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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

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Dated 4 8 1871	

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*Proceedings of the Madras Government, Public Works Department,
4th August 1871.*

No. 49. Read the following Proceedings of the Government of India, Public Works Department, (Railway,) dated Simla, 8th July 1871, Nos. 1,181—85-R.:—

Payments to Railway Companies for Postal Services.

Read again:—

From Director-General of the Post Office, No. 5,378, of 31st March 1871, and enclosures.
From „ „ „ „ „ „ 106, of 13th April 1871.
To „ „ „ „ „ „ 871-R., of 19th May „

OBSERVATIONS.—From the correspondence now read, it appears that the Director-General of the Post Office has succeeded in settling, in a very satisfactory manner, the long-pending discussion with the East Indian Railway Company, relative to the payments for postal services. The following are the terms of the agreement:—

I.—The payment of a rate for the haulage of the chargeable portion of each carriage (that is, the part occupied by sorters and non-service banghy parcels) based on the train-mileage cost.

II.—The payment of an annual sum for the maintenance and renewal of the carriages at the rate of 10 per cent. of the cost of the chargeable portion of each carriage.

2. With regard to the portion of the carriage to be charged for, it was found that the extra sorting accommodation required for an establishment of six sorters was $52\frac{1}{2}$ square feet of floor surface, while the average space assigned to non-service banghy parcels, the average weight of which by each train was $1\frac{1}{2}$ maunds, was $5\frac{1}{2}$ square feet. The space to be charged for, therefore, is $57\frac{1}{4}$ square feet, and as the whole surface amounts to 210 square feet, the proportion of the whole to be charged for is .2747. The cost of hauling this portion of a mile carriage was calculated from that of hauling a whole carriage, and the latter was arrived at by dividing the average cost per train mile by the average number of vehicles composing a train.

RESOLUTION.—The method adopted of calculating the cost of working a vehicle by dividing the average cost per train mile by the average number of vehicles, though not accurate, is probably the best procedure in the absence of more definite statistical record. Under recent orders, however, the cost of working every kind of vehicle will, in future, be deduced for all railways, and recorded for each half-year. As soon as this system has been inaugurated, the calculation of the rate of payment will be simplified.

2. In the train-mile cost, which is the basis of the agreement now made, the expenses of maintaining and renewing the rolling-stock have been included, but if this service is paid for separately, a double payment will be made. In future agreements the proper deduction on this account should be made from the cost of working a train or vehicle, whichever may be taken as the basis of calculation.

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3. The working expenses of many railways are likely to vary from time to time, with the opening out of new collieries, the exhaustion of sources of fuel supply, or other circumstances. Although, therefore, it may be convenient to fix a rate of charge which should not vary with small variations in the cost of working a train or vehicle, this rate should be considered as liable to revision from time to time as considered necessary.

4. Subject to such modifications as are indicated in the foregoing remarks, the Government of India accept the method of calculation, based upon the terms of the settlement with the East Indian Railway Company, which is proposed by the Director-General of the Post Office, 9 feet instead of 8½ square feet per sorter being taken as the chargeable space as suggested by that officer. It will clearly tend to the convenience of administration if one uniform system of charge be everywhere followed, and the Governor-General in Council is of opinion that the arrangements now described should be adopted as the general basis on which future agreements may be made.

From the Officiating Deputy Director-General of the Post Office of India, to the Secretary to the Government of India, Public Works Department, dated 31st March 1871, No. 5,378.

REFERRING to your endorsement No. 6-R., dated 4th January last, I have the honour to forward a printed copy of a memorandum recorded by me after a conference held with the Consulting Engineer to the Government of Bengal and the Railway authorities on the 31st March, in view to a settlement of the long-pending question of the haulage rate for sorting carriages payable by the Post Office to the East Indian Railway.

2. The Government will observe that the rates agreed to with effect from the 1st January 1870 are very much less than those hitherto paid. The adjustment from the 1st January 1870 to the end of March 1871, will result in a refund to the Post Office Department of upwards of half a lac, and future payments will be regulated by the new and more moderate standard.

3. It will be seen that in negotiating terms, while objecting entirely to any concession of principle, I thought it right to yield on various minor points, and to accede to rates which though somewhat higher than those arithmetically deduced, are, on the whole, not unreasonable.

4. I trust that the Government will approve of and confirm the arrangement made.

Memorandum by the Director-General of the Post Office of India, dated 31st March 1871, No. 5,377.

