on closing unremunerative services, subject to the Minister's approval in the case of total withdrawals of passenger services;
- (b) decisions about social necessity for passenger services will be made by the Minister, who is accountable to Parliament; and
- (c) the losses will be provided through a Vote for which the Minister is also accountable.

The Select Committee wanted specific subsidies for individual services in these circumstances. The new arrangements do not provide this. It is perhaps worth mentioning that the Commission, in their reply to the Select Committee, pointed out the considerable practical difficulties in isolating the services for this purpose. The present arrangements will be adequate for the interim period (five years) during which the railways are not expected to pay their way, and their deficits will be met by the Exchequer. What will happen after five years depends on the progress the railways make towards viability, and on the results of the further financial review which the Government will be undertaking (as mentioned in para 47 of Comnd. 1248) towards the end of the period?

To sum up the present British transport policy, one may quote from the speech made by Mr. Marples, the U. K. Minister of Transport, while opening the two day debate in the House of Commons on the Beeching Plan for Reshaping of Railways on the 30th April, 1963. Mr. Marples, pointed out that "he intended a wide operation to work out a coordinated policy for transport as a whole and stressed the Government's determination that transport policy must be related to national planning and the growth and movement of industry and population." He further observed thus "we believe the first and most crucial is that in any democracy the customer himself must choose the most suitable form of transport, be it passenger or freight. After all, he pays—in a dictatorship it is otherwise. We believe the customer should decide whether he goes by road or rail and there should be no artificial restriction. Each form of transport must be allowed and encouraged to develop itself technically and be free to compete and to carry the goods for which it is best suited. Responsibility for a decision to close anything where passengers are concerned.....be it a station or railway—is not the Railway Board's or Dr. Beeching's—it rests squarely and fairly on the Government".

CANADA*

The main principle which has guided the rating policy of the railways in Canada since its earliest development was "charging what the traffic will bear". In addition, the Canadian rate structure incorporated one of the first attempts at geographical equalization of rates; the high rates charged on some rail lines or commodity lines were averaged with the extremely low rates on others. Also, the requirements of national development led the railways, with the active encouragement of the Federal Government, to grant low rates to raw materials and other low-valued commodities. The accepted pricing policy of railway services was that low-valued commodities would not move except at a price which was little above the out-of-pocket costs of performing the services and that the assistance required for such traffic could be contributed, without harm, by high-valued commodities. This ruled out the necessity of a pricing system based entirely on costs. "Thus the traditional principle of rate making, represented a form of cross-subsidisation under which some users of the rail service contributed through higher rates a relatively greater amount to the total transportation bill than did others—on a sort of capacity to pay basis. It sought to influence the character of the railway system so as to help over-come obstacles to national unity and promote the welfare of the country as a whole."

The new competitive environment since the end of the Second World War, brought about a breakdown of the railway monopoly in transportation services and a fundamental change in the railway pricing system. In 1949, the effects of motor transportation on railway traffic were assessed before the Royal Commission on Transportation. It was admitted that "motor transportation was attracting high-valued traffic away from the railways, where rates ranged between three cents and ten cents a ton mile. Motor transportation carriers were recognised to be economic carriers over the short haul". However, the railway pricing system was considered by the Railways as partly inflexible because of the need to maintain cross subsidisation of traffic, but still adequate to ensure the retention of a traffic volume sufficiently above the level of the late thirties to meet revenue requirements.

The Royal Commission on Transportation (1949-51) whose main concern was with complaints of regional inequities, recommended a substantial change in the foundation of the rate structure, principally the establishment of a uniform equalised class-rate scale and uniform equalized commodity mileage scales throughout Canada. The Commission stated in its report that the means of achieving the change

"point to a new departure in class-rates, and commodity mileage rates, and eventually, insofar as practicable, in special or specific rates for the Canadian portion of the North American Continent. It

*The two major railways are the Canadian National Railway and the Canadian Pacific Railway, of which the former is state-owned.

appears that Canada has reached a stage in its development when former methods of making regional rates must give way to a uniform rate structure that, as far as may be possible, will treat all citizens, localities, districts and regions alike."

