

*Palmerston North.*

The installation of the Western Electric rotary automatic system at Palmerston North is nearing completion, the approximate date of the cut-over being early in July. The system, which is the same as that now being operated so successfully at Masterton, Hamilton, Blenheim, and Oamaru, is full automatic, with the exception of a few long-distance rural lines outside the range of automatic operation.

The initial equipment provides accommodation for 1,600 exclusive lines, 400 party lines, 70 toll lines, and 110 rural lines, with an ultimate capacity of 4,000 lines and a possibility of extension to 10,000 lines. Apparatus for the extension of the initial equipment by 400 lines is now coming to hand, and will be required shortly after the cut-over to meet prospective growth.

To ensure the satisfactory operation of this comparatively high-voltage automatic system, the outside line plant in and around Palmerston North has been completely renewed and modernized by the introduction of underground and aerial cables, and also the entire use of the metallic-circuit system except in the few cases where privately erected earth-working extensions of the Department's lines are being maintained by the owners. When cut over to automatic, Palmerston North, in common with other automatic areas in New Zealand, will have one of the most up-to-date and efficient telephone-exchange systems in use in any part of the world.

*Wanganui.*

The automatic system arranged for Wanganui is of the Strowger type, similar to that now being used for auxiliary purposes at Auckland and Christchurch. The delay in completing the Wanganui system is due to exigencies in the telephone situation in other parts of New Zealand—particularly at Auckland—rendering necessary the utilization elsewhere of a portion of the automatic equipment originally intended for Wanganui. Orders have since been placed for the replacement of this apparatus, and when that arrives the work of installation will be proceeded with. The Wanganui service is not to any extent prejudiced by the commandeering of a portion of its original equipment, as the accommodation on the manual switchboard is being satisfactorily extended to meet present requirements by the use of auxiliary manual boards. The chief reason for the installation of an automatic system at Wanganui was to provide a more efficient system and one less costly as regards annual charges, and not so much on account of the obsolescence of the system, as is the case at Auckland.

*Christchurch Metropolitan Area.*

Owing to the non-completion of the Hereford Street central automatic-exchange building, and to the abnormal prices of underground and aerial telephone-cables, temporary measures were adopted at Christchurch in much the same way as at Wellington and Auckland. Auxiliary automatic apparatus is therefore being used in conjunction with the manual, 1,500 automatic lines being installed at central, while 300 lines at Sydenham and 500 at St. Albans are under installation and should be available shortly.

Ultimately Christchurch will have a full automatic system of the Western Electric rotary type, with exchanges at Hereford Street (main), Sydenham, and St. Albans. Before this is possible, however, the whole of the Christchurch line plant will have to be replaced by modern underground and aerial equipment, and the open aerial system reconstructed. This work will be placed in hand as speedily as circumstances will permit.

*Dunedin Metropolitan Area.*

The system of automatic telephones for Dunedin provides for exchanges at Upper Dowling Street (main), Roslyn, and South Dunedin, and is of the same type and ultimate capacity as is designed for Auckland, Wellington, and Christchurch. But for the unfortunate delays of recent years the Dunedin system would long before this have been full automatic. The buildings at Roslyn and South Dunedin that are to accommodate the branch exchanges were erected some time ago, and the automatic material for these branch exchanges is now on hand. This apparatus cannot be brought into use, however, until the main exchange, in conjunction with which the branch exchanges are to operate, is furnished. A site has been secured for the main exchange in Upper Dowling Street, but the erection of the building has been delayed, firstly on account of the difficulty in obtaining materials during the war period, and secondly on account of the financial stringency which followed.

Unlike Christchurch, the outside plant has already been reconstructed and modernized by underground and aerial cables, and it remains only for the main-exchange building to be erected before the installation of the apparatus, preparatory to the introduction of full automatic, can be put in hand.

In order to alleviate the existing telephone situation at Dunedin, a temporary branch manual exchange, making provision for 700 subscribers, and working as an auxiliary to the main switchboard, is being operated at Roslyn. The Dunedin switchboard is also being extended to accommodate 200 additional lines. These temporary measures cannot be indefinitely resorted to, and in the Dunedin area a practical limit to such expedients has now been reached. The subsequent expansion of the system can only be satisfactorily met by the conversion of the whole telephone network to full automatic operation.

*Oamaru.*

An automatic exchange of the Western Electric rotary type, with an initial equipment for 600 straight lines, 30 toll lines, and 20 rural lines, and an ultimate capacity of 3,500 lines, was opened at Oamaru in January last. Preparatory to this installation the line plant connecting subscribers with the exchange switching-apparatus was completely modernized, with most satisfactory results. The system represents the latest development of modern telephone engineering, and from its inception has given general satisfaction. To meet the growth of subscribers consequent upon the long delay an extension of 100 lines is now being installed, and the ordering-up of a further extension is receiving consideration.