A MEETING at which the gentlemen mentioned in the margin were present was held to-day (31st March 1871) at the office of the Board of Agency, East Indian Railway, in view to settling the question which had been long-pending between the East Indian Railway and the Post Office, relative to the haulage payments to be made for the sorting carriages used by the Post Office.

Lieutenant-Colonel Taylor, R.E., Consulting Engineer to the Government of Bengal.
Mr. C. Stephenson, } Members of the Board of Agency,
" G. Sibley, } East Indian Railway.
" A. M. Monteath, Director-General of the Post Office of India.
" Fred. R. Hogg, Officiating Deputy Director-General of the Post Office of India.

2. I stated at the outset that it would be convenient to divide the subject of discussion into two parts, namely, (1) the settlement of the haulage rate payable from the 1st January 1870, under the Government Resolution No. 34, dated 9th November 1869; and (2) the adjustment of

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payments for the period (about a year and a half) made by the Post Office and received by the railway prior to that date under provisional agreement.

"Part of the space occupied by the pigeon-holes and counters is utilized by the stowage of mail bags underneath, and it will, therefore, be reasonable to assume that one-quarter of the carriage is occupied for sorting purposes, and one quarter for banghies, leaving the remaining half or 105 square feet to represent the space that would be occupied if the mails were simply carried in bulk, an operation which could be performed by one man instead of the five and sometimes six carried under present arrangements."

3. This having been agreed to, I took up the letter addressed by the Board of Agency to the Consulting Engineer, under date the 7th December 1870, No. 649-G., and stated that I proposed to accept the distribution of the carriage space used by the Post Office as given in the marginal extract from that letter. This

distribution may be briefly described as follows:—

¼ or 52½ square feet for sorting purposes.
¼ or 52½ " " for banghy " "
¼ or 105 " " for the carriage of letter mails in bulk.

Total... 210 being the area of the whole carriage.

4. In stating that I proposed to accept the above distribution, I observed that in some respects I was conceding points on which I might fairly argue for a distribution more favourable to the Post Office. For instance, as I remarked, the space, which the letter mails in bulk were set down as now occupying, would be very much larger, but for the fact that they were sorted in transit, an operation which reduces greatly the number of separate packets, and allows of their being compactly stored in large bags. Again, as I observed, the space set down as occupied by sorters would, to a certain extent, be required for the persons in charge of the mail, even if there were no sorting; in other words, of the six persons employed in the sorting custody, receipt and delivery of the mails, two at least would be required for the mere custody, receipt, and delivery.

5. Accepting, however, the distribution above described, I proceeded to observe that I could not concede the point urged in the Board's letter to the effect that the whole space occupied by the banghy mail, should be regarded as chargeable space; the Board argued that, although this space might be partly occupied by service banghy parcels, such parcels, were, as they believed, largely composed of stationery-packets and other stores which ought not to be sent by post at all; but I replied that the Government had, from the first, distinctly objected to any payment being made on account of the transit of service banghy parcels, and that I had not come with any wish or power to re-open that question or to discuss with the Board what Government officials ought or ought not to send by banghy post. I remarked further, that the question of any reduction in the quantity of service parcels would not affect the present calculation, which could not be disturbed except by an increase in the quantity of parcels sent by private individuals for which alone I was prepared to pay.

6. I then proceeded to state that I was prepared to accept the calculation made by the Board as per margin, of the train-mile expense, but before applying it to the purpose now in view, I wished to know whether the train mile expense so calculated included the cost of maintenance of the rolling-stock. If it did include it, I observed that some allowance should be made for the fact that the Post Office paid separately an annual sum, being a per-centage on the value of the vehicle towards maintenance and eventual renewal. The Consulting Engineer, however, stated that he thought this point might be waived, and I accordingly did so.

7. The meeting then proceeded to calculate the mileage rate payable thereunder, the result being as follows:—

For the Main Line.

	RS.	A.	P.
Train-mile rate	1	13	10
Carriage-mile rate obtained by dividing the above by 13, being the average number of carriages run on the mail train ...	0	2	3.54
Chargeable proportion of mail carriage, being 2747 of the whole...	0	0	7.56

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For the Jubbulpore Line.

RS. A. P.