On December 21, 1951, the Canadian Parliament enacted in part the recommendations of the Royal Commission on Transportation which determined uniform class and commodity rate scales. The Board of Transport Commissioners in its judgment on December 12, 1952, preliminary to the application of the amendment of the Railway Act with regard to equalization, stated that :

"the national freight rates policy calls for equality of tolls as therein provided even although the circumstances and conditions (for example, costs of railway operations, density of traffic) are not substantially similar."

The new approach emphasised the disregard of the cost of service principle in the pricing of railway services and reflected the thinking that railway rates could be made independently of competition. The equalization of class-rates was made effective since March 1, 1955.

Since 1955 a limited number of commodity rate scales have been equalised. The main difficulty encountered by the Board of Transport Commissioners was the lack of uniformity in commodity rates. The Board found that "commodity rates had been established less in relation to class rates than to circumstances peculiar to each commodity and the territory in which they apply."

This policy of equalization was frustrated by the growth of competitive forces. The traditionally high prices the railways charged for the movement of manufactured commodities gave an extraordinary headway to motor transportation. The attempts made by the railways to hold and gain traffic have forced pricing practices to take cognizance of costs of movements to an increasing extent in both modes. The railway management is now increasingly aware of the necessity of attracting traffic under conditions of price and service in conformity with cost patterns. On the question of pricing of services on cost-oriented basis, the Royal Commission on Transportation (1959-61) have observed thus :

"We regard this change to a more cost conscious pricing policy in all modes of transportation as consistent with the objectives of the National transportation policy. Where railways have cost advantages they should carry traffic if the price discount is sufficient to overcome any service disadvantages. To the extent that government subsidies are used to keep traffic confined to rails where no such advantage exists, there is misallocation of resources. If Government policy, or regulation, prevents the railways from setting prices to attract traffic on the basis of these advantages there is misallocation of resources."

The Royal Commission on Transportation (1959-61) have recommended that rate regulation must continue to stipulate a minimum limit for railways. With railways, extended over the nation, representing large capital investment in few firms, and less involved with each other in price competition, regulation must continue to assure that no rate should ever be set below the direct costs of the movement. Where railways continue to quote identical rates between points, the permissive minimum rate must be determined by the relevant costs of the higher cost route. The Royal Commission have recommended that "the Board of Transport Commissioners should continue to determine, after due consultation and consideration, the definition of out-of-pocket costs which shall be used as a criterion of minimum railway rates, and set up within a costing section of the Board, the necessary procedures for testing the minimum, either on motion of the Board or upon application from those parties able to make representations to the Board. No rate should be suspended until the Board is satisfied it is below the legal minimum."

The regulation of railway rate maxima has from its beginning been based on the assumption that railways enjoyed significant monopoly in overland transportation and, therefore, their pricing practices must be subject to public review. The objective of such rate regulation was to protect shippers from inequitable rates, qualified by the consideration that net rail revenues should be adequate to maintain railway operations. With the rapid advance of competition particularly in the last decade, the area of significant railway monopoly has been steadily eroded. In the areas and for commodities where competition has developed, it can provide a satisfactory ceiling on transport rates. However, in the areas where significant monopoly remains, the tendency towards inequities seems to have increased. The maximum rate control is necessary to provide a means of protecting those shippers in the non-competitive sector, that is, those shippers without adequate alternate transport. The most effective means of providing this protection is a suitable maximum rate control for this diminishing volume of captive traffic. Such control sets the limit to which the burden which any particular shipper must expect to bear. The Royal Commission have recommended that the cost structure of the railways, with their relatively high proportion of fixed to variable costs must be reflected in maximum rates. "Any new system of maximum rate control must provide a measure of defence against significant monopoly in the movement of these commodities. Yet, to be realistic, consideration of degree of significant monopoly must begin at the base point that maximum rate ceilings must not worsen the financial position of the railways, or captive commodity movements will have no means of transportation at all."

