Public Works (1898) Department

Print wanted

RAILWAY BRANCH.

G.O., No. 1296-97-98

DATED 19th Octr 1898

Includes.

G. of I. No. 849 Rly dy 23-6-98.

[Despatch Abstract.]

Metre Gauge Policy for the Madras Ry and its Extensions

Ordered that a copy of letter from the Agent & Manager, Mly & of its enclosures containing an estimate of the cost of, and an expression of his views in regard to the —— be submitted to the Govt of India & Copy of these Proceedings forwarded to the Secy of State

Forwarding a copy of letter from the Agent & Manager, Mly & of its enclosures containing an estimate of the cost of, & an expression of his views in regard to the —

Indexed

[P. W. D. 10—24-3-98.]

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

	No.	Department.	Date.	G.O.	No.	Department.	Date.

RAILWAY.

Government {1898} of Madras.

PUBLIC WORKS.

Recd.
Regd.
} 1898.

Enclosures
Spare copies

G.O., No. 1296 Ry., 19th October 1898.

OCTOBER.

Metre Gauge Policy for the Madras Railway and its extensions

Directing that a copy of a letter from the Agent and Manager, Madras Railway, containing an estimate of the cost of, and an expression of his views in regard to the —, be forwarded to the Government of India with remarks.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following papers :—

Read again G.O., No. 526 Ry., dated 4th April 1898.

Also, letter from the Government of India, dated 31st May 1898, No. 706 R.C., contained in G.O., No. 852 Ry., dated 23rd June 1898.

From—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
To—The Secretary to the Government of India, Public Works Department, Simla.
Dated—Ootacamund, 23rd June 1898, No. 849 Ry.

I am directed to acknowledge the receipt of your letter No. 706 R.C., and in reply to inform you that steps shall at once be taken to obtain an expression of opinion, in regard to the important Railway policy therein referred to, from each of the Railway Companies interested, as well as from Chambers of Commerce and other representative bodies. But as this will take some little time, I am desired to offer, meanwhile, the following remarks.

2. The fact of your referring only to my letter, No. 527 Ry., dated the 4th April 1898, and not to any of the subsequent letters on the same subject, marginally noted, and also your use of the words "West of Erode" in paragraph 2, instead of "West of Podanur", would apparently justify the presumption that the Government of India failed to appreciate that the suggestion made by the Madras Railway Company's Board of Directors, in their letter to their Agent, No. 970, dated the 11th March 1898, made it possible for this Government to so far modify its original proposal as to suggest Podanur instead of Erode as the most suitable point for break of gauge, thus making conversion unnecessary on the 60 miles between Erode and Podanur.

No. 540 Ry., dated 6th April 1898.
No. 613 Ry., dated 23rd April 1898.
Note for Railway Conference of 1898, and letter, No. 689 Ry., dated 4th May 1898.
No. 725 Ry., dated 14th May 1898.
No. 765 Ry., dated 27th May 1898.

3. There is another matter to which I am instructed to invite particular attention, because a perusal of your letter now under reply would, in the opinion of His Excellency the Governor in Council, appear to indicate that the importance of the motives which have led this Government to advocate this particular Railway policy has not been duly appreciated. The Erode-Nanjangod line has not been proposed for the sake of forming a metre-gauge link between the two great metre systems by which the Madras Railway is flanked. It, in common with the Podanur-Dindigul, the Cochin branch, and the Cannanore extension, have been pressed for in order that the main south-west line of the Madras Railway, which at present traverses a wide tract of country in the form, practically, of a feederless trunk, may be furnished with a suitable system of feeders, without which the commercial requirements of the country purporting to be served by the trunk line cannot be adequately met. The Erode-Mysore branch of the Madras Railway would certainly, but merely incidentally, form a connecting link between two metre-gauge systems, and this is an additional reason why it should be on the metre gauge; but the main reason is that, in the opinion of this Government, that gauge will quite suffice to handle any traffic that is ever likely to be attracted to it.

4. This Government, as at present advised, fails to see the reasonableness of the Government of India's stipulation that it be made a condition that the Southern Mahratta and South Indian Railways shall have running powers over the Erode-Mysore branch of the Madras Railway. There would appear to be no reason to anticipate any

such flow of traffic between the two metre Companies' lines as cannot quite adequately be met, to the full satisfaction of traders, by the ordinary facilities afforded by through-booking agreements and by the ordinary rules for interchange of rolling-stock. The main object of the proposed Erode-Mysore branch of the Madras Railway is to bring into direct touch with the Madras Railway system, and of course through it with the South Indian Railway system, the trade of South Mysore which concentrates at, and is financed in, the City of Mysore. This question, however, of the necessity for granting running powers over this branch to foreign lines, shall be dealt with more fully in due course when inquiries about the course of trade, in connection with the policy under reference, shall have been more fully matured. As at present advised this Government sees no more reason for the grant of such powers than might be held to prevail in the case of many other links throughout India where running powers are not proposed to be granted.

5. You express the opinion that it is by no means clear that if running powers are granted to the Southern Mahratta and South Indian Railways over the Erode-Mysore branch, the Madras Railway Company would consider it worth their while to go to a large expense, so near the possible termination of their contract, in converting their broad gauge line for the sake of obtaining the right to make this branch. But in the first place what it is proposed to offer to the Madras Railway Company is not merely the Erode-Mysore branch, but the Podanur-Dindigul and Shoranur-Cochin branches also, as well as a connecting link between Mettupalaiyam and Satyamangalam, all forming, with the converted sections and the Nilgiri Railway, a *reseau* of metre-gauge lines, 577 miles in extent, and of a shape most suitable for economical working. This *reseau* it is proposed to offer them in lieu of the 173 miles of trunk, from Podanur to Cannanore, branchless except for its feeder to the Nilgiris.

6. It is proposed that, for the sake of securing these advantages, and they seem to His Excellency in Council to be well worth their securing, the Company should consent first to convert 137 miles of standard gauge line to metre, at a cost which may presumably be estimated at under 1½ lakhs for the road alone with an additional sum for transhipment arrangements; second to incur the expense of metre gauge rolling-stock for some 550 miles of line; and third to build workshops and whatever may be necessary at Podanur for the upkeep of this metre-gauge rolling-stock.

7. But it must not be forgotten that against these three items of expenditure must be set, at the credit side, the following savings. First the very large reduction in the cost of the 62 miles of the Cannanore extension; second the setting free, for use on the remainder of the broad-gauge system, of the existing rolling-stock of 137 miles of line to be converted; third the saving which it will be possible to effect of the contemplated and at present urgently demanded extension of the main workshops of the Company at Perambur; fourth the saving which will be secured by the proposed strengthening of certain bridges becoming unnecessary, and in its being found possible to utilize existing weak broad-gauge girders on the projected metre-gauge branches. So far as can at present be judged, pending the preparation of estimates, the net results of these Capital items ought to work out very largely favourable to the Company.

8. Then, as regards the revenue side of the account, it appears to this Government that the cost of handling the comparatively small quantity of goods which must break bulk at Perambur will be far more than balanced by the saving accruing from the use of the metre gauge on a portion of the Madras Railway Company's system where the broad gauge is more than adequate for any present or future traffic requirements.

9. The actual need for continuity of gauge between the east and west coasts of India in the part of this Presidency which is traversed by the south-west section of the Madras Railway must not be gauged by the same measure as would be applied had a similar problem to be solved on the North-West Line which connects Madras with Bombay or on the Peshawar-Kurrachee or the Calcutta-Bombay or even on the Calcutta-Kurrachee connection. So far as can at present be judged, pending the completion of traffic analyses, the through traffic *viâ* Podanu between the east and west coasts is very small indeed. There is reason to believe that the interests of the Madras merchant in the trade of the west coast and of the Malabar merchant in the trade of Madras, as measured in weight of goods dealt in, would be more

than amply provided for by a daily train or two on a 2 feet gauge line. The flow of the bulk of the traffic is at present believed to be from Podanur and its neighbourhood towards both coasts and *vice versâ*. Station-to-station traffic figures are being carefully analysed with a view to ascertaining the truth or otherwise of this surmise, and the results shall in due course be communicated.

10. As regards the reference, at the end of paragraph 5 of your letter under reply, to the advisability of the prosecution of work on the Cannanore extension being stopped until the question of its gauge shall have been settled, I am instructed to inform you that work on the first 26 miles is being prosecuted so far as is possible without prejudicing the gauge question, and that as much indeed is being done as is possible in the present state of the season. There has so far been no necessity to seriously obstruct progress, and a full measure of control over all work is retained.

11. As regards the remarks made about the Cochin line in your paragraph 8, I am directed to say that this Government do not consider it to be desirable to interfere in the exercise by His Highness the Rajah of Cochin of his own discretion in regard to the selection of the gauge for the railway which he is about to propose to construct entirely out of his own resources, and the more so in that His Excellency in Council concurs with His Highness the Rajah in the opinion that the metre gauge is in this case the right one.

From—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
To—The Secretary to the Government of India, Public Works Department.
Dated—2nd August 1898, No. 994 Ry.

As it now seems practically certain that the Mettupalaiyam-Coonoor Railway will be opened for all traffic on the 1st of October next, and as, if Government is to be relieved of the onus of its guarantee, it is most important that cart and tonga competition should not come into existence, I am directed to invite special attention to paragraphs 3, 4, and 5 of my letter No. 765 Ry., dated the 27th May 1898, in which the early conversion from broad to metre gauge of the 25 miles Podanur-Mettupalaiyam branch of the Madras Railway, was strongly recommended.

2. This Government is convinced that the conversion would go far to render cart and tonga competition inoperative. There seems every reason to believe, that for the present, no more rolling-stock would be required than the Nilgiri Railway Company now possess, and certainly no more than they will possess when their extension to Ootacamund is sanctioned.

3. The cost of conversion of this section has now been estimated by a committee of officers of the Madras Railway Company as follows for the 26 miles:—

Road	Rs.	21,420
Bridges	„	15,017
Stations	„	12,904
Total ...	Rs.	49,341

4. As regards the question of the allocation of the cost of conversion, I am directed to invite your attention to paragraphs 8 and 9 of the note by the Examiner, Guaranteed Railway Accounts, Madras, which accompanied my letter, No. 725 Ry., dated the 14th May 1898, and to say that in the opinion of this Government there are the strongest grounds for treating this charge exceptionally, and for debiting it to Capital instead of to Revenue. For it is scarcely reasonable to expect that a body of shareholders who are now beginning to earn surplus profits, will consent to forfeit these profits for the sake of securing benefits to Government, and to another Company which there is but a remote prospect of their sharing.

5. The Secretary of State's despatch, referred to in the Examiner's note, recognizes that there will be such exceptional cases, and in the opinion of this Government this is one of them. To rule that the charge must be a revenue charge, would be practically equivalent to ruling that the conversion shall not take place,—a decision which, in the opinion of His Excellency the Governor in Council, would be greatly to be deprecated.

From—The Honorary Secretary, Malabar Chamber of Commerce.
To—The Joint Secretary to Government of Madras, P.W. Dept., Ry. Branch.
Dated—9th July 1898.

I have been directed by the Malabar Chamber of Commerce to acknowledge receipt of copies of G.O., No. 852 Ry., 23rd June 1898, on the subject of the Madras Railway metre-gauge conversion and extension policy, which were distributed amongst its members with a view to eliciting an expression of their opinion.

2. A meeting of the Chamber was held on the 8th instant to discuss the subject, and I now have the honour to inform you that the proposed conversion of the Madras Railway from Podanur to Calicut, to metre-gauge from its present gauge, meets with the approval of the Chamber, and in its opinion the Calicut-Cannanore extension should be constructed on the same gauge, with a view to the conversion in question being carried out by the time that the extension will be completed.

3. The Chamber has been greatly influenced at arriving at this decision, from the fact that it recognizes that there is more likelihood of the line which it has so long advocated from Tellicherry to Mysore through Coorg being constructed if the extension from Calicut to Cannanore is on the metre-gauge; this will facilitate its being linked up with the line on the same gauge terminating at Mysore, and the cost of construction will not be prohibitive, as it might be on the broad gauge.

4. It further appears to the Chamber to be only a question of time before the extension of the railway northward to Mangalore will have to be considered; that important and thriving town must be placed in railway communication with the rest of India, and if the Mangalore-Arsikeri scheme is to be abandoned, the only alternative would appear to be an extension from Cannanore, which, with the Chamber's knowledge of the country between the two towns, would only pay if constructed on the metre gauge.

5. With reference to paragraph 9 in the note by the Consulting Engineer for Railways, Madras, dated 17th June 1898, the Chamber endorses the opinion expressed therein, that the flow of the bulk of the traffic on the Madras Railway is from Podanur and its neighbourhood towards both the coasts and *vice versâ*.

6. Amongst the extensions proposed is that of one of 118 miles between Podanur and Dindigul; the Chamber is of opinion that trade and the interests of the country would be better served by a line from Palghat to Dindigul. It understands that a petition to this effect largely signed has been sent in to Government.

7. I am instructed by the Chamber to urge upon Government, that there be no more delay than is absolutely necessary in the construction of the extension of the line from Calicut to Cannanore, and the conversion of the line from Podanur to Calicut to metre-gauge. If the information the Chamber is receiving is correct, it would appear that, even now, the Engineers in charge of the extension could make better progress if the officer appointed by Government to hand over the land required could cope with the work; the Chamber respectfully suggests that if this is the case a second officer be appointed to assist him.

In conclusion, I am desired to express the thanks of the Chamber to Government for giving it an opportunity of expressing its opinion on the subject in question.

From—The Honorary Secretary, Cochin Chamber of Commerce, Cochin.
To—The Joint Secretary to Government of Madras P.W. Dept., Ry. Branch.
Dated—22nd July 1898.

G.O., No. 852 Ry., 23rd June 1898, having been circulated among the members of this Chamber, a special meeting was held this morning for the purpose of considering the same, and I have now the honour to inform you that the proposals of Government regarding the Madras Railway metre-gauge conversion and extension have the entire support and approval of this Chamber.

In view of the possibly early construction of the Shoranur-Cochin line on the metre-gauge, as also the Tinnevelly-Quilon extension on same gauge, with the probable linking up of the two systems within, it is to be hoped, no great distance of time, this Chamber is of opinion that a policy which advocates the whole West Coast

to be of a uniform gauge, is one deserving of fullest support. Such a gauge would be ample to cope with the trade, is cheaper, and has consequently greater possibilities of extension.

I am further directed to suggest that, before deciding on the new branch line Dindigul-Podanur, the claims of the other route Dindigul-Palghat should be favourably considered, as in the opinion of this Chamber the trade of Malabar would be more advantageously served by the latter line.

From—The Chairman, Chamber of Commerce, Madras.
To—The Joint Secretary to Government of Madras, P.W. Dept., Railway Branch.
Dated—30th July 1898.

I have the honour to acknowledge the receipt of the order of Government, No. 852 Ry., dated the 23rd ultimo, inviting an expression of the opinion of this Chamber on the proposed Madras Railway metre-gauge conversion and extension policy.

This Chamber has carefully considered the scheme set forth in the papers that accompany the Government order, and its members are unanimously of opinion that the scheme, if carried out, would be generally advantageous to the trade of the Presidency, and, therefore, deserves the Chamber's support. In the Chamber's opinion, too, the scheme offers a satisfactory solution of the disabilities under which the Madras Railway Company would suffer by a policy that proposed to allow the existing metre-gauge companies to intrude upon what has always been considered the special territory of the Madras Railway Company. Concerning this aspect of the matter, the Chamber wishes to emphasise its adherence to the views already expressed in its letter of the 2nd May 1888, quoted as an appendix to the Consulting Engineer's note of the 17th June 1898.

The details of the scheme that has now been sketched by the Consulting Engineer will require very careful consideration, but the Chamber feels that these may well be left to be settled between the Railway Department of Government and the Railway Companies concerned. All that the Chamber desires specially to urge is that there should be a speedy settlement of the many minor questions involved, so that the lines on the West Coast may not be unduly delayed by reason of the change of policy proposed.

From—The Honorary Secretary, Nilgiri Planters' Association.
To—The Consulting Engineer for Railways, Madras.
Dated—Kotagiri, 1st August 1898.

In further reply to your letter of July 18th, I have the honour to state that at a meeting of the Nilgiri Planters' Association, held on July 30th at Ootacamund, the following resolution was passed:—

"Madras Railway Metre Gauge Conversion and Extension Policy. Resolved that the policy of the Madras Government has the hearty support of the Nilgiri Planters' Association."

Order—No. 1048 Ry., dated 13th August 1898.

Copies of the communications read above, from the several public bodies who have been consulted about the change of gauge policy, in compliance with the instructions contained in the Government of India's letter No. 706 R.C., dated the 31st May 1898, will be forwarded for the information of the Government of India who will be addressed by a separate letter.

From—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
To—The Secretary to the Government of India, Public Works Department.
Dated—13th August 1898, No. 1049 Ry.

I am now directed to forward, for the information of the Government of India, copies of communications which have been received from the marginally-noted Public Bodies, in accordance with the desire expressed in paragraph 6 of your letter, No. 706 R.C., dated the 31st May 1898.

The Honorary Secretary, Malabar Chamber of Commerce.
" " " Cochin " of "
" " " Nilgiri Planters' Association.
" Chairman, Madras Chamber of Commerce.

2. The opinion of the Madras and South Indian Railway Companies' Boards of Directors has been sought through their respective Agents, and shall be forwarded when received. But this Government has become aware that the opinion of the Board of Directors of the Madras Railway Company which is in favour generally of the change of gauge and metre extension policy under reference, has been given expression to in a letter from their Secretary to the Under Secretary of State for India, No. 9155, dated the 14th June 1898.

From—The Secretary United Planters' Association, Southern India.
To—The Consulting Engineer for Railways, Madras.
Dated—Madras, 15th August 1898.

I have the honour to forward you the following copy of a resolution passed at the annual meeting of this Association on the 10th instant:—

"That this Association do support the policy of the Government of Madras as set out in G.O., No. 852 Ry., dated 23rd June 1898, forwarded by the Consulting Engineer for Railways, Madras, for an expression of opinion, and that the Secretary, United Planters' Association of Southern India, immediately communicate with him, expressing a hope that the subject may be considered at the Railway Conference at Simla in September."

Commending the matter to your best attention.

From—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
To—The Secretary to the Government of India, Public Works Department.
Dated—18th August 1898, No. 1063 Ry.

In continuation of my letter, No. 1049 Ry., dated the 13th August 1898, I am directed to forward herewith, for information, copy of a letter, dated the 15th idem, from the Secretary, United Planters' Association, Southern India, Madras.

From—The Secretary to the Government of India, Public Works Department.
To—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
Dated—Simla, 6th September 1898, No. 108 R.P.

I am directed to acknowledge the receipt of your letters marginally noted on the subject of the proposed metre-gauge policy for the Madras Railway and its extensions, and in reply to inform you that pending receipt of the report and estimates called for in their letter, No. 706 R.C., dated the 31st May 1898, the Government of India are unable to come to any decision either on the question of allocation or on the general merits of the proposal.

No. 849 Ry., dated 23rd June 1898.
No. 852/15 Ry., dated 23rd June 1898.
No. 994 Ry., dated 2nd August 1898.
No. 1011 Ry., dated 8th August.

From—The Agent and Manager, Madras Railway.
To—The Consulting Engineer for Railways, Madras.
Dated—20th September 1898, No. 828.

I have the honour to acknowledge the receipt of G.O., No. 852 Ry., dated the 23rd June 1898.

2. The views of my Board on the question raised in the papers which accompanied this order are very fully given in a letter which the Secretary of the Madras Railway Company addressed to the Under Secretary of State for India on the 14th June last.

3. From this letter you will gather that my Directors are prepared to consent to the construction of the Calicut-Cannanore extension on the metre gauge and that they

are further prepared to consider favourably the conversion from standard to metre gauge of a section of the Company's main line, viz., the section between Podanur and Calicut, provided it is considered desirable to undertake such conversion.

4. My Directors further state that, independently of any decision upon the conversion of the section of the main line above referred to, they are prepared to agree to the immediate conversion of the Nilgiri Branch from Podanur to Mettupalaiyam so that through communication by metre gauge may be formed between Mettupalaiyam and Dindigul *viâ* Podanur, and between Podanur and Mysore *viâ* Mettupalaiyam, Satyamangalam and Nanjangod.

5. My Directors properly attach to their consent to changing the system the condition that the Madras Railway should have the working, if not the construction, of the several branch feeders which are considered to be necessary to fully develop the traffic of the trunk line.

6. My Directors allude particularly to the following new branches or extensions to be hereafter built, viz:—Calicut-Cannanore; Shoranur-Cochin; Podanur-Dindigul; Erode-Nunjangod-Mysore; Mettupalaiyam-Satyamangalam; and the several printed copies of letters written by my Board or by the Agents of the Madras Railway during the last 10 or 11 years, and which are herewith * enclosed, will show you that this Company has always regarded branch lines taking off from its system as within the sphere of the Madras Railway. I regard as legitimately belonging to the Madras Railway the Wynaad and Coorg districts of the Madras Presidency and I strongly favour the construction of a metre-gauge railway from Tellicherry or Calicut to Mysore.

* Not reprinted.
F. J. E. S.

7. I go further and say that the Madras Railway in the near future should extend as a coast line to Quilon in the south and Mangalore in the north. A former Governor-General of India mapped out a Western Coast Railway extending from Tuticorin to Bombay, and there can be no doubt that in the interests of trade such a railway will be some day constructed, and I agree with the Madras Government that, before it is too late, the gauge to be traversed throughout on the western coast should be settled.

8. The printed enclosures to my letter allude to the willingness of the Madras Railway to undertake the construction and working of metre-gauge extensions, it being recognised that the less expensive metre-gauge system is sufficient to serve districts where the traffic is light.

9. It has long been felt that in the matter of railways the western coast has been neglected and if the references now being made to the Government of India result in the claim of the western districts to railway communication being recognised, the discussion will have served a good purpose. The western districts of this Presidency are generally well populated, the inhabitants are well-to-do and the whole country is under cultivation. I know of no other districts where railways could be opened up with the same advantages to the State and to the people as on the western coast.

10. I am submitting with this letter an abstract showing the saving to the State, supposing the line between Calicut and Podanur and Mettupalaiyam be converted and the Calicut-Baliapatam and Shoranur-Cochin lines be constructed on the metre instead of the standard gauge. This abstract is sent to you in accordance with the wishes of the Government of India expressed in paragraph 5 of its letter No. 706 R.C. of the 31st of May 1898.

11. A statement of the traffic that passed Podanur during the year 1897 has been prepared by the Company's Chief Auditor and a copy of this statement with the Chief Auditor's explanatory remarks is enclosed.

12. The Government has directed the particular attention of this Company to the stipulations made in paragraph 4 of the Government of India's letter No. 706 R.C. of the 31st May 1898; and I take it that I am desired to state if the advantage to the Madras Railway would be neutralised if running powers over the section between Erode and Mysore (or the frontier?) were given to the South Indian and Southern Mahratta Railways, while the working of the section was entrusted to the Madras

Railway. The answer to this question cannot of course be a definite one because it turns entirely upon the interpretation placed by the Government of India on the term "running powers."

13. It may perhaps be fairly assumed in a new departure of this kind in India that English practice would be followed. This would mean that the $\frac{\text{owning}}{\text{working}}$ railway would retain the total receipts applicable to the section worked over, and pay to each of the lines which exercised running powers what is termed a "train mileage charge" fixed as nearly as possible to represent the actual cost per mile of the engine, engine staff and guards of a train. The charges for the vehicles hauled would of course be governed by the ordinary Conference Mileage Rules.

14. As far as ordinary rolling-stock is concerned, running powers are now exercised by the Great Indian Peninsula and Madras Railways, through-trains passing freely (with the exception of engines) over the two railways, and it is difficult to see what more could possibly be required between Erode and Nunjangode, even supposing that an examination of the case should lead any one to think through passenger carriages necessary. To through carriages with passengers there could not and would not be the slightest objection, provided there was sufficient through traffic for them. With engines it is a different matter. I have no authoritative information as to the distance from Erode to Nunjangode, but it is said to be 121 miles or equal to the distance, say, from Trichinopoly to Cuddalore.

15. A mixed train takes 18 hours 5 minutes to run from Trichinopoly to Cuddalore, so that the engines belonging to the railways on either side, to whom it is proposed to give running powers, could do absolutely nothing else but run from Nunjangode to Erode or *vice versâ*, and as the engines would have to be changed at each end besides taking fuel and water on the road, it would seem to make absolutely no difference whether trains were worked by the engines of the $\frac{\text{owning}}{\text{working}}$ line or by lines having running powers. To the public there could be no advantage whatever, nor is it probable that any railways could attempt to exercise such powers, unless for the object of making things unpleasant for the $\frac{\text{owning}}{\text{working}}$ railway.

16. It is assumed that the Government of India does not contemplate any divided control as to rates and fares or total receipts, and that, should any restrictions be imposed upon the section Erode to Nunjangode, similar restrictions would also be applied to traffic booked over a similar distance on the South Indian and Southern Mahratta Railways; also that, if running powers were granted to the South Indian and Southern Mahratta Railways, they would also be granted to the working railway for an equal distance over the South Indian and Southern Mahratta Railways on each side, or there could be no reciprocity in such an agreement.

17. As regards through trains belonging to the South Indian or Southern Mahratta Railways these could only be necessary or justifiable if the working railway declined to forward traffic through without delay, or to arrange satisfactory connections with the connecting passenger trains of each railway; but as such connections are already under the control of Government this would be an impossible position.

18. "Train mileage" in England is fixed as nearly as possible at actual cost, the object of "running powers" being to enable another railway to retain a through traffic, the mileage of which it would lose over its own line if it were unable in the absence of running powers to reach the final destination of the traffic. In some cases the railway exercising the running powers owns a short line or terminus beyond the line over which the powers are exercised, but not always. No interference, however, is ever permitted with traffic other than the legitimate *through* traffic arising on the line exercising running powers, and the Government of India in granting permission to the East Indian Railway to run over the Eastern Bengal State Railway stipulate that nothing but through traffic for the Kidderpore Docks shall be carried over the Eastern Bengal State Railway from Nalhati junction.

19. If, therefore, the Government of India determine that running powers shall be granted to the South Indian and Southern Mahratta Railways between Erode and Mysore (or the frontier only as the Mysore State may object to running powers) then it will be necessary to stipulate—

(*a*) That the $\frac{\text{owning}}{\text{working}}$ Railway, Erode-Nunjangode Section, be given the usual liberty of action with rates and fares within the Government maxima and minima.

(*b*) That payment to the railways exercising running powers should not exceed the actual cost of engine power and wages of running staff.

(*c*) That such powers shall not be exercised for less than three-fourths of the scheduled train load of through traffic, either coaching or goods; the term "through traffic" to mean traffic arising on the line wishing to exercise running powers and consigned to a destination beyond the Erode-Nunjangode section.

With these three clauses in operation the advantage to the $\frac{\text{working}}{\text{owning}}$ railway could not be neutralised even if running powers were granted.

20. The tendency of running powers is to increase the cost of working; and where, as in this country, all railways are virtually the property of the State, such powers, in my opinion, cannot be justified except for mutual convenience when arrangements such as those in force at Bombay between the Great Indian Peninsula and Bombay-Baroda and Central Indian Railways and at Cawnpore between the Indian-Midland, East Indian and Oudh and Rohilkhand Railways, for using joint goods sheds and for passing trains over short lengths of railway, are agreed to.

21. It will be seen that I agree with my Board and, subject to the stipulations imposed by my Directors, I favour generally the scheme proposed by the Madras Government believing as I do that it is a comprehensive scheme for railway extension in the Madras Presidency and if carried out will result in the best interests of the Presidency being served. There is room in the many districts of the Madras Presidency for both the Madras and the South Indian Railways without the two railways trying to cross and re-cross each other's systems, and I cannot too strongly condemn competition between the two railways when both are the property of the State and while the State has full power to correct abuses of all kinds if those abuses affect injuriously the interests of the public. The zone or territory of each railway can, it seems to me, be laid down without difficulty and then the Government has only to determine the gauge of branch or feeder line to be constructed from the trunk or parent lines.

22. I may here refer to the fact that in selecting Podanur as the site for metre gauge workshops, we have been guided, first, by its position as an important junction station central to all lengths of the proposed metre-gauge sections, and secondly, because the climate is healthy and land for workshops can be secured at small cost and without difficulty. The report of the Committee appointed to consider the station arrangements at Podanur junction is attached, and this report will be found exhaustive, as it deals very fully with the proposed workshop and junction arrangements.

23. The Locomotive Superintendent in his letter attached explains the objection to utilizing the Nilgiri Railway stock between Podanur and Mettupalaiyam and until in actual working it is known what traffic will remain for us to deal with at Mettupalaiyam as "local and tranship" traffic we cannot determine what length of rails can be saved from the Mettupalaiyam yard. A credit may be available here and a further credit in rails released at Olavakot, but these credits cannot be stated yet.

24. Should the scheme proposed by the Government of Madras be carried through, there will remain for the Secretary of State and the Board of Directors to settle—

(1) how the cost of the conversion from standard to metre gauge is to be disposed of; and

(2) what course is to be pursued with reference to the standard gauge engines and rolling-stock released.

Both matters will have, it seems to me, to be treated specially seeing that our contract is so soon to expire. The released engines and rolling-stock may possibly be sold to the East Coast Railway; but if not so disposed of, I would suggest that the stock released be transferred to the "stores capital" account.

25. The capital raised for the several branch lines it is proposed to construct under the scheme now before the Government will, it is presumed, be governed by Act X of 1895 which provides for interest being paid out of capital during the time railways are under construction.

Enclosure No. 29.

Saving effected by the introduction of the Metre gauge system instead of the Standard gauge on Railways constructed, or to be constructed, west of Podanur

No.	Credits.	Rs.	Rs.	Rs.
1	Mettupalaiyam and Calicut (conversion)—			
	Eighteen standard gauge engines to be released	8,40,572		
	Standard gauge coaching stock to be released	2,90,075		
	Standard gauge goods stock to be released	4,47,800		
	Thirty-three ballast wagons to be released	46,377		
	Saving in construction by making Calicut-Cannanore branch a metre gauge line instead of standard gauge	14,14,440		
			30,39,264	
2	Calicut and Baliapatam (construction)—			
	Saving between the cost of standard and metre gauge engines and rolling-stock required for Calicut-Baliapatam line ..	2,46,840		
			2,46,840	
3	Shoranur-Cochin (construction)—			
	Saving between the cost of standard and metre gauge engines and rolling-stock required for Shoranur-Cochin line	4,46,875		
	Saving in construction between the cost of standard and metre gauge lines between Shoranur and Cochin based on the estimates framed for the first 30 miles	55,02,285		
			60,49,160	
4	Special—			
	Estimated saving in buildings and machinery at Perambur owing to construction of metre gauge shops at Podanur	3,25,000		
	Value of 46 third-class carriages lately sanctioned for standard gauge which will not be required if conversion scheme is carried out ..	1,95,983		
			5,20,983	
				98,56,247

No.	Debits.	Rs.	Rs.	Rs.
1	Mettupalaiyam and Calicut (conversion)—			
	44 Metre gauge engines and rolling-stock * ..	13,21,761		
			13,21,761	
2	Calicut and Baliapatam (construction)—			
	Metre gauge engines and rolling-stock † ..	4,30,380		
			4,30,380	
3	Shoranur Cochin (construction)—			
	Metre gauge engines and rolling stock ‡ ..	3,96,045		
			3,96,045	
4	Special—			
	Re-arranging Podanur yard to suit standard and metre gauges and erecting metre gauge workshops	5,61,533		
	Machinery, &c., required in metre gauge Shops—	Rs.		
	Machinery and fitting shop ..	69,615		
	Boiler shop	22,606		
	Smiths shop	29,478		
	Erecting shop	41,063		
	Carriage shop	9,733		
		1,72,495		
	Approximate cost of converting existing standard gauge line to metre gauge, viz.:—			
	Calicut to Shoranur	1,20,693		
	Shoranur to Podanur	1,09,195		
	Podanur to Mettupalaiyam	49,341		
		10,13,257		
	Total ..		31,61,443	

* Based on cost of South Indian and Southern Mahratta stock per mile as given on page 74 of Part I of the Administration Report of the Director of Traffic for 1897-98.
† Based on cost of Southern Mahratta and Bhowngar Gondal stock per mile as given on pages 74 and 75 of Part I of the Administration Report of the Director of Traffic for 1897-98.
‡ Based on cost of Bhowngar Gondal stock per mile as given on page 75 of Part I of the Administration Report of the Director of Traffic for 1897-98.

