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Historical Significance Statement

**Conversion of Former Telephone Exchange to Dwelling
at:**

**Telephone Exchange,
Common Road,
Whaplode Drove,
PE12 0UF**



1. Introduction

Telephone exchanges began their existence around the same time as the invention of the telephone, with the first recorded exchanges in the UK beginning their use in 1879. The first exchange building being in London and operated by the Telephone Company (Bells Patents) Ltd served just 8 lines. Not long after this the rivalling Edison Telephone Company of London Ltd opened their first exchange which led to rapid competitive expansion. By April 1890 Bells Telephone Company listed seven London exchanges and 16 regional exchanges including Bristol, Manchester and Edinburgh.

Shortly after, due to technical shortcomings on both sides, the two companies merged to form the United Telephone Company of London Ltd, which eventually evolved into the National Telephone Company (NTC), however before this amalgamation was complete a legal case brought against the Edison Telephone Company by the General Post Office (GPO) who regarded the telephone as an infringement and direct threat to their telegraph monopoly. The eventual court ruling in December 1890 declared that telephones were covered by The Telegraph Act 1868, which required all telephone operators to be licensed by Her Majesty's Postmaster General, and the state subsequently came to play a central role in the development of Britain's telecommunications network.

The stalemate between the GPO, who were not in a financial position to compete, and independent telephone patentees, who were unable to fully exploit their technological advances due to the restrictions of their licences, did not end until the last license expired in 1911 and the Telephone Transfer Act brought all telephone companies together under the control of the GPO.

Simply speaking telephone exchanges served as the centre point for small geographic locations of the telecommunications system of the country, their size being depicted by the number of lines operated within that specific location. These buildings were initially operated by switchboard operators, usually women, who were required to physically connect the lines of the incoming call and the intended recipient. However, as the technology developed the switchboard became automated which required only general maintenance to be carried out by workers and resulted in a far smoother operation with less errors being made.

2. Architectural and Historical Development

Before nationalisation the general practice of the National Telephone Company had been to lease existing premises and adapt them when required, therefore, in 1912 most local telephone exchanges were housed in shops, offices, warehouses or other types of buildings. The varying range of building types presented problems for the engineers responsible for the layout of equipment and the majority of these exchange buildings were eventually replaced. Purpose built telephone exchanges were at the time rare and exclusively located in larger towns and cities.

The planned replacement of these unsuitable exchanges and the general expansion of the telephone network was halted by the First World War and when planning eventually resumed in 1927 an ambitious building programme was started, initially in London. The Ministry of Works was tasked with designing buildings that were externally in-keeping with their surroundings to satisfy the Local Planning Authorities but were still capable of housing the functional and spatial requirements stipulated by the GPO. The majority of these initial exchanges were large enough to accommodate equipment for multiples of 10,000 lines.

As demand for telephone services spread across Britain, small, standardised buildings were designed to serve smaller communities. The GPO took responsibility for the design of the equipment as well as the design and erection of the smallest buildings. Their Architect's Section and Engineering Department developed the first building types in the 1920s, those being the Type A, Type B & Type B1, all of which were designed to accommodate 100 line and 200-line exchanges. The three types were initially designed to be constructed using brick or stone, or special construction in areas prone to flooding, which enabled the appearance to blend in with the local vernacular as well as make use of cost effective and available materials to the area. In 1951 timber buildings were trialled in the Type A, Type B & Type B1 format as a direct response to the postwar material and labour shortage. The design responsibility for larger 800-line exchange buildings was given to the Ministry of Works who developed Standard Types D, E & F in conjunction with the GPO's Engineering Department. Two of these building types were designed with future extension in mind, Type E could be extended vertically and Type F horizontally. Much with the Types A, B & B1, these standard types were

designed to be constructed in a range of materials to suit local vernacular and material availability. The repetitive use of standard building types reduced both planning and construction times significantly. In the inter-war years, the number of telephone exchanges nearly doubled and by 1939 there were close to 6000 telephone exchanges in the United Kingdom.

The post office act formally changed the status of the GPO from a department of state to a public corporation known as the Post Office. This legal change had major ramifications on the design and delivery process of telephone exchange buildings and had a significant impact on the established relationship between the Post Office as a key client to the Ministry of Works. Until 1969 the GPO had been a Crown Corporation and did therefore not require planning permission for their buildings, although efforts were made nonetheless to liaise with the LPAs as a matter of goodwill. LPAs were now empowered to approve or refuse planning permission for proposed telephone exchange buildings, and more attention was therefore required to massing, layout and materials of the buildings.

3. Social & Economic Importance

The development of the rural telephone exchange became a vital piece of 20th century infrastructure that transformed isolated country life by bridging distances, improving safety and enabling economic activity. The rural exchanges were generally operated by women as there was very little employment opportunity for them in largely agricultural areas. On this basis the General Post Office and the telephone exchange network is considered to be the first mass employer of female workers and employment as a switchboard operator was considered to be an enjoyable and sociable employment, the operators of these exchanges often becoming well known by the owner of every line that used the exchange.

The social connectivity that was brought about by the development of the rural telephone exchange was huge, it acted to bring communities closer together and allowed neighbours to keep in touch which in turn led to the breaking down of the rural-urban divide and served as a vital precursor to the modern, fully connected digital age. The introduction of these rural exchanges saw the end of the 'Party Line' era, where it was common that multiple families within a locality would share a single phone line in order

to lower costs and overcome limited infrastructure. Each user would have their own ring tone but only one call could be taken at a time which lead to lack of privacy through neighbourly 'eavesdropping' and strict rules over length of phone calls and hanging up the receiver at the end of calls, which could even result in arrest if found to not be adhered to.

Rural exchanges allowed for the access to essential emergency services, medical aid, fire services, police, etc, and therefore greatly improved the safety and emergency response in these areas. Even before the introduction of automated exchanges, local operators would be well known to the local community and would be able to act immediately to provide assistance during emergencies.

Rural telephone access also allowed farmers to received crucial information in a timely manner which had a considerable economic impact on agricultural areas. They had access to information about weather, market prices and farming techniques, members of rural communities could sign up to the 'good morning call' which would provide the receiver with weather reports and critical agricultural alerts, such as frost warnings or the best time to plant crops to avoid pests, which all allowed farmers to manage their operations more efficiently whilst reducing the isolation of agricultural businesses. The rural exchanges also allowed farmers to conduct negotiations without the need for time-consuming travel which resulted in greater economic vitality within that area. The time sensitive sale of crops and produce was reduced significantly which enable far superior selling power on the side of the farmer but also enabled a greater product to be negotiated on in the first instance.