The Royal Commission on Transportation (1959-61) have also referred to the burdens imposed on the Railways in Canada by reason of law and public policy, such as unprofitable passenger or branch lines, obligations to carry grain and grain products at statutory rates etc. The following are

some of the main recommendations made by the Royal Commission on the subject :

- (i) The regulation of transportation in Canada should be minimised as much as possible, consistent with protection of the public interest, and such regulation as is retained should bear in a reasonably equitable fashion on all carriers.
- (ii) In the more settled parts of Canada the most efficient transportation system can be obtained by competition between and within the different modes. In the newer areas it is still possible, and in many cases desirable, to restrict competition.
- (iii) Rationalisation of railway plant and operations should be actively encouraged by public policy and where, for national policy reasons, it is considered necessary to retain rail operations such as unprofitable passenger or branch line services, the railways should be entitled to payment from public funds to cover their deficits on such services.
- (iv) No particular form of transport should be singled out as an instrument of national policy if any burden is involved in the performance of the function unless sufficient compensation is provided to that mode of transport to prevent distortions in the competitive transportation market.
- (v) Assistance to transportation which is designed to aid on national policy grounds, particular shippers and regions should be recognised and not be disguised as a subsidy to the transportation industry. Moreover, assistance of this kind should be available on a non-discriminatory basis to all carriers.
- (vi) Railway branch line network is no longer vital to either the well-being of the communities on the branch lines or the larger society as the truck has essentially removed the feeder function from railways. The objective should be to have a rail system in which the uneconomic portions would be small, kept in existence because of national necessity to provide a certain level of service in certain areas. Such lines which incur losses by commercial criteria should be a burden on public at large and not other users of rail transport.
- (vii) Railways must withdraw eventually all uneconomic rail passenger services because of the impact of competition from airlines, bus lines and private passenger cars. This will bring about a reduction in the inequalities. There is little social justification and less economic, for the permanent provision of rail passenger services. In the interim, it is important that the burden resulting from losses on railway passenger services be lifted from the freight shipper. The Commission have recommended that an annual grant of \$ 13 m. be made available to railways to

provide compensation of losses actually incurred in operation of lines which the railways are prepared to abandon, but shall be continued for some time.

- (viii) Losses associated with the obligation to carry grain and grain products to export positions at a rate set by statute, should in future be borne by Parliament of Canada, who sets the statutory rates.
- (ix) Where the law compels the railways to extend free or reduced carriage, they should be compensated so that railways do not bear the burden which does not properly belong to them.
- (x) There is a danger that an approach to National Transportation Policy which is excessively pre-occupied with its financial aspects may tend to overlook the high national objectives which would not otherwise have been attained. But it is quite apparent that as long as the transportation system is required to perform services which do not reflect commercial incentives, financial assistance from the Government will be a necessary concomitant of transportation policy.

The Royal Commission on Transportation submitted its Report in December, 1961. Although it had been stated in the speech from the Throne in September, 1962 that the Government had under consideration some recommendations based on the Report of the Royal Commission on Transportation, and that legislation would be forthcoming, the somewhat fluid political situation in Canada did not permit any Resolution or Draft Bill to be introduced in Parliament before it was dissolved in February, 1963. The new Government has yet to take action on the Report.

UNITED STATES OF AMERICA*

The U.S. Transportation Law affecting rate regulation has undergone considerable change since the original Act of 1887. The original Act applied to railroad carriers and its rate provisions were designed to combat evils of discriminatory pricing. These evils were considered to be the most important of the causes of the complaints against the railroad system. The railroad rate structure which evolved under the early days of regulation was strongly influenced by value of service considerations. This meant that rates for particular services were not closely related to the costs of providing those services, but rather might be considerably above or below any fair estimate of these costs. The railroads had become 'common carriers' of virtually all commodities known to commerce and thus was placed upon the railroads the obligation to serve all without discrimination at reasonable and not unjustly discriminatory rates. Costs of handling of particular traffic could be and were ignored in considerable degree, and little effort was made to ascertain the costs for particular hauls or service. The system of rates was based upon internal subsidisation. The costs of supporting the railroad system were distributed upon classes of traffic, communities, and particular hauls in rough accord with the supposed ability to pay.†

