Soon

You'll Be Dialling

ANYwhere

By The Rt. Hon. Ernest Marples, M.P.

The Postmaster-General describes, in an interview with Wilfred Greatorex, the new advances which promise to give us the world's most efficient telephone service



RECENTLY I sat at a telephone in Bristol and, simply by dialling, called up my

home in London, then other numbers in Leeds, Birmingham, Glasgow, Manchester and Frome, Somerset. The time taken to reach all six numbers, including my dialling time, was two minutes 26 seconds—or little more than 24 seconds a call compared with the General Post Office average of about 55 seconds a call for operator-handled trunk calls. In most cases it

took the person at the other end longer to answer than it took the automatic apparatus to steer the call and initiate the ringing.

At present 18,000 telephones in the Bristol area are connected for subscriber trunk dialling, which is known as STD. The G.P.O. aims by 1970 to have three out of four trunk calls in Britain dialled direct. Forty-six more towns will have the system by the end of next year.

With STD, the only difference from dialling a local call is that the caller first dials the simple code of the exchange he wants before he dials the party number. All trunk dialling codes in Britain start with a nought. London's code is or, Manchester's of and Liverpool's of. To get Mayfair 8144 in London the caller dials or May 8144.

The code numbers have been carefully assigned. High numbers like 919 or 878 take almost two seconds longer to pick out than combinations set low on the dial—and telephone men are greatly interested in seconds. Saving a second on each trunk call made in Britain represents a saving of some one million hours of subscribers' time a year. For this reason the low numbers are given to major cities which get the most calls, such as Birmingham (021) and Edinburgh (031).

For other large towns where letters are not already used for local dialling, the o is followed by the first two letters of the place name and

then a figure. Leed's code is OLE2 and Newcastle's ONE2. This is done to avoid a pure sequence of numbers which would be harder to memorize.

Three essential mechanisms make up the Group Routing and Charging Equipment, known to telephone men as Grace, which makes longdistance dialling possible. Registers record electronically each letter and figure dialled. Translators then begin to direct the routing of the call without waiting to learn the local number. They are the brains of the system. They translate the information passed by the caller into the form best suited to control the switching mechanisms which see the call through to its destination. Alternative routing of calls when circuits are busy is also being developed.

The third STD mechanism is the metering control equipment—the

call charger. This instrument, which behaves like a taxi-meter, records a single unit fee at intervals throughout the call. It charges at varying rates according to the information passed by the register about the distance of the call and the time it is made. The subscriber may rent a private meter to keep beside his telephone. It gives him a check both on individual trunk calls and his total telephone account.

STD means cheaper trunk calls. There is no minimum three-minute charge. For twopence, a Bristol subscriber can buy 12 seconds of talking time to London or Edinburgh, 20 seconds to places between 35 and 50 miles away, and 30 seconds to places up to 35 miles away. In cheaprate periods the unit fee buys half as much time again. This means that it is usually cheaper to dial direct and leave a message for the person

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you wish to contact than to make a personal call. Already there has been a big drop in personal calls from Bristol since STD started.

Now a new coin-box is being introduced to allow trunk calls to be dialled from call offices and coin-box telephones. It works on the payon-answer system and has no A or B buttons. Only when the call is answered can money be put into the box. Then the coin-slots open automatically, a new signal—the paytone—is heard, and conversation can start.

While STD is producing its own revolution, experts see it only as one more step forward in the general advance of telephony. Here are some developments which seem to be on the way:

You will not dial your calls at all. Instead, you will punch keys like those on an adding machine. Keycalling was demonstrated at the Brussels Exhibition. Tests show that while most people *think* they will dislike keying numbers, 99 out of 100 prefer keys to dials after experience. Keys are also much faster—five or six seconds to key an average number against ten to twelve to dial it.

One day you may be able to have a hands-free telephone. Known to engineers as the Loudspeaking Telephone, it allows you to talk freely from your desk or while moving about the room. When you telephone your relatives or friends, both parties can join in—just as if they were all together.

At the end of this interview, the Postmaster-General added that perhaps the most exciting immediate prospect in telephony is International STD. Experts from Britain and other West European nations are meeting to work out a dialling pattern between the countries. Even now, subscribers in Paris can call up numbers in Brussels by automatic dialling. About one million subscribers in Paris and some 300,000 in Belgium today have automatic trunk connexions.

Britain's first link-up will probably be with France or the Low Countries. The day is coming when International STD, along with the electronic telephone exchange and key-calling, will enable you to make almost instantaneous contact with your Riviera hotel or a friend in New York.

Forty years after inventing the telephone, that great Scotsman, Alexander Graham Bell, said: "Leave the beaten track occasionally and dive into the woods. You will be certain to find something you have never seen before." The G.P.O.'s engineers are pioneering new routes which even Bell could hardly have imagined.