

at Madrid in September, 1932. Mr. Esson is the Dominion's representative on the Advisory Committee of Imperial and International Communications, Ltd., London, the merger company which assumed control in 1929 of various Empire cable and radio services.

### TELEPHONE-EXCHANGE SERVICES.

During the year new automatic-telephone exchanges were brought into operation at Hastings and Marton. The Hastings work was proceeding when the Hawke's Bay earthquake occurred on the 3rd February, 1931, and dislocated the telephone-exchange service. Temporary arrangements were made to accommodate a large number of the subscribers, and the work of installing the automatic exchange—an undertaking of magnitude—was accelerated to the extent that complete automatic service was made available on the 31st May, less than four months after the earthquake.

Since the close of the year the new automatic installation has been put into operation at Whangarei (on the 3rd April); while the work of installation of the new automatic exchange at Lower Hutt has proceeded apace, and will be completed in a short time.

The success of a telephone-exchange system depends in periods of economic stress as well as in times of prosperity on concentration on the main objective—a telephone service as free as humanly possible from imperfections, errors, or delays, and one enabling subscribers to obtain efficient communication over the length and breadth of the country quickly and at reasonable cost. The lessening of development work that has been in evidence during the year has enabled close attention to be given to minor problems of service, with the result that the telephone service has never been more satisfactory. The Department, by maintaining and improving the standard of service, hopes that telephone subscribers will realize the fact that the telephone is at all times invaluable.

The loss of subscribers during the year represents between two and three per cent. of the main telephone stations. The small percentage loss would appear to indicate that telephone charges are recognized to be not unreasonable, and that the telephone is indispensable in business and social life. Because of these facts, the reconnection of the subscribers who have relinquished their telephones may be expected as soon as conditions begin to improve.

### LONG-DISTANCE TELEPHONE COMMUNICATION.

Owing to the adverse financial situation, with a consequent falling-off in toll traffic, the further extension of the long-distance telephone network within the Dominion has been temporarily suspended. In the meantime attention has been directed to investigational work designed to provide additional carrier-current telephone channels over the existing Cook Strait telegraph cables. Details of the work are given on page 20 of this report.

In view of the temporary cessation of activity in long-distance telephone development it may not be out of place to briefly recapitulate the extent to which the Dominion network for toll communication has been extended and enlarged during the last few years.

Prior to 1926 telephone communication, except at certain hours of the day or night when the inter-island telegraph cables could be made available for telephone purposes, was restricted to the Island in which the caller was situated. The inherent limitations of the telegraph cables as speech-carrying channels made the inter-island service a limited and low-grade one, while the land circuits then in use did not enable speech to be carried on satisfactorily beyond a restricted range. Thus the telephone service available was a restricted one and more or less of local and provincial utility. The installation in 1926 of the telephone cable connecting the North and South Islands was the first step towards the marked increase in