Following World War I, pressure of the need for rehabilitating railroad credit and supporting the transportation system as a whole led to the Transportation Act of 1920. Section 15a of the Act of 1920 provided that the Inter-State Commerce Commission which was charged with the responsibility of establishing and maintaining an adequate transportation system in the country, should so adjust rates that carriers as a whole earn an aggregate income equal to a fair return on the value of their property. This part of the law proved to be unworkable and led to the rate-making rule (section 15a(2)). The amendment authorised the Inter-State Commerce Commission to fix minimum as well as maximum rates. Prior to this, the Commission merely had the authority to prescribe maximum rates. The revised rule of rate-making directed the Inter-State Commerce Commission to give due consideration to :

- (i) the effect of rates on the movement of traffic;
- (ii) the need of the public for adequate and efficient railway transportation service, at the lowest cost consistent with the furnishing of such service; and
- (iii) the need of revenues sufficient to enable the carriers to provide such service.

The extension of rate regulation to motor carriers, water carriers, and freight forwarders, which was brought about by the Acts of 1935, 1940 and

* The railways in U.S.A. are all privately-owned.

† U.S. Department of Commerce, Rationale of Federal Transportation Policy, April 1960.

1942 created difficult problems concerning the application and rationale of minimum rate policy. These problems involved questions concerning the competitive relationships between the various modes, and the appropriate limits to rate cutting when regulated carriers vied for traffic.

The addition of Section 15a(3)* to the Transportation Act of 1958 had to be made due to inadequacy of the existing statutes for dealing with the complex regulatory problems. The minimum rate policy was characterised as inconsistent. In a report accompanying the Transportation Act of 1958, (Section 15a(3)), the Senate Committee on Interstate and Foreign Commerce stated that each form of transportation should have the opportunity to make rates reflecting different inherent advantages each has to offer so that the public may exercise its choice, cost and service both considered. The report further stated that it appeared from the record that the Inter-State Commerce Commission had not been consistent in allowing one or another of the several modes of transportation to assert their inherent advantages in the making of rates and therefore, the Committee recommended that the Commission consistently follow the principle of allowing each mode of transportation to assert its inherent advantages, whether they be of service or cost. The Senate Report declared that Congress intended that rates of each transport agency should be determined in each case according to the facts and circumstances attending the movement of the traffic by that agency. In other words, "there appears to be no warrant for believing that rail rates for example, be held up to a particular level to preserve a motor-rate structure or vice versa." Continuing, the Senate Report stated that "it anticipated that the broad effect of the amendment would be to encourage competition between the different modes to the benefit of the shipping public, and that it would produce consistency in the interpretation of the national transportation policy."

A recent Report† of the U.S. Department of Commerce has strongly criticised the existing rate regulatory policy. It has recommended that Government regulation should place the carriers in a position to compete fairly with each other. Since rates are a crucial factor in the competitive struggle, changes should be slow. Broad and general revisions reflecting the underlying cost relationships are to be preferred to sporadic and selective rate cutting activities. The improved methods of cost analysis will enable the regulatory agencies to set maximum and minimum criteria rather than specific detailed rates, and the carriers will have the normal managerial initiative of other American enterprises.

*Section 15a(3) of the Transportation Act, 1958 provides: "In a proceeding involving competition between carriers of different modes of transportation subject to this Act, the Commission, in determining whether a rate is lower than a reasonable minimum rate, shall consider the facts and circumstances attending the movement of the traffic by the carrier or carriers to which the rate is applicable. Rates of a carrier shall not be held up to particular level to protect the traffic of any other mode of transportation, given due consideration to the objectives of the national transportation policy declared in this Act."

†Federal Transportation Policy and Program (1960).

