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WIRELESS TELEGRAPHY.

A Wireless Telegraphy Conference of delegates representing Australia, New Zealand, and Fiji, and the Admiralty, met in Melbourne on the 15th December, 1909, to discuss a scheme for connecting New Zealand, Australia, and the Pacific islands by wireless. Mr. J. K. Logan, I.S.O., Superintendent of Electric Lines, represented New Zealand. The recommendations of the Conference were as of Electric Lines, represented New Zealand. follows:-

- (1.) Establishment of high-power stations at Sydney, Doubtless Bay, and Suva; the Sydney station to be capable of communicating with Doubtless Bay, and Doubtless Bay with Suvå.
- (2.) Establishment of medium-power stations at Tulagi (Solomon Islands), Ocean Island (Gilbert Archipelago), and Vila (New Hebrides).

(3.) Rejection of proposals of Pacific Radio-telegraph Company.

(4.) State control of system.

- (5.) Cost of Vila and Tulagi stations to be borne by Imperial and Commonwealth Governments in proportion of two-thirds and one-third respectively; any loss on working to be borne by same Governments in same proportions; the question of the co-operation of French Government in establishment of Vila station to be left to Imperial Govern-
- (6.) Cost of Fiji station to be borne by Imperial Government, one-third; Commonwealth, one-fourth; New Zealand, one-sixth; and Fiji, one-fourth; any loss on annual working to be borne in same proportions; Fiji to pay additional contribution if station used in connection with a local Fijian system.

(7.) Cost of Ocean Island station, capable of communication with Fiji, to be borne by Imperial Government, two-thirds; Commonwealth, one-third; the Pacific Phosphates Company to guarantee against loss on working-expenses and sinking fund.

(8.) Embodiment of wireless system for Western Pacific in an agreement between Governments interested, and for executive control and management by High Commissioner for Western Pacific.

New Zealand's liability for other than for the Doubtless Bay station would be £2,000 for the Suva station. The resolutions have been agreed to by the New Zealand Government.

Tenders have been invited for the erection of five wireless-telegraph stations to meet the requirements of defence, the navy, and the mercantile marine service in the Dominion. Provision is made for high-power stations at or near Doubtless Bay and Bluff, with a range of 1,250 nautical miles, and three medium-power stations, one at or near Gisborne, one at or near Cape Farewell, and one at Sumner. These medium-power stations will command ships at sea for a distance of 500 nautical miles, and the Sumner one will reach the Chatham Islands. Doubtless Bay will command Sydney and Fiji, and communicate with vessels of the navy and the mercantile marine. The stations above mentioned will also be able to intercommunicate with each other, either direct or by transmission. Ships approaching New Zealand from any direction equipped with wireless apparatus will therefore be able to communicate with one or other of these stations.

TELEPHONE EXCHANGES.

Seventeen new exchanges were opened during the year, the number of subscribers increased by 2,104 and the total number of connections by 2,848.

The total number of exchanges now is 153, made up of 30 central and 123 subexchanges.

The total number of connections is 29,681, compared with 26,833 in 1909. They may be classified as follows: Paying, 22,242; free, 2; bureaux, 2,656; service, 312; extensions, 4,469.

New connections numbered 3,711, and those given up 1,314. The increase in connections is equal

to 10.61 per cent.

On the 31st March, 1910, there were 1,270 miles of telephone-line and 35,233 miles of wire.

Owing to increasing number of subscribers, new switchboards were installed at Te Aroha, Paeroa, le Kuiti, Greytown, Kimbolton, Manaia, Opunake, Pahiatua, Waipawa, Waitara, Woodville, Picton, and Kumara.

Two sections were added to the Auckland Exchange switchboard, increasing the capacity to 3,599.

The central-battery equipment which was brought into operation at Invercargill and Timaru in June, 1909, has given entire satisfaction to subscribers, besides greatly facilitating switching operations.

At Hastings, the conversion to metallic circuit and the installation of the central-battery system are well forward.

The conversion of exchange subscriber's circuits from earthworking to metallic was completed at Auckland, Wellington, Wanganui, and Christchurch.

Preliminary steps have been taken to establish the metallic-circuit system at the following exchanges: New Plymouth, Feilding, Hawera, Palmerston North, Napier, Gisborne, and Masterton.

In August, 1909, the work of laying conduits to provide for placing the telephone cables in Auckland City underground was commenced. 628 chains of ducts are now ready for receiving cables.

Over five miles of lead cable, representing 1,615 miles 74 chains of twin wire, have been drawn into the underground ducts in Wellington City. 769 miles 18 chains of this are in use, and on completion of the splices many overhead circuits will be diverted underground and a quantity of overhead cable dismantled.