ENCLOSURE No. 30.

STATEMENT PREPARED BY THE MADRAS RY. CO.'S CHIEF AUDITOR SHOWING MOVEMENT OF TRAFFIC PAST PODANUR IN THE YEAR 1897.

From Podanur westward, blocks Nos. 44—52 are here for convenience called "West Coast Block."

Business done between the West Coast and each of the following blocks.	From West Coast. Maunds.	To West Coast. Maunds.	Remarks.
1–8 Arkonam-Madras	122,129	84,711	} Will all break gauge.
9–19 Arkonam-Raichur	43,641	9,930	
20–39 Arkonam-Erode (with Bangalore Branch)	794,041	981,309	
53 Kolar Gold Fields Railway	308,943	45	
55 Great Indian Peninsula Railway	8,186	1,087	
56–57 Southern Mahratta Railway *viâ* Guntakal or Bangalore.	34,809	47,399	
58–62 South Indian Railway	394,576	222,821	} Will not break gauge.
41–43 Nilgiri Railway	634,638	246,921	
40 Between Erode and Podanur including Podanur ..	191,538	267,343	Perhaps half will break gauge.

The above statement seems to show that, for the full year 1897, 1,373,000 maunds were exported from and 1,211,000 maunds were imported to the West Coast block, to and from places whose continuity of gauge it is proposed to sever. *That is, 26 ten-ton wagons will have to break bulk at Podanur daily.*

But on the other hand, gauge will not in future have to be broken by 1,160,000 maunds of exports and 651,000 maunds of imports per annum. In other words, 18 ten-ton wagon loads, of which 16 do now actually break bulk at one junction or another, need not in future break bulk.

The result of the change of gauge will be the daily transhipment of 26 ten-ton wagons at Podanur, while our other junctions will be relieved of the cost of transhipment of 16 ten-ton wagon loads per diem, which will no longer be required to change gauge.

Madras is concerned with only two wagons per day.

ENCLOSURE No. 31.

REPORT BY THE DEPARTMENTAL COMMITTEE APPOINTED TO CONSIDER THE ALTERATIONS NECESSARY AT PODANUR IN CONNECTION WITH THE PROPOSED BREAK OF GAUGE AT THAT STATION.

In accordance with the instructions contained in the Agent and Manager's letter, No. 10686/6552 of 6th July, the Committee met at Podanur on the 11th, 12th, 13th and 14th July and again in Madras on the 22nd idem, to consider the alterations necessary for, and the transhipment facilities and workshop accommodation which will be entailed by, the conversion of the Mettupalaiyam Branch and the main line west of Podanur to the metre gauge.

GENERAL ARRANGEMENT OF YARD.

2. In considering the respective portions of the station yard to be appropriated to the standard and metre gauge systems, the principal considerations the Committee has had in view have been the following:—

(1) The inevitable large extension in the future of the metre gauge yard and workshops when Podanur becomes the head-quarters of an extensive metre gauge system.
(2) The most suitable site for the metre gauge workshops.
(3) The fact that the standard gauge accommodation at Podanur, which will become the terminus of the standard gauge system, is not likely in the future to require large extensions.
(4) The qustion of cost.

3. To the north side of the line at the east end of the yard the vacant land is low and therefore costly to make up to formation level, and, being under wet cultivation, would be expensive to acquire. The high land on the north side of the yard is occupied by the company's buildings and Podanur village.

If the metre gauge is brought in on the north side of the station building, it will lead either (*a*) to the demolition of Company's buildings and Podanur village, or (*b*) to a most undesirable cramping of the shunting sidings opposite the station, and the expenditure of a large sum of money in providing a new transhipping shed and additional shunting sidings at the east end of the station. On the south side of the station the land now in the Company's possession affords accommodation for a large metre gauge yard and the greater portion of the site for metre gauge workshops. The ground available for the latter is a large open plain, approximately rail level, the

soil being such that foundations will be shallow. The Committee have therefore come to the conclusion that the standard gauge system should be brought in on the north side and the metre gauge yard and locomotive and carriage workshops should be placed on the south side of the existing station-house. The accompanying plan embodies the Committee's proposals.

4. In designing a mixed gauge yard unhampered by any existing works, a crossing of the gauges on the level would naturally be avoided, and the Committee are fully sensible of the disadvantages which accompany such a crossing. It was the endeavour of the Committee in the first place to so arrange the yard that there should be no crossing of the gauges; but for the reason stated it was found necessary to bring the standard gauge into the north side of the yard, and under the circumstances a crossing of the gauges is unavoidable.

5. After full consideration of several schemes the Committee decided to cross the gauges at the point shown on the plan which is within station limits and 600 feet from the eastern extremity of the passenger platform. It is intended that the standard and the metre gauge signals, and the metre gauge cross-over from the main line to the shunting neck, should be interlocked in such a manner as to render it impossible for trains on the two gauges to be received or despatched from or to the east and north, except when the main line is clear. It is intended that, as shown on the plan, the locking frame for these points and signals shall be erected in a cabin the floor of which should be 15 feet above standard gauge rail level, in order that the signalman may have a clear view over the north end of the yard. An interlocking arrangement of this description would effectually protect trains from all risk of collision, and considering the comparatively small number of trains passing in and out of the station and the proximity of the crossing to the platform, the inconvenience of the crossing of the gauges would be reduced to a minimum.

ESTIMATE OF ROLLING STOCK REQUIRED.

6. In order to arrive at the accommodation to be provided in the yard for both gauges, and in the workshops for metre gauge stock, the Committee have made the following estimate of the train services and of the necessary equipment of metre gauge rolling stock for the Western section:—

TRAIN SERVICE.

A.—Podanur East. Standard Gauge.

1 Mail train.	2 E. trains including loco. wood and ballast and *vice versâ* daily. Equal to ten trains in and out per day.
2 Mixed trains.	

B.—Podanur West. Metre Gauge.

N.B.—The Committee in dealing with the metre gauge train service have assumed the hauling power of a metre gauge engine to be $\frac{2}{3}$ of that now laid down for the standard gauge engines, and the weight of metre gauge bogie stock to be equal, unit for unit, to that of 4-wheel standard gauge stock.

1 Mail train.	3 E. trains including loco. wood and ballast and *vice versâ* daily.
3 Mixed trains.	

C.—Mettupalaiyam Branch.

1 Mail train.	1. E. train including loco. wood and ballast and *vice versâ* daily.
2 Mixed trains.	

Services B and C give 22 metre gauge trains in and out daily, for which engine power has to be provided, exclusive of the Coimbatore and Palghat local train services and shunting engines.

LOCOMOTIVES.

7. Standard gauge—as per train service A. Eleven engines will be stationed at Podanur, for about 6 of which running shed accommodation must be provided.

Metre gauge—as per services B and C—

16	engines for train service (*i.e.*, main line trains, a single trip daily; branch trains, a double trip daily) ...	} Of which running shed accommodation at Podanur will be required for about 10.
3	engines for shunting at Podanur and local service ...	
5	„ spare at Podanur and for shed	
1	engine for shunting and locals at Olavakkot.	
1	„ for spare for Mails at Olavakkot.	
2	engines for train service at Calicut.	
1	engine shunting at Calicut.	
1	„ spare at Calicut.	
30	engines to be maintained in running order.	
Add 8	at 25 per cent. of above for proportion under repair and for which workshop accommodation has to be found.	
Total ... 38	metre gauge locomotives for equipment of the three sections to be converted.	

8. The loading of the metre gauge trains will be as follows :—

Mail Train.	*Mixed Trains.*
1 I class carriage.	1 composite I and II class.
1 II class carriage.	4 III class.
5 III class carriages.	1 III class latrine.
1 III class latrine carriage.	3 brake vans.
1 P. O. V.	12 goods vehicles.
2 brake vans.	
11 normal loads.	21 normal loads.

N.B.—This will apparently be the maximum load of the engine on the main line and leaves no margin for extra traffic.

Two sets of coaches will be required to work each train between Podanur and Calicut and one set to work each train between Podanur and Mettupalaiyam.

Coaching Stock.

9. The coaching stock to be provided will therefore be as follows :—

	For trains.	For strengthening trains.	For repairs at 12½%	Total.
I class ...	3	3	1	7
II class	3	3	1	7
Composite ...	(*a*) 10	3	1	14
III class ...	(*b*) 53	(*c*) 20	9	82
Do. latrine ...	(*d*) 11	...	2	13
Brake vans ...	(*e*) 44	6	6	56
P. O. vans ...	3	1	1	5
Horse boxes ...	(*f*) 9	...	1	10
Carriage trucks...	(*f*) 5	...	1	6
Baggage vans ...	(*f*) 5	...	1	6
Total coaching stock to be provided for ...				203

(*a*) Main line mixed 6
Branch ,, ... 2
Palghat and Coimbatore locals .. 2
— 10

(*b*) Mail main line .. .. 5 × 2 = 10
,, Mettupalaiyam branch .. 5
Mixed main line .. 4 × 3 × 2 = 24
,, Mettupalaiyam branch 4 × 2 = 8
Palghat locals 3
Coimbatore locals 3
— 53

(*c*) It must be noted that the feast traffic at Karaimadai and Tirur has to be provided for.

(*d*) Mail main line .. .. 1 × 2 = 2
,, branch .. .. 1 = 1
Mixed main line 1 × 2 × 3 = 6
,, branch .. .. 1 × 2 = 2
— 11

(*e*) Mail main line .. .. 2 × 2 = 4
,, branch 2
Mixed main line 3 × 3 × 2 = 18
,, branch .. .. 2 × 2 = 4
E. train main line 2 × 3 × 2 = 12
,, branch 2
Palghat and Coimbatore locals .. 2
— 44

(*f*) This figure is an estimate only.

Goods Stock.

10. The average number of wagons on the Podanur-Calicut section daily for the last six months has been 135 and on the Mettupalaiyam branch 88, but on many days the figures have been 50 per cent. in excess of these. Allowance has also to be made for the delay to wagons due to transhipping and for the percentage under repairs. The minimum equipment of goods stock therefore for which it seems safe to estimate for the three sections is 135 + 88 = 223, to this add 50 per cent. as explained above, which gives a total of 335 goods wagons. To put it in another way the train service arranged for above will move the goods stock as follows daily :—

	Vehicles.	Trains.	Directions.	
Main line	12	× 3	× 2	= 72
Branch ,, ...	12	× 2		= 24
				96
Allowing 24 hours at each end for discharge makes each wagon available once in three days				3
				317

to which must be added wagons under repair. Of the total number, say, 50 should be open wagons capable of carrying timber.

Transhipping Accommodation.

11. In order to arrive at the accommodation to be provided at the tranship shed and platform, the Committee have taken out from the records of Podanur station for the month of June, which was a fairly representative heavy month, the loaded wagons passing in the six directions, viz., East to West, West to East, East to North, North to East, West to North and North to West, the traffic transhipped at Podanur under the same heads and the local traffic consigned to and from Podanur in the same directions.

12. The figures work out as follows :—

		Daily average. Metre gauge loaded wagons.	Daily average. Standard gauge loaded wagons.
Loaded wagons from stations East to stations West which will require transhipment ...	287	...	10
Loaded wagons from stations West to East ...	614	22	...
Loaded wagons from stations East to Mettupálaiyam branch	352	...	12
Loaded wagons from stations Mettupálaiyam branch to East	163	6	...
Total ...		28	22

The wagons consigned with local traffic and with mixed consignments requiring transhipment to and from Podanur during the month of June were as follows :—

From stations East to Podanur	216	...	7
Do. West to Podanur	128	5	...
Do. M.T.P. branch to Podanur ...	66	2	...
From Podanur to stations to East	179	...	6
do. West	207	7	...
,, do. M.T.P. branch	66	3	...
Total ...		45	35

Accommodation therefore is required for 45 wagons on each gauge.

13. The local traffic is sufficient to justify small local goods sheds for both gauges, but hitherto this traffic has been dealt with in the tranship shed, and the Committee do not consider the inconvenience of this procedure would be sufficient at present to render local goods sheds necessary.

14. The Committee have utilised the existing tranship shed and platform for the new transhipping arrangements. It will accommodate, as shown in the plan, 23 standard gauge and 13 metre gauge wagons against the platform (of which 4 and 3 respectively will be under cover) and 26 standard gauge vehicles and 13 metre gauge vehicles on the second lines.

15. With this accommodation the traffic specified in paragraph 12 can probably be dealt with. When further facilities are required, they can be provided either by removing the old and unsightly buildings at the west end of the passenger station and extending the tranship platform and lines over the site (extending the passenger platform an equivalent distance to the east) or by erecting separate local goods sheds.

Vehicle Accommodation on Standard Gauge Lines.

16. The average number of wagons in the Podanur yard at 8 A.M. for the last half-year was 75. But the traffic from the West Coast fluctuates much, and there have very frequently been over 100 wagons in the yard in the morning, the maximum having been 115 on the 15th May. Having in view the extra delay to stock due to transhipment on the one hand and the fact that traffic between Mettupálaiyam branch and West Coast will not come on the broad gauge lines on the other, it does not seem safe to assume a lower maximum than the following :—

Ninety goods vehicles for which storage accommodation must be provided,
With three marshalling lines for sorting vehicles,
A line on which to stand a formed goods train, and
Accommodation for 50 vehicles in the broad gauge tranship lines.

In addition two passenger trains and about 20 spare coaches will have to be stabled.

17. It is the intention of the Committee that on the standard gauge side the work of shunting and marshalling trains shall be performed from the shunting neck at the west end of the yard. A short trap siding is provided at the east end to enable vehicles to be drawn out of the horse and carriage transfer line without fouling the main line; but, as it may be found necessary to extend this trap siding into a shunting neck for the service of the platform lines, it has been shown in dotted lines on the plan as a probable future extension.

18. Two cranes of 3 tons capacity and one of 5 tons will be necessary on the transhipment platform to deal with the extensive timber traffic between the West Coast and the Gold Mines.

19. A standard gauge running shed to accommodate six engines and a turn-table have been provided at the west end of the standard gauge yard.

VEHICLE ACCOMMODATION ON METRE GAUGE LINES.

20. On the metre gauge side of the yard it is proposed to use the existing lines with slight modifications only, slewing them to metre gauge. The chief addition consists in the shunting necks provided at each end of the yard. The accommodation provided in addition to the platform and the second lines is a line on which to stand a formed train and storage for approximately 60 metre gauge vehicles in addition to the carriage shed lines for storing coaching stock, which it is considered will suffice for present requirements.

21. The design of the yard is such that when extensions become necessary new lines can readily be added. The plan includes the efficient trapping of the sidings on both gauges and the present catch siding to the west of the station can therefore be done away with.

STATION ACCOMMODATION.

22. In order to provide accommodation at the passenger platform for two metre gauge passenger trains it is necessary to extend the platform to 1,000 feet, and this is shown on the plan with a scissors crossing at the centre of the platform line on each gauge. The full length of platform not being required on the standard gauge side, the platform line on that side has been arranged as shown in the plan, so as to afford the required accommodation in the transhipment lines without widening the passenger platform.

23. Provision has been made for a horse and carriage transfer platform and lines at the east end of the passenger platform to meet the heavy horse and carriage traffic between Madras and the Hills.

LOCOMOTIVE REQUIREMENTS.

24. The Committee have considered the best method of utilising the existing locomotive buildings, viz., running shed, carriage shed, round house and the building now used as Locomotive Foreman's office, store and workshop and running bungalow. Part of the latter building has been embodied in the workshop plan and has been appropriated for workshop offices. The remaining portion of this building will be required for the Locomotive Foreman's office, stores and running bungalow. The running shed will not be in excess of the accommodation required for metre gauge running engines and has in the plan been appropriated for a metre gauge running shed. The carriage shed will be required for stabling metre gauge carriages.

25. The round house is an awkward building to work in with the general arrangement of the yard, and the Committee are of opinion that it is undesirable to include this building as part of the workshop plan. It might, however, be allowed to remain, and probably a use for it will be found in the future. In this connection it may be pointed out that the District Engineer's stores and the Public Works Inspector's store, office and workshops have to be demolished to provide room for the new standard gauge running shed and these might occupy a portion of the building. A store for metre gauge station machinery fittings and the work connected therewith will also be required and a portion of the building might be allotted to that purpose.

26. It has been suggested that the round house might be utilised as the broad gauge running shed, but the Committee do not recommend this for the reason that it would involve a most objectionable crossing of the gauges as indicated in dotted lines on the plan.

LOCOMOTIVE AND CARRIAGE WORKSHOPS.

27. The general arrangement of the shops is in echelon—a plan which allows of almost unlimited extension. The shops as now proposed are shown in full red lines and possible future extensions in dotted red lines. In considering the size of the workshops required the figures given in paragraphs 7, 9 and 10 have been taken and shop accommodation has been provided for 25 per cent. of engines, 12½ per cent. of passenger, and 10 per cent. of goods stock. These proportions give the following figures:—

Engines	8
Carriages	24
Wagons	34

28. The following shops have been included in in the plan:—

Carriage shop.	Erecting shop.
Paint shop.	Boiler shop.
Smithy and wheel shop.	Stores.
Fitting and machine shop.	Weigh bridge shed.

The proposed carriage and wagon repair shop will provide covered accommodation for 24 vehicles only, as it is considered this will meet immediate requirements. It will probably be found convenient to execute foundry and saw mill work at Perambur Works, and under these circumstances no provision has been made for buildings for these purposes. Two or three saw benches may be required and accommodation for these can be found in the carriage or machine shop.

29. The length of permanentway in the workshop yard may be considered excessive, but this is unavoidable if the shops are to be so designed as to provide for large future extensions, and it should not be overlooked that the opening of the Calicut-Cannanore section will probably be coincident with the carrying out of the scheme now under consideration.

30. In the Proceedings of the Committee of Locomotive and Carriage Superintendents for India, Vol. VI, plate XLV, is given a plan of metre gauge workshop for repairing 10 engines and 100 vehicles (presumably short stock) at one time, and it is interesting to compare the areas of the several shops shown on this plan with the areas of the shops the Committee propose for Podanur. The following are the figures:—

	Area of proposed metre gauge workshops at Podanur.	Area of metre gauge shops shown on plate XLV, Vol. VI, of the Proceedings of the Committee of Loco and Car. Supts. for India.
	SQ. FT.	SQ. FT.
Saw mill	...	8,400
Carriage shop	24,000	16,800
Paint shop	7,200	8,400
Smithy and wheel shop ...	13,680	10,080 (Smithy only).
Fitting shop	15,120	16,800
Foundry	...	6,720
Erecting shop	20,520	21,300
Boiler shop	9,000	9,940
Pattern shop, Copper smith's shop	... ...	3,360
Tinker's shop		
Weigh bridge shed	525	...

HOUSING OF LOCOMOTIVE WORKSHOP STAFF.

31. The question of to what extent accommodation for the staff of the locomotive workshops should be provided by the Company appears to be one for the management to decide, but the Europeans or Eurasians in charge of the several shops must be housed, and the Committee suggest that in framing estimates eight houses of the driver's double block type should be allowed for and also quarters for the Locomotive officer in charge of the shops.

32. The only buildings, which will be demolished if the Committee's proposals are accepted, are the 20 menials' huts on the site of the proposed shops, the Travelling Auditor's bungalow, the Church room and the District Engineer and Inspector's stores and workshops, and provision for replacing these has been included in the estimate.

33. The Committee suggest for consideration the advisableness of at once acquiring a considerable area of land south of the present limits of the compound for future workshop extensions and housing of staff, as in the event of parcherries and buildings being erected on land that must ultimately be required for railway purposes the compensation to be paid to the owners when it has to be taken over will be much enhanced.

DISTRICT ENGINEER'S ESTIMATE FOR ALTERATIONS AND ADDITIONS.

34. The District Engineer's estimate for the alterations and additions, shown on the plan attached, is as follows:—

Standard gauge yard including engine sheds, &c.	Rs.	95,841
Metre gauge yard	„	32,128
Transhipping platform, &c.	„	9,545
Additions to passengers' platform	„	2,606
Locomotive works and yard	„	3,86,513
Bungalow for Locomotive officer	„	12,000
Do. for Travelling Auditor	„	3,200
Eight houses for Chargemen	„	16,000
Ten houses for menials to replace those demolished ...	„	2,700
Replacing district stores, work sheds and Inspector's sheds	„	1,000
Total	„	5,61,533

Enclosure No. 32.

From—The Locomotive Superintendent, Madras Railway.
To—The Agent and Manager, Madras Railway.
Dated—Perambur Works, 2nd September 1898, No. B. 2676/903.

In continuation of this office letter No. B. 2676/835 of the 13th ultimo, paragraphs 4 and 5, it should be remembered that included in the total of 55 engines therein mentioned as necessary to work the whole traffic are the engines which will be required for working the trains between Mettupalaiyam and Podanur in the event of the Mettupalaiyam branch being converted to narrow gauge.

2. I believe it has been contemplated that the rack engines working between Mettupalaiyam and Ootacamund should run through, without changing, to Podanur, but this would be a most undesirable if not impossible arrangement. The ghaut engines are specially built for ghaut work, the boilers being erected out of the horizontal, which though necessary on the ghaut would in all probability cause considerable practical difficulties in steaming, &c., were the engines working on the level. I am further not sure what water capacity the engines have, but I very much question whether they would carry enough water to cover the distance between Mettupalaiyam and Podanur—a section where, as you are aware, water is exceedingly scarce. The engines are also fitted with heavy and expensive machinery connected with the rack engine for driving through the rack, and, as this would not be necessary on a level line, if used it would mean not only carrying so much dead weight backwards and forwards for nothing, but the whole of the rack gearing as well as the rack engine itself would needlessly be exposed to dust, dirt and possible damage.

3. The engines are further only constructed for running at a low speed, and, apart altogether from the above objections, they would, if forced to maintain a speed such as would ordinarily be required on a level line, very soon knock themselves to pieces.

4. Assuming also that it were arranged for the rack engines to go through to Podanur, although this might reduce the total number of 55 ordinary metre gauge engines shown as required, it would be necessary to increase the number of rack engines, for, while the four engines now in the Nilgiri Company's possession may possibly suffice to work the traffic over the Mettupalaiyam-Coonoor section, this would not be the case if the engines were sent on beyond Mettupalaiyam and so not available for the return ghaut trains. I need scarcely point out that the cost of one of the rack engines is far greater than that of any of the several types of standard metre gauge engines.

5. With regard to the stock, I am not quite certain as to the form of construction of these, but I believe all wagons and carriages working on the Nilgiri Railway are provided with the vacuum brake as well as with a special brake connected with the rack. No wagon stock in India, either metre or broad gauge, is fitted with the vacuum brake, but it is understood the vacuum brake is a working necessity on the Nilgiri line. It would not be therefore possible without discontinuing the use of this brake for ordinary metre gauge wagons to be taken up the ghaut. On the other hand, if the Nilgiri wagons were sent off their own section on to either the Madras Railway or other foreign lines, the stock of wagons which it would be necessary to maintain fitted with both vacuum and rack brakes for work over the ghaut would have to be very greatly augmented.

6. It would probably be practicable and perhaps advisable for, say, one carriage to run through daily between Mettupalaiyam and Podanur for convenience of passengers, but beyond this I am of opinion that it will be found necessary to tranship all passengers and goods at Mettupalaiyam, the only alternative to this being as above, either—

(*a*) the discontinuance of the use of the vacuum brake on goods wagons, a contingency which, I presume on the score of safety, is impracticable, or
(*b*) the provision of a sufficient number of special wagons fitted with vacuum and rack brake to maintain the service over the Nilgiri line as well as to carry goods through if consigned to stations off the Nilgiri section or on a foreign line.

Enclosure Nos. 1 to 28.

From—The Agent, Madras Railway Company.
To—The Consulting Engineer, Madras.
Dated—20th April 1888, No. 374; 27th April 1888, No. 411; 11th May 1888, No. 466; 14th January 1889, No. 34; 11th June 1894, No. 455; 22nd March 1895, No. 285; 8th August 1895, No. 706; 2[illegible]th August 1895, No. 769; 14th July 1896, No. 604; 12th July 1897, No. 654; 20th July 1897, No. 681; 9th October 1897, No. 968; 10th January 1898, No. 28; 28th January 1898, No. 84; 13th May 1898, No. 437.

From—The Agent, Madras Railway Company.
To—The Board of Directors, Madras Railway Company, London.
Dated—14th July 1888, No. 1839; 19th September 1888, No. 1848; 30th January 1889, No. 1863; 8th July 1896, No. 2263; 21st July 1897, No. 2318; 16th September 1897, No. 2326.

From—The Board of Directors, Madras Railway Company.
To—The Agent, Madras Railway.
Dated—20th April 1888, No. 794; 2nd November 1888, No. 804; 28th November 1890, No. 843; 27th July 1894, No. 903; 18th June 1897, No. 957; 8th October 1897, No. 961; 11th March 1898, No. 970.

Order—No. 1296 Ry., dated 19th October 1898.

The Government of India will be addressed.

2. A copy of these Proceedings will be forwarded to the Secretary of State in continuation of Despatch No. $\frac{16}{1079}$ Ry., dated 23rd August 1898.

[Here enter No. 1297 Ry., dated 19th October 1898.]

(True Extract.)

Francis J. E. Spring,
Joint Secretary.

Hzd. C. Parthasarathy.

DESPATCH

to

The Right Honourable the Secretary of State

for signature

of

His Excellency and Honourable Members.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

(Copy.)

LETTER to the Right Honourable the Secretary of State for India.

No. 22 / 1296 Ry., dated 19th October 1898.

FORWARDING copies of further correspondence with the Government of India on the subject of the proposed metre gauge policy for the Madras Railway and its extensions.

No. $\frac{22}{1296\ \text{Ry.}}$, 19th October 1898.

PUBLIC WORKS DEPARTMENT.

Letter—to

The Right Honourable the SECRETARY of STATE for INDIA.

My Lord,

We have the honour to forward herewith a copy of a letter No. 1297 Ry., dated the 19th October 1898, which, since the despatch to your Lordship of our letter No. $\frac{16}{1079\ \text{Ry.}}$, dated 23rd August 1898, we have addressed to the Government of India on the subject of the proposed metre gauge policy for the Madras Railway and its extensions.

We have the honour to be,
My Lord,
Your Lordship's most obedient, humble servants,

(Signed) A. E. HAVELOCK.
(„) H. W. BLISS.
(„) A. T. ARUNDEL.

Fort St. George,
19th October 1898.

RAILWAY.

Government {1898} of Madras.

PUBLIC WORKS.

Recd. } 1898. *Enclosures*

Regd. } *Spare copies*

Letter, No. 1297 Ry., 19th October 1898.

OCTOBER.

Metre Gauge Policy for the Madras Railway and its extensions

Forwarding with remarks a copy of a letter from the Agent and Manager, Madras Railway, containing an estimate of the cost of, and an expression of his views in regard to the —.

PUBLIC WORKS DEPARTMENT.

Railway.

Letter—from

Francis J. E. Spring, Esq., c.i.e.,

Joint Secretary to the Government of Madras,

Public Works Department,

Railway Branch.

To

The Secretary to the Government of India,

Public Works Department.

Sir,

In continuation of the correspondence ending with your letter No. 108 R.P., dated the 6th September 1898, and in compliance with the request contained in paragraphs 5 and 6 of your letter No. 706 R.C., dated 31st May 1898, I am directed to forward a copy of a letter and of its enclosures from the Agent and Manager, Madras Railway Company, No. 828, dated the 20th September 1898, containing an estimate of the cost of, and an expression of his views in regard to, the metre gauge extension and conversion policy put forward by this Government.

2. With my letters, Nos. 1049 and 1063 Ry., dated the 13th and 18th August 1898, you were furnished with the opinions of the various Public and Commercial representative bodies who in compliance with your request were consulted on the subject of that policy. This Government notes with satisfaction that public opinion as well as that of the Madras Railway Company is strongly in favour of the proposals.

3. An expression of the views of the Agent, South Indian Railway Company, will be found in the accompanying copy of an extract from a letter to his Board of Directors, No. 593, dated 6th July 1898. As might naturally be expected the South Indian Railway Company's Agent finds himself obliged to oppose the proposal. But viewing the matter in the interests, not merely of one particular body of shareholders, but of those of the producers, consumers and merchants of the Presidency generally, and with an eye solely to what it considers to be best for the development of Southern India, this Government is unable to find any great weight in Captain Shelley's arguments.

4. In paragraph 3 of your letter No. 706 R.C., dated the 31st May 1898, the Government of India express hesitation in recommending to the Secretary of State "so radical a step as the introduction of a break of gauge on a main line of communication between the East and the West Coasts of India." In paragraph 9 of my reply No. 849 Ry., dated 23rd June 1898, it was opined that the through traffic between the East and West Coasts passing through Podanur would on enquiry be found to be very small. Confirmation of this opinion will be found in one of the enclosures of the Madras Railway Company's Agent's letter now forwarded, in which it is shown that 26 ten-ton-wagon loads daily will have to break bulk if gauge is changed at Podanur, but that, as a set-off against this, 16 ten-ton-wagon loads which now actually break bulk at one junction or another need not do so in future. The net effect therefore in the form of breakage of bulk will be 10 wagons daily, and of this number only 2 wagons per day are of mutual concern to the merchants of the East

and West Coasts. Thus the surmise expressed in my No. 849 Ry. of the 23rd June 1898 that the weight of traffic likely to be affected would be found not to be very large, and that it is not in any way comparable with that on the Calcutta-Bombay, Madras-Bombay, or Lahore-Kurrachee routes, would appear to have been well founded.

5. The 4th paragraph of your letter, No. 706 R.C., dated the 31st May 1898, was specially laid before the Madras Railway Company for attention and reply. In that paragraph the Government of India insisted on the necessity for the grant of running powers over the proposed Erode-Mysore branch of the Madras Railway for the two metre-gauge systems which will by its means be linked together. In paragraph 4 of this Government's reply, No. 849 Ry., dated the 23rd June 1898, the opinion was expressed that there is no reason to anticipate any such flow of traffic between the two metre-gauge systems as cannot be quite adequately met, to the full satisfaction of traders, by the ordinary through booking and interchange of rolling-stock rules. In the latter half of page 2, and in the 3rd page, of his letter now forwarded, the Agent, Madras Railway Company, deals very fully with the question of running powers and arrives at the conclusion that although, with suitable provisos and precautions, the grant of such powers to the two metre-gauge Companies might not result in injury to the interests of the owning railway, yet, except as may be arranged between all concerned for mutual convenience, the exercise of such powers is not called for where all railways are virtually the property of the State, and where control of train connections, as well as, between limits, of rates and fares, rests in the hands of Government. His Excellency the Governor in Council adheres to the opinion already expressed, an opinion concurred in by the Agent, Madras Railway Company, that if the Erode-Mysore branch is owned by the Madras Railway Company all the reasonable requirements of the two metre-gauge Companies, and certainly all the requirements of the public, can be perfectly satisfactorily met by the ordinary rules for the through running of loaded goods and passenger stock.

6. In paragraph 2 of your letter, No. 706 R.C., of the 31st May 1898, it was stated that the Government of India understood that this Government's adherence to the policy under reference was based mainly upon the consideration that the existence of the broad gauge west of Erode constitutes an obstacle (*a*) to the development of railways towards the west coast on a gauge commensurate with the probable bulk of the traffic to be carried, and (*b*) to the linking up of the existing metre-gauge systems. But though these considerations have certainly carried weight with this Government, they have not done so to any undue extent. What has carried far more weight than any consideration of the nature of that referred to has been, as already more than once explained, the principle that the sphere of influence of each railway system ought, so far as is practicable, to be coincident with trade tracts, rather than that it should be governed by the comparatively unimportant accident of gauge. This Government is strongly impressed with the supreme importance of the acceptance of the truth of this principle in the interests of general development, especially at this side of India where Military considerations, which bulk so large as a factor in similar questions in the north, are comparatively speaking of minor importance, and where trade considerations are supreme.