The main drawbacks of the existing rate practices, according to John Doyle* are the following :

- (a) Rates presently fail to adequately reflect the costs of producing service. As a result :
 - (i) rate policy fails to promote maximum efficiency in the use of existing transportation facilities;
 - (ii) rate policy tends to produce an uneconomic distribution of traffic and it handicaps common carriers.
- (b) The second major drawback of existing rate practices consists of the opportunities which may exist for predatory rate-making which threatens the maintenance of sound diversified transportation system by placing in jeopardy carriers that have an economically justifiable role. The danger of unfair competitive rate making is increased by the fact that present pricing policy sanctions selective rate-making. This means that a rail carrier can introduce a low rate into one area which rate does not apply to other areas. It has enabled rail carriers to engage in types of competitive rate making which have properly been characterised as unfair competition.
- (c) The third drawback of the existing rate policy is that it does not tend to encourage use of efficient new transportation techniques. This is particularly true of integrated transportation service between the modes including such techniques as containerisation and piggy-back.

President Kennedy in his Transportation Message to the U.S. Congress in April, 1962, referred to the question of rate regulation of various transport carriers. He observed that :

“some carriers are subject to rate regulation on the transportation of particular commodities while other carriers, competing for the same traffic, are exempt. Some carriers benefit from public facilities provided for their use, while others do not; and of those enjoying the use of public facilities, some bear a large part of the cost, while others bear little or none.”

He has, therefore, asked the Congress to do away with minimum rate regulation on bulk and agricultural commodities and on passenger fares. The exemption would apply to all carriers subject to regulation by the Inter-State Commerce Commission. The purpose of this exemption is to equalise competitive opportunities between carriers of different modes of transportation and to permit the forces of competition to replace cumbersome regulation for these commodities. At present the transportation of bulk commodities by water carriers is exempt from all rate regulation under the Interstate Commerce Act, including the approval of minimum rates; but this exemption

* Report of the Special Study Group on Transportation Policies in the United States of America (1961).

is denied to all other modes of transportation. Extending to such other carriers the exemption from the approval or prescription of minimum rates would correct this inequity.

Similarly, the exemption from minimum rate regulation for the transportation of certain agricultural and fishery products (specified in section 203(b) of the Interstate Commerce Act) now available only to motor carriers and freight forwarders would be extended under this section to all carriers subject to the Interstate Commerce Act. The purpose of this amendment, like the exemption from minimum rate regulation for bulk commodities, is to reduce drastically and equalise fairly the regulation of freight rates in the country. Freed to exercise normal managerial initiative, carriers will be able to rationalize their operations and reduce costs; and shippers should consequently enjoy a wider choice, improved service and lower rates.

To prevent the absence of minimum rate regulation under the above proposals from resulting in predatory, discriminatory trade practices or rate wars reflecting monopolistic ambitions rather than true efficiency, there is included a provision making carriers who engage in such practices subject to relevant 'anti-trust' laws.

President Kennedy has resubmitted to the U.S. Congress on 5th March, 1963 drafts of two major Bills, designed to implement proposals made in his transportation message of April, 1962 on which no conclusive action was taken by the 87th Congress. The President has observed thus :

"In my message to the Congress last year, I pointed out that the basic objective of our transportation system must be to assure the availability of fast, safe and economical transportation, services needed in a growing and changing economy to move people and goods, without waste or discrimination, in response to private and public demands, at the lowest cost consistent with health, convenience; and national security. In that message I recommended a number of legislative steps to accomplish this purpose.

"If action is not taken to establish a transportation policy consistent with the new demands upon the economy, we face serious problems of dislocation and deterioration in both the transportation industry and the economic life of the nation which it affects. I urge that action be taken to establish such a policy.

"Our objectives must be achieved, primarily, by continued reliance on unsubsidised, privately owned facilities, operating under the incentives of private profit and the checks of competition insofar as this is practicable. The law should provide a consistent and comprehensive framework of equal competitive opportunity that will achieve this objective at the lowest economic and social cost of the nation.

