company from opening any street or public road within the county of London without the consent of the Postmaster- General and the London County Council, which injunction was granted in July.

1901. The government policy of 1899 was abandoned in London, the Post Office making an agreement with the company in regard to the London business. The company consented to free intercommunication between its subscribers and those of the Post Office, and undertook to charge rates identical with those charged by the Post Office. The Postmaster-General on the other hand agreed to provide underground wires for the company on a rental, and agreed to buy in 1911 the company’s plant in London at the cost of construction less allowance for repairs and depreciation.

1904. The government had option to purchase the company’s provincial plant under the licence of 1884. Negotiations took place, but no agreement was reached.

1905. The government contracted to buy the company's plant in 1911, thus in effect annulling the act of 1899 which had failed to accomplish its object of establishing all-round competition.

By 1907 altogether 59 local authorities had examined the proposition of establishing telephone systems after 1899, and licences were granted to local authorities at Brighton, Belfast, Chard, Glasgow, Grantham, Huddersfield, Hull, Portsmouth, Swansea, Tunbridge Wells, Oldham, Scarborough and Hartle­pool, but only six municipalities proceeded with the business. Glasgow opened its exchange in March 1901, Tunbridge Wells in May 1901, Portsmouth in March 1903, Brighton in October 1903, Swansea in November 1903 and Hull in October 1904. The Tunbridge Wells and Swansea municipal undertakings were subsequently sold *to* the National Telephone Company, and the Glasgow and Brighton undertakings to the Post Office. Hull and Portsmouth were the only municipal telephone systems working in 1907.

The effect of the unsettled policy of the Post Office until 1905 and of the difficulties created by the local authorities was that the National Telephone Company was never able to do its best to develop the enterprise on the most efficient lines. In 1885 there were only 3800 telephone subscribers in London and less than 10,000 in the rest of the United Kingdom, and telephonic services were available in only about 75 towns, while in the same year the American Bell Telephone Company had over 134,000 subscribers. The removal in 1884 of the pro­hibition against the erection of trunk lines at once enabled considerable expansion to take place. Within six years the services had been extended to 400 towns with about 55,000 subscribers. Large as this progress was it would have been much greater if the Telephone Company had been granted adequate powers to put wires underground and thus instal a complete metallic circuit in place of the single wire, earth­return, circuit which it was constrained to employ. Subse­quently the progress was still greater. In 1906 there were 30,551, equal to 7∙2 per cent., more telephone stations in the United Kingdom than in the ten European countries of Austria, Hungary, Belgium, Denmark, Holland, Italy, Norway, Portugal, Russia, Sweden and Switzerland, having a combined popula­tion of 288 millions as against a population of 42 millions in the United Kingdom. Apart from France, Germany and Switzerland, there was no European country that had as many telephones working as London. That city, with a population of 6 millions, had nearly as many telephones as the whole of Sweden with about the same population, or as the whole of France, with a population of 39 millions. The only European country which can be compared with the United Kingdom in telephone development is Germany. With a population of 58 millions there are 10∙2 telephones per 1000 of the population in that country compared with 10·15 in Great Britain and Ireland. The development of telephony in the United States of America is much greater than anywhere else; on the 1st of January 1907, 5 per cent. of the population were telephone subscribers.

*Tariffs.*—Telephone business is characterized by two features: (1) that the capital account is never closed, and (2) that the costli­ness of the service increases with the size of the undertaking. The original method of charging adopted in Great Britain took the telephone instrument as the unit, charging a fixed annual rental independent of the amount of use to which the instrument was put. The study of telephone economics showed that the proper basis for charging was the “ message-mile," on the theory that the