7. Amongst the enclosures of the Madras Railway Company's Agent's letter now forwarded will be found a statement of the cost of the proposed policy, showing credits as well as debits, as called for in paragraph 5 of your letter now under reference No. 706 R.C. of 31st May 1898. The Agent has thought it right to show all possible debits and credits, but has done so without explanation or criticism. At first sight the net result would appear to be a saving of about Rs. 67 lakhs. But the actual state of the case may perhaps more clearly be stated as follows:—

(*a*) A saving of Rs. 56½ lakhs is obtained by the substitution of a light cheap metre-gauge railway with 40lb. rails, slow speeds, limited accommodation, and 1 in 80 grades, in place of a first-class standard gauge railway, from Shoranur to Cochin, in order that a railway of some sort, adequate to all local requirements may come within the means of His Highness the Rajah.

(*b*) It has not been thought expedient by the Madras Railway Company to cut down the standard and the cost of the Calicut-Baliapatam Railway to anything like the same scale as that of the Cochin line. The corresponding saving on this account therefore, after retaining 59lb. rails and 1 in 150 grades, works out to only 14¼ lakhs.

(*c*) The rolling-stock estimate for the metre gauge, omitting for the present the Podanur-Dindigul and Erode-Mysore sections with the Mettupalaiyam-Satyamangalam link, works out to Rs. 21½ lakhs, against which must be set a credit of Rs. 25 lakhs for rolling-stock set free or not needed, showing a net credit of Rs. 3½ lakhs.

(*d*) Against a contemplated outlay of Rs. 7½ lakhs on yards, shops and machinery, a saving of 3¼ lakhs in the shape of outlay intended to be incurred but now no longer needed at Perambore, may equitably be set, showing a net outlay of Rs. 4¼ lakhs.

(*e*) Change of gauge alone is estimated as likely to cost the comparatively small sum of Rs. 2¾ lakhs.

These figures though given only in the abstract have been based by the Madras Railway Company on carefully elaborated estimates arrived at after consideration and conferences on the spot by the heads of all departments. These detailed estimates are still being elaborated and can in due course be produced if demanded.

8. As might naturally be expected, the question of allocation of the expenditure involved in the cost of converting the parts to be converted of the Madras Railway Company's system bulks large in the Company's estimation. The question was referred to in my letter urging the immediate conversion of the Mettupalaiyam branch, No. 994, dated 2nd August 1898, and in the note by the Examiner, Guaranteed Railway Accounts, which accompanied my No. 725 Ry., dated 14th May 1898. The allocation of the Shoranore-Cochin and Calicut-Baliapatam rolling-stock will of course go with the other items of the capital estimates for those extensions. That of the metre gauge rolling-stock for the Podanur-Calicut section, estimated at Rs. 13,21,761, may fairly be debited to the Madras Railway Company's capital account if at the same time the value Rs. 16,24,834 of stock set free be credited thereto. This Government does not control and has no real knowledge of the requirements of the East Coast Railway and so is unable to criticise the Agent's suggestion that the stock to be set free be sold to that line. The suggestion however seems worthy of consideration, and, in the event of its not being found practicable, the stock set free might, as suggested by the Agent, be brought on the "Stores Capital" Account of the Madras Railway, to be gradually absorbed, as renewals of rolling-stock, whether on the Madras Railway Company's own line or on the East Coast Railway, make such absorption possible.

9. The Agent has not separated the cost of altering Podanur yard from that of the workshops at that place, but the details are stated by the Consulting Engineer to be as follows:—

Podanur standard gauge yard	Rs.	95,841
„ metre „ „	„	32,128
Platforms and transhipping	„	12,151
Bungalows	„	34,900
Locomotive shops and yard, metre gauge	„	3,86,513
Total ...	Rs.	5,61,533

The last two items, amounting to Rs. 4,21,413, as well as the cost Rs. 1,72,495 of machinery, appear to be properly capital items as being partially necessitated by the extensions to Cochin and Baliapatam, and partly balanced by the anticipated savings in its being no longer necessary to enlarge the Perambore shops at a cost estimated at Rs. 3¼ lakhs. The remaining items, amounting to Rs. 1,40,120, as well as the cost, estimated at Rs. 2,79,229, of change of gauge from Mettupaliyam through Podanur and Shoranur to Calicut, total Rs. 4,19,349, seem to be the only items the propriety of whose allocation to capital might appear to be open to question, and in regard to these sums I am instructed to offer the following remarks.

10. This matter is dealt with in paragraphs 8 and 9 of the note by the Examiner of Guaranteed Railway Accounts, Madras, which accompanied my letter No. 725 Ry., dated the 27th May 1898. I am now instructed to say that His Excellency the Governor in Council concurs with Major Waller in thinking that there are strong grounds for a recommendation that the cost of change of gauge should be specially allowed to be treated as capital outlay; for though, from a narrow and strictly technical point of view, it may be objected that a change from standard to metre gauge is not a substantial improvement, yet it must be recognized that the entire case is exceptional and must be judged of from a broader standpoint than that suitable for the case of, say, the substitution of a heavier girder for a lighter one. The advantages which are anticipated from the entire policy which is advocated—a policy of which the change of gauge of a section of the old Madras Railway is but one item—will accrue less to the Madras Railway Company's shareholders than to this Presidency and to its traders as a whole. Moreover, allowing for delays in the accomplishment of the entire scheme, these advantages cannot be expected to have been realized to the full until the period for the termination of the Madras Railway Company's contract shall have so nearly arrived that the advantages will be reaped rather by Government and by the future working Company than by the present owning Company. Other advantages which are expected to follow later on, *e.g.*, the linking up with Quilon on the south and the extensions into South Canara and Coorg referred to in paragraphs 5 and 6 of my letter No. 540 Ry., of April 6th, 1898, are necessarily somewhat too remote to be of much interest to the present Company, though this Government feels it to be a duty to endeavour to secure them in anticipation.

11. For these reasons it seems to this Government to be equitable that the whole of the cost involved in the conversion policy shall be treated as a capital charge, for not only is the Madras Railway Company very unlikely to derive any appreciable advantage therefrom, except such as must result to them equally with Government from the extension at the cost necessarily of capital of the projected feeders to Podanur, Cochin, Baliapatam and Mysore; but also because the policy is intended to secure, for the Presidency in general and for its traders, benefits which can hardly be expected to fully mature until the present railway Company shall have ceased to exist.

12. The military aspect of the subject under consideration has not yet been touched upon. The opinion of the military authorities shall in due course be communicated; but meanwhile it may suffice to say that the change of gauge, if carried out, will render the now inevitable march, or its alternative a break of gauge at Mettupalaiyam, no longer necessary for troops moving between Wellington and Calicut.

13. In conclusion I am directed to express the hope that the case may now be considered by the Government of India to be sufficiently ripe to be laid before the Secretary of State for discussion with the Madras Railway Company's Board of Directors, and that a decision in a sense favourable to this Government's recommendation may be arrived at, at no distant date. As already pointed out delay is inimical to the interests not only of the Calicut-Cannanore Railway programme, but also of Government as the guarantors of the Nilgiri Railway which, as explained in my letter No. 994 Ry. of August 2nd, 1898, cannot be expected with any chance of success to compete with the road until the gauge of the Podanur-Mettupalaiyam Section shall have been assimilated to that of the hill railway.

I have the honour to be,
Sir,
Your most obedient servant,

Francis J. E. Spring,
Joint Secretary.

Fort St. George,
19th October 1898.

Ed. W. D'Moss.

RAILWAY.

Government {1898} of Madras.

PUBLIC WORKS.

Recd. }1898. *Enclosures*

Regd. *Spare copies*

G.O., No. 1296 Ry., 19th October 1898.

OCTOBER.

Metre Gauge Policy for the Madras Railway and its extensions

Directing that a copy of a letter from the Agent and Manager, Madras Railway, containing an estimate of the cost of, and an expression of his views in regard to the —, be forwarded to the Government of India with remarks.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following papers :—

Read again G.O., No. 526 Ry., dated 4th April 1898.

Also, letter from the Government of India, dated 31st May 1898, No. 706 R.C., contained in G.O., No. 852 Ry., dated 23rd June 1898.

From—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
To—The Secretary to the Government of India, Public Works Department, Simla.
Dated—Ootacamund, 23rd June 1898, No. 849 Ry.

I am directed to acknowledge the receipt of your letter No. 706 R.C., and in reply to inform you that steps shall at once be taken to obtain an expression of opinion, in regard to the important Railway policy therein referred to, from each of the Railway Companies interested, as well as from Chambers of Commerce and other representative bodies. But as this will take some little time, I am desired to offer, meanwhile, the following remarks.

2. The fact of your referring only to my letter, No. 527 Ry., dated the 4th April 1898, and not to any of the subsequent letters on the same subject, marginally noted, and also your use of the words "West of Erode" in paragraph 2, instead of "West of Podanur", would apparently justify the presumption that the Government of India failed to appreciate that the suggestion made by the Madras Railway Company's Board of Directors, in their letter to their Agent, No. 970, dated the 11th March 1898, made it possible for this Government to so far modify its original proposal as to suggest Podanur instead of Erode as the most suitable point for break of gauge, thus making conversion unnecessary on the 60 miles between Erode and Podanur.

No. 540 Ry., dated 6th April 1898.
No. 613 Ry., dated 23rd April 1898.
Note for Railway Conference of 1898, and letter, No. 689 Ry., dated 4th May 1898.
No. 725 Ry., dated 14th May 1898.
No. 765 Ry., dated 27th May 1898.

3. There is another matter to which I am instructed to invite particular attention, because a perusal of your letter now under reply would, in the opinion of His Excellency the Governor in Council, appear to indicate that the importance of the motives which have led this Government to advocate this particular Railway policy has not been duly appreciated. The Erode-Nanjangod line has not been proposed for the sake of forming a metre-gauge link between the two great metre systems by which the Madras Railway is flanked. It, in common with the Podanur-Dindigul, the Cochin branch, and the Cannanore extension, have been pressed for in order that the main south-west line of the Madras Railway, which at present traverses a wide tract of country in the form, practically, of a feederless trunk, may be furnished with a suitable system of feeders, without which the commercial requirements of the country purporting to be served by the trunk line cannot be adequately met. The Erode-Mysore branch of the Madras Railway would certainly, but merely incidentally, form a connecting link between two metre-gauge systems, and this is an additional reason why it should be on the metre gauge; but the main reason is that, in the opinion of this Government, that gauge will quite suffice to handle any traffic that is ever likely to be attracted to it.

4. This Government, as at present advised, fails to see the reasonableness of the Government of India's stipulation that it be made a condition that the Southern Mahratta and South Indian Railways shall have running powers over the Erode-Mysore branch of the Madras Railway. There would appear to be no reason to anticipate any

such flow of traffic between the two metre Companies' lines as cannot quite adequately be met, to the full satisfaction of traders, by the ordinary facilities afforded by through-booking agreements and by the ordinary rules for interchange of rolling-stock. The main object of the proposed Erode-Mysore branch of the Madras Railway is to bring into direct touch with the Madras Railway system, and of course through it with the South Indian Railway system, the trade of South Mysore which concentrates at, and is financed in, the City of Mysore. This question, however, of the necessity for granting running powers over this branch to foreign lines, shall be dealt with more fully in due course when inquiries about the course of trade, in connection with the policy under reference, shall have been more fully matured. As at present advised this Government sees no more reason for the grant of such powers than might be held to prevail in the case of many other links throughout India where running powers are not proposed to be granted.

5. You express the opinion that it is by no means clear that if running powers are granted to the Southern Mahratta and South Indian Railways over the Erode-Mysore branch, the Madras Railway Company would consider it worth their while to go to a large expense, so near the possible termination of their contract, in converting their broad gauge line for the sake of obtaining the right to make this branch. But in the first place what it is proposed to offer to the Madras Railway Company is not merely the Erode-Mysore branch, but the Podanur-Dindigul and Shoranur-Cochin branches also, as well as a connecting link between Mettupalaiyam and Satyamangalam, all forming, with the converted sections and the Nilgiri Railway, a *reseau* of metre-gauge lines, 577 miles in extent, and of a shape most suitable for economical working. This *reseau* it is proposed to offer them in lieu of the 173 miles of trunk, from Podanur to Cannanore, branchless except for its feeder to the Nilgiris.

6. It is proposed that, for the sake of securing these advantages, and they seem to His Excellency in Council to be well worth their securing, the Company should consent first to convert 137 miles of standard gauge line to metre, at a cost which may presumably be estimated at under $1\frac{1}{2}$ lakhs for the road alone with an additional sum for transhipment arrangements; second to incur the expense of metre gauge rolling-stock for some 550 miles of line; and third to build workshops and whatever may be necessary at Podanur for the upkeep of this metre-gauge rolling-stock.

7. But it must not be forgotten that against these three items of expenditure must be set, at the credit side, the following savings. First the very large reduction in the cost of the 62 miles of the Cannanore extension; second the setting free, for use on the remainder of the broad-gauge system, of the existing rolling-stock of 137 miles of line to be converted; third the saving which it will be possible to effect of the contemplated and at present urgently demanded extension of the main workshops of the Company at Perambur; fourth the saving which will be secured by the proposed strengthening of certain bridges becoming unnecessary, and in its being found possible to utilize existing weak broad-gauge girders on the projected metre-gauge branches. So far as can at present be judged, pending the preparation of estimates, the net results of these Capital items ought to work out very largely favourable to the Company.

8. Then, as regards the revenue side of the account, it appears to this Government that the cost of handling the comparatively small quantity of goods which must break bulk at Perambur will be far more than balanced by the saving accruing from the use of the metre gauge on a portion of the Madras Railway Company's system where the broad gauge is more than adequate for any present or future traffic requirements.

9. The actual need for continuity of gauge between the east and west coasts of India in the part of this Presidency which is traversed by the south-west section of the Madras Railway must not be gauged by the same measure as would be applied had a similar problem to be solved on the North-West Line which connects Madras with Bombay or on the Peshawar-Kurrachee or the Calcutta-Bombay or even on the Calcutta-Kurrachee connection. So far as can at present be judged, pending the completion of traffic analyses, the through traffic *vid* Podanur between the east and west coasts is very small indeed. There is reason to believe that the interests of the Madras merchant in the trade of the west coast and of the Malabar merchant in the trade of Madras, as measured in weight of goods dealt in, would be more

than amply provided for by a daily train or two on a 2 feet gauge line. The flow of the bulk of the traffic is at present believed to be from Podanur and its neighbourhood towards both coasts and *vice versâ*. Station-to-station traffic figures are being carefully analysed with a view to ascertaining the truth or otherwise of this surmise, and the results shall in due course be communicated.

10. As regards the reference, at the end of paragraph 5 of your letter under reply, to the advisability of the prosecution of work on the Cannanore extension being stopped until the question of its gauge shall have been settled, I am instructed to inform you that work on the first 26 miles is being prosecuted so far as is possible without prejudicing the gauge question, and that as much indeed is being done as is possible in the present state of the season. There has so far been no necessity to seriously obstruct progress, and a full measure of control over all work is retained.

11. As regards the remarks made about the Cochin line in your paragraph 8, I am directed to say that this Government do not consider it to be desirable to interfere in the exercise by His Highness the Rajah of Cochin of his own discretion in regard to the selection of the gauge for the railway which he is about to propose to construct entirely out of his own resources, and the more so in that His Excellency in Council concurs with His Highness the Rajah in the opinion that the metre gauge is in this case the right one.

From—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
To—The Secretary to the Government of India, Public Works Department.
Dated—2nd August 1898, No. 994 Ry.

As it now seems practically certain that the Mettupalaiyam-Coonoor Railway will be opened for all traffic on the 1st of October next, and as, if Government is to be relieved of the onus of its guarantee, it is most important that cart and tonga competition should not come into existence, I am directed to invite special attention to paragraphs 3, 4, and 5 of my letter No. 765 Ry., dated the 27th May 1898, in which the early conversion from broad to metre gauge of the 25 miles Podanur-Mettupalaiyam branch of the Madras Railway, was strongly recommended.

2. This Government is convinced that the conversion would go far to render cart and tonga competition inoperative. There seems every reason to believe, that for the present, no more rolling-stock would be required than the Nilgiri Railway Company now possess, and certainly no more than they will possess when their extension to Ootacamund is sanctioned.

3. The cost of conversion of this section has now been estimated by a committee of officers of the Madras Railway Company as follows for the 26 miles:—

Road	Rs.	21,420
Bridges	„	15,017
Stations	„	12,904
Total ...	Rs.	49,341

4. As regards the question of the allocation of the cost of conversion, I am directed to invite your attention to paragraphs 8 and 9 of the note by the Examiner, Guaranteed Railway Accounts, Madras, which accompanied my letter, No. 725 Ry., dated the 14th May 1898, and to say that in the opinion of this Government there are the strongest grounds for treating this charge exceptionally, and for debiting it to Capital instead of to Revenue. For it is scarcely reasonable to expect that a body of shareholders who are now beginning to earn surplus profits, will consent to forfeit these profits for the sake of securing benefits to Government, and to another Company which there is but a remote prospect of their sharing.

5. The Secretary of State's despatch, referred to in the Examiner's note, recognizes that there will be such exceptional cases, and in the opinion of this Government this is one of them. To rule that the charge must be a revenue charge, would be practically equivalent to ruling that the conversion shall not take place,—a decision which, in the opinion of His Excellency the Governor in Council, would be greatly to be deprecated.

From—The Honorary Secretary, Malabar Chamber of Commerce.
To—The Joint Secretary to Government of Madras, P.W. Dept., Ry. Branch.
Dated—9th July 1898.

I have been directed by the Malabar Chamber of Commerce to acknowledge receipt of copies of G.O., No. 852 Ry., 23rd June 1898, on the subject of the Madras Railway metre-gauge conversion and extension policy, which were distributed amongst its members with a view to eliciting an expression of their opinion.

2. A meeting of the Chamber was held on the 8th instant to discuss the subject, and I now have the honour to inform you that the proposed conversion of the Madras Railway from Podanur to Calicut, to metre-gauge from its present gauge, meets with the approval of the Chamber, and in its opinion the Calicut-Cannanore extension should be constructed on the same gauge, with a view to the conversion in question being carried out by the time that the extension will be completed.

3. The Chamber has been greatly influenced at arriving at this decision, from the fact that it recognizes that there is more likelihood of the line which it has so long advocated from Tellicherry to Mysore through Coorg being constructed if the extension from Calicut to Cannanore is on the metre-gauge; this will facilitate its being linked up with the line on the same gauge terminating at Mysore, and the cost of construction will not be prohibitive, as it might be on the broad gauge.

4. It further appears to the Chamber to be only a question of time before the extension of the railway northward to Mangalore will have to be considered; that important and thriving town must be placed in railway communication with the rest of India, and if the Mangalore-Arsikeri scheme is to be abandoned, the only alternative would appear to be an extension from Cannanore, which, with the Chamber's knowledge of the country between the two towns, would only pay if constructed on the metre gauge.

5. With reference to paragraph 9 in the note by the Consulting Engineer for Railways, Madras, dated 17th June 1898, the Chamber endorses the opinion expressed therein, that the flow of the bulk of the traffic on the Madras Railway is from Podanur and its neighbourhood towards both the coasts and *vice versâ*.

6. Amongst the extensions proposed is that of one of 118 miles between Podanur and Dindigul; the Chamber is of opinion that trade and the interests of the country would be better served by a line from Palghat to Dindigul. It understands that a petition to this effect largely signed has been sent in to Government.

7. I am instructed by the Chamber to urge upon Government, that there be no more delay than is absolutely necessary in the construction of the extension of the line from Calicut to Cannanore, and the conversion of the line from Podanur to Calicut to metre-gauge. If the information the Chamber is receiving is correct, it would appear that, even now, the Engineers in charge of the extension could make better progress if the officer appointed by Government to hand over the land required could cope with the work; the Chamber respectfully suggests that if this is the case a second officer be appointed to assist him.

In conclusion, I am desired to express the thanks of the Chamber to Government for giving it an opportunity of expressing its opinion on the subject in question.

From—The Honorary Secretary, Cochin Chamber of Commerce, Cochin.
To—The Joint Secretary to Government of Madras P.W. Dept., Ry. Branch.
Dated—22nd July 1898.

G.O., No. 852 Ry., 23rd June 1898, having been circulated among the members of this Chamber, a special meeting was held this morning for the purpose of considering the same, and I have now the honour to inform you that the proposals of Government regarding the Madras Railway metre-gauge conversion and extension have the entire support and approval of this Chamber.

In view of the possibly early construction of the Shoranur-Cochin line on the metre-gauge, as also the Tinnevelly-Quilon extension on same gauge, with the probable linking up of the two systems within, it is to be hoped, no great distance of time, this Chamber is of opinion that a policy which advocates the whole West Coast

to be of a uniform gauge, is one deserving of fullest support. Such a gauge would be ample to cope with the trade, is cheaper, and has consequently greater possibilities of extension.

I am further directed to suggest that, before deciding on the new branch line Dindigul-Podanur, the claims of the other route Dindigul-Palghat should be favourably considered, as in the opinion of this Chamber the trade of Malabar would be more advantageously served by the latter line.

From—The Chairman, Chamber of Commerce, Madras.
To—The Joint Secretary to Government of Madras, P.W. Dept., Railway Branch.
Dated—30th July 1898.

I have the honour to acknowledge the receipt of the order of Government, No. 852 Ry., dated the 23rd ultimo, inviting an expression of the opinion of this Chamber on the proposed Madras Railway metre-gauge conversion and extension policy.

This Chamber has carefully considered the scheme set forth in the papers that accompany the Government order, and its members are unanimously of opinion that the scheme, if carried out, would be generally advantageous to the trade of the Presidency, and, therefore, deserves the Chamber's support. In the Chamber's opinion, too, the scheme offers a satisfactory solution of the disabilities under which the Madras Railway Company would suffer by a policy that proposed to allow the existing metre-gauge companies to intrude upon what has always been considered the special territory of the Madras Railway Company. Concerning this aspect of the matter, the Chamber wishes to emphasise its adherence to the views already expressed in its letter of the 2nd May 1888, quoted as an appendix to the Consulting Engineer's note of the 17th June 1898.

The details of the scheme that has now been sketched by the Consulting Engineer will require very careful consideration, but the Chamber feels that these may well be left to be settled between the Railway Department of Government and the Railway Companies concerned. All that the Chamber desires specially to urge is that there should be a speedy settlement of the many minor questions involved, so that the lines on the West Coast may not be unduly delayed by reason of the change of policy proposed.

From—The Honorary Secretary, Nilgiri Planters' Association.
To—The Consulting Engineer for Railways, Madras.
Dated—Kotagiri, 1st August 1898.

In further reply to your letter of July 18th, I have the honour to state that at a meeting of the Nilgiri Planters' Association, held on July 30th at Ootacamund, the following resolution was passed:—

"Madras Railway Metre Gauge Conversion and Extension Policy. Resolved that the policy of the Madras Government has the hearty support of the Nilgiri Planters' Association."

Order—No. 1048 Ry., dated 13th August 1898.

Copies of the communications read above, from the several public bodies who have been consulted about the change of gauge policy, in compliance with the instructions contained in the Government of India's letter No. 706 R.C., dated the 31st May 1898, will be forwarded for the information of the Government of India who will be addressed by a separate letter.

From—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
To—The Secretary to the Government of India, Public Works Department.
Dated—13th August 1898, No. 1049 Ry.

I am now directed to forward, for the information of the Government of India, copies of communications which have been received from the marginally-noted Public Bodies, in accordance with the desire expressed in paragraph 6 of your letter, No. 706 R.C., dated the 31st May 1898.

The Honorary Secretary, Malabar Chamber of Commerce.
" " " Cochin " of "
" " " Nilgiri Planters' Association.
" Chairman, Madras Chamber of Commerce.

2. The opinion of the Madras and South Indian Railway Companies' Boards of Directors has been sought through their respective Agents, and shall be forwarded when received. But this Government has become aware that the opinion of the Board of Directors of the Madras Railway Company which is in favour generally of the change of gauge and metre extension policy under reference, has been given expression to in a letter from their Secretary to the Under Secretary of State for India, No. 9155, dated the 14th June 1898.

From—The Secretary United Planters' Association, Southern India.
To—The Consulting Engineer for Railways, Madras.
Dated—Madras, 15th August 1898.

I have the honour to forward you the following copy of a resolution passed at the annual meeting of this Association on the 10th instant:—

"That this Association do support the policy of the Government of Madras as set out in G.O., No. 852 Ry., dated 23rd June 1898, forwarded by the Consulting Engineer for Railways, Madras, for an expression of opinion, and that the Secretary, United Planters' Association of Southern India, immediately communicate with him, expressing a hope that the subject may be considered at the Railway Conference at Simla in September."

Commending the matter to your best attention.

From—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
To—The Secretary to the Government of India, Public Works Department.
Dated—18th August 1898, No. 1063 Ry.

In continuation of my letter, No. 1049 Ry., dated the 13th August 1898, I am directed to forward herewith, for information, copy of a letter, dated the 15th idem, from the Secretary, United Planters' Association, Southern India, Madras.

From—The Secretary to the Government of India, Public Works Department.
To—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
Dated—Simla, 6th September 1898, No. 108 R.P.

I am directed to acknowledge the receipt of your letters marginally noted on the subject of the proposed metre-gauge policy for the Madras Railway and its extensions, and in reply to inform you that pending receipt of the report and estimates called for in their letter, No. 706 R.C., dated the 31st May 1898, the Government of India are unable to come to any decision either on the question of allocation or on the general merits of the proposal.

No. 849 Ry., dated 23rd June 1898.
No. 852/15 Ry., dated 23rd June 1898.
No. 994 Ry., dated 2nd August 1898.
No. 1011 Ry., dated 8th August.

From—The Agent and Manager, Madras Railway.
To—The Consulting Engineer for Railways, Madras.
Dated—29th September 1898, No. 828.

I have the honour to acknowledge the receipt of G.O., No. 852 Ry., dated the 23rd June 1898.

2. The views of my Board on the question raised in the papers which accompanied this order are very fully given in a letter which the Secretary of the Madras Railway Company addressed to the Under Secretary of State for India on the 14th June last.

3. From this letter you will gather that my Directors are prepared to consent to the construction of the Calicut-Cannanore extension on the metre gauge and that they

are further prepared to consider favourably the conversion from standard to metre gauge of a section of the Company's main line, viz., the section between Podanur and Calicut, provided it is considered desirable to undertake such conversion.

4. My Directors further state that, independently of any decision upon the conversion of the section of the main line above referred to, they are prepared to agree to the immediate conversion of the Nilgiri Branch from Podanur to Mettupalaiyam so that through communication by metre gauge may be formed between Mettupalaiyam and Dindigul *viâ* Podanur, and between Podanur and Mysore *viâ* Mettupalaiyam, Satyamangalam and Nanjangod.

5. My Directors properly attach to their consent to changing the system the condition that the Madras Railway should have the working, if not the construction, of the several branch feeders which are considered to be necessary to fully develop the traffic of the trunk line.

6. My Directors allude particularly to the following new branches or extensions to be hereafter built, viz:—Calicut-Cannanore; Shoranur-Cochin; Podanur-Dindigul; Erode-Nunjangod-Mysore; Mettupalaiyam-Satyamangalam; and the several printed copies of letters written by my Board or by the Agents of the Madras Railway during the last 10 or 11 years, and which are herewith * enclosed, will show you that this Company has always regarded branch lines taking off from its system as within the sphere of the Madras Railway. I regard as legitimately belonging to the Madras Railway the Wynaad and Coorg districts of the Madras Presidency and I strongly favour the construction of a metre-gauge railway from Tellicherry or Calicut to Mysore.

* Not reprinted.
F. J. E. S.

7. I go further and say that the Madras Railway in the near future should extend as a coast line to Quilon in the south and Mangalore in the north. A former Governor-General of India mapped out a Western Coast Railway extending from Tuticorin to Bombay, and there can be no doubt that in the interests of trade such a railway will be some day constructed, and I agree with the Madras Government that, before it is too late, the gauge to be traversed throughout on the western coast should be settled.

8. The printed enclosures to my letter allude to the willingness of the Madras Railway to undertake the construction and working of metre-gauge extensions, it being recognised that the less expensive metre-gauge system is sufficient to serve districts where the traffic is light.

9. It has long been felt that in the matter of railways the western coast has been neglected and if the references now being made to the Government of India result in the claim of the western districts to railway communication being recognised, the discussion will have served a good purpose. The western districts of this Presidency are generally well populated, the inhabitants are well-to-do and the whole country is under cultivation. I know of no other districts where railways could be opened up with the same advantages to the State and to the people as on the western coast.

10. I am submitting with this letter an abstract showing the saving to the State, supposing the line between Calicut and Podanur and Mettupalaiyam be converted and the 14th May Palghatcherry and Shoranur-Cochin lines be constructed on the metre and the Calicut-Ballapavan [illegible] instead of the standard gauge. This abstract is sent to you in accordance with the wishes of the Government of India expressed in paragraph 5 of its letter No. 706 R.C. of the 31st of May 1898.

11. A statement of the traffic that passed Podanur during the year 1897 has been prepared by the Company's Chief Auditor and a copy of this statement with the Chief Auditor's explanatory remarks is enclosed.

12. The Government has directed the particular attention of this Company to the stipulations made in paragraph 4 of the Government of India's letter No. 706 R.C. of the 31st May 1898; and I take it that I am desired to state if the advantage to the Madras Railway would be neutralised if running powers over the section between Erode and Mysore (or the frontier?) were given to the South Indian and Southern Mahratta Railways, while the working of the section was entrusted to the Madras

Railway. The answer to this question cannot of course be a definite one because it turns entirely upon the interpretation placed by the Government of India on the term "running powers."

13. It may perhaps be fairly assumed in a new departure of this kind in India that English practice would be followed. This would mean that the $\frac{\text{owning}}{\text{working}}$ railway would retain the total receipts applicable to the section worked over, and pay to each of the lines which exercised running powers what is termed a "train mileage charge" fixed as nearly as possible to represent the actual cost per mile of the engine, engine staff and guards of a train. The charges for the vehicles hauled would of course be governed by the ordinary Conference Mileage Rules.

14. As far as ordinary rolling-stock is concerned, running powers are now exercised by the Great Indian Peninsula and Madras Railways, through-trains passing freely (with the exception of engines) over the two railways, and it is difficult to see what more could possibly be required between Erode and Nunjangode, even supposing that an examination of the case should lead any one to think through passenger carriages necessary. To through carriages with passengers there could not and would not be the slightest objection, provided there was sufficient through traffic for them. With engines it is a different matter. I have no authoritative information as to the distance from Erode to Nunjangode, but it is said to be 121 miles or equal to the distance, say, from Trichinopoly to Cuddalore.

15. A mixed train takes 18 hours 5 minutes to run from Trichinopoly to Cuddalore, so that the engines belonging to the railways on either side, to whom it is proposed to give running powers, could do absolutely nothing else but run from Nunjangode to Erode or *vice versâ*, and as the engines would have to be changed at each end besides taking fuel and water on the road, it would seem to make absolutely no difference whether trains were worked by the engines of the $\frac{\text{owning}}{\text{working}}$ line or by lines having running powers. To the public there could be no advantage whatever, nor is it probable that any railways could attempt to exercise such powers, unless for the object of making things unpleasant for the $\frac{\text{owning}}{\text{working}}$ railway.

16. It is assumed that the Government of India does not contemplate any divided control as to rates and fares or total receipts, and that, should any restrictions be imposed upon the section Erode to Nunjangode, similar restrictions would also be applied to traffic booked over a similar distance on the South Indian and Southern Mahratta Railways; also that, if running powers were granted to the South Indian and Southern Mahratta Railways, they would also be granted to the working railway for an equal distance over the South Indian and Southern Mahratta Railways on each side, or there could be no reciprocity in such an agreement.

17. As regards through trains belonging to the South Indian or Southern Mahratta Railways these could only be necessary or justifiable if the working railway declined to forward traffic through without delay, or to arrange satisfactory connections with the connecting passenger trains of each railway; but as such connections are already under the control of Government this would be an impossible position.

18. "Train mileage" in England is fixed as nearly as possible at actual cost, the object of "running powers" being to enable another railway to retain a through traffic, the mileage of which it would lose over its own line if it were unable in the absence of running powers to reach the final destination of the traffic. In some cases the railway exercising the running powers owns a short line or terminus beyond the line over which the powers are exercised, but not always. No interference, however, is ever permitted with traffic other than the legitimate *through* traffic arising on the line exercising running powers, and the Government of India in granting permission to the East Indian Railway to run over the Eastern Bengal State Railway stipulate that nothing but through traffic for the Kidderpore Docks shall be carried over the Eastern Bengal State Railway from Nalhati junction.