"There must be equality of opportunity for all modes and for all passengers and shippers, without any special preferences. There should be maximum reliance on the forces of competition consistent with a continuing need for protection against destructive competition between forms of transportation or between competing carriers. . . ."

ARGENTINA*

In December 1959, the Government of Argentina requested the U.N. Special Fund for assistance in making a survey of the country's transportation system "for the purpose of coordinating plans for development and improvement and assigning priorities to the investments which will necessarily have to be made. . . ." The International Bank for Reconstruction and Development served as Executive Agency. The long term studies conducted by the Transport Planning Group, which comprised the representatives of the Argentine Government, the U.N. Special Fund and the World Bank, related to integrated transportation plan including the investments, organisational and institutional improvements, and policies concerning regulation, rates and tariffs, labour and other measures needed for an effective plan. The Minister of Public Works and Services served ex-officio as Chairman of the Planning Group.

The freight rates structure of the Argentine Railways possesses the characteristics that have traditionally characterised railway rate structures in other countries, namely :—

1. A system of classifying freight into a limited number of groups or classes for rate-making purposes;
2. Recognition of both cost-of-service factors, and value-of-service, or demand factors in determining the class to which an article is assigned;
3. Use of distance scales of rates for the various classes of freight with some degree of tapering of the rates, that is, with rates, increasing less rapidly than distance; and
4. The use of "special rates" for traffic movements for which the rates determined by the classification and basic scales do not seem appropriate.

The basic tariffs are characterized by rates that increase with distance, but which exhibit the tapering principle to a limited extent. The new scales taper somewhat less than the old scales. Although the initial rates are higher, the rates increase less rapidly with distance for the shorter distances than the previous scales, but increase more rapidly than the old scales for the longer distances. The result is to give the rate lines less of a taper than the ones which they have replaced.

A uniform level of basic rates is maintained by the Argentine Railways. Many of the special tariffs, likewise apply on all the railways and are on a uniform basis. The transportation costs differ on different lines of railway and in different areas. Part of the difference in costs is to be explained by differences in traffic density, and part by differences in operating conditions encountered. Since unit costs of railway transport decline with increasing density, particularly when the absolute density is low, a rate level that is

* The Argentine Railways are state-owned.

adequate for heavy-density lines is quite inadequate for lines of light density. Not only is there a wide variation in traffic density on Argentine Railways but there is a great variety in operating conditions arising largely from the characteristics of the terrain over which they operate.

The demand for uniformity of rate levels stems from a desire to give equality of opportunity for economic development of all areas. When natural obstacles impose higher transport costs on some areas than on others, the equalization of rate levels constitutes a subsidy to such areas at the expense of the shipping public generally. This spreading of transport costs over the whole shipping public finds its justification in political or social considerations, or in terms of broad national economic policy.* In view of the fact that Argentina has chosen to establish a uniform level of rates, and because there is a recognized need for the decentralization of the population and the development of the interior of the country, the Transport Planning Group is of the opinion that Argentina need not abandon its present policy of uniformity in the rate level. Many railway lines on which operating costs are higher than the average are undoubtedly lines which are important to the development of the areas which they serve. The imposition of higher rates on such lines could handicap their development. "If, however, a rate system can be devised which imposes higher rates on such lines but which makes appropriate exceptions on traffic that is important for the economic development of the area, the main objection to uniformity would be overcome. The attainment of somewhat greater revenue in the high cost areas would be achieved, yet the economic development of the areas would not be hindered by the higher rates. The readjustment of rates generally in conformity with this plan would be extremely difficult."

It is, however, evident that the information required for sound rate making policy is not easily obtainable. "In fact, some of it in the very nature of things is impossible to obtain precisely. Rate-making is a matter of judgment to a considerable degree, and trial-and-error methods must be utilized to correct errors of judgment that will inevitably be made. Nevertheless, the range within which reliance must be placed on judgment can be considerably narrowed."