Train-mile rate	2	11	6
Carriage mile rate obtained by dividing the above by 10, being the average number of carriages run on the mail train	0	4	4.2
Chargeable proportion of mail carriage, being .2747 of the whole	0	1	2.34

It was agreed, therefore, to fix 8 Pies as the rate per mile run to be paid by the Post Office for the sorting carriages on the main line, and double that amount or 1 Anna 4 Pies for the sorting carriages on the Jubbulpore line.

8. It remains only to explain more particularly the proportion (.2747) taken above for the chargeable space of the sorting carriage. This figure was obtained by adding the one-quarter space (52½ square feet) on account of sorters accommodation to 5½ square feet, being the portion of the banghy mail accommodation occupied by the non-service parcels (as per margin), and by deducting therefrom the proportion borne by the chargeable space to the

whole space of the carriage, namely, $\left\{ \frac{\text{chargeable } 52\frac{1}{2} \times 5\frac{1}{2}}{\text{whole space } 210} \right\} = .2747$.

9. It was agreed, therefore, that the payments for the sorting carriages used on the main line should be adjusted from 1st January 1870, at the rate of 8 Pies per mile run, and that further payments should be regulated by that rate. As respects the Jubbulpore branch line, it was agreed that payments should commence from the 1st March 1870, being the date when sorting was first organized on that line, and should be regulated by the rate above-mentioned, namely, 1 Anna 4 Pies per mile run.

10. The next point considered was that of the rent payments for maintenance and renewal of the carriages in use. It was agreed that the Post Office should pay yearly from the 1st January 1870, 10 per cent. of the value of the chargeable portion of each carriage. There being twenty carriages in use, which cost Rupees 4,964 each, the payment for them under the above arrangement would be as follows:—

	Cost of whole carriage.	Cost of chargeable portion, namely, .2747 of whole.	Ten per cent. on cost of chargeable portion.
	RS.	RS.	RS.
Each carriage	4,964	1,363	136
For twenty carriages			2,720

11. The meeting then proceeded to consider the question of the adjustment of payments prior to the 1st January 1870. Although holding that the provisional payments already made for that period, based on an excessive estimate of the cost of hauling a sorting carriage, might fairly be made the subject of reduction, I considered it, on the whole, proper to assent to let all payments prior to that date stand in full adjustment of all claims preferred by the Railway. The Bengal Government had given its approval to the excessive estimate above referred to, and though now, as already stated, that estimate is admitted to be wrong, I did not feel called upon to press for an adjustment of payments made so far back. This was agreed to.

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From the Director-General of the Post Office of India, to the Secretary to the Government of India, Public Works Department, dated 13th April 1871, No. 106.

In my letter No. 5,378, dated 31st March 1871, I reported the final settlement, so far as this office and the East Indian Railway are concerned, of the long-pending question of haulage rates for sorting carriages.

2. The amount of trouble, annoyance, and, to some extent, irritation, to which the discussion of this question in some of its stages gave rise, was very great, and, looking back upon it now, it is obvious that this arose from misunderstanding in various ways, and from the great difficulty of coming to any settlement to the satisfaction of both parties respecting the primary basis of calculation, namely, the amount of extra carriage space rendered necessary by the introduction of sorting. To compare the space required under a system of sorting with that which would be required if there were no sorting during transit, is, and will always be, a very difficult matter, for, while the employment of sorters involves extra space for standing-room and stamping counters, it results in a large saving in the space required for the storage of mails. In other words, the mails are sorted and stored in a very limited number of bags, whereas, if there were no sorting during transit, each Post Office on the line of Railway would have to make up separate packets or bags for each other office on the line in advance, and the enormous number of separate packets or bags thus handed into the train would not only be of much greater aggregate weight, but would require to be so stored in the carriage as to admit of ready and correct delivery at the various stations of destination, thus involving in another form nearly, if not quite, as much space as that required for the operation of sorting. On this point I may mention that it has been calculated that if there were no sorting on the East Indian Railway line, each mail carriage leaving Allahabad would have to carry with it an average of no less than 8,339 separate packets or bags, the arrangement of which, for the purposes of delivery at the station of destination, would certainly require just as much accommodation as the present sorting carriage.

