

AUXILIARY TELEPHONE SERVICES : INFORMATION, TIME, ETC., AND THE RELATION OF BROADCASTING THERETO.

In the most efficient telephone systems of the world it is not now the custom to give general information to subscribers over the telephone, as is done in the larger centres in New Zealand. This practice was at one time followed, but has been abandoned, for two important reasons :—

(1) That the giving of special services of the nature referred to, as well as information relating to public events, causes a diversion of the telephone facilities for which the subscriber normally pays, and a consequent degradation of its general utility. This renders it difficult for subscribers in branch exchanges to obtain the usual rapid communication with other parts of the system in cases of sickness, fire, urgent business, and similar uses. This is due to the fact that the apparatus and inter-connecting junction circuits between the various parts of the networks become overloaded with the "special" calls. This condition has already been experienced in New Zealand during occasions when, for example, election results have been furnished to the public per medium of the telephone.

(2) Since the advent of radio-telephone broadcasting it is generally agreed that the broadcasting-station is the more fit and proper medium for the communication of information of general public interest. This popular medium is capable of communicating with all points in a country without causing the dislocation of other important services. It is therefore argued that those desiring to be kept posted in the progress of important events should be subscribers to the latest scientific means for the instantaneous and widespread dissemination of information of a general character.

The time has, in my opinion, arrived when due attention should be given to this aspect of telephone service.

STANDARDS OF TRANSMISSION.

Considerable attention is now being paid to the maintenance of standards of transmission and reception in connection with the transmission of speech by telephone. International standards have been set up on which substandards may be based, and the quality as well as the volume of telephone speech properly gauged. In due course we shall receive advice of the conditions under which New Zealand can be admitted to this standardization group and supplied with the necessary data and standards of reference.

OBSERVATION AND TRAFFIC STUDIES.

The methods whereby the service given to the public is kept under constant review were closely scrutinized and working data obtained. In all telephone organizations of note, traffic movements and observation statistics form an important part of the routine work of a highly trained section of the staff. In this respect we have a good deal to emulate in New Zealand, where, on account of the relatively low development, little has been done so far to place this phase of telephone supervision upon the efficient plane that exists in similar organizations abroad.

The traffic and commercial sections of up-to-date telephone companies are composed of specialists who are required to possess certain essential qualifications for their particular work. They make special studies of all phases of telephone development, with results that speak for themselves. Commercial engineers and assistants with suitable training relieve plant engineers to a large extent of investigations into telephone growth and prospects, and furnish reliable data upon which plant and equipment extensions may be based.

Attention to this phase of telephone organization would, I feel sure, result in many advantages in the more efficient and economical administration of the telephone service of this country.

RATES AND QUALITY OF SERVICE.

Telephone and toll rates were investigated as closely as time permitted, and comparative data obtained, as well as information as to the basis upon which such services are made available for public use.

The ultimate effect of our New Zealand flat-rate rental system upon the calling-rate and efficiency of service furnished an important subject for investigation—particularly with the advent of a high-grade automatic service—and the information thus obtained will, it is believed, be of considerable value in guiding the policy of the Department at this stage of its development.

After reviewing the most efficient telephone systems of the world, one feels compelled to observe that the art of telephone communication is not yet finalized. The transmission of speech over long distances, both by wire and by radio, the use of thermionic repeaters and of radio-frequency methods generally, have introduced many changes into telephone technique. It will be some time before these changes become stabilized. Rapid improvements in regard to distance of transmission are possible to a progressive and financially healthy organization. It may well be expected that within a comparatively brief period international and trans-oceanic telephony will become general.

What is called "transmission quality" is also receiving an increasing amount of attention in the advanced telephone centres of the world. International standards of transmission and intercommunication are being set up, because it is realized that the day of international long-distance telephone communication is at hand.

Only by the careful and systematic development of telephonic standards may New Zealand expect to be accepted as a partner in such an international scheme. Instead of reducing rates, profits should rather be applied towards improving the standards of transmission, and hence the possible distances as well as the reliability of communication. This can be effected only by the gradual introduction of modern facilities which are at the same time more complex and more costly than those which have so far met the requirements of local and comparatively short-distance communication.

In short, it would seem more desirable to retain a scale of charges—already very favourable to New Zealand subscribers as compared with other telephone countries—which will make such development and expansion possible, than to reduce them to such a low level that the activities of the Department will be unduly hampered and future developments towards world-wide telephone communication seriously jeopardized.