19. If, therefore, the Government of India determine that running powers shall be granted to the South Indian and Southern Mahratta Railways between Erode and Mysore (or the frontier only as the Mysore State may object to running powers) then it will be necessary to stipulate—

(*a*) That the $\frac{\text{owning}}{\text{working}}$ Railway, Erode-Nunjangode Section, be given the usual liberty of action with rates and fares within the Government maxima and minima.

(*b*) That payment to the railways exercising running powers should not exceed the actual cost of engine power and wages of running staff.

(*c*) That such powers shall not be exercised for less than three-fourths of the scheduled train load of through traffic, either coaching or goods; the term "through traffic" to mean traffic arising on the line wishing to exercise running powers and consigned to a destination beyond the Erode-Nunjangode section.

With these three clauses in operation the advantage to the $\frac{\text{working}}{\text{owning}}$ railway could not be neutralised even if running powers were granted.

20. The tendency of running powers is to increase the cost of working; and where, as in this country, all railways are virtually the property of the State, such powers, in my opinion, cannot be justified except for mutual convenience when arrangements such as those in force at Bombay between the Great Indian Peninsula and Bombay-Baroda and Central Indian Railways and at Cawnpore between the Indian-Midland, East Indian and Oudh and Rohilkhand Railways, for using joint goods sheds and for passing trains over short lengths of railway, are agreed to.

21. It will be seen that I agree with my Board and, subject to the stipulations imposed by my Directors, I favour generally the scheme proposed by the Madras Government believing as I do that it is a comprehensive scheme for railway extension in the Madras Presidency and if carried out will result in the best interests of the Presidency being served. There is room in the many districts of the Madras Presidency for both the Madras and the South Indian Railways without the two railways trying to cross and re-cross each other's systems, and I cannot too strongly condemn competition between the two railways when both are the property of the State and while the State has full power to correct abuses of all kinds if those abuses affect injuriously the interests of the public. The zone or territory of each railway can, it seems to me, be laid down without difficulty and then the Government has only to determine the gauge of branch or feeder line to be constructed from the trunk or parent lines.

22. I may here refer to the fact that in selecting Podanur as the site for metre gauge workshops, we have been guided, first, by its position as an important junction station central to all lengths of the proposed metre-gauge sections, and secondly, because the climate is healthy and land for workshops can be secured at small cost and without difficulty. The report of the Committee appointed to consider the station arrangements at Podanur junction is attached, and this report will be found exhaustive, as it deals very fully with the proposed workshop and junction arrangements.

23. The Locomotive Superintendent in his letter attached explains the objection to utilizing the Nilgiri Railway stock between Podanur and Mettupalaiyam and until in actual working it is known what traffic will remain for us to deal with at Mettupalaiyam as "local and tranship" traffic we cannot determine what length of rails can be saved from the Mettupalaiyam yard. A credit may be available here and a further credit in rails released at Olavakot, but these credits cannot be stated yet.

24. Should the scheme proposed by the Government of Madras be carried through, there will remain for the Secretary of State and the Board of Directors to settle—

(1) how the cost of the conversion from standard to metre gauge is to be disposed of; and

(2) what course is to be pursued with reference to the standard gauge engines and rolling-stock released.

Both matters will have, it seems to me, to be treated specially seeing that our contract is so soon to expire. The released engines and rolling-stock may possibly be sold to the East Coast Railway; but if not so disposed of, I would suggest that the stock released be transferred to the "stores capital" account.

25. The capital raised for the several branch lines it is proposed to construct under the scheme now before the Government will, it is presumed, be governed by Act X of 1895 which provides for interest being paid out of capital during the time railways are under construction.

Enclosure No. 29.

Saving effected by the introduction of the Metre gauge system instead of the Standard gauge on Railways constructed, or to be constructed, west of Podanur

No.	Credits.	Rs.	Rs.
1	Mettupalaiyam and Calicut (conversion)—		
	Eighteen standard gauge engines to be released ..	8,40,572	
	Standard gauge coaching stock to be released ..	2,90,075	
	Standard gauge goods stock to be released ..	4,47,800	
	Thirty-three ballast wagons to be released ..	46,377	
	Saving in construction by making Calicut-Cannanore branch a metre gauge line instead of standard gauge	14,14,440	30,39,264
2	Calicut and Baliapatam (construction)—		
	Saving between the cost of standard and metre gauge engines and rolling-stock required for Calicut-Baliapatam line	2,46,840	2,46,840
3	Shoranur-Cochin (construction)—		
	Saving between the cost of standard and metre gauge engines and rolling-stock required for Shoranur-Cochin line	4,46,875	
	Saving in construction between the cost of standard and metre gauge lines between Shoranur and Cochin based on the estimates framed for the first 80 miles	56,02,285	60,49,160
4	Special—		
	Estimated saving in buildings and machinery at Peramour owing to construction of metre gauge shops at Podanur	3,25,000	
	Value of 46 third-class carriages lately sanctioned for standard gauge which will not be required if conversion scheme is carried out ..	1,95,983	5,20,983
			98,56,247

No.	Debits.	Rs.	Rs.
1	Mettupalaiyam and Calicut (conversion)—		
	Metre gauge engines and rolling-stock * ..	13,21,761	
			13,21,761
2	Calicut and Baliapatam (construction)—		
	Metre gauge engines and rolling-stock † ..	4,30,380	
			4,30,380
3	Shoranur Cochin (construction)—		
	Metre gauge engines and rolling-stock † ..	3,96,045	
			3,96,045
4	Special—		
	Re-arranging Podanur yard to suit standard and metre gauges and erecting metre gauge workshops	5,61,533	
	Machinery, &c., required in metre gauge shops—	Rs.	
	Machinery and fitting shop	69,615	
	Boiler shop	22,606	
	Smiths shop	29,478	
	Erecting shop	41,063	
	Carriage shop	9,733	
		1,72,495	
	Approximate cost of converting existing standard gauge line to metre gauge, viz.:—		
	Calicut to Shoranur	1,20,693	
	Shoranur to Podanur	1,09,195	
	Podanur to Mettupalaiyam	49,341	10,13,267
	Total ..		31,61,443

* Based on cost of South Indian and Southern Mahratta stock per mile as given on page 74 of Part I of the Administration Report of the Director of Traffic for 1897-98.
† Based on cost of Southern Mahratta and Bhownagar Goudal stock per mile as given on pages 74 and 75 of Part I of the Administration Report of the Director of Traffic for 1897-98.
‡ Based on cost of Bhownagar Goudal stock per mile as given on page 75 of Part I of the Administration Report of the Director of Traffic for 1897-98.

ENCLOSURE No. 30.

STATEMENT PREPARED BY THE MADRAS RY. CO.'S CHIEF AUDITOR SHOWING MOVEMENT OF TRAFFIC PAST PODANUR IN THE YEAR 1897.

From Podanur westward, blocks Nos. 44—52 are here for convenience called "West Coast Block."

	Business done between the West Coast and each of the following blocks.	From West Coast. Maunds.	To West Coast. Maunds.	Remarks.
1–8	Arkonam-Madras	122,129	84,711	} Will all break gauge.
9–19	Arkonam-Raichur	43,641	9,930	
20–39	Arkonam-Erode (with Bangalore Branch)	794,041	981,309	
53	Kolar Gold Fields Railway	308,943	45	
55	Great Indian Peninsula Railway	8,186	1,087	
56–57	Southern Mahratta Railway *viâ* Guntakal or Bangalore.	34,809	47,399	} Will not break gauge.
58–62	South Indian Railway	394,576	222,821	
41–43	Nilgiri Railway	634,638	246,921	
40	Between Erode and Podanur including Podanur ..	191,538	267,343	Perhaps half will break gauge.

The above statement seems to show that, for the full year 1897, 1,373,000 maunds were exported from and 1,211,000 maunds were imported to the West Coast block, to and from places whose continuity of gauge it is proposed to sever. *That is*, 26 *ten-ton wagons will have to break bulk at Podanur daily.*

But on the other hand, gauge will not in future have to be broken by 1,160,000 maunds of exports and 651,000 maunds of imports per annum. In other words, 18 ten-ton wagon loads, of which 16 do now actually break bulk at one junction or another, need not in future break bulk.

The result of the change of gauge will be the daily transhipment of 26 ten-ton wagons at Podanur, while our other junctions will be relieved of the cost of transhipment of 16 ten-ton wagon loads per diem, which will no longer be required to change gauge.

Madras is concerned with only two wagons per day.

ENCLOSURE No. 31.

REPORT BY THE DEPARTMENTAL COMMITTEE APPOINTED TO CONSIDER THE ALTERATIONS NECESSARY AT PODANUR IN CONNECTION WITH THE PROPOSED BREAK OF GAUGE AT THAT STATION.

In accordance with the instructions contained in the Agent and Manager's letter, No. 10686/6552 of 6th July, the Committee met at Podanur on the 11th, 12th, 13th and 14th July and again in Madras on the 22nd idem, to consider the alterations necessary for, and the transhipment facilities and workshop accommodation which will be entailed by, the conversion of the Mettupalaiyam Branch and the main line west of Podanur to the metre gauge.

GENERAL ARRANGEMENT OF YARD.

2. In considering the respective portions of the station yard to be appropriated to the standard and metre gauge systems, the principal considerations the Committee has had in view have been the following:—

(1) The inevitable large extension in the future of the metre gauge yard and workshops when Podanur becomes the head-quarters of an extensive metre gauge system.
(2) The most suitable site for the metre gauge workshops.
(3) The fact that the standard gauge accommodation at Podanur, which will become the terminus of the standard gauge system, is not likely in the future to require large extensions.
(4) The qustion of cost.

3. To the north side of the line at the east end of the yard the vacant land is low and therefore costly to make up to formation level, and, being under wet cultivation, would be expensive to acquire. The high land on the north side of the yard is occupied by the company's buildings and Podanur village.

If the metre gauge is brought in on the north side of the station building, it will lead either (*a*) to the demolition of Company's buildings and Podanur village, or (*b*) to a most undesirable cramping of the shunting sidings opposite the station, and the expenditure of a large sum of money in providing a new transhipping shed and additional shunting sidings at the east end of the station. On the south side of the station the land now in the Company's possession affords accommodation for a large metre gauge yard and the greater portion of the site for metre gauge workshops. The ground available for the latter is a large open plain, approximately rail level, the

soil being such that foundations will be shallow. The Committee have therefore come to the conclusion that the standard gauge system should be brought in on the north side and the metre gauge yard and locomotive and carriage workshops should be placed on the south side of the existing station-house. The accompanying plan embodies the Committee's proposals.

4. In designing a mixed gauge yard unhampered by any existing works, a crossing of the gauges on the level would naturally be avoided, and the Committee are fully sensible of the disadvantages which accompany such a crossing. It was the endeavour of the Committee in the first place to so arrange the yard that there should be no crossing of the gauges; but for the reason stated it was found necessary to bring the standard gauge into the north side of the yard, and under the circumstances a crossing of the gauges is unavoidable.

5. After full consideration of several schemes the Committee decided to cross the gauges at the point shown on the plan which is within station limits and 600 feet from the eastern extremity of the passenger platform. It is intended that the standard and the metre gauge signals, and the metre gauge cross-over from the main line to the shunting neck, should be interlocked in such a manner as to render it impossible for trains on the two gauges to be received or despatched from or to the east and north, except when the main line is clear. It is intended that, as shown on the plan, the locking frame for these points and signals shall be erected in a cabin the floor of which should be 15 feet above standard gauge rail level, in order that the signalman may have a clear view over the north end of the yard. An interlocking arrangement of this description would effectually protect trains from all risk of collision, and considering the comparatively small number of trains passing in and out of the station and the proximity of the crossing to the platform, the inconvenience of the crossing of the gauges would be reduced to a minimum.

ESTIMATE OF ROLLING STOCK REQUIRED.

6. In order to arrive at the accommodation to be provided in the yard for both gauges, and in the workshops for metre gauge stock, the Committee have made the following estimate of the train services and of the necessary equipment of metre gauge rolling stock for the Western section:—

TRAIN SERVICE.

A.—Podanur East. Standard Gauge.

1 Mail train.	2 E. trains including loco. wood and ballast and *vice versâ* daily. Equal to ten trains in and out per day.
2 Mixed trains.	

B.—Podanur West. Metre Gauge.

N.B.—The Committee in dealing with the metre gauge train service have assumed the hauling power of a metre gauge engine to be $\frac{2}{3}$ of that now laid down for the standard gauge engines, and the weight of metre gauge bogie stock to be equal, unit for unit, to that of 4-wheel standard gauge stock.

1 Mail train.	3 E. trains including loco. wood and ballast and *vice versâ* daily.
3 Mixed trains.	

C.—Mettupalaiyam Branch.

1 Mail train.	1. E. train including loco. wood and ballast and *vice versâ* daily.
2 Mixed trains.	

Services B and C give 22 metre gauge trains in and out daily, for which engine power has to be provided, exclusive of the Coimbatore and Palghat local train services and shunting engines.

LOCOMOTIVES.

7. Standard gauge—as per train service A. Eleven engines will be stationed at Podanur, for about 6 of which running shed accommodation must be provided.

Metre gauge—as per services B and C—

16	engines for train service (*i.e.*, main line trains, a single trip daily; branch trains, a double trip daily) ...	Of which running shed accommodation at Podanur will be required for about 10.
3	engines for shunting at Podanur and local service ...	
5	„ spare at Podanur and for shed	
1	engine for shunting and locals at Olavakkot.	
1	„ for spare for Mails at Olavakkot.	
2	engines for train service at Calicut.	
1	engine shunting at Calicut.	
1	„ spare at Calicut.	
30	engines to be maintained in running order.	
Add 8	at 25 per cent. of above for proportion under repair and for which workshop accommodation has to be found.	
Total ... 38	metre gauge locomotives for equipment of the three sections to be converted.	

8. The loading of the metre gauge trains will be as follows :—

Mail Train.	*Mixed Trains.*
1 I class carriage.	1 composite I and II class.
1 II class carriage.	4 III class.
5 III class carriages.	1 III class latrine.
1 III class latrine carriage.	3 brake vans.
1 P. O. V.	12 goods vehicles.
2 brake vans.	
11 normal loads.	21 normal loads.

N.B.—This will apparently be the maximum load of the engine on the main line and leaves no margin for extra traffic.

Two sets of coaches will be required to work each train between Podanur and Calicut and one set to work each train between Podanur and Mettupalaiyam.

Coaching Stock.

9. The coaching stock to be provided will therefore be as follows :—

	For trains.	For strengthening trains.	For repairs at 12½%.	Total.
I class ...	3	3	1	7
II class	3	3	1	7
Composite ...	(*a*) 10	3	1	14
III class ...	(*b*) 53	(*c*) 20	9	82
Do. latrine ...	(*d*) 11	...	2	13
Brake vans ...	(*e*) 44	6	6	56
P. O. vans ...	3	1	1	5
Horse boxes ...	(*f*) 9	...	1	10
Carriage trucks...	(*f*) 5	...	1	6
Baggage vans ...	(*f*) 5	...	1	6
Total coaching stock to be provided for ...				203

(*a*) Main line mixed
Branch ,, ,, ,, .. 6
Palghat and Coimbatore locals .. 2
— 10

(*b*) Mail main line .. .. 5 × 2 = 10
,, Mettupalaiyam branch .. 5
Mixed main line .. 4 × 3 × 2 = 24
,, Mettupalaiyam branch 4 × 2 = 8
Palghat locals 3
Coimbatore locals 3
— 53

(*c*) It must be noted that the feast traffic at Karaimadai and Tirur has to be provided for.

(*d*) Mail main line .. .. 1 × 2 = 2
,, branch .. .. 1 = 1
Mixed main line .. 1 × 2 × 3 = 6
,, branch .. .. 1 × 2 = 2
— 11

(*e*) Mail main line .. .. 2 × 2 = 4
,, branch 2
Mixed main line .. 3 × 3 × 2 = 18
,, branch .. 2 × 2 = 4
E. train main line .. 2 × 3 × 2 = 12
,, branch 2
Palghat and Coimbatore locals .. 2
— 44

(*f*) This figure is an estimate only.

Goods Stock.

10. The average number of wagons on the Podanur-Calicut section daily for the last six months has been 135 and on the Mettupalaiyam branch 88, but on many days the figures have been 50 per cent. in excess of these. Allowance has also to be made for the delay to wagons due to transhipping and for the percentage under repairs. The minimum equipment of goods stock therefore for which it seems safe to estimate for the three sections is 135 + 88 = 223, to this add 50 per cent. as explained above, which gives a total of 335 goods wagons. To put it in another way the train service arranged for above will move the goods stock as follows daily :—

	Vehicles.	Trains.	Directions.	
Main line	12	× 3	× 2	= 72
Branch ,, ...	12	× 2		= 24
				96
Allowing 24 hours at each end for discharge makes each wagon available once in three days				3
				317

to which must be added wagons under repair. Of the total number, say, 50 should be open wagons capable of carrying timber.

Transhipping Accommodation.

11. In order to arrive at the accommodation to be provided at the tranship shed and platform, the Committee have taken out from the records of Podanur station for the month of June, which was a fairly representative heavy month, the loaded wagons passing in the six directions, viz., East to West, West to East, East to North, North to East, West to North and North to West, the traffic transhipped at Podanur under the same heads and the local traffic consigned to and from Podanur in the same directions.

12. The figures work out as follows :—

		Daily average. Metre gauge loaded wagons.	Daily average. Standard gauge loaded wagons.
Loaded wagons from stations East to stations West which will require transhipment ...	287	...	10
Loaded wagons from stations West to East ...	614	22	...
Loaded wagons from stations East to Mettupálaiyam branch	352	...	12
Loaded wagons from stations Mettupálaiyam branch to East	163	6	...
Total ...		28	22

The wagons consigned with local traffic and with mixed consignments requiring transhipment to and from Podanur during the month of June were as follows :—

From stations East to Podanur	216	...	7
Do. West to Podanur	128	5	...
Do. M.T.P. branch to Podanur ...	66	2	...
From Podanur to stations to East	179	...	6
,, do. West	207	7	...
,, do. M.T.P. branch	66	3	...
Total ...		45	35

Accommodation therefore is required for 45 wagons on each gauge.

13. The local traffic is sufficient to justify small local goods sheds for both gauges, but hitherto this traffic has been dealt with in the tranship shed, and the Committee do not consider the inconvenience of this procedure would be sufficient at present to render local goods sheds necessary.

14. The Committee have utilised the existing tranship shed and platform for the new transhipping arrangements. It will accommodate, as shown in the plan, 23 standard gauge and 13 metre gauge wagons against the platform (of which 4 and 3 respectively will be under cover) and 26 standard gauge vehicles and 13 metre gauge vehicles on the second lines.

15. With this accommodation the traffic specified in paragraph 12 can probably be dealt with. When further facilities are required, they can be provided either by removing the old and unsightly buildings at the west end of the passenger station and extending the tranship platform and lines over the site (extending the passenger platform an equivalent distance to the east) or by erecting separate local goods sheds.

Vehicle Accommodation on Standard Gauge Lines.

16. The average number of wagons in the Podanur yard at 8 A.M. for the last half-year was 75. But the traffic from the West Coast fluctuates much, and there have very frequently been over 100 wagons in the yard in the morning, the maximum having been 115 on the 15th May. Having in view the extra delay to stock due to transhipment on the one hand and the fact that traffic between Mettupálaiyam branch and West Coast will not come on the broad gauge lines on the other, it does not seem safe to assume a lower maximum than the following :—

Ninety goods vehicles for which storage accommodation must be provided,
With three marshalling lines for sorting vehicles,
A line on which to stand a formed goods train, and
Accommodation for 50 vehicles in the broad gauge tranship lines.

In addition two passenger trains and about 20 spare coaches will have to be stabled.

17. It is the intention of the Committee that on the standard gauge side the work of shunting and marshalling trains shall be performed from the shunting neck at the west end of the yard. A short trap siding is provided at the east end to enable vehicles to be drawn out of the horse and carriage transfer line without fouling the main line; but, as it may be found necessary to extend this trap siding into a shunting neck for the service of the platform lines, it has been shown in dotted lines on the plan as a probable future extension.

18. Two cranes of 3 tons capacity and one of 5 tons will be necessary on the transhipment platform to deal with the extensive timber traffic between the West Coast and the Gold Mines.

19. A standard gauge running shed to accommodate six engines and a turn-table have been provided at the west end of the standard gauge yard.

VEHICLE ACCOMMODATION ON METRE GAUGE LINES.

20. On the metre gauge side of the yard it is proposed to use the existing lines with slight modifications only, slewing them to metre gauge. The chief addition consists in the shunting necks provided at each end of the yard. The accommodation provided in addition to the platform and the second lines is a line on which to stand a formed train and storage for approximately 60 metre gauge vehicles in addition to the carriage shed lines for storing coaching stock, which it is considered will suffice for present requirements.

21. The design of the yard is such that when extensions become necessary new lines can readily be added. The plan includes the efficient trapping of the sidings on both gauges and the present catch siding to the west of the station can therefore be done away with.

STATION ACCOMMODATION.

22. In order to provide accommodation at the passenger platform for two metre gauge passenger trains it is necessary to extend the platform to 1,000 feet, and this is shown on the plan with a scissors crossing at the centre of the platform line on each gauge. The full length of platform not being required on the standard gauge side, the platform line on that side has been arranged as shown in the plan, so as to afford the required accommodation in the transhipment lines without widening the passenger platform.

23. Provision has been made for a horse and carriage transfer platform and lines at the east end of the passenger platform to meet the heavy horse and carriage traffic between Madras and the Hills.

LOCOMOTIVE REQUIREMENTS.

24. The Committee have considered the best method of utilising the existing locomotive buildings, viz., running shed, carriage shed, round house and the building now used as Locomotive Foreman's office, store and workshop and running bungalow. Part of the latter building has been embodied in the workshop plan and has been appropriated for workshop offices. The remaining portion of this building will be required for the Locomotive Foreman's office, stores and running bungalow. The running shed will not be in excess of the accommodation required for metre gauge running engines and has in the plan been appropriated for a metre gauge running shed. The carriage shed will be required for stabling metre gauge carriages.

25. The round house is an awkward building to work in with the general arrangement of the yard, and the Committee are of opinion that it is undesirable to include this building as part of the workshop plan. It might, however, be allowed to remain, and probably a use for it will be found in the future. In this connection it may be pointed out that the District Engineer's stores and the Public Works Inspector's store, office and workshops have to be demolished to provide room for the new standard gauge running shed and these might occupy a portion of the building. A store for metre gauge station machinery fittings and the work connected therewith will also be required and a portion of the building might be allotted to that purpose.

26. It has been suggested that the round house might be utilised as the broad gauge running shed, but the Committee do not recommend this for the reason that it would involve a most objectionable crossing of the gauges as indicated in dotted lines on the plan.

LOCOMOTIVE AND CARRIAGE WORKSHOPS.

27. The general arrangement of the shops is in echelon—a plan which allows of almost unlimited extension. The shops as now proposed are shown in full red lines and possible future extensions in dotted red lines. In considering the size of the workshops required the figures given in paragraphs 7, 9 and 10 have been taken and shop accommodation has been provided for 25 per cent. of engines, 12½ per cent. of passenger, and 10 per cent. of goods stock. These proportions give the following figures:—

Engines	8
Carriages	24
Wagons	34

28. The following shops have been included in in the plan:—

Carriage shop.	Erecting shop.
Paint shop.	Boiler shop.
Smithy and wheel shop.	Stores.
Fitting and machine shop.	Weigh bridge shed.

The proposed carriage and wagon repair shop will provide covered accommodation for 21 vehicles only, as it is considered this will meet immediate requirements. It will probably be found convenient to execute foundry and saw mill work at Perambur Works, and under these circumstances no provision has been made for buildings for these purposes. Two or three saw benches may be required and accommodation for these can be found in the carriage or machine shop.

29. The length of permanentway in the workshop yard may be considered excessive, but this is unavoidable if the shops are to be so designed as to provide for large future extensions, and it should not be overlooked that the opening of the Calicut-Cannanore section will probably be coincident with the carrying out of the scheme now under consideration.

30. In the Proceedings of the Committee of Locomotive and Carriage Superintendents for India, Vol. VI, plate XLV, is given a plan of metre gauge workshop for repairing 10 engines and 100 vehicles (presumably short stock) at one time, and it is interesting to compare the areas of the several shops shown on this plan with the areas of the shops the Committee propose for Podanur. The following are the figures:—

	Area of proposed metre gauge workshops at Podanur.	Area of metre gauge shops shown on plate XLV, Vol. VI, of the Proceedings of the Committee of Loco and Car. Supts. for India.
	SQ. FT.	SQ. FT.
Saw mill	...	8,400
Carriage shop	24,000	16,800
Paint shop	7,200	8,400
Smithy and wheel shop ...	13,680	10,080 (Smithy only).
Fitting shop	15,120	16,800
Foundry	...	6,720
Erecting shop	20,520	21,300
Boiler shop	9,000	9,940
Pattern shop, Copper smith's shop, Tinker's shop ...	...	3,360
Weigh bridge shed	525	...

HOUSING OF LOCOMOTIVE WORKSHOP STAFF.

31. The question of to what extent accommodation for the staff of the locomotive workshops should be provided by the Company appears to be one for the management to decide, but the Europeans or Eurasians in charge of the several shops must be housed, and the Committee suggest that in framing estimates eight houses of the driver's double block type should be allowed for and also quarters for the Locomotive officer in charge of the shops.

32. The only buildings, which will be demolished if the Committee's proposals are accepted, are the 20 menials' huts on the site of the proposed shops, the Travelling Auditor's bungalow, the Church room and the District Engineer and Inspector's stores and workshops, and provision for replacing these has been included in the estimate.

33. The Committee suggest for consideration the advisableness of at once acquiring a considerable area of land south of the present limits of the compound for future workshop extensions and housing of staff, as in the event of parcherries and buildings being erected on land that must ultimately be required for railway purposes the compensation to be paid to the owners when it has to be taken over will be much enhanced.

DISTRICT ENGINEER'S ESTIMATE FOR ALTERATIONS AND ADDITIONS.

34. The District Engineer's estimate for the alterations and additions, shown on the plan attached, is as follows:—

Standard gauge yard including engine sheds, &c.	Rs.	95,841
Metre gauge yard	„	32,128
Transhipping platform, &c.	„	9,545
Additions to passengers' platform	„	2,606
Locomotive works and yard	„	3,86,513
Bungalow for Locomotive officer	„	12,000
Do. for Travelling Auditor	„	3,200
Eight houses for Chargemen	„	16,000
Ten houses for menials to replace those demolished ...	„	2,700
Replacing district stores, work sheds and Inspector's sheds	„	1,000
Total	„	5,61,533

P.W. Ry. 688

B. Form No. 12.

No. 979 Ry.

Proposed change of gauge & metre extension policy for the Madras Ry.

Government of Madras.

PUBLIC WORKS DEPARTMENT,

RAILWAY BRANCH.

SERIAL No. 28(6)

To

THE SECY. TO THE GOVT. OF INDIA,

P. W. DEPARTMENT.

(4)

H.E. The Governor.

Draft for approval. This is the ad interim letter authorised by H.E. in the Note below. I shall submit the draft G.O.t. Chamber of Commerce &c. letter.

18/6/98

Sir,

Fort St. George, the 23rd June 1898.

I am directed to acknowledge the receipt of your letter No. 706 R. C., and in reply to inform you that steps shall at once be taken to obtain an expression of opinion, in regard to the important Railway Policy therein referred to, from each of the Railway Companies interested, as well as from Chambers of Commerce and other representative bodies. But as this will take some little time, I am desired to offer, meanwhile, the following remarks.

2. The fact of your referring only to my letter No. 527 Ry., dated the 4th April 1898, and not to any of the subsequent letters on the same subject, marginally

noted, and also your use of the words "West of Erode" in para 2, instead of "West of Podanur", would apparently justify the pre-sumption that the Government of India failed to appreciate that the suggestion made by the Madras Railway Company's Board of Directors, in their letter to their Agent, No. 970, dated the 11th March 1898, made it possible for this Government to so far modify its original pro-posal as to suggest Podanur instead of Erode as the most suitable point for break of gauge, thus making conversion unnecessary on the 60 miles between Erode and Podanur.

540 Ry. d/ 6-4-98.
613 Ry. d/ 23-4-98.
Note for the Railway Conference of 1898 and letter No.689 Ry. dated 4th May 1898.
725 Ry. d/ 14-5-98.
765 Ry. d/ 27-5-98.

3. There is another matter to which I am instructed to invite particular attention, because a perusal of your letter now under reply would in the opinion of His Excellency the Governor in Council appear to indicate that the importance of the motives which have led this Government to advocate this particular Railway Policy has not been duly appreciated. The Erode-Nanjangod Line has not been proposed for the sake of forming a metre gauge link between the two great metre systems by which

the Madras Railway is flanked. It, in common with the Podanur-Dindigul, the Cochin Branch, and the Cannanore extension, have been pressed for in order that the main South West Line of the Madras Rail-way, which at present traverses a wide tract of country in the form, practically, of a feederless trunk, may be furnished with a suitable system of feeders, with-out which the commercial requirements of the country purporting to be served by the trunk line cannot be adequately met. The Erode-Mysore Branch of the Madras Railway would certainly, but merely incidentally, form a connecting link between two metre gauge systems, and this is an additional reason why it should be on the metre gauge; but the main reason is that in the opinion of this Government that gauge will quite suffice to handle any traffic that is ever likely to be attracted to it.

4. This Government as at present advised fails to see the reasonableness of the Government of India's stipulation that it

be made a condition that the Southern Mahratta and South Indian Railways shall have running powers over the Erode-Mysore Branch of the Madras Railway. There would appear to be no reason to anticipate any such flow of traffic between the two metre Companies' lines as can-not quite adequately be met, to the full satisfaction of traders, by the ordinary facilities afforded by through booking agree-ments and by the ordinary rules for inter-change of rolling stock. The main object of the proposed Erode-Mysore Branch of the Madras Railway is to bring into direct touch with the Madras Railway system, and of course through it with the South Indian Railway system, the trade of South Mysore which con-centrates at, and is financed in, the City of Mysore. This question, however, of the necessity for granting running powers over this branch to foreign lines, shall be dealt with more fully in due course when enquiries about the course of trade, in connection with the policy under reference, shall have been more fully matured. As at present advised this Government sees no more reason for the grant of such powers

than might be held to prevail in the case of many other links throughout India where running powers are not proposed to be granted.

5. You express the opinion that it is by no means clear that if running powers are granted to the Southern Mahratta and South Indian Railways over the Erode-Mysore Branch, the Madras Railway Company would consider it worth their while to go to a large expense, so near the possible ter-mination of their contract, in converting their broad gauge line for the sake of obtaining the right to make this branch. But in the first place what it is proposed to offer to the Madras Railway Company is not merely the Erode-Mysore Branch, but the Podanur-Dindigul and Shoranur-Cochin Branches also, as well as a connecting link between Mettupalaiyam and Satyamangalam, all forming, with the converted sections and the Nilgiri Railway, a <u>reseau</u> of metre gauge lines, 577 miles in extent, and of a shape most suitable for economical working.

This reseau it is proposed to offer them in lieu of the 173 miles of trunk, from Podanur to Cannanore, branchless except for its feeder to the Nilgiris.

6. It is proposed that, for the sake of securing these advantages, and they seem to His Excellency in Council to be well worth their securing, the Company should consent 1st to convert 137 miles of standard gauge line to metre, at a cost which may presumably be estimated at under 1½ lakhs for the road alone with an additional sum for transhipment arrangements; 2nd to incur the expense of metre gauge rolling stock for some 550 miles of line; and 3rd to build workshops and what-ever may be necessary at Podanur for the upkeep of this metre gauge rolling stock.

7. But it must not be forgotten that against these three items of expenditure must be set, at the credit side, the following savings. 1st The very large reduction in the cost of the 62 miles of the Cannanore extension; 2nd the setting free, for use on the remainder of the broad gauge system, of the existing

rolling stock of 137 miles of line to be converted; 3rd the saving which it will be possible to effect of the contemplated and at present urgently demanded extension of the main workshops of the Company at Perambur; 4th the saving which will be secured by the proposed strengthening of certain bridges becoming unnecessary, and in its being found possible to utilize existing weak broad gauge girders on the projected metre gauge branches. So far as can at present be judged, pending the preparation of estimates, the net results of these Capital items ought to work out very largely favourable to the Company.