3. I have made the above remarks with the object of showing to the Government how many difficulties beset the question, and what large room there is for conflicting opinions. The difficulty which has been experienced in arriving at a satisfactory settlement with the East Indian Railway Company will, I fear, be equally felt in conducting the negotiations with other Companies as necessity arises from time to time. Already it has been found that some additional space is required in the sorting carriages used on the Great Indian Peninsula Railway lines, which re-opens the whole question of the arrangements previously made with that Company; already two preparations have been made for a limited amount of sorting during transit on the Madras lines and on the Punjab lines, which, in the probable event of an increase of space required over the present non-chargeable limit of two compartments of a second-class carriage, will give rise to similar negotiations with the authorities of those Railway Companies.

4. I am most anxious, therefore, that the data derived from the elaborate consideration and eventual settlement of the question as respects the East Indian Railway Company should be utilized so as to save the trouble of going over the same difficult ground with each Railway Company in India. I do not mean by this to suggest that the rates payable to the East Indian Railway should in any sense be taken as those which ought to be paid to other Companies for the train mile expense, which forms one primary basis of the calculation, for the East Indian Railway, will necessarily differ in different Railways. But this will not interfere with the prescription for all Railways of a formula of calculation based upon data derived from the settlement of the question as respects the East Indian Railway.

5. For instance, the detailed measurement of all the different parts of the East Indian Railway sorting carriages, and the tedious consideration of how far each portion of space ought to be chargeable, or otherwise, has resulted in fixing the extra sorting accommodation required for an establishment of six sorters at 52½ square feet of floor surface, or about 8½ square feet for each sorter. I would propose that 9 square feet per sorter be taken as the chargeable space in all future calculations. Again, as respects non-service banghy mails, the settlement with the East Indian Railway assigned 5½ square feet of floor-surface as the space to be charged for on account

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of non-service banghy parcels. The statistics on which this calculation was made show that the average weight of non-service banghy parcels sent, or received, by each train, was 1½ maunds, and

* Mds. Sq. ft. Md. Sq. ft.
1½ : 5½ : 1 : 4

this gives* 4 square feet as the space chargeable for every maund of banghy parcels. Of course a maund of banghy parcels does not occupy any-

thing like 4 square feet of floor surface, but in any compartment reserved for banghies there will ordinarily be a certain amount of unused space, and the proportion of 4 square feet for every maund of average weight of non-service banghy parcels makes due allowance for such unused space. I would propose, therefore, that in all cases where the payments for non-service banghies are, like payments for sorting accommodation, based upon the space required, 4 square feet per maund be taken to represent the chargeable space.

6. If these data† be accepted, the calculation of haulage payment for any Railway will be

† Viz., 9 square feet of floor surface for each sorter; 4 square feet for each maund of non-service banghy parcels.

most simple, depending solely upon the train mileage expense of the Railway concerned. For instance, if the train mileage expense on any

particular Railway be (say) Rupees 2, it will be easy to deduce therefrom the carriage mile expense by dividing the train mile expense by the average number of carriages run on a train; and it will be easy also, having obtained the carriage mile expense, to deduce therefrom the expense per square foot of carriage accommodation by dividing the carriage mile expense by the average number of square feet of floor-surface for each carriage. The cost per mile for each square foot so deduced, multiplied by the number of square feet for which the Post Office has to pay under the calculation already described, will at once give the rate of payment per mile run to be made by the Post Office for the haulage of its sorting carriages.

7. As already stated, I propose the above formula of calculation solely with the object of avoiding prolonged and troublesome negotiations with each Railway Company in detail on every occasion when haulage rates have to be considered. The data which I have proposed are taken from an arrangement most carefully discussed and considered for more than a year, and which has been accepted by both parties as thoroughly satisfactory. I admit that in many respects the arrangement made with the East Indian Railway Company is, as shown in my memorandum, favourable to the Company, considerations which I had a right to urge having been waived; but I do not regret this, especially now that I have to propose the prescription of a formula of calculation based upon the data arrived at. The Government will, doubtless, feel that in prescribing a formula of calculation based upon certain fixed data, it should be thoroughly satisfied that those data are not illiberal; and it may rest assured that the data now proposed are thoroughly liberal from the fact that they have been readily and cordially accepted by the East Indian Railway Company after a minute and prolonged consideration of the matter, notwithstanding that that Company had from misunderstanding made exorbitant demands on this very account.

