General Post Office Telecommunications in the First World War

One hundred years ago, on 11 November 1918, the last shots were fired on the Western Front as the First World War drew to a close. With the signing of the Armistice, so came to a conclusion an era of rapidly developing technology, not least in the realm of telecommunications.

Army field telegraph unit during the First World War.
(TCB 417/E50892)

The use of the telegraph for military command and control was first seen in the Crimean War (1854 – 1856) and had revolutionised the face of warfare by the time of the Boer War (1899 – 1902). The extensive use of telegrams by commanders to co-ordinate battle strategy and by the press to inform politicians and civilians at home, had brought the importance of communications to the forefront of military thinking – a fact accentuated by the explosive and swift beginnings of the First World War in August 1914.

The General Post Office (GPO) made an important contribution to the British defence and military programmes. The Signals Service of the Royal Engineers was recruited heavily from GPO Staff, growing from around 6,000 men in 1914 to upward of 70,000 by 1918. The Army Post Office Corps and the Field Telegraph Company were constituted as companies of XXIV Corps, later the 8th (City of London) Battalion, the London Regiment (the Post Office Rifles), and won battle honours at Festubert, Vimy Ridge, Ypres, Bourlon Wood, Bullecourt, Passchendaele and Villers.

At the beginning of the war, the Signals Service was primarily a telegraphic service, and it had to quickly adapt its function to the growth of the telephone and the requirements of trench warfare. Initially in 1914, the civilian telephone was pressed into front line service, faring badly in the damp, muddy conditions. Later developments included the field magneto telephone for voice transmission and buzzer telephones for Morse; the Telephone D Mark 3 became the standard army telephone and the ‘Fullerphone’ made buzzer signals secure in 1915.

The decision was made early in the war to destroy the German communication network, which was more efficient worldwide than the British system. In co-operation with the GPO, German cables passing through the Channel were cut on the 5th August 1914, and

naval forces later destroyed German wireless stations in the colonies. Despite German attempts to destroy British cables, the cable system was maintained intact throughout the war.

On the Home Front, the principal role of the GPO was to provide telephone and telegraph communications to support to support UK air defence..

GPO telephone links were directly established between the Royal Flying Corps, the Admiralty, anti-aircraft batteries and the police, following the first air raids on London. Local GPO engineers were a vital link in the area warning scheme; when responsibility for air defence was passed to the War Office in 1917, GPO engineers laid telephone lines linking listening posts at local operations centres to London Air Defence Area HQ and to individual airfields.

By November 1918, Great Britain possessed the most advanced air defence scheme in the world, the first of its kind which relied heavily on the communications network provided by the GPO. The service was invaluable and an influential factor in the outcome of the war.

Other GPO war work included improved ground to air communications, submarine hunting research and interception of enemy signals, to list only a very few areas the GPO worked on.

The GPO was also involved in charitable acts contributing to the war effort, including supplying a free telephone service for institutions such as the Red Cross, and the providing Electrophone entertainment facilities in military hospitals.

All of this GPO work for the war effort was largely achieved in the absence of over 75,000 GPO employees who had left to join the armed forces, including 12,000 men who fought in the Post Office Rifles. Almost 13,000 men from the GPO Engineering Department joined up, nearly 51% of the whole Department, mostly serving in the Signals Service.

Wireless telegraph operator using a Morse key in a shell hole. (TCB 417/E36705)

Group of WAAC signallers in France (Telegraph and Telephone Journal Vol 4, 1918)

Hundreds of GPO women also enlisted to the Womens Army Auxiliary Corps (WAAC), many of whom served near the Western Front as “signallers” - telegraphists and telephonists .

Essential positions within the GPO vacated by men of military service age were filled by pensioners and some roles by women for the first time, creating a much changed pattern of social employment.

Tragically, 8.858 of the GPO people who had joined up never returned home, and we remember their sacrifice on this the centenary of the end of the First World War.

Learn more about our GPO colleagues who gave their lives at www.bt.com/lestweforget.

For a full account of all the work that BT and Openreach predecessor the GPO Engineering Department carried out for the war effort, read the 1919 report of the GPO Engineer in Chief Sir William Slingo online. (Post 30/4304A https://tinyurl.com/yafa7hvy)