8. Then, as regards the revenue side of the account, it appears to this Government that the cost of handling the comparatively small quantity of goods which must break bulk at Perambur will be far more than balanced by the saving accruing from the use of the metre gauge on a portion of the Madras Railway Company's system where the broad gauge is ~~sufficient~~ adequate more than

for any present or future traffic requirements.

9. The actual need for continuity of gauge between the east and west coasts of India in the part of this Presidency which is traversed by the South West Section of the Madras Railway must not be gauged by the same measure as would be applied had a similar problem to be solved on the North West Line which connects Madras with Bombay or even on the Calcutta Bombay or on the Peshawar Kurrachee Kurrachee connection. So far as can at present be judged, pending the completion of traffic analyses, the through traffic via Podanur between the East and West Coasts is very small indeed. There is reason to believe that the interests of the Madras merchant in the trade of the West Coast and of the Malabar merchant in the trade of Madras, as measured in weight of goods dealt in, would be more than amply provided for by a daily train of two on a 2 ft. gauge line. The flow of the bulk of the traffic is at present believed to be from Podanur and its neighbourhood towards both coasts and vice versa. Station to Station traffic figures are being carefully analysed with a view to ascertaining

(5)

the truth or otherwise of this surmise, and the results shall in due course be communicated.

10. As regards ~~your~~ the reference, at the end of para 5 of your letter under reply, to the advisability of the prosecution of work on the Cannanore extension being stopped until the question of its gauge shall have been settled, I am instructed to inform you that work on the 1st 26 miles is being prosecuted so far as is possible without prejudicing the gauge question, and that as much indeed is being done as is possible in the present state of the season. There has so far been no necessity to seriously obstruct progress, and a full measure of control over all work is re-tained.

11. As regards the remarks made about the Cochin line in your para 8, I am directed to say that this Government do not consider it to be desirable to interfere in the exercise by His Highness the Rajah of Cochin of his own discretion in regard to

the selection of the gauge for the Railway which he is about to propose to construct entirely out of his own resources, and the more so in that His Excellency in Council concurs with His Highness the Rajah in the opinion that the metre gauge is in this case the right one.

7 R.S.

R.

18/6/98

Despatched on 23/6/98

Public Works (1898) Department.

Railway

CURRENT No. 1064

SERIAL No. 55

Mads

From Govt of India P.W.D.

Order Filed

No. 108 R.P

Dated 6th September 1898

Received } 12th —do—

Registered }

Enclosures

Spare copies

SUBJECT.

Proposed metre gauge Policy for the Madras Ry and its extensions

Stating that pending the receipt of the report and Estimates called for in Letter No. 706 R.C. dt/31-5-98 the Govt of India is unable to come to any decision either on the question of allocation or on the general merits of the proposal

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

All communications should be addressed to the Secretary.

SECRETARY TO RECEIVED 12 SEP. 1898 GOVT. OF MADRAS RYS.

SERIAL No. 521

No. 108 R.P.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY PROJECTS.

To

The Joint Secretary to the Government of Madras,

Public Works Department, Railway Branch.

File JH 16.9.98.

Simla, the 6th September 1898.

Sir,

I am directed to acknowledge the receipt of your letters marginally noted on the subject of the proposed metre-gauge policy for the Madras Railway and its extensions, and in reply to inform you that pending receipt of the report and estimates called for in their letter No.706 R.C., dated the 31st May 1898, the Government of India are unable to come to any decision either on the question of allocation or on the general merits of the proposal.

S.N°28(6)	No.849 Ry., dated 23rd June 1898.	
	No.852 Ry., dated 23rd June 1898.	
S.N° 29	No.994 Ry., dated 2nd August 1898.	
" 44	No.1011 Ry. dated 8th August 1898.	
" 49		

page 14 of S.N° 29 + 19
para 3 of S.N° 29.
also S.N°s 38, 44, 45, 46, 47, 54.

I have the honour to be,

Sir,

Your most obedient servant,

F. Rupcott

Secretary.

16/9/98

Documents accompanying:-

Nil.

S.A.

Public Works (189) Department.

CURRENT No. 4431

From The Agent Macleay

Order

No. 828

Dated 20. Sept 1895.

Received 23rd "

Registered

Enclosures

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SUBJECT.

Forwarding an estimate of the cost of, and an expression of his views in regard to, the metre gauge extension and conversion policy put forward by the Govt.

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

81

E.R.'s Current No. 4431 23.9.98.

MADRAS RAILWAY COMPANY,
AGENT AND MANAGER'S OFFICE,
MADRAS, 20th *September* 1898.

No. 828.

FROM

THE AGENT AND MANAGER,
Madras Railway.

To

THE CONSULTING ENGINEER FOR RAILWAYS,
Madras.

SIR, SN°29

I have the honor to acknowledge the receipt of Government Order No. 852 Railway, dated the 23rd June 1898.

The views of my Board on the question raised in the papers which accompanied this Order are very fully given in a letter which the Secretary of the Madras Railway Company addressed to the Under Secretary of State for India on the 14th June last. Enclosure to SN°31.

From this letter you will gather that my Directors are prepared to consent to the construction of the Calicut-Cannanore Extension on the metre gauge and that they are further prepared to consider favourably the conversion from standard to metre gauge of a section of the Company's main line, *viz.*, the section between Podanur and Calicut, provided it is considered desirable to undertake such conversion.

My Directors further state that independently of any decision upon the conversion of the section of the main line above referred to, they are prepared to agree to the immediate conversion of the Nilgiri Branch from Podanur to Mettupalaiyam so that through communication by metre gauge may be formed between Mettupalaiyam and Dindigul *viâ*. Podanur, and between Podanur and Mysore *viâ*. Mettupalaiyam, Sattiamangalam and Nunjangode.

My Directors properly attach to their consent to changing the system the condition that the Madras Railway should have the working, if not the construction, of the several branch feeders which are considered to be necessary to fully develop the traffic of the trunk line.

My Directors allude particularly to the following new branches or extensions to be hereafter built, *viz*:—

Calicut-Cannanore.
Shoranur-Cochin.
Podanur-Dindigul.
Erode-Nunjangode. Mysore.
Mettupalaiyam-Sattiamangalam.

and the several printed copies of letters written by my Board or by the Agents of the Madras Railway during the last 10 or 11 years and which are herewith enclosed will show you that this Company has always regarded branch lines taking off from its system as within the sphere of the Madras Railway. I regard as legitimately belonging to the Madras Railway the Wynaad and Coorg Districts of the Madras Presidency and I strongly favour the construction of a metre gauge Railway from Tellicherry or Calicut to Mysore.

I go further and say that the Madras Railway in the near future should extend as a coast line to Quilon in the South and Mangalore in the North.

A former Governor-General of India mapped out a Western Coast Railway extending from Tuticorin to Bombay and there can be no doubt that in the interests of trade such a Railway will be some day constructed and I agree with the Madras Government that, before it is too late, the gauge to be traversed throughout on the Western Coast should be settled.

The printed enclosures to my letter allude to the willingness of the Madras Railway to undertake the construction and working of metre gauge extensions, it being recognised that the less expensive metre gauge system is sufficient to serve districts where the traffic is light.

It has long been felt that in the matter of railways the Western Coast has been neglected and if the references now being made to the Government of India result in the claim of the Western Districts to railway communication being recognised, the discussion will have served a good purpose.

The Western Districts of this Presidency are generally well populated, the inhabitants are well to do and the whole country is under cultivation. I know of no other Districts where Railways could be opened up with the same advantages to the State and the people as on the Western Coast.

I am submitting with this letter an abstract showing the saving to the State, supposing the line between Calicut and Podanur and Mettupalaiyam be converted and the Calicut-Baliapatam and Shoranur-Cochin lines be constructed on the metre instead of the standard gauge. This abstract is sent to you in accordance with the wishes of the Government of India expressed in para 5 of its letter 706 R. C. of the 31st of May 1898.

A statement of the traffic that passed Podanur during the year 1897 has been prepared by the Company's Chief Auditor and a copy of this statement with the Chief Auditor's explanatory remarks is enclosed.

The Government has directed the particular attention of this Company to the stipulations made in paragraph 4 of the Government of India's letter No. 706 R. C. of the 31st May 1898 and I take it that I am desired to state if the advantage to the Madras Railway would be neutralised if running powers over the section between Erode and Mysore (or the frontier ?) were given to the South Indian and Southern Mahratta Railways, while the working of the section was entrusted to the Madras Railway.

The answer to this question cannot of course be a definite one because it turns entirely upon the interpretation placed by the Government of India on the term "running powers."

It may perhaps be fairly assumed in a new departure of this kind in India that English practice would be followed. This would mean that the $\frac{\text{owning}}{\text{working}}$ Railway would retain the total receipts applicable to the section worked over and pay to each of the lines which exercised running powers what is termed a "train mileage charge" fixed as nearly as possible to represent the actual cost per mile of the Engine, Engine staff and Guards of a train. The charges for the vehicles hauled would of course be governed by the ordinary Conference Mileage Rules.

As far as ordinary rolling stock is concerned, running powers are now exercised by the G. I. P. and Madras Railways through trains passing freely (with the exception of Engines) over the two Railways, and it is difficult to see what more could possibly be required between Erode and Nunjangode, even supposing that an examination of the case should lead any one to think through passenger carriages necessary. To through carriages with passengers there could not and would not be the slightest objection, provided there was sufficient through traffic for them.

With Engines it is a different matter. I have no authoritative information as to the distance from Erode to Nunjangode, but it is said to be 121 miles or equal to the distance, say, from Trichinopoly to Cuddalore.

A mixed train takes 18 hours 5 minutes to run from Trichinopoly to Cuddalore, so that the Engines belonging to the Railways on either side, to whom it is proposed to give running powers, could do absolutely nothing else but run from Nunjangode to Erode or *vice versa*, and

as the Engines would have to be changed at each end besides taking fuel and water on the road, it would seem to make absolutely no difference whether trains were worked by the Engines of the $\frac{\text{owning}}{\text{working}}$ line or by lines having running powers. To the public there could be no advantage whatever, nor is it probable that any Railways could attempt to exercise such powers, unless for the object of making things unpleasant for the $\frac{\text{owning}}{\text{working}}$ Railway.

It is assumed that the Government of India does not contemplate any divided control as to rates and fares or total receipts, and that, should any restrictions be imposed upon the section Erode to Nunjangode, similar restrictions would also be applied to traffic booked over a similar distance on the South Indian and Southern Mahratta Railways; also that, if running powers were granted to the South Indian and Southern Mahratta Railways, they would also be granted to the working Railway for an equal distance over the South Indian and Southern Mahratta Railways on each side, or there could be no reciprocity in such an agreement.

As regards through trains belonging to the South Indian or Southern Mahratta Railways these could only be necessary or justifiable if the working Railway declined to forward traffic through without delay or to arrange satisfactory connections with the connecting passenger trains of each Railway, but as such connections are already under the control of Government, this would be an impossible position. "Train mileage" in England is fixed as nearly as possible at actual cost, the object of "running powers" being to enable another Railway to retain a through traffic, the mileage of which it would lose over its own line if it were unable in the absence of running powers to reach the final destination of the traffic. In some cases the Railway exercising the running powers owns a short line or terminus beyond the line over which the powers are exercised, but not always.

No interference however is ever permitted with traffic other than the legitimate *through* traffic arising on the line exercising running powers, and the Government of India in granting permission to the East Indian Railway to run over the Eastern Bengal State Railway stipulate that nothing but through traffic for the Kidderpore Docks shall be carried over the Eastern Bengal State Railway from Nalhati Junction.

If therefore the Government of India determine that running powers shall be granted to the South Indian and Southern Mahratta Railways between Erode and Mysore (or the frontier only as the Mysore State may object to running powers) then it will be necessary to stipulate:

(*a*) That the $\frac{\text{owning}}{\text{working}}$ Railway Erode Nanjangode Section be given the usual liberty of action with rates and fares within the Government maxima and minima.

(*b*) That payment to the Railways exercising running powers should not exceed the actual cost of Engine power and wages of running staff.

(*c*) That such powers shall not be exercised for less than $\frac{3}{4}$ths of the scheduled train load of through traffic, either coaching or goods; the term through traffic to mean traffic arising on the line wishing to exercise running powers and consigned to a destination beyond the Erode Nunjangode section.

With these three clauses in operation the advantage to the $\frac{\text{working}}{\text{owning}}$ Railway could not be neutralised even if running powers were granted.

The tendency of running powers is to increase the cost of working and where, as in this country, all Railways are virtually the property of the State, such powers, in my opinion, cannot be justified except for mutual convenience when arrangements such as those in force at Bombay between the Great Indian Peninsula and Bombay-Baroda and Central Indian Railways and at Cawnpore between the Indian-Midland, East Indian and Oudh and Rohilkhand Railways, for using joint goods sheds and for passing trains over short lengths of Railway are agreed to.

It will be seen that I agree with my Board and subject to the stipulations imposed by my Directors, I favor generally the scheme proposed by the Madras Government, believing as I do that it is a comprehensive scheme for Railway extension in the Madras Presidency,

and if carried out will result in the best interests of the Presidency being served. There is room in the many Districts of the Madras Presidency for both the Madras and the South Indian Railways without the two Railways trying to cross and re-cross each other's systems and I cannot too strongly condemn competition between the two Railways when both are the property of the State and while the State has full power to correct abuses of all kinds if those abuses affect injuriously the interests of the public. The zone or territory of each Railway can, it seems to me, be laid down without difficuity and then the Government has only to determine the gauge of branch or feeder line to be constructed from the trunk or parent lines.

I may here refer to the fact that in selecting Podanur as the site for metre gauge workshops we have been guided first by its position as an important junction station, central to all lengths of the proposed metre gauge sections, and secondly because the climate is healthy and land for workshops can be secured at small cost and without difficulty.

The Report of the Committee appointed to consider the station arrangements at Podanur Junction is attached and this report will be found exhaustive, as it deals very fully with the proposed workshop and junction arrangements.

The Locomotive Superintendent in his letter attached explains the objection to utilising the Nilgiri Railway stock between Podanur and Mettupalaiyam and until in actual working it is known what traffic will remain for us to deal with at Mettupalaiyam as "local and tranship" traffic we cannot determine what length of rails can be saved from the Mettupalaiyam yard. A credit may be available here and a further credit in rails released at Olavakot but these credits cannot be stated yet.

Should the scheme proposed by the Government of Madras be carried through, there will remain for the Secretary of State and the Board of Directors to settle :—

(1) How the cost of the conversion from standard to metre gauge is to be disposed of and

(2) What course is to be pursued with reference to the standard gauge Engines and Rolling Stock released.

Both matters will have, it seems to me, to be treated specially seeing that our contract is so soon to expire. The released Engines and Rolling Stock may possibly be sold to the East Coast Railway, but if not so disposed of, I would suggest that the stock released be transferred to the "Stores Capital" account.

The Capital raised for the several branch lines it is proposed to construct under the scheme now before the Government will, it is presumed, be governed by Act X of 1895 which provides for interest being paid out of Capital during the time Railways are under construction.

I have the honor to be,
Sir,
Your most obedient servant,

Louis . J. Mds

Agent and Manager.

1058

ENCLOSURE TO AGENT AND MANAGER'S LETTER TO CONSULTING ENGINEER,

No. 828, *dated the* 20*th September* 1898.

Printed in G.O. 396 R 11.5.88

Letter from the Agent and Manager, Madras Railway Company, to the Consulting Engineer for Railways, Madras, No. 374, *dated* 20*th April* 1888.

I have the honor to call your attention to the Railway Map of the Madras Presidency prepared in your office, and corrected up to June 1887, some copies of which you were good enough to send me. This map shows the railways which have been constructed in Southern India and proposed extensions which have been surveyed. Several of these proposed lines would, if carried out, seriously affect the traffic of the Madras Railway, and many of them lie entirely within what may fairly be considered as the legitimate field of operation of this Company. I have, therefore, the honor to request that you will be good enough to favour me with some particulars concerning them for the information of my Board, whom I am about to address on the subject.

2. *Guntakal to Hindupur.*—The line joining the important military station of Bangalore with the trunk lines leading to the north should, I venture to think as a matter of public policy, be made on the standard Indian gauge, so as to insure unbroken communication with the great arterial system of the Empire. His Excellency Sir Charles Arbuthnot, Commander-in-Chief of Madras, informed me, during a recent conversation, that he attached great importance to this, and His Excellency Sir Frederick Roberts, Commander-in-Chief in India, has repeatedly urged the advantages of the broad gauge under such conditions.

3. So strongly was this felt in the case of the Bellary Branch that the Government of India made the laying down of a third rail for the broad gauge one of the conditions upon which the Bellary Branch was transferred to the Southern Mahratta Railway Company, whose system is on the metre gauge, and I learn by the last letter received from the Secretary of this Company (No. 793 of 23rd March) that the "Board have reason to know that the question of laying down the third rail on the Bellary Branch is now engaging the attention of the Government of India." No proposition for the further extension of the Madras Railway system has recently been placed officially before my Board, but I have every reason to believe that they would be prepared to recommend the construction of a line from Bangalore to Guntakal as part of their present broad gauge system. This, as you are of course aware, was one of the directions in which it was originally proposed to make the Madras Railway, and I cannot think that the interests of the Empire in connection with the chief line in this Presidency will receive due consideration if sanction be given for the construction of the railway between Guntakal and Bangalore on the metre gauge. I have the honor to request that I may be favoured with copies of the estimates and reports in connection with this line, regarding which I propose to address my Board by the outgoing mail.

4. *Nilgiri Railway.*—In a memorandum on the Madras Railway system, written by General Mullins, R.E., one of the Directors of this Company, and dated 28th March 1885, a copy of which was forwarded to you with letter No. 551 of 3rd August 1885, the proposed line up the Coonoor ghat was discussed at considerable length. General Mullins says in the opening paragraph of this portion of his memorandum, "endeavours have been made to float a special Company to carry out this project, but hitherto without success, and it is probable that, should the Madras Railway Company be inclined to take it up, there would be no difficulty in obtaining the concurrence of the promoters, on payment of survey and connected expenses not exceeding a sum of Rs. 30,000." In a subsequent paragraph of the same memorandum, General Mullins says : "It requires no argument to show that if this ghat line is to be made at all, it should be carried out by the Madras Railway, for no separate Company could work it as economically or as conveniently."

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1088

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Printed in G.O. 39 11 Oct 1898

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5. In your letter No. 655 of 7th November 1885, you mentioned that the period allowed to the Nilgiri-Rigi Railway Company under their new agreement for the formation of a Company had been extended to the 1st March 1886, and that it was not then possible to say whether they would be successful or not in raising the required capital, but that should they fail to do so, you had reason to believe that the Government would be willing to consider the proposal of the Board of Directors to construct a line out of the capital set free by the sale of the Bellary Branch.

6. In a letter to the Agent, No. 756 of 18th December 1885, the Secretary, Madras Railway Company, stated that the above had been duly noted, and "if at the expiration of the extended period allowed to the above mentioned Company, *viz.*, 1st March 1886, they have not succeeded in raising the requisite capital, you will submit, on behalf of the Board, a proposition for the construction of the line in question with full details of its estimated cost and of the traffic that may be expected thereon."

7. At the expiration of the period named, the Acting Agent wrote to you (letter No. 139 of 8th March 1886) asking for a further reply to his previous letter, and was then informed (letter No. 133 of 9th idem), that a new Company styled "The Nilgiri Railway Company, Limited," had been duly registered for the purpose of constructing a line of Railway from Mettupalaiyam to Coonoor, and that the intervention of the Madras Railway Company was not at present required.

8. I understand that Mr. Woolley has obtained a concession from Government to enable him to form a Company to raise capital and make the line. I also understand that up to the present the required capital has not been subscribed. I shall be obliged if you can inform me of the general conditions of Mr. Woolley's concession, and especially how much longer time is allowed under his agreement for carrying out the work, as, in the event of his concession lapsing at an early date, it is probable that the Madras Railway Company would still be willing to make a line to Coonoor and Ootacamund in connection with their present system.

Letter from the Agent and Manager, Madras Railway Company, to the Consulting Engineer for Railways, Madras, No. 411, *dated* 27*th April* 1888.

In continuation of my letter No. 374 of 20th Instant, on the subject of proposed railway extensions in this Presidency, I have now the honor to call your attention to the Villupuram-Pakal and Pakal-Dharmavaram Railways, which are, I understand, proposed as part of the South Indian Railway system.

2. It is an admitted principle in State Railway Administration, and one to which I am told the present Director-General of Railways, India, attaches great importance, that when a moderate traffic only can be secured in a country, it is desirable to assign to each railway system its own territory so as to avoid a greater competition than the extent of the traffic will bear; a glance at the map will show how completely this principle has been ignored in the case of the proposed lines between Vellore and Guntakal junction, all of which lie within the legitimate working field of the Madras Railway.

3. The financial interests of the Government in the prosperity of this latter railway are very great, inasmuch as over ten millions sterling have been expended on its construction; the traffic which it can secure, especially on its north-west line, is much less than it can easily carry; then why introduce a competing line in a district which does not hold out any great commercial advantages? The answer to this question is that the proposed railway under notice, is considered necessary for the protection of the country from the ravages of those terrible famines which every now and then occur, and to prevent which the State is bound,

both from a humane and a financial point of view, to use every exertion, and to incur the heavy expenditure, by which alone such calamities can to a very great extent be reduced if not entirely averted.

4. But it may fairly be required that the Government when deciding upon the construction of "famine lines" should at the same time consider the commercial aspects of the question, and should endeavour to make such lines contribute to the general prosperity of the empire

5. I would ask, has this been done in the present case? Referring again to the map, it will be seen that if the proposed Guntakal to Hindupur line is carried out as part of the Southern Mahratta system, and the portion between Vellore and Dharmavaram is worked by the South Indian Railway, the result will be as follows. During certain seasons the traffic from Hindupur, Nandyál, and other places in this Presidency which should come to Madras, will be carried by the Southern Mahratta Railway to the Portuguese harbour of Goa. At other seasons when the Goa harbour is closed, this traffic, as well as that brought by the Nellore-Tirupati Railway, will be carried *via* Villupuram to the French port of Pondicherry, so that the metre gauge system, as at present proposed, is admirably fitted to divide traffic, which legitimately belongs to Madras, between the foreign ports of Goa and Pondicherry.

6. It may be thought at first sight that this is an exaggerated picture of the case, but I would remind you of the importance which the three following factors have in the settlement of the route by which goods travel:—

(i.) Goods being sent through to their destination without break of bulk.

(ii.) Effect of through rates which managers can afford to quote for long mileage.

(iii.) The high port dues at the Madras harbour, which, it is said, are already driving trade to rival ports.

7. As I understand them, the Government requirements are that a cheap railway should be constructed through a district exposed to famine, and that it should be so connected with the neighbouring railways and ports as to exert the maximum useful effect in times of scarcity.

8. All these objects would be gained if the portion of the railway under notice, which lies between Vellore and Dharmavaram, were constructed and worked by the Madras Railway Company. This would naturally involve the transfer of the Nellore-Tirupati line to the same Agency.

9. In times of famine the proposed line would be just as useful as hitherto anticipated, whereas at other times the second factor which I have mentioned in para. 6 would operate as much in favour of Madras as in the interests of foreign ports, and undue competition would to a great extent be avoided.

10. The working of the broad and narrow gauge systems under the same administration has been successfully tried on the Bombay and Baroda Railway, and I have reason to believe that if the Government approve of the arrangement suggested in para. 8 of this letter, the Company I have the honour to represent, would be prepared to construct and work these lines on the metre gauge.

11. The question is now, I believe, under consideration of the Secretary of State for India, with whom my Board are in communication; so I trust I shall be favoured at an early date with the views of the Madras Government on the suggestions I have made, as prompt action is desirable, if my proposals are approved.

Letter from the Agent and Manager, Madras Railway Company, to the consulting Engineer for Railways Madras, No. 466, *dated* 11*th May* 1888.

I have the honour to forward a copy of a letter No. 794 of 20th April, which I received by last mail from the Secretary of the Madras Railway Company.

2. In the first paragraph the Board call attention to Railway extensions that are projected in various directions and express the fear that, unless these are carried out by the Company, the Madras Railway will lose heavily.

3. In the next paragraph I am directed to submit this question to the Government of Madras for their careful consideration, in the hope that the claims of this Company to the construction, and working of any projected extensions, in the territory which may be properly regarded as coming within the Madras Railway district, may be favourably considered.

4. Attention is next directed to the proposed line between Guntakal and Bangalore which seems to the Board to be one which is eminently within the province of the Madras Railway Company to undertake. This line is mentioned in my letter No. 374 of 20th April, and at the meeting of Council on 4th instant, at which I had the honour to be present, His Excellency the Governor requested me to send in further particulars in support of this Company's claim for its construction and working together with such figures bearing upon the question as could be obtained. This additional information is now being collected.

The Board very earnestly desire that the attention of the Government and of the Military authorities may be invited to their proposal to undertake this line on the standard gauge and trust it will be viewed with favour.

5. In para. 5, the Board express their desire to undertake the construction and working of other branches and extensions, and state that they are prepared to make these on the metre gauge if the Government prefer this to the standard gauge. They mention the following :—

Shoranur to Cochin; Palghat by Pollachi to Dindigul;

Suramangalam by Salem to Namakal, "and several others."

6. The Board suggest that estimates be prepared both for the metre and broad gauges of such lines as, in my opinion, it will be desirable for this Company to undertake, it being understood that if made on the standard gauge, they would be constructed in the lightest manner consistent with efficiency and economy in working.

7. In compliance with the orders of the Board, I propose to submit estimates for the following lines :—

(i) From Bangalore to Guntakal, broad gauge.

(ii) From Suramangalam by Salem, Namakal, Karúr, Dindigul and Pollachi to Palghat. This may be on either the metre or standard gauge, as Government prefer, and upon their decision on this point will depend the alignment I would suggest for the extensions to Cochin and Tellicherry, as I consider these should be on the same gauge and form part of the same system as the line through Dindigul.

8. It will be seen that, by this proposal, the town of Salem will be given the railway communication, to which His Excellency the Governor attaches so much importance, and that all the branches named by the Board will be united into one system, by which means the working will be greatly facilitated. You will remember that, in a conversation I had with you early in March, the line from Palghat to Dindigul was mentioned as a possible extension of the Madras Railway, and more recently it was suggested that the Branch to Salem might be extended to Namakal. I trust, therefore, the system now proposed will meet with your full approval and that of the Madras Government.

9. In view to the submission of the estimates just mentioned, I have the honour to request that I and the Chief Engineer may be afforded an opportunity of examining the plans and sections of the line from Guntakal to Hindupur, which has been already surveyed, and the estimate for which you have been good enough to send me; also the plans and sections of the line from Palghat to Dindigul, and I shall be much obliged if you can give me two copies of the estimate for this latter line.

10. So far as I am aware, the lines from Bangalore direct to Hindupur and from Salem to Dindigul have not yet been surveyed, so I request that I may be authorized to depute an experienced Engineer to examine these lines, and to report upon them, and also to have such sections, etc., made as will enable the Chief Engineer to furnish the estimates ordered by the Board.

11. It will facilitate matters if Government can now decide whether the proposed Dindigul system should be made on the broad or metre gauge; but if this be regarded as a question which depends upon a comparison of the estimates rather than upon the broader basis of State policy, then I shall submit estimates for both systems.

Letter from the Secretary, Madras Railway Company, London, to the Agent and Manager, No. 794, dated 20th April 1888.

(Enclosure to Letter to Consulting Engineer, No. 466, dated the 11th May 1888.)

Looking at the Map which accompanies the Administration Report of the Public Works Department, Railway Branch, Madras, 1886-87, the Board observe that extensions are projected in various directions, the carrying out of which will, the Board apprehend, very materially affect the traffic of the Madras Railway. If it be determined to construct these contemplated lines by other Agency than this Company, the Madras Railway will be exposed to competition on all sides, and it is feared, may lose very heavily. The pecuniary interests of Government in this Railway, no less than those of the Company, should be sufficient to ensure caution in proceeding with other lines which could seriously interfere with the development of the Madras line.

Projected extensions in Madras Presidency.

2. I am desired, therefore, to request your early and special attention to this question, and that you will submit it to the Government of Madras for their careful consideration, in the hope that the claims of this Company to the construction and working of any projected extensions on the metre gauge or otherwise, within the territory which may be properly regarded as coming within the Madras Railway district, may be favourably entertained.

3. Of the proposed lines described on the page prefixed to the Administration Report above quoted, the first on the list, viz., the Hindupur extension, to be prolonged, no doubt eventually to Bangalore, seems to the Board to be one which is eminently within the province of the Madras Railway Company to undertake. The direct connection of the important city and military station of Bangalore with Bombay and Calcutta, by means of a chord line on the standard gauge from the junction at Guntakal, seems to the Board to be a necessary completion of the Main Arterial Railway System of India. To construct this extension by an Agency distinct from the Madras Railway Company, would not only very seriously affect the Traffic Revenue of the Madras Railway, but if done on the metre gauge, would interfere with the political and military value of the communication. The Board very earnestly desire that the attention of the Government and of the Military authorities may be invited to their proposal to undertake this line on the standard gauge and trust that it will be viewed with favour.

With regard to the question of gauge, your Committee are of opinion that all the leading trunk lines with their principal feeders, should be on the broad gauge, the metre gauge being as a rule confined to tracts of country where that system is already in successful operation, and to local lines where the traffic is likely to be so light that cheapness of construction more than counterbalances the undoubted disadvantage of break of gauge.

4. The Board would refer to the opinion expressed on the question of gauge by the Select Committee on Indian Railways in their Report of 1884, para. 21, page 10 as being applicable to this case.

5. There are other Branches and Extensions which this Company are desirous to undertake, and which, provided they had the management and control of them, they would be prepared to construct even on the metre gauge, if preferred by the Government to the standard gauge. These are the surveyed line to Cochin from Shoranur, the extension from Palghat to Pollachi and Dindigul, a Branch to the town of Salem and Namakal, and several others.

2. In the first paragraph the Board call attention to Railway extensions that are projected in various directions and express the fear that, unless these are carried out by the Company, the Madras Railway will lose heavily.

3. In the next paragraph I am directed to submit this question to the Government of Madras for their careful consideration, in the hope that the claims of this Company to the construction, and working of any projected extensions, in the territory which may be properly regarded as coming within the Madras Railway district, may be favourably considered.

4. Attention is next directed to the proposed line between Guntakal and Bangalore which seems to the Board to be one which is eminently within the province of the Madras Railway Company to undertake. This line is mentioned in my letter No. 374 of 20th April, and at the meeting of Council on 4th instant, at which I had the honour to be present, His Excellency the Governor requested me to send in further particulars in support of this Company's claim for its construction and working together with such figures bearing upon the question as could be obtained. This additional information is now being collected.

The Board very earnestly desire that the attention of the Government and of the Military authorities may be invited to their proposal to undertake this line on the standard gauge and trust it will be viewed with favour.

5. In para. 5, the Board express their desire to undertake the construction and working of other branches and extensions, and state that they are prepared to make these on the metre gauge if the Government prefer this to the standard gauge. They mention the following :—

Shoranur to Cochin; Palghat by Pollachi to Dindigul;

Suramangalam by Salem to Namakal, "and several others."

6. The Board suggest that estimates be prepared both for the metre and broad gauges of such lines as, in my opinion, it will be desirable for this Company to undertake, it being understood that if made on the standard gauge, they would be constructed in the lightest manner consistent with efficiency and economy in working.

7. In compliance with the orders of the Board, I propose to submit estimates for the following lines :—

(i) From Bangalore to Guntakal, broad gauge.

(ii) From Suramangalam by Salem, Namakal, Karúr, Dindigul and Pollachi to Palghat. This may be on either the metre or standard gauge, as Government prefer, and upon their decision on this point will depend the alignment I would suggest for the extensions to Cochin and Tellicherry, as I consider these should be on the same gauge and form part of the same system as the line through Dindigul.