8. The Government has already prescribed in paragraph 15 of the Resolution of the 9th November 1869, No. 34, that "the proportion for which the Post Office will pay, should, if possible, be settled by agreement between the Railway Companies and the Post Office on an actual inspection and calculation of the space commonly occupied by the mails in bulk, and the Post Office servants charged with the receipt and distribution of the mails in transit, and of the space required only for sorting purposes," and all that I now ask for is the substitution for the above order of the data

Nine square feet of floor surface for each sorter; 4 square feet for each maund of non-service banghy parcels.

marginally noted, it being understood that the cost of haulage per square foot of floor-surface will be deduced from the train mileage in the manner above described.

9. I feel sure that an order of the kind, for which I now ask, will save an immense amount of trouble, misunderstanding, irritation, and delay, in fixing the payments to be made by the Post Office to the several Railway Companies on account of haulage of sorting carriages, and that it will result in arrangements satisfactory at once to the Post Office and to the Railway Companies concerned.

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4th August 1871.*

From the Government of India, Public Works Department, to the Director-General of the Post Office of India, dated 19th May 1871, No. 871.

I AM directed to acknowledge the receipt of your letters, Nos. 5,378 and 106, the former, dated 31st March 1871, reporting the terms which you have arranged with the Agency of the East Indian Railway and the Consulting Engineer for the haulage and rent of sorting carriages on that Railway, and the latter, dated 13th April 1871, advocating the prescription for all Railways of a formula of calculation based upon data derived from the above-named settlement.

2. With reference to the first case, I am directed to congratulate you on the general result of this long-pending difference with the East Indian Railway Company, and to record the satisfaction of the Government of India in this department at your consistent and successful efforts to obtain a reduced rate. The arrangements made with the Agency of the East Indian Railway appear to be judicious, and are generally approved. I am desired, however, to convey the following remarks on one or two minor points for consideration in the settlement of future rates of payment.

3. The method adopted of calculating the cost of working a vehicle by dividing the average cost per train mile by the average number of vehicles, though not accurate, is probably the best procedure in the absence of more definite statistical record. Under recent orders, however, the cost of working every kind of vehicle will, in future, be deduced for all Railways, and recorded for each half-year. As soon as this system has been inaugurated, the calculation of the rate of payment will be simplified.

4. In the train mile cost, which is the basis of the agreement now made, the expenses of maintaining and renewing the rolling-stock are, as pointed out by you, included; but, at the instance of the Consulting Engineer, no deduction was made on this account, although this service is to be separately paid for. The reasons which led to this advice are not known, but unless there be some compensating advantage, which is not mentioned, it would appear unnecessary to pay twice for the maintenance of the rolling-stock. If the average train mile charges of the Carriage and Waggon Departments, exclusive of greasing and oiling, were deducted from the train mile cost, it would make a difference of about 14 per cent. in the sum fixed as the rate to be paid for haulage by the Post Office. On the other hand, the propriety of the annual charge of 10 per cent. on the first cost of the sorting carriages for their maintenance and renewal is one that can only be judged by experience. The amount paid in a year, divided by the number of vehicle miles run, will give the average mileage cost, and this can then be compared with the average cost of this service as included in the total cost of working a train mile.

5. It must further be noted that, although the expenses of working on the main line of the East Indian Railway do not vary much, the expenses of the Jubbulpore line will be much affected by the opening of the Chord line and the Railway to the Nerbudda Coal-fields, which will reduce the price of fuel, and greatly lower the cost of haulage on the line. It seems right, therefore, that the rates now adopted should be considered as liable to be modified by any such change of circumstances, of which you might keep yourself informed by a communication with the Consulting Engineer.

6. If, after duly considering the foregoing remarks, you are still desirous of negotiating for the present with other Companies on the basis of the total train-mileage cost, the Government of India will be prepared to accept the formula of calculation proposed in the second of your letters under reply, and to recommend its general adoption; but before any action can be taken in the matter, it is necessary that this point of principle should be decided.

ORDER.—Ordered that copy of this Resolution, and of the papers read, be forwarded to the Local Governments noted in the margin for information, and for the guidance of the Consulting

Madras. | Bengal.
Bombay. | Punjab.

No 2033 - 4. Aug 67
H. H. in order

C. No 31480

Govt of 1871 Madras.

PUBLIC WORKS.

20 *Twenty Consulting Engrs
for Railways*

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Re: /

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Nos. 49 & 50

*Postal Service. Recd.
from the Govt of India
for payment to Railways
supplies for Postal
service communicated
the Comdg. Engineer*