68. The Committee have only to add, with reference to the financial question, that the cable would be a competitive line, and would have to be managed accordingly. While they have felt themselves bound, as they have remarked, to show extreme caution in their estimates, they consider that the question of expenditure, and still more the question whether a business approximating more to the capacity of the cable could be obtained, would largely depend, as would similar questions in all industrial enterprises, on the energy and care shown by the management.

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69. The evidence has clearly shown that the best management and the adoption of the most improved methods can get much more paying work out of a cable than inferior management and

the use of older methods.

# Recommendation and Summary.

70. In consideration of the traffic estimated for the cable, and of the opinion expressed below, that a duplicate cable should be laid at the earliest possible moment, the Committee have arrived at the conclusion that a core over the long section from Vancouver to Fanning Island of 552 lb. copper and 368 lb. guttapercha will be sufficient. On the assumption that this recommendation is adopted, and taking the total annual expenditure at £144,887, and the increase of business at 10 per cent. per annum on 750,000 words in 1896, a Pacific cable would, if it came into actual work on the 1st January, 1900, earn £178,437 in its first year of working if the rate obtained by it per word were 3s. 3d., thus leaving a credit balance on the first year's working of £33,550. If the rate per word were reduced to 2s., in the year 1900 it would earn £109,807; in 1901, £120,788; in 1902, £132,867; and in 1903, £146,153; it would thus become a paying concern during the fourth year of working.

#### 5. Ownership.

71. The Committee are of opinion that the cable should be owned and worked by the Governments interested.

72. In arriving at this conclusion they do not underrate the importance of allowing all commercial undertakings to be carried out, whenever possible, by private enterprise unassisted by Government. But in the present case there seems to be no probability that private capital will be forthcoming for the purpose of laying a Pacific cable without a larger subsidy than the Governments interested in the project would be prepared to grant.

73. If Government assistance, in some form or other, is necessary, the Committee think that a scheme under which the cable would be constructed and owned by the Governments interested

is much to be preferred to a private company working under a Government subsidy.

#### 6. Management.

74. The Committee are of opinion that the general direction should be in the hands of a manager in London, under the control of a small Board, on which the associated Governments would be represented. The manager would be in communication with the telegraph authorities of the respective Governments with regard to matters of local administration. The details could be arranged without difficulty by the Governments interested.

## 7. Contract.

75. The contract would in the main follow the ordinary forms, specimens of which are shown in the appendix [not printed]. Provision should be made for a preliminary survey under the supervision of an officer appointed by the Governments, and for the maintenance of the cable by the contractor for six months, as recommended above. The cable in shallow waters should be protected by brass-taping against marine insects. The details of the specification would present no difficulty when the type for the long section has been fixed upon, as there is not much difference between the present modes of constructing submarine cables.

### Duplication.

76. The Committee have only to add that it would, in their opinion, be necessary to lay a duplicate cable, and that, if a deviation from an all-British route were permissible in the case of a duplicate cable, and if the circumstances of the time permitted of it, such a cable might advantageously follow a somewhat different route, vid Honolulu. Most cables on important routes have been duplicated, but generally in the first instance they have been laid singly, and the duplication has followed when the success of the undertaking warranted a fresh outlay of capital.

77. There can be no doubt, however, that the duplication should be effected at the earliest convenient opportunity. Cables have usually been duplicated to protect and preserve their business in cases of interruptions, even when there have been no competing lines ready to profit by their breakdowns. Duplication would be, therefore, the more necessary in the case of a new line,

which would be laid in competition with an existing undertaking.

78. If a second cable were laid along the same route as the first, the annual expenditure entailed by it might be reckoned at £37,000 less than that of the first, as the additional working-expenses would certainly not exceed £15,000, and there would be no additional standing charges for repairing-ships. If a second cable were laid  $vi\hat{a}$  Honolulu, not only would there be the above-mentioned reduction in annual expenditure of £37,000, but also a very material reduction in the charges for interest and sinking fund, as the capital required would be less.

79. In the event, therefore, of a second cable being laid along the route recommended for the first, and on the assumption that the tariff were reduced to 2s. a word, and that such a reduction brought no increase of business beyond the 10 per cent. per annum already estimated, the total annual receipts from the two cables would exceed the total annual expenditure upon them in the tenth year from the commencement of the work of the first cable in 1900. If a second cable were