8. It will be seen that, by this proposal, the town of Salem will be given the railway communication, to which His Excellency the Governor attaches so much importance, and that all the branches named by the Board will be united into one system, by which means the working will be greatly facilitated. You will remember that, in a conversation I had with you early in March, the line from Palghat to Dindigul was mentioned as a possible extension of the Madras Railway, and more recently it was suggested that the Branch to Salem might be extended to Namakal. I trust, therefore, the system now proposed will meet with your full approval and that of the Madras Government.

9. In view to the submission of the estimates just mentioned, I have the honour to request that I and the Chief Engineer may be afforded an opportunity of examining the plans and sections of the line from Guntakal to Hindupur, which has been already surveyed, and the estimate for which you have been good enough to send me; also the plans and sections of the line from Palghat to Dindigul, and I shall be much obliged if you can give me two copies of the estimate for this latter line.

10. So far as I am aware, the lines from Bangalore direct to Hindupur and from Salem to Dindigul have not yet been surveyed, so I request that I may be authorized to depute an experienced Engineer to examine these lines, and to report upon them, and also to have such sections, etc., made as will enable the Chief Engineer to furnish the estimates ordered by the Board.

11. It will facilitate matters if Government can now decide whether the proposed Dindigul system should be made on the broad or metre gauge; but if this be regarded as a question which depends upon a comparison of the estimates rather than upon the broader basis of State policy, then I shall submit estimates for both systems.

Letter from the Secretary, Madras Railway Company, London, to the Agent and Manager, No. 794, dated 20th April 1888.

(Enclosure to Letter to Consulting Engineer, No. 466, dated the 11th May 1888.)

Projected extensions in Madras Presidency.

Looking at the Map which accompanies the Administration Report of the Public Works Department, Railway Branch, Madras, 1886-87, the Board observe that extensions are projected in various directions, the carrying out of which will, the Board apprehend, very materially affect the traffic of the Madras Railway. If it be determined to construct these contemplated lines by other Agency than this Company, the Madras Railway will be exposed to competition on all sides, and it is feared, may lose very heavily. The pecuniary interests of Government in this Railway, no less than those of the Company, should be sufficient to ensure caution in proceeding with other lines which could seriously interfere with the development of the Madras line.

2. I am desired, therefore, to request your early and special attention to this question, and that you will submit it to the Government of Madras for their careful consideration, in the hope that the claims of this Company to the construction and working of any projected extensions on the metre gauge or otherwise, within the territory which may be properly regarded as coming within the Madras Railway district, may be favourably entertained.

3. Of the proposed lines described on the page prefixed to the Administration Report above quoted, the first on the list, viz., the Hindupur extension, to be prolonged, no doubt eventually to Bangalore, seems to the Board to be one which is eminently within the province of the Madras Railway Company to undertake. The direct connection of the important city and military station of Bangalore with Bombay and Calcutta, by means of a chord line on the standard gauge from the junction at Guntakal, seems to the Board to be a necessary completion of the Main Arterial Railway System of India. To construct this extension by an Agency distinct from the Madras Railway Company, would not only very seriously affect the Traffic Revenue of the Madras Railway, but if done on the metre gauge, would interfere with the political and military value of the communication. The Board very earnestly desire that the attention of the Government and of the Military authorities may be invited to their proposal to undertake this line on the standard gauge and trust that it will be viewed with favour.

With regard to the question of gauge, your Committee are of opinion that all the leading trunk lines with their principal feeders, should be on the broad gauge, the metre gauge being as a rule confined to tracts of country where that system is already in successful operation, and to local lines where the traffic is likely to be so light that cheapness of construction more than counterbalances the undoubted disadvantage of break of gauge.

4. The Board would refer to the opinion expressed on the question of gauge by the Select Committee on Indian Railways in their Report of 1884, para. 21, page 10 as being applicable to this case.

5. There are other Branches and Extensions which this Company are desirous to undertake, and which, provided they had the management and control of them, they would be prepared to construct even on the metre gauge, if preferred by the Government to the standard gauge. These are the surveyed line to Cochin from Shoranur, the extension from Palghat to Pollachi and Dindigul, a Branch to the town of Salem and Namakal, and several others.

6. The Board would suggest that estimates be prepared both for the metre and broad gauges of such lines as, in your opinion, it will be desirable for this Company to undertake, it being understood that the standard gauge would be constructed at first in the lightest manner consistent with efficiency and economy in working.

7. The Board would be prepared also to take over the working of the line from Nellore to Tirupati which traverses a region within the Madras Railway area, rather than that of the South Indian Railway.

8. The extension of the broad gauge line to the military station of Cannanore has been under consideration, and also the realignment of the portion of the South-West Line from Sholinghur to Mailpati, so as to take in several important towns, but sufficient data are not yet to hand to show the probable financial results of these extensions.

9. The capital at present standing to the credit of the Company will be expended in completing the several large bridges on the North West Line and other sanctioned works. But there still remain, under the Company's Act of Parliament, 17 Vic., Session 1854, borrowing powers to the extent of some three millions sterling, and the Secretary of State might, the Board hope, be disposed to authorise the issue, from time to time, of debentures for the construction of such extensions as may be shown to be desirable and which have received the the approval and sanction of the Government in India.

Extract from a letter from the Agent and Manager, to the Secretary, Madras Railway Company, No. 1839, dated 14th July 1888.

* * * *

4. With my demi-official letter, dated the 30th ultimo, No. 3854, I forwarded for the information of the Board, two copies of G. O. No. 467 R., Public Works, refering to your letter No. 794 of the 20th of April last, on the subject of Projected Railway extensions in the Madras Presidency.

5. It will be observed from para. 5 that His Excellency the Governor is in favour of the metre gauge for the line which is to be constructed beween Guntakal and Hindupur and eventually on to Tumkur, but the views of His Excellency the Commander-in-Chief are favourable to the broad gauge and his expression of opinion has been communicated to the Government of India.

6. In paragraph 6, authority is conveyed for the examination of the country between Salem and Namakal, and for the preparation of plans and estimates for a Branch from Suramangalam to Namakal, if the investigation proves favourable, and in paragraph 7, I am authorised to have approximate estimates prepared for a broad gauge line from Palghat to Dindigul from the surveys and estimates which have already been made.

7. Government also approve, in paragraph 6, of an examination of the country between Calicut and Cannanore for a broad gauge line, and in paragraph 9 an intimation is conveyed that the suject of the Branch to Cochin, which was surveyed in 1869, may again be placed before Government.

Extract from a letter from the Agent and Manager, to the Secretary, Madras Railway Company, No. 1848, dated 19th September 1888.

* * * *

Regarding extensions of Madras Railway.

10. Letter No. 662, dated the 1st instant, with which the Consulting Engineer forwarded copy of the Proceedings of Government, No. 704 R of the 28th ultimo, and requested me to obtain the views of the Board of Directors on paragraphs 4 and 5 of letter from the Government of India, No. 804 R. C., dated 7th August 1888, regarding certain extensions of the Madras Railway.

11. I enclose a copy of the Proceedings under notice, and beg to request that the Board will favour me with a further expression of their views on this question.

Letter from the Agent and Manager, Madras Railway Company, to the Consulting Engineer for Railways, Madras, No. 34, dated 14th January 1889.

With reference to Government Order, No. 704 R. of 28th August 1888, I have the honour to forward a copy of letter No. 804 of 2nd November, from the Secretary, Madras Railway Company, in which the views of the Board of Directors regarding the terms on which this Company would be prepared to construct proposed extensions are explained. The Board recommend the issue of Debentures at 3¼ or 3½ per cent. guaranteed by the Secretary of State as this, in their opinion, would be the most advantageous means of raising the Capital. Should, however, the Government prefer that the capital should be raised in India by the offer of a 4 per cent. silver guarantee on terms and conditions to be agreed upon by the Government and the Company, the Board would not raise any objection if such a method of obtaining the Capital were found feasible especially as respects the portion of the capital which would be expended in India.

Iu compliance with the orders of my Board, I have the honour to commmunicate their views and to request that they may be submitted for the consideration of the Government of India.

Letter from the Secretary, to the Agent and Manager, Madras Railway Company, No. 804, dated 2nd November 1888.

(Enclosure to Letter to Consulting Engineer, No 34, dated 14th January 1889).

Regarding certain extensions of the Madras Railway.

The Board have had under consideration your letter No. 1848, forwarding copy of the Proceedings of Government, No. 704 R. of the 28th August 1888, which embody a letter from the Government of India of the 7th idem, communicating the approval of that Government to the Order of the Government of Madras of the 7th June 1888, No. 467 R, regarding certain extensions of the Madras Railway, and desiring, in paras. 4 and 5, the expression of the views of the Board as to the terms upon which the Madras Railway Company would be prepared to construct such extensions as might be approved by Government.

2. In reply to this requisition, the Board would invite attention to para. 9 of their letter of the 20th April 1888, No. 794. Under the Company's Act of Parliament, 17th Victoria, Sess. 1854, there remain borrowing powers to the extent of three millions sterling, and upon no other terms, in the opinion of this Board, could money be provided more advantageously than by the issue of Debentures at the rate of 3¼ or 3½ per cent., guaranteed by the Secretary of State. The extensions which the Board recommend are such as would become part and parcel of their system. They do not propose to embark on any new undertakings which would require special terms for submission to Government, and alterations in the Act under the provisions of which the operations of the Company are now controlled.

3. It has been suggested that capital might be raised in India, for the execution of the various projects proposed, by the offer of a silver guarantee by the Secretary of State, of 4 per cent., on terms and conditions to be agreed upon by the Government and the Company. The Board are unable to see that capital could be more advantageously provided in this form than by the issue of Debentures in London at 3¼ or 3½ per cent. At the same time, if it were found feasible to raise capital in India by the introduction of a silver guarantee, the Board could have no objection, especially as respects that portion of the capital which would be expended in India.

4. The total capital expenditure of the Madras Railway Company to the 31st December, 1887, was £10,470,466. Of this amount £6,201,221 was withdrawn from the Treasury at the India Office, and £4,269,245 in India, showing that about six-tenths of the capital has been expended in this country.

5. Taking the value of the Rupee at 1*s.* 4*d.*, and assuming that money could be raised by Debentures at 3½ per cent., it would be more economical to obtain the money here, whether it was required for expenditure in this country or in India, than to borrow at 4 per cent. in Madras (*vide* illustrations in margin).

For an expenditure of £10,000 in England the amount to be remitted from India at 1*s.* 4*d.* is

Rs. 1,50,000	£10,000
4 per cent.	3½ per cent.
Rs. 6,000	£350 equivalent

of which at 1*s.* 4*d.* per Rupee is Rs. 5,250.

For expenditure in India—
Rs. 1,00,000 if raised in Madras at 4 per cent. would cost Rs. 4,000 per annum.
The equivalent of Rs. 1,00,000 at 1*s.* 4*d* .is £6,666 13 4
Interest on which at 3½ per cent. is ... 233 6 8
To remit which amount from India at 1*s.* 4*d.* would cost Rs. 3,500 per annum.

Showing a saving in interest of ½ per cent. in each case.

6. I am to desire that the views of the Board may be communicated to the Government of Madras, with the request that they may be submitted for the consideration of the Government of India.

Extract from a letter to the Secretary, Madras Railway, from the Agent and Manager, No. 1863, dated 30th January 1889.

* * * * *

25. Letter No. 34, dated the 14th instant, with which I forwarded a copy of your letter No. 804, regarding the terms on which the Company would be prepared to construct proposed extensions, and said that the Board recommended the issue of Debentures at 3¼ or 3½ per cent. guaranteed by the Secretary of State, as this, in their opinion, would be the most advantageous means of raising the Capital. Should, however, the Government prefer that the capital should be raised in India by the offer of a 4 per cent. silver guarantee, on terms and conditions to be agreed upon by the Government and the Company, the Board would not raise any objection, if such a method of obtaining the Capital were found feasible, especially as respects the portion of the Capital which would be expended in India.

26. I said that in compliance with the Orders of the Board I communicated their views and I requested that they might be submitted for the consideration of the Government of India.

Extract from a letter from the Secretary, to the Agent and Manager, Madras Railway Company, No. 843, dated 28th November 1890.

* * *

14. In respect to further extensions within the district of, and in more immediate connection with, the Madras Railway system, the Board desire me to redirect your attention to the letters noted in the margin, in which are set forth those undertakings which the Company are desirous to construct as early as practicable. These are :—

No. 794. (paras 2 and 5) dated 20th April 1888.
No. 804, dated 2nd Nov. 1888.

Dindigul to Palghat,
Palghat to Cochin, and
Calicut to Tellicherry.

15. These extensions have all been noticed in former communications and there can be no doubt that their construction would bring extra traffic to the main line. If the capital for these undertakings was provided by the Government, or by Debentures raised by the Company,

the whole of the surplus profits would go to the general receipts of the Madras Railway, and thus be of advantage both to the Government and to the Company.

16. You will be good enough to urge the consideration of this matter on the Government of Madras.

Letter from the Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, No. 6025/455, dated 11th June 1894.

I have the honour to return the map sent to me with your 47/0 of the 6th instant from Ootacamund and to enclose for your information copy of a report submitted by the Company's Traffic Canvasser on the 19th November 1888.

2. I am disposed to think that for traffic purposes, the proposed line should pass from Dindigul *viâ* Dharapuram and Pollachi to Podanur and that it should be constructed on the standard gauge and form part of the Madras Railway system.

3. In connection with this subject I would refer you to para. 7 of G.O., 467 R, of the 7th June 1888.

4. The bulk of the traffic from Pollachi will consist of timber and as this commodity finds its market to the north-east, it will be cheaper and more direct for the traffic to pass *viâ* Podanur than *viâ* Palghat.

5. Then again if the line is extended eastwards from Podanur, the Engines and Rolling Stock engaged on the Mettupalaiyam Branch which are now confined to purely local trains can be utilised on the through journey from Mettupalaiyam to Dindigul.

6. I am of opinion too that for public convenience Dindigul, Dharapuram and Pollachi should be connected direct with the important junction at Podanur.

7. We have available borrowing powers more than sufficient to construct this Railway, and as the last loans taken up by my Directors in London were secured at the low interest rate of 3 per cent., it would, it seems to me, be a wise measure to open out by railway communication a well cultivated district such as a Railway from Dindigul to Podanur would pass through.

Letter from the Secretary, to the Agent and Manager, Madras Railway, No. 903, dated 27th July 1894.

Re Petition for a line from Erode to Satyamangalam.

At the close of para. 10 of their letter, No. 897, dated 13th April last, the Board acknowledged the receipt of a petition from Native Merchants and others praying for the construction of a line of railway from Erode to Satyamangalam. You expressed no decided opinion yourself on the question, and no further information has since reached the Board in this connection. But having regard to the very favourable view taken by the Traffic Manager of the line proposed, to the fact that the district is a very important one, and that if a railway can be made without crossing the Bhavani River, it would in all probability prove a profitable piece of line, the Board will no longer defer the expression of their views.

2. Mr. Read is of opinion that this extension should be continued from Satyamangalam to Mettupalaiyam, so as to complete the loop, and form an alternative route from east to west to the foot of the Nilgiris. The distance from Mettupalaiyam to Satyamangalam is 35 miles, and that from Satyamangalam to Erode about 42 miles.

3. A reconnaissance of the country and neighbourhood seems to have been made in 1891 by the Chief Engineer of Mysore, but a thorough survey and estimate must now be made, and if the data should enable you confidently to recommend to the Board the construction of this line, they would be prepared, with the sanction and approval of the Government, to construct the entire loop line from Erode to Mettupalaiyam.

4. In the event, however, of one only of these extensions being undertaken on the standard gauge, the Board would be inclined to give the preference to that from Mettupalaiyam to Satyamangalam; it is the shorter section, it would bring traffic from a fertile and important region, both to the main line and to the Nilgiri Railway, and it would not interfere with any existing or possible metre gauge lines.

5. In the meantime, the Memorialists may be told that the Board will consider very carefully the mode in which their wishes can be best carried out.

6. Another extension of the Madras Railway system, which has always been considered desirable, is a line from Pālghat or Podanur to Dindigul. This was included among the projected extensions put forward in the Board's letter No. 794, dated 20th April 1888, was again referred to in their No. 804 of 2nd November 1888, and was discussed and disposed of in G. O., 26th April 1889, No. 465 R., Public Works. The subject was again alluded to in para. 14 of the Board's letter No. 843 of 28th November 1890, and the Government of Madras were specially urged to consider the proposal for these extensions, and the manner suggested by the Board in which the Capital for these undertakings could be raised.

Re extension from Palghat or Podanur to Dindigul.

7. The Board desire to repeat their proposal in respect of this line from either Pālghat or Podanur to Dindigul.

8. It must be understood, however, that before the Board could consent to undertake the construction of this or any other extension, they must be satisfied, from the result of careful surveys and estimates that the lines are such as could profitably be undertaken as additions to the Company's system, to form part and parcel of the Madras Railway.

9. Unless each extension can be reasonably expected to yield a net return on its own length sufficient to cover, or nearly so, the interest on the additional capital required for its construction, the Board feel that they would not be justified in sanctioning a proposal to construct such a line, as an addition to the Company's system.

10. The Board believe that the line to Dindigul has already been surveyed, plans and sections prepared, and an estimate formed of the cost as well as of the probable returns.

11. Being in possession of the Board's views on the subject, and after you have obtained the fullest information in respect to the matters above-mentioned, yon can submit with confidence the course you recommend for adoption.

Letter from the Agent and Manager, Madras Railway Company, to the Consulting Engineer for Railways, Madras, No. 285, dated 22nd March 1895.

I have the honour to reply to your No. 974 of the 19th instant.

In para. 2 of your No. 850 D. of the 23rd August last, certain branch lines were named which, it was believed, had been put forward as possible feeders to the Madras Railway and you asked whether these or any other branches should be preferred to the line to Cannanore and you further desired that the views of my Board might be obtained on the matter.

Writing to my Board on the 5th September 1894, I expressed in para. 15 of my official letter of that date, the opinion that branch lines from Calicut to Cannanore and Shoranur to Cochin were commercially of greater importance than the other Railways referred to by you.

My Board have not replied specially to this particular para. of my letter; but as they have since approved of the appointment of survey parties to estimate for the construction of branch lines to both Cannanore and Cochin, it is assumed that they hold the same opinion that I expressed in para 15 of my. letter above referred to.

There can be no question that branch lines are badly wanted from

1. Calicut to Cannanore.
2. Shoranur to Cochin.
3. Podanur to Dindigul.
4. Salem to Dindigul.
5. Arcot to Wallajabad and Ranipet.
6. Salem to Porto Novo.
7. Erode to Satyamangalam.

I have placed the lines numerically in the order of importance which they appear to me.

These branch lines, it is urged, all fall within the scope of the Madras Railway and should be worked by the parent Company.

In para. 3 of your No. 850 D, you invite my opinion to the remarks of the Government of India on the traffic prospects of the Cannanore branch.

I attach statements of the export and import traffic at Calicut, Tellicherry, Cannanore and Mahé. We know that the bulk of the traffic in grain and other edible commodities we carry to Calicut is distributed at Calicut and sent North and South by road and canal throughout Malabar and the Wynaad and it is believed that when the Coast Railways are opened, this traffic will be very considerably increased as with the extensions of the Railways, competition by sea from Cocanada and the East Coast should cease.

Malabar is supplied with rice in very large quantities from the East Coast (by sea) and from North Arcot (by rail).

We can hold our own to Calicut where we have direct communication; but we are handicapped when the traffic has to go inland from Calicut by road or canal.

The exports and imports at all the ports I have named seem to give promise of a valuable traffic by Railway and we know that the whole district is very densely populated and that the passenger traffic will be heavy.

The Traffic Manager and the Acting Chief Auditor have approached the traffic possibilities from another view and for the information of Government, I submit copies of their reports and copies of the returns they have sent me.

Letter from the Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, No. 6025/706, dated 8th August 1895.

With reference to your letter No. 47/0 of the 6th June 1894, I have the honour to suggest that a survey of the proposed line from Podanur to Dindigul be undertaken during the next working season and that the route to be followed be that from Podanur through Pollachi, Udumalpett and Dharapuram to Dindigul, with a branch from Kathakolu to Pulney, which is at foot of the hills, and about only 16 miles from Kodaikanal.

Letter from the Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, No. 6025/769, dated 28th August 1895.

With reference to your No. 88/0 of the 13th August 1895, I have the honour to send you a map showing

(*a*) a line from Podanur to Dindigul *viâ* Dharapuram, 119 miles long.

(*b*) an alternative direct line from Podanur to Dindigul with branch to Dharapuram, say 115 miles.

The latter is recommended as the most suitable route to take.

The cost of a final survey and section will be for scheme (*a*) Rs. 59,500, and for scheme (*b*) Rs. 57,500, at Rs. 500 a mile.

If the Branch is constructed as part and parcel of the Madras Railway, the Company will of course bear the cost of the survey, but if the line is to be handed to a private Company, then the cost of the survey should be borne by the Government or the private Company.

The Board in their letters of the *28th November 1890, and the †27th July 1894 have already viewed the extension of this Company's system to Dindigul favourably.

* Para 14 of No. 843.
† Para 6-11 of No. 903.

If the Government of India has finally decided that the guaranteed Railways shall not be extended, then I shall be glad to learn on what conditions the Government will favour the construction of branch feeder lines to the Madras Railway system.

Extract from a letter to the Secretary, Madras Railway, from the Agent and Manager, No. 2263, dated 8th July 1896.

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14. With para. 17 of my letter No. 2227, I forwarded copy of a communication from the Consulting Engineer, No. 3624, dated the 13th November last, in which it was suggested that a Traffic Officer might be deputed to make exhaustive enquiries into the prospects of traffic, &c., of the proposed line from Podanur to Dindigul. In compliance with this suggestion, Mr. J. L. Taylor, Assistant Traffic Manager, was deputed to undertake the duty and I now forward herewith, for the Board's information, six printed copies of the report submitted by him. It will be observed from the report that Mr. Taylor is strongly in favour of a line from Podanur to Dindigul with a branch line from Udumalpet to Dharapuram. The total length of the line including the branch, is 118 miles, and the Acting Chief Engineer states that the approximate cost of making a detail survey will be Rs. 500 per mile or Rs. 59,000 for the whole project. I shall be obliged if the Board will kindly accord their approval to the undertaking of the work at the cost mentioned above. To enable me to apply for the sanction of the Government of India without loss of time, I beg to suggest that the approval of the Board may be communicated to me by telegraph. The words "Dindigul sanctioned" will be understood to signify what is required. It is proposed to undertake this survey during the next cold season if the Government approve. The recent favourable concessions offered by Government to Planters and others in acquiring land on the Annamalai Hills, the produce from which will be tapped by the proposed line, will materially add to its traffic and there is every prospect of this important extension proving a valuable addition to the Company's system.

Proposed line from Podanur to Dindigul.

Letter from the Acting Agent and Manager, Madras Railway, to the Officiating Consulting Engineer for Railways, Madras, No. 604, dated 14th July 1896.

Adverting to correspondence ending with your letter, No. 3624, dated 13th November 1895, I have the honour to inform you that in compliance with the request contained in the latter part of the above letter, Mr. J. L. Taylor, Assistant Traffic Manager, was deputed to make exhaustive inquiries into the prospects of traffic on the proposed extension from Podanur to Dindigul, and I have now the pleasure to forward 6 copies of Mr. Taylor's printed Report for your information.

2. It will be observed that Mr. Taylor recommends that the route to be followed should be from Podanur, through Pollachi, Udumalpet, Pulney, to Dindigul, the distance being 97 miles, with a branch from Udumalpet to Dharapuram, length 21 miles; or a total of 118 miles for the the whole scheme.

3. The prospects of traffic are so highly spoken of that in the opinion of this office it is considered that a detail survey of this proposed extension should be undertaken during the next cold season. The Acting Chief Engineer estimates the cost of such a survey at Rs. 500 per mile or Rs. 59,000 for the whole project. The Board has been addressed on the subject, and requested to accord their sanction to the survey being undertaken, and as soon as I receive their reply, I will communicate with you with a view to soliciting the sanction of Government for the proposed outlay.

Letter from the Acting Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, No. 9096/654, dated 12th July 1897.

I have the honour to invite your further consideration of this office letter No. 285, dated 22nd March 1895, in which is given a list comprising 7 extensions and feeder lines, the construction of which is advocated as falling within the scope of the Madras Railway.

2. Out of the 7 branch lines or extensions therein enumerated (1) the Calicut-Cannanore, (2) the Shoranur-Cochin, and (5) Arcot-Ranipet extensions have been surveyed in detail and the plans and estimates of these projects have been duly submitted in the form prescribed by the Government of India whose sanction is now anxiously awaited.

3. Of the remaining proposed extensions, (3) the Podanur-Dindigul extension comes next on the list, and (7) the Erode to Satyamangalam project should, in the opinion of this office, be taken in connection with it, inasmuch as they both fall more or less in the same district, and the Board moreover have placed on record their application in regard to these two extensions in one and the same letter, No. 903, dated 27th July 1894, to which reference is invited. With reference to the Podanur-Dindigul extension, a report of the anticipated returns based on investigations made by a specially deputed officer has already been submitted to Government, together with an approximate estimate of the cost of construction derived from a preliminary survey carried out under State Agency. It remains only therefore to have a detail survey now made, the alignment finally fixed, and the estimates framed and submitted in the form prescribed by the Government of India.

4. As regards the Mettupalaiyam-Satyamangalam extension no preliminary survey has yet been made, or probable statistics of traffic ascertained, and it appears desirable that this information should be secured at an early date.

5. Now that the Government have approved of the principle on which the capital for the construction of the Calicut-Cannanore extension is to be raised, and on the terms on which this line is to be worked by the Madras Railway, it is presumed that all other projects submitted by this Company will be dealt with in the same manner. I request therefore that you will be so good as to communicate to me, for the information of the Board, the views of the Government in regard to the two extensions referred to to enable me to advise the Board what measures should be adopted in order to further advance these projects and thus enable them to be submitted at an early date in a complete form.

Letter from the Acting Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, No. 681, dated 20th July 1897.

In continuation of my letter No. 7797C/654, dated 12th July 1897, I have the honour to forward a copy of paragraph 16 of letter No. 957, dated 18th June 1897, since received from the Board, dealing with recent proposals which it is understood have been made to the Government of India by the Nilgiri Railway Company for the extension of the metre gauge system from Mettupalaiyam to Satyamangalam, and from Erode to Nanjangode and it will be observed that I am instructed to represent without delay to the Government that this project, if carried out, would very seriously injure the Madras Railway.

2. With reference to this subject the attention of Government is respectfully invited to the vigorous protest recorded on behalf of this Company in this office letter, No. 7797/114, dated 9th February 1894, when the latter project was then put forward by Messrs. Kerby and Lonsdale to be undertaken by private enterprise and the arguments then adduced, apply with equal, if not greater force, at the present time. In regard to the connection between Erode and Nanjangode on the metre gauge Mr. Moss, the Agent and Manager, wrote in that letter as follows:—

"I need scarcely say that the construction of such a line will be most detrimental to "the interests of this Company. All traffic that is now interchanged between the Mysore "country and districts South of Erode is conveyed *viâ* Bangalore City and Jalarpet and "travels over the Madras Railway for a distance of 198 miles. If the proposed connection is "made, the whole of this traffic will be lost to us and will be conveyed by the new line on "account of the shorter mileage. It is not alone this traffic that will be diverted, the new "line will also prejudicially affect the traffic now carried between Mysore State and all stations "on our South-West line, west of Erode. The loss of revenue to this Company will be very "serious and it may be placed without exaggeration at 10 lacs of Rupees annually. As the "Madras Railway is a guaranteed line and does not earn the full amount of interest guaranteed, "this loss will fall upon the State; it, therefore, becomes a question for consideration whether "the advantages to be anticipated from the opening of this line are such as will compensate "the Government for the loss which it will inflict on the Madras Railway.

3. The fact that the proposed connection would not be the means of bringing new traffic to any existing Railway, and that its success would entirely depend upon the amount of traffic it diverted from this line, was strenuously urged, and Mr. Moss added that it was difficult to understand how Government could view with favour any scheme from which the Native State of Mysore would derive material advantage, gained too at the expense of the Government of India, and at the sacrifice of the Madras Railway Company.

In reply to these representations the Government of India recorded that "the Mangalore-Arsikere line was the only part of the metre gauge scheme put forward by Messrs Kerby and Lonsdale that could be considered." (Vide your letter, No. 107/0, dated 15th August 1894.)

4. Previously, in March 1893, the Madras Chamber of Commerce had also addressed the Government on this subject and respectfully protested in the strongest manner possible against the construction of the Erode-Nanjangode Railway on the metre gauge, on the ground that it would seriously affect the Port of Madras, as it would place the foreign ports of Karikal and Marmagao in direct connection by the metre gauge system, and urged that such policy, if inaugurated, would be ruinous to the trade of Madras whose interests were identical with those of the Madras Railway.

In G. O. No. 965 R., dated 22nd June 1893, it is recorded that "the Governor in Council is unable to endorse these views of the Chamber of Commerce," and observed that it was "extremely probable that both the Madras Railway and the Port of Madras would share in the increase of the general prosperity which may be looked for from the obviously desirable connection;" but in the following year was issued G. O. No. 356 R., dated 15th June 1894, in which it is stated that "the Governor in Council has recommended the postponement of the Nanjangode-Erode connection till other and more important lines are constructed."

5. It is further contended on behalf of this Company that the metre gauge already crosses the Madras Railway at Renigunta, Guntakal and Katpadi, and directly competes with it by these routes, through which the South Indian Railway possesses ample communication between the Northern and Southern districts of the Presidency, greatly to the detriment of the Madras Railway. It is therefore urged that to allow the metre gauge to intersect it again, at Erode would have a still further disastrous effect on the earnings of this Company, and the proposed connection moreover is one as to the necessity for which sufficient and valid grounds have not yet been advanced.

6. It is claimed that any desired extensions traversing the area between Erode and Mettupalaiyam fall within the legitimate sphere of the Madras Railway and the Board have, already in July 1894, submitted their application for the construction of a loop line on the Standard gauge between these two stations, as well as for an alternative scheme, comprising the shorter extension from Mettupalaiyam to Satyamangalam and thence to Nanjangode if subsequently found expedient, as now advocated. It is therefore hoped that the Board's application will receive from Government that prior and favourable consideration to which it is justly entitled. From the fact moreover that the difficulties as to the terms on which these extensions and feeder lines should be constructed and worked by the Madras Railway have now been removed, it is only reasonable to expect that the Government will entrust to this Company the carrying out of the projects now referred to on the same lines as those on which the Calicut-Cannanore extension has been recently sanctioned.

7. For the foregoing reasons it is earnestly requested that the claims of the Board in regard to the extensions in question may be favourably viewed by the Government, and in compliance with the Board's instructions, I am to ask that early sanction may be conveyed to me to make a preliminary survey for a line on the standard gauge from Mettupalaiyam to Satyamangalam, and from Satyamangalam to Nanjangode, and to collect statistics of the probable traffic to be obtained. It is further requested that the views of the Mysore Durbar may be ascertained in regard to that portion of this project which falls in Mysore territory.

8. On the receipt of your reply an estimate will be submitted for this work, the cost of which, it is suggested, should be chargeable to the Company's capital in the first instance and included in the final estimate for the construction of the line if the project be eventually approved and sanctioned.

Extract from a letter from the Secretary, Madras Railway, to the Agent and Manager, No. 957, dated 18th June 1897.

(Enclosure to Letter to Consulting Engineer, No. 681, dated 20th July 1897.)

Proposed extensions by Nilgiri Railway Company.

16. Having learnt quite recently that proposals had been made to the Government of India by the Nilgiri Railway Company for an extension of their Railway on the metre gauge from Mettupalaiyam to Satyamangalam, and from Erode to Nanjangode, the Board are desirous that you should lose no time in representing to the Government that this is simply a revival of the project which was considered several years ago, and which, if carried out, would very seriously injure the Madras Railway.

The Agent and Manager showed very clearly in his letter to the Government Consulting Engineer of the 9th February 1894, how very seriously such a line would damage the Madras Railway. Mr. Moss's figures have never been challenged, nor his statements impugned, and the Board submit that they apply with equal force at the present time.

It is understood that the South Indian Railway Company has expressed its willingness to help forward the undertaking, provided it is approved by the Government of India.