The Transport Planning Group have suggested that two areas of enquiry must obviously be recognised if rate-making is to proceed on sound lines. The first of these is in the area of costs. The railways need to do much in this area, employing experts who are familiar with, or can become familiar with, the work in railway cost finding in other countries. In this connection, the Group have observed that the average cost of moving all traffic is of practically no significance in rate-making. It is the cost of moving particular commodities, or the cost of particular freight movements that often needs to

* It was on the basis of a broad public interest in supporting a railway transport system that was adequate for the country as a whole that the Supreme Court of the United States upheld, as not unreasonable, higher rates on stronger railroad than were necessary to support them; but which were based on the needs of all the lines in the region. (Dayton-Goose Creek Ry. Co. V. United States, 263 U.S. 456, 480, 1924).

be obtained, and this is often a difficult operation. It should also be apparent that determination of long-run variable costs is of prime importance in rate-making. The railways need to know more about the degree to which their costs may be expected to vary with changes in traffic volume. In other words, they need to know the extent to which, under prevailing conditions, their costs are variable and the extent to which they are more or less constant regardless of changes in traffic volume.

A second field in which more information is needed relates to the nature of the demand for transport services. Rate-making authorities need to be fully cognizant of the limitations imposed by 'what the traffic will bear' considerations. Obviously, rates that will not move traffic bring no revenue to the railway, while rates that will permit traffic to move in substantial volume are profitable to the carrier provided variable costs are covered and some contribution is made to fixed costs. In order to have this information, the rate-making officials need to have close contact with shippers of freight. They need to know as much as it is possible to know about the effect that changes in rates, up or down, will have on the industries whose raw materials and whose products they carry. In this connection the Report has drawn attention to the Market Research Office of the Dutch Railways, the function of which is to become fully informed of the transportation requirements of the various commodities shipped and of the needs and wishes of shippers.

In addition to these areas in which the railways should be better informed, there is another need if rate-making is to be carried on effectively. Railway officials should have a genuine interest in the needs of their patrons, and they should recognise that railways exist to serve the requirements of the people and communities on their lines and the needs of the areas in which they operate. It is easy for officials of government-owned railways to become indifferent to these needs. "It sometimes happens of privately-owned railways also, but self-interest often compels them to heed the desires and demands of the producing interests of the areas they serve. This force does not operate as strongly when the railways are a state enterprise. But the fact that they are a state enterprise is itself a recognition that their function is to serve the interests of the citizenry."

To implement efforts to obtain knowledge of shipper needs and to induce responsiveness thereto, the railways should consider what organizational set-up would be most appropriate to attain this objective. Such an organization, however, should not become an instrument for handing out special favours or concessions to the detriment of other shippers.

The following specific recommendations have been made by the Planning Group with respect to the rate structure :

1. The railways should recognize that the former practice of charging high rates on valuable commodities has been rendered largely impossible by the development of highway competition. Recongnition of

this fact is seen in the recently revised rate system; but the railways should be continually on the alert to make further modifications of their rates to prevent the diversion of such traffic.

2. Rates on low-rated commodities should be scrutinized to eliminate any rates that fail to cover long-run variable costs.
3. Rates on particular commodities should be continuously re-examined to determine whether these commodities are making as large a contribution to fixed costs as can reasonably be expected.
4. The practice of tying special tariffs to basic distance scales results in undesirable inflexibility in the rate-structure, and prevents the railways from reflecting both costs of service and demand factors in rates for particular movements.
5. To implement more effective rate-making the railways should employ experts who are or can become familiar with the work in railway cost determination that has been carried on in other countries, and who can employ these techniques to cost finding on the Argentine Railways. The railways should also become more fully aware of factors affecting the demand for transport, the needs of shippers, and the effect of rates on the movement of traffic, and should develop an understanding of the transport needs of the various economic interests of the Nation.

NOTE :—The Transport Planning Group submitted its Report to the Government of Argentina in early 1962. The recommendations made in the Report have yet to be accepted by the Government.

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