

Series 2: Telegraph – Domestic vs. International Traffic

Map 1: *Telegraph – Domestic versus International Traffic, 1870*

The map shows domestic vs. international telegraph traffic for the year of 1870. Data are for 1870, except for the United Kingdom (1872) and Germany (1872). Owing to its formation as a unified country in 1871, Germany only started to appear in the statistics of the Central Office of Telegraphy in Geneva from 1872 on. The map gives a good overview of the intensity of telegraph traffic in Europe by 1870/72. It becomes clear that intensity of the telegraph traffic in the United Kingdom was unmatched by other European countries at the time. The British telegraph system handled almost seventeen and a half million telegrams, whereas the German system, as the number two in volume of traffic, handled just over ten million, France as the number three six and a half million telegrams. The map shows very well the existence of a concentration of telegraphy in the north western parts and – to a lesser degree – in the central parts of Europe. Comparing the relative importance of domestic telegraphy to international telegraphy, it appears that of the three countries with the highest levels of traffic Germany had the highest proportion of international telegraph traffic, outdistancing even the United Kingdom. Perhaps also surprisingly, of all European countries Austria had the highest proportion of international telegraphy traffic compared to its domestic traffic.

Map 2: *Telegraph - Domestic versus International Traffic, 1880*

The map shows domestic vs. international telegraph traffic for the year of 1880. All data are for 1880 except Italy (1881), Spain (1879), and the Ottoman Empire (1884). Comparing the level of telegraphy use with 1870, it turns out that the three countries with the highest levels of the telegraphy use remain unchanged, United Kingdom, France, Germany, but that France overtakes Germany in the amount of traffic. Both Italy and Russia show a remarkable growth in traffic as compared to 1870. When we examine the level of international vs. domestic telegraphy, we can conclude that international telegraphy accounted for one seventh in the British flow of telegrams, one third in the German flow, and one sixth in the French flow. Two thirds of the number of Austrian telegrams sent that year had an international destination. In absolute numbers Germany had the highest proportion of international telegraphy of all European countries - almost 4.5 million telegrams – as opposed to 4 million for the United Kingdom, and 3.4 million for France. Austria, in total volume number four in Europe, accounted for almost 2 million international telegrams.

Map 3: *Telegraph - Domestic versus International Traffic, 1890*

The map shows domestic vs. international telegraph traffic for the year of 1880. All data are for 1890 except for Portugal (1887) and Serbia (1891). The increase in the amount of telegrams exchanged in 1890 as compared to 1880 is impressive. The number of telegrams exchanged within the British system more than doubled, the same happened in France and Spain. Interestingly, in Germany the amount of telegrams exchanged in 1890 was lower than in 1880. Of all European countries, only in Austria, Bosnia-Herzegovina, and Denmark the amount of telegrams exchanged internationally was bigger than the amount exchanged nationally. Countries handling international telegraphy traffic of almost the same size as their domestic traffic were Belgium and the Netherlands.

Map 4: *Telegraph - Domestic versus International Traffic, 1900*

The map shows domestic vs. international telegraph traffic for the year of 1900. All data are for 1900, except for United Kingdom (1901), Germany (1901), Serbia (1899), and Turkey (1901). Comparing the telegraphy traffic of 1900 with ten years before it turns out that the amount of telegrams exchanged in the UK increased by one half, in Germany it grew by two thirds and in France by one third. All European countries experienced a growth of telegraphy traffic, although there were variations in intensity. In Switzerland, for example, the increase was modest at less than 10%, while Turkish telegraph traffic more than doubled compared to 1890. Countries with relatively strong international telegraphy traffic were Portugal, Belgium, the Netherlands, Norway, Sweden, Austria, and Hungary.

Map 5: *Telegraph - Domestic versus International Traffic, 1910*

The map shows domestic vs. international telegraph traffic for the year of 1910. All data are for 1910, except for Portugal (1912). Telegraphy traffic continued to grow between 1900 and 1910, except for the United Kingdom, which experienced a slight reduction in the amount of telegrams handled. Possible explanations for this decline might be the take-off of competing technologies, such as the radio-telegraph and telephony. The overall picture emerging from the map is of a system still growing substantially, but not at as fast a pace as before. Interestingly, international telegraphy grew faster than its domestic counterpart. In Austria international telegraphy grew almost by fifty percent, while domestic traffic rose by only one fifth. In Belgium international traffic grew by more than a third against a ten percent rise of domestic telegraphy. Similar patterns can be observed in other European countries as well. Only in the Ottoman Empire did domestic telegraphy grow at a faster rate than in other European countries. One explanation for the decline of domestic telegraph traffic in nearly all European countries could be the rise of telephony during this period.

Map 6: *Telegraph - Domestic versus International Traffic, 1920*

The map shows domestic vs. international telegraph traffic for the year of 1920. Data are for 1920, except for Austria (1921), Bulgaria (1921), Norway (1919), Romania (1921), Russia (1921), and Turkey (1925). Many, but not all countries with loss of territory after the First World War experienced a decline in telegraph traffic. In Germany and Bulgaria traffic in 1920 was substantial bigger than in 1910. In the German case, this increase completely depended on growth in domestic telegraphy, while cross-border telegraphy from and to Germany diminished sharply between 1910 and 1920. International telegraphy diminished not only in Germany, but in many European countries: Russia, Romania, Hungary, Austria, and Belgium. As the map shows, Russia in 1920 had the strongest disproportion between domestic and international telegraphy of all European countries. In other European countries the amount of international telegraphy increased, though, for example in Austria, Switzerland, Denmark, Portugal, and in the Netherlands. A core of telegraph traffic can still be discerned in Europe in 1920, comprised of the three top-ranking countries - Great Britain, France, Germany- and their adjoining neighbours.

Map 7: Telegraph - Domestic versus International Traffic, 1930

The map shows domestic vs. international telegraph traffic for the year of 1930. Data are for 1930, except for Ireland (1929), Italy (1932) and Portugal (1932). Traffic levels in telegraphy in 1930 remained high in Europe despite a growing competing force of radio telegraphy and telephony. The growth pattern emerging when comparing 1930 with 1920 is quite uneven. In some countries telegraphy traffic was still on the rise, in others it stagnated, and in a third group of countries it was on the decline. When examining international versus domestic telegraphy, it is striking that in countries with a high volume of traffic, like Germany and the United Kingdom, international traffic was almost as important as domestic traffic, but also in France the relative weight of international traffic had become more important. In Switzerland, Austria, Denmark, and the Netherlands international telegraphy was much more important than domestic telegraphy. In contrast, international telegraphy in Portugal ceased to be of much weight, just as in Soviet Union the proportion of international telegraphy was marginal compared to domestic traffic.