You will represent to the Government that, in the opinion of the Board, it is an unwise policy to afford facilities for lines to be constructed which run in direct competition with an old-established Railway already successfully at work, and that such lines are not required to provide for the traffic from Mysore to the South, which is now conveyed by our Bangalore Branch to Erode, whence it is carried on by the South Indian Railway to its destination at Tanjore, Tinnevelly and Madura.

What the Board would strongly advocate is an extension on the standard gauge, as part and parcel of the Madras Railway system, from Mettupalaiyam, through Satyamangalam to Nanjangode. This would prove of the greatest value to the Mysore Government and to the Nilgiri Railway, and would not disturb the present flow of traffic to the South.

Of course, the consent of the Mysore Government must be obtained before any extension through their territory could be undertaken.

You will press this matter upon the Government, and obtain their sanction, if possible, to make such surveys and reconnaissances as may be necessary to enable you to estimate the amount of funds that would be required to carry out the project.

You must bear in mind the caution conveyed in para. 8 of the Board's letter, No. 903 of the 27th July 1894, as to the necessity of being satisfied that the line is one which can profitably be undertaken by the Company.

You will recollect that in 1893 a numerously signed petition was addressed to the Company by the inhabitants of the Satyamangalam Taluk, praying for the construction of a line from Erode to Satyamangalam, and that Mr. Read, the Traffic Manager, recommended that the extension should be constructed to Mettupalaiyam, and so complete the loop.

The Board in noticing this matter in their letter, No. 903 of the 27th July 1894, expressed themselves in favour of the line from Mettupalaiyam to Satyamangalam in preference to that from Erode, and they are now of opinion that if this line were extended from Satyamangalam to Nanjangode the wants of the country would be most satisfactorily supplied. You will therefore urge the matter upon the Government of Madras in this sense.

Extract from a letter from the Agent and Manager, Madras Railway, to the Secretary, No 2318, dated 21st July 1897.

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7. On the 12th July 1897, I addressed the Consulting Engineer and requested that the views of the Government might be communicated to me in regard to the Podanur-Dindigul connection, and the Erode-Satyamangalam extension—which I considered should be taken in connection with it—both on the standard gauge, to enable me to advise the Board of the measures which should be adopted to further advance these projects and submit them in the complete form prescribed by the Government of India. A copy of this letter is enclosed for the Board's information.

Proposed extensions by Nilgiri Railway Company.

On the 20th idem, I forwarded to the Consulting Engineer a copy of para. 16 of your No. 957, referring to recent proposals made by the Nilgiri Railway Company for extending their metre gauge system from Mettupalaiyam to Satyamangalam and from Erode to Nanjangode.

In my covering letter the vigorous protest, recorded by Mr. Moss in his letter to the Consulting Engineer of 9th February 1894, was reiterated. It was further pointed out that the metre gauge already crossed the Madras Railway at Katpadi, Renigunta and Guntakal, and competed directly with it by these routes, through which the South Indian Railway possessed ample communication between the Northern and Southern Districts of the Presidency, and that to permit the metre gauge to intersect it again at Erode would have a further disastrous effect on the earnings of this Company, as so clearly shown by Mr. Moss. It was also claimed that any desired extensions traversing the country between Erode and Mettupalaiyam fell within the legitimate sphere of the Madras Railway Company, and the Board's application for projects in this area should receive the prior and favourable consideration of Government to which they were justly entitled. The fact, moreover, that the difficulties in regard to the terms on which the construction and working of these extensions by the Madras Railway have been removed, should, it was pointed out, now induce the Government to entrust to this Company the carrying out of these projects on the same lines as those on which the Calicut-Cannanore extension has been recently sanctioned.

In accordance with the Board's instructions, the early sanction of Government has been applied for to make a preliminary survey for a line on the standard gauge from Mettupalaiyam to Satyamangalam and from Satyamangalam to Nanjangode, and to collect statistics

of probable traffic. It was suggested that funds for this work should be chargeable to the Company's Capital in the first instance, and included in the final estimate for the construction of the line, if the project be eventually sanctioned. I request that the approval of the Board to the above suggestion may be communicated to me. A copy of my letter to the Consulting Engineer on this subject is enclosed for the information of the board.

Extract from a letter from the Agent and Manager, Madras Railway, to the Secretary, No. 2326, dated 16th September 1897.

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6. With reference to para. 7 of my letter No. 2318, I forwarded on the 8th instant copy of a letter, dated the 6th September 1897, received from the Consulting Engineer in reply to mine of the 20th July 1887 on the subject of the proposed extensions from Mettupalaiyam to Satyamangalam and from Erode to Nanjangode.

Proposed extensions from Mettupalaiyam to Satyamangalam and from Erode to Nanjangode.

In regard to the 10 lakhs quoted by Mr. Moss in his letter of 9th February 1894 to the Consulting Engineer as the estimated loss which would be sustained by this Company in the event of the latter connection being constructed on the metre gauge, and alleged in the Consulting Engineer's letter "to be greatly exaggerated," I have requested the Chief Auditor to compile corresponding figures for the more recent half-year ending 30th June 1897, and an abstract of these results will be sent to the Consulting Engineer.

It will be observed that the general question as to the expediency of the Board undertaking the construction and working of future extensions on the metre gauge is raised by the Consulting Engineer, and I see no objection why, if the Government are not disposed to sanction extensions advocated by the Board on the standard gauge, they should not be permitted to adopt the metre gauge on certain conditions in perference to transferring them to a competing company. And as to the terms it is considered that all future extensions should be applied for on the lines recently sanctioned for the Calicut-Cannanore project. I shall be glad to receive the Board's instructions on these matters.

Although the Consulting Engineer suggests that the Board's reply may be procured by telegraph, I fear it will not be possible for the Board to communicate their views on such an important subject in a telegram. I requested therefore by the last mail that the Board would be so good as to accede to this suggestion if practicable; but if not, that I might be favoured with a reply by return mail as the subject is one of urgency.

Extract from a letter from the Secretary, Madras Railway, to the Agent and Manager, No. 961, dated 8th October 1897.

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In reply to para. 6 of No. 2326, and with refernce to the Consulting Engineer's letter of the 6th ultimo, forwarded with yours of the 8th idem, I am desired to say that the Board have offered to construct the connection from their main line through Satyamangalam to Nanjangode on the standard gauge, because that is the gauge of the whole system of the Madras Railway; but if the Government cannot consent to this extension being made on the broader, they are quite willing to construct it on the narrower gauge, on such terms as may be agreed upon, provided that the working is retained altogether in the hands of this Company. The Board have therefore despatched to you this day the following telegram.

"Accept construction Nanjangode extension metre gauge."

Letter from the Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, No. 9096A/968, dated 9th October 1897.

In continuation of this office letter No. 9096/861, of the 8th ultimo, I have the honour

to inform you that I have to-day received a telegram from my Board intimating that this Company is prepared to construct the Nanjangode extension on the metre gauge.

I assume my Board have come to this decision rather than allow competing Railway to cross our system at any other points.

It has been previously urged that within a given area of our system this Company should be allowed to construct all feeder Railways required in the interests of the public and I trust that this contention will be considered reasonable. There is sufficient country unopened to the South and East of the South Indian system to allow of that Railway extending its influence without intruding upon the Zone which in equity and justice we claim to belong to the Madras Railway.

When you wrote the closing remarks to para. 1 of your letter No. 108/0 of the 6th ultimo, you were probably not aware that at Mr. Upcott's request I furnished your Examiner of Accounts with figures showing how the sum of 10 lakhs you refer to had been arrived at. This information was given on the understanding that the particulars should not fall into the hands of the Railways competing with us, and having at the time readily and courteously complied with Mr. Upcott's request, I can only regret that we are now accused of having submitted "greatly exaggerated" figures.

Letter from the Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, No. 9085/28 dated 10th January 1898.

With reference to correspondence on the subject of the proposed Podanur-Dindigul extension, ending with my letter No. 9085/898 of the 16th September last, I have the honour to enquire if the Government will sanction the making of a survey of the proposed line by this Company and whether, if sanction is given, the estimates are to be prepared for a line on the metre or standard gauge. If the extension is constructed on the metre gauge system, the question of converting the line between Podanur and Mettupalaiyam from standard to metre gauge may require consideration. May I ask you to kindly read the letters which have passed regarding this project, noted in the margin.

Consulting Engineer to A. & M., 47/O, dated, 6th June 1894.
A. & M. to Consulting Engineer, 6025/455, dated 11th June 1894.
Secretary to A.& M., 903, dated 27th July 1894.
A. & M. to Consulting Engineer, 6025/706, dated 8th August 1895.
Consulting Engineer to A. & M. 88/O,dated 13th August 1895.
A. & M. to Consulting Engineer, 6025/769, dated 28th August 1895.
Consulting Engineer to A. & M., 3624 dated 13th November 1895.
A. & M. to Consulting Engineer 604, dated 14th July 1896.
" " 9085/1074, dated 30th November 1896.
" " 9085/898, dated 16th September 1897.

Letter from the Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, No. 9096A/84, dated 28th January 1898.

With reference to G. O., No. 135 R., dated 24th January 1898, I have the honour to invite your attention to my letter No. 9096A/968, dated 9th October 1897, in which I communicated my Board's willingness to construct and work the Erode-Nanjangode Extension on the metre gauge and to express the hope that the claims of this Company to work the proposed line will not be overlooked.

This Company is desirous of working the proposed extension in connection with the Dindigul and Podanur and the Nilgiri Railways, and to extend the system south from Satyamangalam to Mettupalaiyam.

Letter from the Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, No. 437, dated 13th May 1898.

With reference to your letter No. 360 of the 4th February last in reply to my letter, No. 9096A/84 of the 28th January on the subject of the Podanur-Dindigul and the Mettupalaiyam-Satyamangalam, Erode-Nanjangode proposed lines, I have the honour to invite the special attention of the Government to para. 15 of letter No. 970, from my Board, copy of which I enclose.

I understand from this letter that if the Government is prepared to place the construction and working of these branch Railways in the hands of the Madras Railway my Board will agree to the Podanur-Mettupalaiyam Branch of the Madras Railway being converted from standard to metre gauge, so securing a continuous gauge between Coonoor and Dindigul on the one side and between Coonoor and Mysore via Satyamangalam and Nanjangode on the other side.

In the event of the gauge being changed, passengers from Madras to the Hills would leave the standard gauge carriages at Podanur, instead of at Mettupalaiyam.

If the proposal suggested by the Board is entertained, the work of strengthening the girders of the bridges on the Podanur-Mettupalaiyam branch, now under suspension, may be indefinitely postponed, as the girders now laid are sufficiently strong, it is believed, to bear the weight without risk of metre gauge engines and stock.

Extract from a letter from the Secretary, Madras Railway, to the Agent and Manager, No. 970, dated 11th March 1898.

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15. The Board learn with some disappointment from para. 9 of No. 2348 and G. O., No. 135, dated 24th January 1898, that the survey of the proposed Erode-Nanjangode Railway has been entrusted to the South Indian Railway, but they accept with satisfaction the assurance of the Government of India, that the utilization of that Company for this purpose will in no way prejudice the question of the agency by which the line, if ever made, shall be financed, constructed and worked.

Survey by S. I. Ry. of proposed Erode-Nanjangode Railway, etc.

The Board understand that you have clearly explained to the Consulting Engineer the serious loss of revenue which would accrue to the Madras Railway, a loss to be shared equally by the Government and the Company, if another agency were allowed to construct this extension from Mysore to our South-West line. You have also specially invited the attention of that officer to the express offer of this Company to construct and work this extension on the metre gauge. The Board trust therefore that the claims of the Madras Railway to undertake the construction of this line will not be set aside.

As you have remarked to the Consulting Engineer, this Company would desire to work this extenson in connection with the proposed Podanur and Dindigul Railway, also with the Nilgiri Railway, and to extend the system from Satyamangalam to Mettupalaiyam, the present standard gauge branch to that place from Podanur being converted into the metre gauge.

Moreover, it occurs to the Board to suggest for the consideration of the Government and of the Company working the Bangalore-Mysore Railway, whether it would not be desirable to extend that line direct to the northern foot of the Nilgiri mountains, and eventually to climb the ghat to Ootacamund. The scheme would be of great value, if brought no further than to the foot of the ghat, and prove of much advantage to the Nilgiri Railway. The distance is between 40 and 50 miles, and the gradients, it is believed, are easy.

PRINTED AT THE LAWRENCE ASYLUM PRESS.

Enclosure to Agent and Manager's letter to Consulting Engineer, No. 828, dated the 20th September 1898.

MADRAS RAILWAY.

Statement showing saving effected by the introduction of the Metre gauge system instead of the Standard gauge on Railways constructed, or to be constructed, west of Podanur.

No.	Debits.	Rs.	A.	P.	Rs.	A.	P.	No.	Credits.	Rs.	A.	P.	Rs.	A.	P.
1	**Mettupalaiyam & Calicut** (conversion).							1	**Mettupalaiyam & Calicut** (conversion).						
	Metre gauge Engines & Rolling Stock.* ...	13,21,761	0	0					18 Standard gauge Engines to be released ...	8,40,572	0	0			
									Value of Standard gauge coaching stock to be released	2,90,075	0	0			
									Value of Standard gauge goods stock to be released	4,47,800	0	0			
									Value of 33 ballast wagons to be released ...	46,377	0	0			
									Saving in construction by making Calicut-Cannanore Branch a Metre gauge line instead of Standard gauge	14,14,440	0	0			
					13,21,761	0	0						30,39,264	0	0
2	**Calicut & Baliapatam** (construction).							2	**Calicut & Baliapatam** (construction).						
	Metre gauge Engines & Rolling Stock.** ...	4,30,380	0	0	4,30,380	0	0		Saving between the cost of Standard and Metre gauge Engines and Rolling Stock required for Calicut-Baliapatam Line ...	2,46,840	0	0			
													2,46,840	0	0
3	**Shoranur-Cochin** (construction).							3	**Shoranur-Cochin** (construction).						
	Metre gauge Engines & Rolling Stock.*** ...	3,96,045	0	0					Saving between the cost of Standard and Metre gauge Engines and Rolling Stock required for Shoranur-Cochin Line	4,46,875	0	0			
									Saving in construction between the cost of Standard and Metre gauge lines between Shoranur and Cochin based on the Estimates framed for the first ~~20~~ 30 miles ...	56,02,285	0	0			
					3,96,045	0	0						60,49,160	0	0
4	**Special**							4	**Special**						
	Re-arranging Podanur yard to suit standard and metre gauges and erecting metre gauge Workshops	5,61,533	0	0					Estimated saving in buildings and machinery at Perambur owing to construction of metre gauge shops at Podanur	3,25,000	0	0			
	Machinery, &c., required in metre gauge shops.														
	Machinery and Fitting Shop ... Rs. 69,615								Value of 46 third class carriages lately sanctionedfor Standard gauge which will not be required if conversion scheme is carried out.	1,95,983	0	0			
	Boiler Shop ... ... „ 22,606														
	Smiths Shop ... ... „ 29,478														
	Erecting Shop... ... ... „ 41,063														
	Carriage Shop... ... ... „ 9,733	1,72,495	0	0									5,20,983	0	0
	Approximate cost of converting existing Standard gauge line to metre gauge, viz :—														
	Calicut to Shoranur	1,20,693	0	0											
	Shoranur to Podanur	1,09,195	0	0											
	Podanur to Mettupaliyam	49,341	0	0	10,13,257	0	0								
					31,61,443	0	0						98,56,247	0	0

* Based on cost of South Indian and Southern Mahratta stock per mile as given on page 74 of Part I of the Administration Report of the Director of Traffic for 1897-98.
** Based on cost of Southern Mahratta and Bhownagar Gondal Stock per mile as given on Pages 74 and 75 of Part I of the Administration Report of the Director of Traffic for 1897-98.
*** Based on cost of Bhownagar Gondal Stock per mile as given on Page 75 of Part I of the Administration Report of the Director of Traffic for 1897-98.

MADRAS, 20th *September* 1898.

LOUIS S. MOSS,
Agent and Manager.

21 DP

Enclosure to Agent and Manager's letter to Consulting Engineer No 828 dated the 20th September 1898.

Statement prepared by the Chief Auditor showing movement of Madras Railway Traffic past Podanur in the year 1897.

From Podanur westward, blocks Nos. 44—52 are here for convenience called "West Coast Block."

Business done between the West Coast and each of the following blocks :—	From West Coast.	To West Coast	Remarks.
	Maunds.	Maunds.	
1-8 Arkonam-Madras	122,129	84,711	Will all break gauge.
9-19 Arkonam-Raichur	43,641	9,930	
20-39 Arkonam-Erode (with Bangalore Branch).	794,041	981,309	
53 Kolar Gold Fields Railway ...	308,943	45	
55 Great Indian Peninsula Railway ...	8,186	1,087	
56-57 Southern Mahratta Railway *viâ* Guntakal or Bangalore.	34,809	47,399	Will not break gauge.
58-62 South Indian Railway	394,576	222,821	
41-43 Nilgiri Railway	634,638	246,921	
40 Between Erode and Podanur including Podanur.	191,538	267,343	Perhaps half will break gauge.

The above statement seems to show that for the full year 1897, 1,373,000 maunds were exported from and 1,211,000 maunds were imported to the West Coast Block to and from places whose continuity of gauge it is proposed to sever. *That is, 26 ten-ton wagons will have to break bulk at Podanur daily.*

But on the other hand, gauge will not in future have to be broken by 1,160,000 maunds of exports and 651,000 maunds of imports per annum. In other words, 18 ten ton wagon loads, of which 16 do now actually break bulk at one junction or another, need not in future break bulk.

The result of the change of gauge will be the daily transhipment of 26 ten-ton wagons at Podanur, while our other junctions will be relieved of the cost of transhipment of 16 ten ton wagon loads per diem, which will no longer be required to change gauge.

Madras is concerned with only two wagons per day.

F. D.

28*th June* 1898.

22 [illegible]

MADRAS RAILWAY COMPANY.

Report by the Committee appointed to consider the alterations necessary at Podanur in connection with the proposed break of gauge at that Station.

In accordance with the instructions contained in the Agent and Manager's letter No. 10686/6552 of 6th July, the Committee met at Podanur on the 11th, 12th, 13th and 14th July and again in Madras on the 22nd idem, to consider the alterations necessary and the transhipment facilities and workshop accommodation which will be entailed by the conversion of the Mettupalaiyam Branch and the main line west of Podanur to the metre gauge.

GENERAL ARRANGEMENT OF YARD.

2. In considering the respective portions of the station yard to be appropriated to the standard and metre gauge systems the principal considerations the Committee has had in view have been the following :—

1. The inevitable large extension in the future of the metre gauge yard and workshops when Podanur becomes the head-quarters of an extensive metre gauge system.
2. The most suitable site for the metre gauge workshops.
3. The fact that the standard gauge accommodation at Podanur, which will become the terminus of the standard gauge system, is not likely in the future to require large extensions.
4. The question of cost.

3. To the north side of the line at the east end of the yard the vacant land is low and therefore costly to make up to formation level, and, being under wet cultivation, would be expensive to acquire. The high land on the north side of the yard is occupied by the Company's buildings and Podanur village.

If the metre gauge is brought in on the north side of the station building, it will lead either (*a*) to the demolition of Company's buildings and Podanur village, or (*b*) to a most undesirable cramping of the shunting sidings opposite the station and the expenditure of a large sum of money in providing a new transhipping shed and additional shunting sidings at the east end of the station.

On the south side of the station the land now in the Company's possession affords accommodation for a large metre gauge yard and the greater portion of the site for metre gauge workshops.

The ground available for the latter is a large open plain, approximately rail level, the soil being such that foundations will be shallow. The Committee have therefore come to the conclusion that the standard gauge system should be brought in on the north side and the metre gauge yard and locomotive and carriage workshops should be placed on the south side of the existing station-house. The accompanying plan embodies the Committee's proposals.

4. In designing a mixed gauge yard unhampered by any existing works, a crossing of the gauges on the level would naturally be avoided, and the Committee are fully sensible of

the disadvantages which accompany such a crossing. It was the endeavour of the Committee in the first place to so arrange the yard that there should be no crossing of the gauges, but for the reason stated it was found necessary to bring the standard gauge into the north side of the yard, and under the circumstances a crossing of the gauges is unavoidable.

5. After full consideration of several schemes the Committee decided to cross the gauges at the point shewn on the plan which is within station limits and 600 feet from the eastern extremity of the passenger platform. It is intended that the standard and the metre gauge signals and the metre gauge cross-over from the main line to the shunting neck should be interlocked in such a manner as to render it impossible for trains on the two gauges to be received or despatched from or to the east and north, except when the main line is clear. It is intended that, as shewn on the plan, the locking frame for these points and signals shall be erected in a cabin, the floor of which should be 15 feet above standard gauge rail level, in order that the signalman may have a clear view over the north end of the yard. An interlocking arrangement of this description would effectually protect trains from all risk of collision, and considering the comparatively small number of trains passing in and out of the station and the proximity of the crossing to the platform, the inconvenience of the crossing of the gauges would be reduced to a minimum.

ESTIMATE OF ROLLING STOCK REQUIRED.

6. In order to arrive at the accommodation to be provided in the yard for both gauges and in the workshops for metre gauge stock the Committee have made the following estimate of the train services and of the necessary equipment of metre gauge rolling stock for the Western section:—

Train Service.

A.—*Podanur East. Standard Gauge.*

1 Mail train.

2 Mixed trains.

2 E. trains including loco. wood and ballast and *vice versâ* daily. Equal to ten trains in and out per day.

B.—*Podanur West. Metre Gauge.*

N.B.—The Committee in dealing with the metre gauge train service have assumed the hauling power of a metre gauge engine to be $\frac{2}{3}$ of that now laid down for the standard gauge engines and the weight of metre gauge bogie stock to be equal unit for unit to that of 4-wheel standard gauge stock.

1 Mail train.

3 Mixed trains.

3 E. trains including loco. wood and ballast and *vice versâ* daily.

C.—*Mettupalaiyam Branch.*

1 Mail train.

2 Mixed trains.

1 E. train including loco. wood and ballast and *vice versâ* daily.

Services B and C give 22 metre gauge trains in and out daily, for which engine power has to be provided, exclusive of the Coimbatore and Palghat local train services and shunting engines.

Locomotives.

7. Standard gauge—as per train service A. 11 engines will be stationed at Podanur, for about 6 of which running shed accommodation must be provided.

Metre gauge—as per services B. and C.

16 engines for train service (*i.e.*, main line trains, a single trip daily; branch trains, a double trip daily.)		Of which running shed accommodation at Podanur will be required for about 10.
3 engines for shunting at Podanur and local service.		
5	„ spare at Podanur and for shed.	
1	„ for shunting and locals at Olavakkot.	
1	„ for spare for Mails at Olavakkot.	
2	„ for train service at Calicut.	
1	„ shunting at Calicut.	
1	„ spare at Calicut.	
30 engines to be maintained in running order.		
Add 8 at 25 per cent. of above for proportion under repair and for which workshop accommodation has to be found.		
Total... 38 metre gauge locomotives for equipment of the three sections to be converted.		

8. The loading of the metre gauge trains will be as follows:—

Mail Train.

1 I class carriage.
1 II class carriage.
5 III class carriages.
1 III class latrine carriage.
1 P. O. V.
2 brake vans.
—
11 normal load.

N.B.—This will apparently be the maximum load of the engine on the main line and leaves no margin for extra traffic.

Mixed Trains.

1 composite I and II class.
4 III class.
1 III class latrine.
3 brake vans.
12 goods vehicles.
—
21

Two sets of coaches will be required to work each train between Podanur and Calicut and one set to work each train between Podanur and Mettupalaiyam.

Coaching Stock.

9. The coaching stock to be provided will therefore be as follows:—

	For trains.	For strengthening trains.	For repairs at 12½%.	Total.
I class	3	3	1	7
II class	3	3	1	7
Composite	*a* 10	3	1	14
III class	*b* 53	*c* 20	9	82
III class latrine ...	*d* 11	...	2	13
Brake vans	*e* 44	6	6	56
P. O. vans	3	1	1	5
H. boxes (double) ...	*f* 9	...	1	10
Carriage trucks ...	*f* 5	...	1	6
Baggage vans ...	*f* 5	...	1	6
Total coaching stock to be provided for ...				206

a. Main line mixed ... ... 6; Branch „ ... ... 2; Palghat and Coimbatore locals ... ... 2 = 10

b. Mail main line ... 5×2=10; „ Metplm. branch ... 5; Mixed main line 4×3×2=24; „ Metplm. branch 4×2= 8; Palghat locals ... ... 3; Coimbatore locals ... ... 3 = 53

c. It must be noted that the feast traffic at Karaimadai and Tirur has to be provided for

d. Mail main line ...1×2= 2; „ branch ... 1= 1; Mixed main line 1×2×3= 6; „ branch ...1×2= 2 = 11

e. Mail main line ...2×2= 4; „ branch ... ... 2; Mixed main line 3×3×2=18; „ branch 2×2= 4; E. train main line 2×3×2=12; „ branch ... ... 2; Palghat and Coimbatore locals ... ... 2 = 44

f. This figure is an estimate only.

Goods Stock.

10. The average number of wagons on the Podanur-Calicut section daily for the last six months has been 135 and on the Mettupalaiyam branch 88, but on many days the figures have been 50 per cent. in excess of these. Allowance has also to be made for the delay to wagons due to transhipping and for the percentage under repairs. The minimum equipment of goods stock therefore for which it seems safe to estimate for the three sections is 135 + 88 = 223, to this add 50 per cent. as explained above, which gives a total of 335 goods wagons. To put it in another way the train service arranged for above will move the goods stock as follows daily:—

	Vehicles.		Trains.		Directions.		
Main line	12	×	3	×	2	=	72
Branch	12	×	2			=	24
							96
Allowing 24 hours at each end for discharge makes each wagon available once in three days							3
							317

to which must be added wagons under repair. Of the total number say, 50 should be open wagons capable of carrying timber.

TRANSHIPPING ACCOMMODATION.

11. In order to arrive at the accommodation to be provided at the tranship shed and platform, the Committee have taken out from the records of Podanur station for the month of June, which was a fairly representative heavy month, the loaded wagons passing in the six directions, viz., East to West, West to East, East to North, North to East, West to North and North to West, the traffic transhipped at Podanur under the same heads and the local traffic consigned to and from Podanur in the same directions.

12. The figures work out as follows:—

	Daily Average Metre gauge loaded wagons.	Standard gauge loaded wagons.
Loaded wagons from stations East to stations West which will require transhipment	287 ...	10
Do. do. West to East ...	614 22	...
Do. do. East to Metplm. branch ...	352 ...	12
Do. do. Metplm. branch to East ...	163 6	...
Total ...	28	22

The wagons consigned with local traffic and with mixed consignments requiring transhipment to and from Podanur during the month of June were as follows:—

From stations East to Podanur ...	216 ...	7
Do. West to Podanur ...	128 5	...
Do. M.T.P. branch do. ...	66 2	...
„ Podanur to stations to East ...	179 ...	6
„ do. West ...	207 7	...
„ do. M. T. P. branch ...	66 3	...
Total ...	45	35

Accommodation therefore is required for 45 wagons on each gauge.

13. The local traffic is sufficient to justify small local goods sheds for both gauges, but hitherto this traffic has been dealt with in the tranship shed, and the Committee do not consider the inconvenience of this procedure would be sufficient at present to render local goods sheds necessary.

14. The Committee have utilised the existing tranship shed and platform for the new transhipping arrangements. It will accommodate as shewn in the plan 23 standard gauge and 13 metre guage wagons against the platform (of which 4 and 3 respectively will be under cover) and 26 standard gauge vehicles and 13 metre gauge vehicles on the second lines.

15. With this accommodation the traffic specified in para. 12 can probably be dealt with. When further facilities are required, they can be provided either by removing the old and unsightly buildings at the west end of the passenger station and extending the tranship platform and lines over the site (extending the passenger platform an equivalent distance to the east) or by erecting separate local goods sheds.

VEHICLE ACCOMMODATION ON STANDARD GAUGE LINES.

16. The average number of wagons in the Podanur yard at 8 A.M. for the last half-year was 75. But the traffic from the West Coast fluctuates much, and there have very frequently been over 100 wagons in the yard in the morning, the maximum having been 115 on the 15th May. Having in view the extra delay to stock due to transhipment on the one hand and the fact that traffic between Mettupalaiyam Branch and West Coast will not come on the broad gauge lines on the other, it does not seem safe to assume a lower maximum than the following:—

Ninety goods vehicles for which storage accommodation must be provided,
With three marshalling lines for sorting vehicles,
A line on which to stand a formed goods train, and
Accommodation for 50 vehicles in the broad gauge tranship lines.

In addition two passenger trains and about 20 spare coaches will have to be stabled.

17. It is the intention of the Committee that on the standard gauge side the work of shunting and marshalling trains shall be performed from the shunting neck at the west end of the yard. A short trap siding is provided at the east end to enable vehicles to be drawn out of the horse and carriage transfer line without fouling the main line; but, as it may be found necessary to extend this trap siding into a shunting neck for the service of the platform lines, it has been shewn in dotted lines on the plan as a probable future extension.

18. Two cranes of 3 tons capacity and one of 5 tons will be necessary on the transhipping platform to deal with the extensive timber traffic between the West Coast and the Gold Mines.

19. A standard gauge running shed to accommodate six engines and a turn-table have been provided at the west end of the standard gauge yard.

VEHICLE ACCOMMODATION ON METRE GAUGE LINES.

20. On the metre gauge side of the yard it is proposed to use the existing lines with slight modifications only, slewing them to metre gauge. The chief addition consists in the shunting necks provided at each end of the yard. The accommodation provided in addition to the platform and the second lines is a line on which to stand a formed train and storage for approximately 60 metre gauge vehicles in addition to the carriage shed lines for storing coaching stock, which it is considered will suffice for present requirements.

21. The design of the yard is such that when extensions become necessary new lines can readily be added. The plan includes the efficient trapping of the sidings on both gauges and the present catch siding to the west of the station can therefore be done away with.

STATION ACCOMMODATION.

22. In order to provide accommodation at the passenger platform for two metre gauge passenger trains it is necessary to extend the platform to 1,000 feet, and this is shewn on the plan with a scissors crossing at the centre of the platform line on each gauge. The full length of platform not being required on the standard gauge side, the platform line on that side has been arranged as shewn in the plan, so as to afford the required accommodation in the transhipping lines without widening the passenger platform.

23. Provision has been made for a horse and carriage transfer platform and lines at the east end of the passenger platform to meet the heavy horse and carriage traffic between Madras and the Hills.

LOCOMOTIVE REQUIREMENTS.

24. The Committee have considered the best method of utilising the existing locomotive buildings, viz., running shed, carriage shed, round house and the building now used as Locomotive Foreman's office, store and workshop and running bungalow. Part of the latter building has been embodied in the workshop plan and has been appropriated for workshop offices. The remaining portion of this building will be required for the Locomotive Foreman's office, stores and running bungalow. The running shed will not be in excess of the accommodation required for metre gauge running engines and has in the plan been appropriated for a metre gauge running shed. The carriage shed will be required for stabling metre gauge carriages.

25. The round house is an awkward building to work in with the general arrangement of the yard, and the Committee are of opinion that it is undesirable to include this building as part of the workshop plan. It might, however, be allowed to remain, and probably a use for it will be found in the future. In this connection it may be pointed out that the District Engineer's stores and the P. W. Inspector's store, office and workshops have to be demolished to provide room for the new standard gauge running shed and these might occupy a portion of the building. A store for metre gauge station machinery fittings and the work connected therewith will also be required and a portion of the building might be allotted to that purpose.

26. It has been suggested that the round house might be utilised as the broad gauge running shed, but the Committee do not recommend this for the reason that it would involve a most objectionable crossing of the gauges as indicated in dotted lines on the plan.

LOCO. AND CARRIAGE WORKSHOPS.

27. The general arrangement of the shops is in echelon—a plan which allows of almost unlimited extension. The shops as now proposed are shewn in full red lines and possible future extensions in dotted red lines. In considering the size of the workshops required the figures given in paras. 7, 9 and 10 have been taken and shop accommodation has been provided for 25 per cent. of engines, 12½ per cent. of passenger, and 10 per cent. of goods stock. These proportions give the following figures:—

Engines	8
Carriages	24
Wagons	34

28. The following shops have been included in in the plan:—

Carriage shop.	Erecting shop.
Paint shop.	Boiler shop.
Smithy and Wheel shop.	Stores.
Fitting and Machine shop.	Weigh bridge shed.