user should pay according to the facilities offered and the extent to which he made use of them. In a large city, where several inter­connected exchanges have to be built and thousands of subscribers are put into communication with each other, the service is at once more costly and more valuable than in a small town with a few hundred subscribers accommodated in one exchange. Differences not only in the size of towns, but in the arrangement and char­acter of the population, make each district a telephone problem by itself, and nullify close comparisons between telephone rates and telephone efficiencies in different areas and different countries. But the tendency is towards a system of charging a moderate sum to cover the rent of the instrument and an additional fee per message. For instance, in the county of London, the telephone tariff is £5 per annum plus 1d. per call within the county and 2d. tier call outside the county. Subscribers outside the county of London pay only £4 in annual subscription and 1d. per call to sub­scribers on the same exchange and 2d. per call to subscribers on other exchanges. In each case the minimum annual amount for message fees is £1, 10s. The alternative is given of an unlimited service (“ flat rate ”) at £17 per annum. In the provinces the unlimited service costs only £7, 10s. for subscribers within half a mile of the exchange, £1, 5s. being charged for every additional quarter of a mile or fraction thereof. The toll or message rates are £3, with 1d. per call, with a minimum of £1, 10s. As the cost of the service varies in proportion to the amount of use, the toll rate is more scientific, and it has the further advantage of discouraging the unnecessary use of the instrument, which causes congestion of traffic at busy hours and also results in lines being “ engaged " when serious business calls are made. The tariff for unlimited use has to be made very high to cover the cost of the additional burdens thrown upon the service, and it only works economically to the individual subscriber who has an exceptionally large number of calls originating from his instrument. The message-rate system equalizes the charges according to the service rendered. Another method of charge, known as the “ measured service rate,” is de­signed to make the subscriber pay in proportion to the quality and quantity of the service he takes. It is widely used in America, and was introduced into Great Britain in 1907. The subscriber pays a fixed annual rent which covers a certain number of free out­ward calls, say 500; additional calls he purchases in advance in blocks of several hundred at so much per hundred, the price being reduced as the number increases. »

For subscribers who desire the telephone for occasional use, the party-line system has been devised, whereby several telephones are connected to one line leading to the exchange. In London a two- line party service costs £3 per annum, the message fees being 1d. per call to subscribers within the county and 2d. per call to those outside it, with a minimum of £3. The fee charged for the use of public telephone call offices is 2d. per message.

The trunk line service is charged for on rates which vary from 3d. (for 25 m.) up to 1s. (for 100 m.) for a three minutes' conversa­tion between 6 a.m. and 8 p.m. For every 40 m. above 100 m. an additional 6d. per conversation is charged. A reduction has been made in the charges for trunk calls at night, and calls for single periods of three minutes are allowed at half the ordinary rates between 7 ρ.m. and 7 a.m. A call between London and Liverpool, which ordinarily costs 2s., can be made for 1s. between those hours. The growth of traffic on this basis has been considerable, and the arrangement has proved of advantage to the public, as it provides cheap facilities at times which are convenient for social conversation.

Telephone subscribers may telephone ordinary messages to any post office which may be reached through the local exchange system, or by means of the trunk wires, in order that the messages may be written down and forwarded as telegrams or express letters or ordinary letters. Subscribers to exchanges may also make arrangements to have all telegrams (except Press telegrams) ad­dressed to them delivered by telephone instead of messenger. Telephone subscribers may also obtain the services of an express messenger by telephoning to the nearest post office connected with the exchange.

*National Telephone Company.—*The issued share and debenture capital of the company on the 31st of December 1907 was:—

15,000 6% 1st preference shares of £10 each. . £150,000

15,000 6% 2nd preference shares of £10 each . 150,000

250,000 5% 3rd preference shares of £5 each . . 1,250,000

6 % preferred stock ...... 2,225,000

Deferred stock ....... 3,366,425 71,715 new shares of £5 each .... 358,575

£7,500,000

3½ % debenture stock 2,000,000

4% debenture stock ...... i,716,593

£11,216,593

The company has *a* reserve fund of £2,467,7.07, the major part of which is invested in the business. The gross income for the year 1907 amounted to £2,702,228, of which £257,920 was paid to the Post Office in respect of royalties. The working expenses amounted