The proposed carriage and wagon repair shop will provide covered accommodation for 24 vehicles only, as it is considered this will meet immediate requirements. It will probably be found convenient to execute foundry and saw mill work at Perambur Works, and under these circumstances no provision has been made for buildings for these purposes. Two or three saw benches may be required and accommodation for these can be found in the carriage or machine shop.

29. The length of permanent-way in the workshop yard may be considered excessive, but this is unavoidable if the shops are to be so designed as to provide for large future extensions, and it should not be overlooked that the opening of the Calicut-Cannanore section will probably be coincident with the carrying out of the scheme now under consideration.

30. In the Proceedings of the Committee of Locomotive and Carriage Superintendents for India, Vol. VI, plate XLV, is given a plan of metre gauge workshop for repairing 10 engines and 100 vehicles (presumably short stock) at one time, and it is interesting to compare the areas of the several shops shewn on this plan with the areas of the shops the Committee propose for Podanur.

The following are the figures:—

	Area of proposed metre gauge workshops at Podanur. SQ. FT.	Area of metre gauge shops shewn on plate XLV, Vol. VI, of the Proceedings of the Committee of Loco. and Car. Supt. for India. SQ. FT.
Saw mill	...	8,400
Carriage shop	24,000	16,800
Paint shop	7,200	8,400
Smithy and Wheel shop ...	13,680	10,080 (Smithy only.)
Fitting shop	15,120	16,800
Foundry	...	6,720
Erecting shop	20,520	21,300
Boiler shop	9,000	9,940
Pattern shop, Copper smith's shop, Tinker's shop	...	3,360
Weigh bride shed	525	...

HOUSING OF LOCOMOTIVE WORKSHOP STAFF.

31. The question of to what extent accommodation for the staff of the Locomotive Workshops should be provided by the Company appears to be one for the management to decide,

but the Europeans or Eurasians in charge of the several shops must be housed, and the Committee suggest that in framing estimates eight houses of the Driver's double block type should be allowed for and also quarters for the locomotive officer in charge of the shops.

32. The only buildings, which will be demolished if the Committee's proposals are accepted, are the 20 menials' huts on the site of the proposed shops, the Travelling Auditor's bungalow, the Church room and the District Engineer and Inspector's stores and workshops, and provision for replacing these has been included in the estimate.

33. The Committee suggest for consideration the advisableness of at once acquiring a considerable area of land south of the present limits of the compound for future workshop extensions and housing of staff, as in the event of parcherries and buildings being erected on land that must ultimately be required for Railway purposes the compensation to be paid to the owners when it has to be taken over will be much enhanced.

DISTRICT ENGINEER'S ESTIMATE FOR ALTERATIONS AND ADDITIONS.

34. The District Engineer's Estimate for the alterations and additions, shewn on the plan attached, is as follows:—

Description of Work.	Amount.			Total.		
	RS.	A.	P.	RS.	A.	P.
Standard gauge yard including engine sheds, &c.	95,841	0	0			
Metre gauge yard	32,128	0	0			
Transhipping platform, &c.	9,545	0	0			
Additions to Passengers platform	2,606	0	0			
Locomotive works and yard	3,86,513	0	0			
Bungalow for Locomotive Officer	12,000	0	0			
Do. for Travelling Auditor	3,200	0	0			
8 houses for Chargemen	16,000	0	0			
10 houses for menials to replace those demolished.	2,700	0	0			
Replacing district stores and work sheds for painters, &c., and Inpector's sheds.	1,000	0	0			
Total Rupees ...	...	...	...	5,61,533	0	0

D. ROSS-JOHNSON, *Dy. Traffic Manager.*

H. J. STANLEY, *Asst. Loco. Supdt.*

HARRY J. THOMPSON, *District Engineer.*

2650

Enclosure to Agent and Manager's letter to Consulting Engineer No. 828 dated the 20th September 1898.

MADRAS RAILWAY,
LOCOMOTIVE SUPERINTENDENT'S OFFICE,
PERAMBUR WORKS, *2nd September* 1898.

B. 2676/903.

THE AGENT AND MANAGER.

MY DEAR SIR,

In continuation of this office letter No. B. 2676/835 of the 13th ultimo, paragraphs 4 and 5, it should be remembered that included in the total of 55 engines therein mentioned as necessary to work the whole traffic are the engines which will be required for working the trains between Mettupalaiyam and Podanur in the event of the Mettupalaiyam Branch being converted to narrow gauge.

2. I believe it has been contemplated that the rack engines working between Mettupalaiyam and Ootacamund should run through, without changing, to Podanur, but this would be a most undesirable, if not impossible arrangement. The Ghaut Engines are specially built for ghaut work, the boilers being erected out of the horizontal which though necessary on the ghaut would in all probability cause considerable practical difficulties in steaming, &c., were the engines working on the level. I am further not sure what water capacity the engines have, but I very much question whether they would carry enough water to cover the distance between Mettupalaiyam and Podanur—a section where, as you are aware, water is exceedingly scarce. The engines are also fitted with heavy and expensive machinery connected with the rack engine for driving through the rack, and, as this would not be necessary on a level line, if used it would mean not only carrying so much dead weight backwards and forwards for nothing, but the whole of the rack gearing as well as the rack engine itself would needlessly be exposed to dust, dirt and possible damage.

3. The engines are further only constructed for running at a low speed, and, apart altogether from the above objections, they would, if forced to maintain a speed such as would ordinarily be required on a level line, very soon knock themselves to pieces.

4. Assuming also that it were arranged for the rack engines to go through to Podanur, although this might reduce the total number of 55 ordinary metre gauge engines shown as required, it would be necessary to increase the number of rack engines, for, while the four engines now in the Nilgiri Company's possession may possibly suffice to work the traffic over the Mettupalaiyam Coonoor Section, this would not be the case if the engines were sent on beyond Mettupalaiyam and so not available for the return ghaut trains. I need scarcely point out that the cost of one of the rack engines is far greater than that of any of the several types of standard metre gauge engines.

5. With regard to the stock, I am not quite certain as to the form of construction of these, but I believe all wagons and carriages working on the Nilgiri Railway are provided with the vacuum brake as well as with a special brake connected with the rack. No wagon stock in India, either metre or broad gauge, is fitted with the vacuum brake, but it is understood the vacuum brake is a working necessity on the Nilgiri Line. It would not be therefore possible without discontinuing the use of this brake for ordinary metre gauge wagons to be taken up the ghaut. On the other hand, if the Nilgiri wagons were sent off their own section on to either the Madras Railway or other foreign lines, the stock of wagons which it would be necessary to maintain fitted with both vacuum and rack brakes for work over the ghaut would have to be very greatly augmented.

6. It would probably be practicable and perhaps advisable for, say, one carriage to run through daily between Mettupalaiyam and Podanur for convenience of passengers, but beyond this I am of opinion that it will be found necessary to tranship all passengers and goods at Mettupalaiyam, the only alternative to this being as above, either

(*a*) the discontinuance of the use of the vacuum brake on goods wagons, a contingency which, I presume on the score of safety, is impracticable, or

(*b*) the provision of a sufficient number of special wagons fitted with vacuum and rack brake to maintain the service over the Nilgiri Line as well as to carry goods through if consigned to stations off the Nilgiri Section or on a foreign line.

Yours faithfully,
C. E. PHIPPS,
Loco. Superintendent.

28-5/

SERIAL No. 32

SOUTH INDIAN RAILWAY COMPANY, LIMITED.

AGENT'S OFFICE,

No. 593.

Trichinopoly, 6th July, 1898.

Extract para

RAILWAY EXTENSIONS.

In continuation of the last paragraph under this heading in my letter No. 581 dated 13th April, 1898, I am now able to forward in the packet, 2 copies of Government Order No. 852 Railway dated 23rd June, 1898. It will be observed that the scheme initiated by the Madras Government consist in:—

(a). The conversion of the Madras Railway between Podanur and Calicut, and of the Nilgiri Branch of that railway from the standard to the metre gauge.

(b). The construction and working by the Madras Railway as metre gauge branches of the following lines:—

(i).	Calicut - Cannanore	62	miles.
(ii).	Shoranur - Cochin	73	„
(iii).	Podanur - Dindigul	118	„
(iv).	Erode - Nanjangode-Mysore (15 miles already made) ...	130	„
(v).	Mettupalaiyam - Sattyamangalam	25	„
		408.	„

The principal reasons advanced in support of the project are:—

(a). That the area between the South-West Line of the Madras Railway and the main line of the South Indian Railway constitutes a district which should be legitimately served by the former railway.

(b). That the Madras Railway Company has a grievance in consequence of its line being crossed at several points by the South Indian Railway, and is greatly dissatisfied at this tapping of what it has rightly regarded as its lawful territory.

(c). That as the extensions enumerated above can only be justified on the metre gauge, the Madras Railway Company would be debarred from providing and working its own feeder lines unless the proposed conversion of gauge is undertaken.

(d). That the requirements of the country to be served by the Podanur-Dindigul Branch are better met by a Company whose interest it is to draw the traffic towards Calicut and Westwards than by one which will draw it Eastwards and Southwards, and that the trade of the district is now in the hands of the Madras Railway.

(e). That the Erode - Mysore line is not primarily required to link up the Southern Mahratta, and South Indian Railways, and that the working of this connection by the South Indian Railway Company is to the advantage of nobody but the Company's shareholders.

(f). That the conversion of the standard to the metre gauge will not be costly and will enable several economies both in regard to the Madras Railway and its proposed extensions to be effected.

In regard to these contentions I beg to offer the following remarks. From the close proximity to the sea of the main line of the South Indian Railway, branches from it in an easterly direction can only be undertaken between say Mayavaram and Madura, so that if the Company is to be debarred from extending its system towards the Madras Railway, no further feeder lines beyond those about to be made will be possible. As I understand the observations of the Madras Government and Consulting Engineer, it would appear that the country on both sides of the South-West line of the Madras Railway is considered as constituting the legitimate territory of that administration. This contention may be generally admitted in regard to the district lying immediately to the north of this line but can I think hardly hold in respect to the area between it and the South Indian Railway. This country is already crossed by the three South Indian Railway branches from Chingleput to Arkonam, Villupuram to Katpadi, and Trichinopoly Junction to Erode, and is about to be penetrated by a further extension from Tinnevelly to Quilon It therefore seems obvious that prior to the elaboration of the present scheme the area in question was admittedly acknowledged as the legitimate traffic field of this Company. This view is also held by the Madras Chamber of Commerce as shown by the extract from the Chairman's letter of 2nd May, 1888, quoted below:—

"The large tract bound by the Southern Mahratta main line and the "Bellary-Kistna Railway to the north, by the south-west line of the Madras "Railway to the south, by the Coromandel Coast to the east, and the Malabar "Coast to the west might have been reasonably regarded as the proper field of "labour of the Madras Railway Company: while the area south of the south-"west line of the Madras Railway might continue to be assigned to the South "Indian Railway Company."

The principle of hypothecating separate areas to different railways may I think be generally admitted, but cases must exceptionally arise where adherence to this principle would be opposed to the general good. In my opinion the integrity of a railway area should not be preserved at the expense of interposing a third agency between two large railway systems of the same gauge, a condition which obtains in connection with the proposed link between Erode and Mysore.

The alleged grievance of the Madras Railway Company in respect to its lines being crossed by the branches from Villupuram to Dharmavaram, and from Pakala to Nellore, is more a grievance against the Government of India than against the South Indian Railway Company. It is to be observed that the Madras Railway system has been crossed at two, not at several points, by lines which were constructed as State railways and which this Company were required to work under the terms of its contract. The greater portion of these

State railways are practically famine lines with next to no local traffic and one of these lines has in the interests of the Madras Railway been deprived of long lead traffic by isolation from the important trade centre of Bangalore and the junction of Guntakul. I feel absolutely certain that the Madras Railway Company has suffered no injury from the crossing of its system at Katpadi and Renigunta, and am equally positive that the South Indian Railway Company has experienced considerable loss in working these unremunerative lines. I can therefore see no reason why these crossing of the Madras Railway should be considered as in any way strengthening the claim of that administration to the working of the Podanur-Dindigul, and Erode-Mysore connections.

It is of course unfortunate that the extensions to Cochin and Cannanore, contemplated by the Madras Railway will not prove sufficiently remunerative to justify the construction of broad gauge lines. This however need cause no difficulty for they could be worked by the South Indian Railway administration as detached branches without any need for converting the gauge of the Madras Railway. Both the Cuddapah-Nellore, and the Mysore State railways were for years worked as isolated lines, and what was possible in the past must be possible in the future. This arrangement would not detract from the value of these branches as feeders to the Madras Railway as their interests would coincide with those of that line. Both the lines could eventually be joined up with the South Indian and Southern Mahratta Railways by extensions from Quilon and Mysore respectively, should such connections be found desirable hereafter. The gauge of the Calicut-Cannanore Railway is no concern of this Company, but I would venture to observe that if that of the Madras Railway be adopted, the possible West Coast Railway would end at the suitable terminus of Calicut, and all necessity for the waste of money on interrupting the present unbroken gauge between Madras and Calicut be obviated.

I have no information to show that the requirements of the country would be better served by the Podanur-Dindigul Branch being worked by the Madras than by the South Indian Railway, but the statement that the trade of the district is now in the hands of the former line is hardly substantiated by facts. The South Indian Railway has carried, and is carrying, considerable Dharapuram traffic from and to Dindigul and Karur. Had this not been the case it is difficult to understand why the Madras Railway recently incurred the expense of establishing an out-agency at Dharapuram.

The primary reason for the construction of the Erode-Mysore extension is the establishment of a link between the Southern Mahratta and South Indian Railways, but it is also recognized that the two large towns of Trichinopoly and Mysore containing 90,000 and 60,000 inhabitants respectively, require better facilities for mutual trade than are afforded with the present devious connection via Jalarpet and Bangalore. The Erode-Mysore line has been steadily opposed by the Madras Railway and it is only after the failure of other measures that the compromise of allowing that administration to work the branch has been proposed. The intrusion of the Madras Railway between Erode and Mysore is not only calculated to prove prejudicial to the South Indian and Southern Mahratta Railways and to the branch line itself, but cannot fail to be detrimental to the trading community of Southern India. It is obvious that even if the running powers ordered by the Government of India are allowed, the direct

route must suffer if in the hands of an Agency whose interests are not identical with those of the Branch and which has the power of manipulating rates and delaying traffic. The Local Government in its remarks regarding the working of the Erode-Mysore connection by South Indian Railway Agency being solely advantageous to this Company's shareholders, seems to have overlooked the fact that the interests of the Government of India are more with the shareholders of South Indian Railway than with those of the Madras Railway. Now that the latter line is paying its guarantee Government only receives a half share of its surplus profits, while about $\frac{4}{5}$ths of the profits of the South Indian Railway Undertaking are paid over to the State. It has also to be remembered that as the earnings of the Madras Railway increase, so does the value of that Company's shares, and the amount that will have to be expended on the purchase of the line.

With the various economies anticipated from the scheme propounded by Government of Madras, this Company has but little concern There is no doubt that all the extensions dealt with in the orders of Government could be made on the metre gauge without one yard of the Madras Railway having to be converted, and that the conversion is only necessary to enable the branches to be worked by the agency of that line. Under these circumstances the one apparent economy in the proposed scheme is the saving effected by not strengthening the girders on 26 miles of line. Although it is stated in the accompaniments to the Government Order under discussion, that the suggested conversion of gauge is a substantial improvement I believe the opinion is generally held that a metre gauge line cannot carry as economically as a broad gauge railway. If this view is correct it is apparently proposed to spend money on depreciating the value of the Madras Railway for the benefit of Madras Railway shareholders, and as far as can be seen, no one else.

I shall be glad to receive the Board's instructions in regard to the reply to be sent to Government in response to its reference.

STAFF.

Agent's Privilege leave. I intend availing myself on the 1st August, 1898, of the two months leave referred to in your letter No. 208.

TRAFFIC RECEIPTS.

Week ending 12th June, 1897, Rs. 1,77,192-15- 6, Miles 1,042, per mile Rs. 170
Do. 11th June, 1898, „ 1,74,270- 7-10, „ 1,042, „ „ 167

The Passenger and Goods earnings are shewn below:—

PASSENGER EARNINGS.

Week ending 12th June, 1897, Rs. 1,01,941, Miles 1,042, per mile Rs. 98
Do. 11th June, 1898, „ 1,06,183, „ 1,042, „ „ 102

Both periods include Marriage season traffic.

GOODS EARNINGS.

Week ending 12th June, 1897, Rs. 68,742, Miles 1,042, per mile Rs. 66
Do. 11th June, 1898, „ 61,258, „ 1,042, „ „ 59

Metre gauge conversion and extension policy

Form No. 1. PUBLIC WORKS DEPARTMENT,

RAILWAY BRANCH.

Papers to be read in Proceedings:—

Agmt G.O. dated 2nd Aug 98 — 1898 No. 994 Ry.
Agmt G.O. dated 18th Aug — 1898 No 1063 - Ry.
Again G.O., dated 23rd June — 1898, No. 849. Ry.
Again G.O., dated 23rd June — 1898, No. 852 Ry.
" " " " 13th Aug — 1898 No. 1048-49 Ry.
Current No. 1064 Ry. of 1898, dated 6th Sept 98, from Govt of India Ry.
E.Rs " " 4431 " 1898, " 20th Sept 98, " " Govt Madras Ry.
" " " 189 , "

ORDER. No. 1296 Ry dated 19/10/98.

The Govt of India will be addressed.

2. A copy of these Proceedings will be forwarded to the Secy of State in continuation of Despatch No. 16/1079 Railway, dated 23rd August 1898.

H.E. and cie. 3.10.98

I have not waited before drafting to take special orders in Council about this. because the action necessary seems to be merely to carry on our argument in favor of the policy.

The letter to India is a long one. but I have tried to put things so that it may be merely or possibly a final one. and the argument therein put forward come better as from Government than if they took the form of a note of the Govt. merely endorsed by Govt.

JWS. 30/9/98

JAH 2.10.98

JWS. 30/9/98

4/10/98

JWS. 4/10/98

A.R.

I want this in print, clean. for H.E.'s signature on the despatch, if possible before H.E. goes on tour. If on the other hand it does not seem possible the despatch will probably have to wait for H.E.'s return, so let me have the letter in print, anyhow. I will correct the proofs here. Expedite, please.

JWS. 6/10/98

O 30.9.98. Cir/20/1898. R/5/10/98

To,

The Right Honourable

The Secretary of State

for India.

My Lord,

We have the honour to forward here-
-with a copy of a letter, No. 1297 Ry
dated the 19th October 1898, which, since
the despatch to your Lordship of our letter
No. 16 / 1079 Ry. dated 23rd August 1898, we
have addressed to the Government of India
on the subject of the proposed metre gauge
policy for the Madras Railway and its
extensions.

We have &c.,

R. Form No. 12.

No. 1297 Ry

Government of Madras.

PUBLIC WORKS DEPARTMENT,

RAILWAY BRANCH.

27 P Letter

To

The Secy. to the Govt. of India,

P. W. Department.

S I M L A.

19th Octr 1898.

Sir,

In continuation of the correspon- A

-dence ending with your letter No. 108 R.P.

dated the 6th September 1898, and in com-

-pliance with the request contained in B

paras 5 and 6 of your letter No. 706 R.C.

dated 31st May 1898, I am directed to for-

-ward a copy of a letter and of its enclo-

-sures from the Agent and Manager, Madras

Railway Company No. 828, dated the 20th

September 1898, containing an estimate of

the cost of, and an expression of his views

in regard to, the metre gauge extension

and conversion policy put forward by this

Government.

C C

2. With my letters No. 1049 and 1063 Ry.

A.Sr 2.10.98

HA 4/10/98

REA 3-10-98

See para 10.

dated the 13th and 18th August 1898 you were furnished with the opinions of the various Public and Commercial representative bodies who in compliance with your request were con-
-sulted on the subject of that policy. This Government notes with satisfaction that pub-
-lic opinion as well as that of the Madras Railway Company is strongly in favour of the proposals.

3. An expression of the views of the Agent, South Indian Railway Company, will be found in the accompanying copy of an ex-
-tract from a letter to his Board of Directors, D
No. 593, dated 6th July 1898. As might naturally be expected the South Indian Railway Company's Agent finds himself obliged to oppose the proposal. But viewing the matter in the interests, not merely of one particular body of shareholders, but of those of the producers, consumers and merchants of the Presidency gene-
-rally, and with an eye solely to what it con-
-siders to be best for the development of Southern India, this Government is unable to find any great weight in Captain Shelley's

281

arguments.

4. In para 3 of your letter No. 706 R.C. dated the 31st May 1898 the Government of India express hesitation in recommending to the Secretary of State "so radical a step as the introduction of a break of gauge on a main line of communication bet-
-ween the East and the West Coasts of India." In para 9 of my reply No. 849 Ry. dated 23rd June 1898, it was opined that the through traffic between the East and West Coasts passing through Podanur would on enquiry be found to be very small. Con-
-firmation of this opinion will be found in one of the enclosures of the Madras Railway Company's Agent's letter now for-
-warded, in which it is shown that 26 ten ton waggon loads daily will have to break bulk if gauge is changed at Podanur, but that as a set off against this, 16 ten ton waggon loads which now actually break bulk at one junction or another need not do so in future. The net effect therefore in the form of breakage of bulk will be 10 waggons daily, and of this number only 2 waggons

per day are of mutual concern to the merchants of the East and West Coasts. Thus the surmise E expressed in my No. 849 Ry. of the 23rd June 1898 that the weight of traffic likely to be affected would be found not to be very large, and that it is not in any way comparable with that on the Calcutta-Bombay, Madras-Bombay, or Lahore Kurrachee routes would appear to have been well founded.

4. The 4th paragraph of your letter No. B 706 R. C., dated the 31st May 1898, was spe--cially laid before the Madras Railway Company for attention and reply. In that paragraph the Government of India insisted on the neces--sity for the grant of running powers over the proposed Erode-Mysore branch of the Madras Railway for the two metre gauge systems which will by its means be linked together. In para E' 4 of this Government's reply, No. 849 Ry., dated the 23rd June 1898, the opinion was ex--pressed that there is no reason to anticipate any such flow of traffic between the two metre gauge systems as cannot be quite ade--quately met to the full satisfaction of

2 9 P

traders by the ordinary through booking and interchange of rolling stock rules.

In the latter half of page 2 and in the 3rd page of his letter now forwarded, the Agent, Madras Railway Company, deals very fully with the question of running powers and arrives at the conclusion that although, with suitable provisos and precautions, the grant of such powers to the two metre gauge Companies might not result in injury to the interests of the owning railway, yet, except as may be arranged between all con--cerned for mutual convenience, the exer--cise of such powers is not called for where all Railways are virtually the property of the State, and where control of train connections, as well as, between limits, of rates and fares, rests in the hands of Government. His Excellency the Governor in Council adheres to the opinion already expressed, an opinion concurred in by the Agent, Madras Railway Company, that if the Erode-Mysore branch is owned by the Madras Railway Company all the reasonable require--ments of the two metre gauge Companies,

and certainly all the requirements of the public, can be perfectly satisfactorily met by the ordinary rules for the through running of loaded goods and passenger stock.

5. In paragraph 2 of your letter No. 706 R.C. of the 31st May 1898, it was stated that the Government of India understood that this Government's adherence to the policy under reference was based mainly upon the considera-tion that the existence of the broad gauge west of Erode constitutes an obstacle (a) to the development of railways towards the West Coast on a gauge commensurate with the probable bulk of the traffic to be carried, and (b) to the linking up of the existing metre gauge systems. But though these considerations have certainly carried weight with this Government, they have not done so to any undue extent. What has carried far more weight than any consideration of the nature of that referred to has been, as already more than once explained, the principle that the sphere of influence of each railway system ought, so far as is practicable, to be coincident with trade tracts, rather than that it should

be governed by the comparatively unimpor-tant accident of gauge. This Government is strongly impressed with the supreme im-portance of the acceptance of the truth of this principle in the interests of general development, especially at this side of India where Military considerations, which bulk so large as a factor in simi-lar questions in the North, are compara-tively speaking of minor importance, and where trade considerations are supreme.

6. Amongst the enclosures of the Madras Railway Company's Agent's letter now for-warded will be found a statement of the cost of the proposed policy, showing cred-its as well as debits, as called for in para 5 of your letter now under reference No. 706 R.C. of May 31st 1898. The Agent has thought it right to show all possible debits and credits, but has done so with-out explanations or criticism. At first sight the net result would appear to be a saving of about Rs. 67 lakhs. But the actual state of the case may perhaps more

clearly be stated as follows:-

(a) A saving of Rs. 56½ lakhs is obtained by the substitution of a light cheap metre gauge railway with 40 lb. rails, slow speeds, limited accommodation, and 1 in 80 grades in place of a first class standard gauge railway, from Shoranur to Cochin, in order that a railway of some sort, adequate to all local requirements may come within the means of His Highness the Rajah.

(b) It has not been thought expedient by the Madras Railway Company to cut down the standard and the cost of the Calicut-Baliapatam Railway to any-thing like the same scale as that of the Cochin line. The corresponding saving on this account therefore, after retaining 50 lb. rails and 1 in 150 grades, works out to only 14¼ lakhs.

(c) The rolling stock estimate for the metre gauge, omitting for the present the Podanur-Dindigul and Erode-Mysore Sections with the Mettupalaiyam-Satya-mangalam link, works out to Rs. 21½ lakhs, against which must be set a credit of Rs. 25 lakhs for rolling stock set free or not needed, showing a net credit of Rs. 3½ lakhs.

(d) Against a contemplated outlay of Rs. 7½ lakhs on yards, shops, and machi-nery, a saving of 3¼ lakhs in the shape of outlay intended to be incurred but now no longer needed at Perambore, may equita-bly be set, showing a net out-lay of Rs. 4¼ lakhs.

(e) Change of gauge alone is estimat-ed as likely to cost the com-paratively small sum of Rs. 2¾ lakhs.

These figures though given only in the abstract have been based by the Madras Railway Company on carefully elaborated estimates arrived at after consideration and conferences on the spot by the heads of all Departments. These detailed esti-mates are still being elaborated and can

in due course be produced if demanded.

7. As might naturally be expected, the question of allocation of the expenditure involved in the cost of converting the parts to be converted of the Madras Railway Com-pany's system bulks large in the Company's estimation. The question was referred to in my letter urging the immediate conversion of the Mettupalaiyam branch, No. 994, dated 2nd August 1898, and in the Note by the Examiner, Guaranteed Railway Accounts, which accompanied my No. 725 Ry. dated 14th May 1898. The alloca-tion of the Shoranore-Cochin and Calicut-Baliapatam rolling stock will of course go with the other items of the Capital estimates for those extensions. That of the metre gauge rolling stock for the Podanur-Calicut Section, estimated at Rs. 13,21,761, may fairly be debited to the Madras Railway Company's Capi-tal account if at the same time the value Rs. 16,24,834 of stock set free be credited thereto. This Government does not control and has no real knowledge of the requirements of the East Coast Railway and so is unable to criticise the Agent's suggestion that the stock to be set free be sold to that line. The suggestion however seems worthy of consideration, and, in the event of its not being found practicable, the stock set free might, as suggested by the Agent, be brought on the "Stores Capital" Account of the Madras Railway, to be gradually absorbed as renewals of rolling stock, whether on the Madras Railway Company's own line or on the East Coast Railway, make such absorption possible.

8. The Agent has not separated the cost of altering Podanur yard from that of the workshops at that place, but the details are stated by the Consulting Engineer to be as follows:-

Podanur standard gauge yard.	Rs.	95,841
" Metre " " "		32,128
Platforms and transhipping.	"	12,151
Bungalows. ...	"	34,900
Loco. Shops & yard, metre gauge.	"	3,86,513
Total Rupees...		5,61,533

The last two items amounting to Rs. 4,21,413 as well as the cost Rs. 1,72,495 for machi-

-nery, appear to be properly Capital items as being partially necessitated by the exten-
-sions to Cochin and Baliapatam, and partly balanced by the anticipated savings in its being no longer necessary to enlarge the Perambore shops at a cost estimated at Rs. 3¼ lakhs. The remaining items, amounting to Rs. 1,40,120 as well as the cost, estimated at Rs. 2,79,229, of change of gauge from Mettupalai-
-yam through Podanur and Shoranur to Calicut, total Rs. 4,19,349 seem to be the only items the propriety of whose allocation to Capital might appear to be open to question, and in regard to these sums I am instructed to offer the follow-
-ing remarks.

9. This matter is dealt with in paras 8 and 9 of the Note by the Examiner of Guaranteed Railway Accounts, Madras, which accompanied my letter No. 725 Ry. dated the 27th May 1898. I am now instructed to say that His Excellency the Governor in Council concurs with Major Walle- -king that there are strong grounds for a recommendation that the cost of change of gauge should be specially allowed to be treated as Capital outlay, for though, from a narrow and strictly technical point of view, it may be objected that a change from standard to metre gauge is not a sub-
-stantial improvement, yet it must be recognized that the entire case is excep-
-tional and must be judged of from a broader stand-point than that suitable for the case of, say, the substitution of a heavier girder for a lighter one. The advantages which are anticipated from the entire policy which is advocated, a policy of which the change of gauge of a section of the old Madras Railway is but one item, will accrue less to the Madras Railway Company's shareholders than to this Presidency and to its traders as a whole. Moreover, allow-
-ing for delays in the accomplishment of the entire scheme, these advantages cannot be expected to have been realized to the full until the period for the termination of the Madras Railway Company's contract shall have so nearly arrived that the advantages will be reaped rather by Government and by the future working Company than by the present owning Company. Other advantages

which are expected to follow later on, e.g. the linking up with Quilon on the South and the extensions into South Canara and Coorg referred to in paras 5 and 6 of my letter No. 540 Ry. of April 6th 1898, are necessarily somewhat too remote to be of much interest to the present Company, though this Government feels it to be a duty to endeavour to secure them, in anticipation.

10. For these reasons it seems to this Government to be equitable that the whole of the cost involved in the conversion policy shall be treated as a Capital charge; for not only is the Madras Railway Company very un-likely to derive any appreciable advantage therefrom, except such as must result, to them equally with Government, from the exten-sion, at the cost necessarily of Capital, of the projected feeders to Podanur, Cochin, Baliapatam and Mysore; but also because the policy is intended to secure, for the Presi-dency in general and for its traders, bene-fits which can hardly be expected to fully mature until the present Railway Company shall have ceased to exist.

11. The Military aspect of the subject under consideration has not yet been touched upon. The opinion of the Military Authorities shall in due course be com-municated; but meanwhile it may suffice to say that the change of gauge, if car-ried out, will render the now inevitable march, or its alternative a break of gauge at Mettupalaiyam, no longer necessary for troops moving between Wellington and Cali-cut. ~~The regiment stationed at Cannanore has hitherto always journeyed to and from Cuttack by sea, or by road, so that they were able to travel by rail between that place and Madras. It will be as least in no way more inconvenient than heretofore, in spite of the disadvantage of having to detrain at Podanur.~~

12. In conclusion I am directed to ex-press the hope that the case may now be considered by the Government of India to be sufficiently ripe to be laid before the Secretary of State for discussion with the Madras Railway Company's Board of Directors, and that a decision in a sense favourable

3 Sep

× Why Cuttack? Surely Calicut is meant. AS

I don't like this way of putting it Query AS

I would leave out the last sentence altogether. The railway to Cannanore doesn't yet exist, so the comparison of advantages is very nebulous. AS

I do not like this word in this connection. Perhaps "change carriages" would be better. A.M.H.

to this Government's recommendation may be arrived at at no distant date. As already pointed out delay is inimical to the interests not only of the Calicut-Cannanore Railway programme, but also of Government as the guarantors of the Nilgiri Railway which, as explained in my letter No. 994 G.R. of August 2nd 1898, cannot be expected with any chance of success to compete with the road until the gauge of the Podanur Mettupalaiyam Section shall have been assimilated to that of the hill railway.

J.W.S.

R.

30/9/98

Documents accompg:
(1) Letter from Secy No. 828 of 20/9/98 with 5 enclos
(2) Extract from letter from A.G. Chennai No. 573 of 6/7/98

19-10-98

Ordered accordingly

Secy to Govt