

The development of telephony in the Polish territories

Compared to mail and the telegraph, telephone communication has proven to be the most convenient way for people to exchange ideas. It not only provided the chance to convey your message, but also enabled you to receive an instant reply, much like in a face-to-face conversation.

In the beginning, telephones across all partitions were utilized by the railroads, where they effectively supplemented telegraphic communication for managing railway traffic.

The first city telephone network was established in Warsaw in 1882. A year earlier, the concession for its construction and operation had been granted to The International Bell Telephone Company, based in the United States. The telephone exchange established as a result was situated at 10 Próźna Street in Warsaw. After the expiration of the concession, the Russian government handed over the Warsaw telephone network in 1900 to the Swedish company Telephonaktienbolaget H. T. Cedergren affiliated with L. M. Ericsson. At the time, 2022 telephones were installed in Warsaw. One of the terms of the agreement was to build a new telephone exchange and network. As stated in the above document, the building erected by the Swedish Cedergren Society at 37 Zielna Street was equipped with

state-of-the-art equipment supplied by L. M. Ericsson, and thanks to innovative technologies, telephone cables began to be run underground. The telephone exchange building certainly distinguished itself among the tenements in Warsaw. It wasn't just the facade made of light-coloured Swedish limestone from Gotland that was impressive. The stunning Art Nouveau interior design of the telephone exchange building, including its furniture, moulding, and stained glass windows, was also a point of pride for the growing city.

The grand opening of the new telephone exchange took place on November 16, 1904. It was this event that started the history of L. M. Ericsson in Poland.

L. M. Ericsson in Warsaw

When the new telephone exchange began operations in 1904, it had 5,200 telephones connected to it. In response to the rapid growth in the number of subscribers, a decision was made to build another building at 39 Zielna Street. Upon its completion in 1908, it not only served as a site for expanding the telephone exchange, but also became the first high-rise building in Warsaw. In contrast to American skyscrapers, the avant-garde building showcased Art Deco decor in some areas, while the telephone exchange rooms were designed with a more minimalist aesthetic.

Telephone operators

The role of women has evolved through different stages globally, transitioning from domestic responsibilities to social and scientific pursuits. Ongoing emancipation and the acquisition of additional rights have encouraged women to assert their position in society and be recognized as fully-fledged individuals. Unfortunately, in the early 20th century, there were virtually no job opportunities for women from respectable families. Inventions from the turn of the century, like the telephone, provided an ideal environment for jobs that were rapidly taken over by a large number of women. Telephone operators are prime examples of workers who significantly accelerated communication between people.

Women were the first in Poland to secure positions as telephone operators at Ericsson's telephone exchange located on Zielna Street in Warsaw. It represented not only a social advancement for them but also a significant boost in prestige and the long-awaited financial independence, allowing them to rent an apartment and make a living in Warsaw. While the interviews were challenging, candidates who spoke at least Russian, possessed a pleasant voice and demeanour, and were unmarried with no children had a strong chance of being hired by Ericsson. It was the first company to provide social security, high labour standards and guaranteed employment for women.

However, the job of telephone operators was incredibly demanding. On many occasions, they connected around 500 calls per hour, which required constant focus, intelligence, quick reflexes, and composure.

The eight-hour workday for the telephone operators included a three-hour break, typically spent in the club lounge designated for them. It served as a place to eat, socialize, unwind, and even as an ideal venue for hosting naming parties. Additionally, the telephone operators had access to a locker room, a washroom, and a bedroom since the women would not venture out after their evening shifts for safety reasons.

From the outset, telephone operators formed a close-knit and socially active community. Together they went on bicycle trips, attended courses or ballet lessons.

Development of telephony in Poland in the 1920s and 1930s

After gaining independence, the Post Office, Telegraph, and Telephone became public utility entities whose services were accessible to all citizens.

From 1921 to 1922, the state initiated the process of monopolizing the previously licensed local telephone networks. The only network that the Ministry of Treasury was unable to acquire because of insufficient funds was the one in Warsaw. Even though the concession of the Cedergren Society, which merged with L.M. Ericsson in Stockholm in 1918, expired in 1919, the Ministry was compelled to grant Ericsson, which represented the company's interests, at least a one-year extension to operate the Warsaw network. However, the Polish government retained the right to participate, leading to the formation of the **Polish Joint Stock Telephone Company (PAST)** in 1922. Based on its charter, the Ministry of Posts and Telegraphs awarded PAST a concession to construct, renovate, and operate telephone networks in Warsaw, as well as in Łódź, Lviv, Boryslaw, Sosnowiec, Lublin, and Białystok, for a period of 25 years, under the Law on State Exclusivity of Post, Telegraph, and Telephone. By 1923, Ericsson had already started the process of expanding and upgrading all the networks for which it held a license. This was particularly significant for the Lviv and Białystok networks, which had been

acquired by PAST and were far more modest compared to the main network in Warsaw.

Ericsson's investments in Poland extended beyond merely upgrading the city networks. Equally 100 years ago, in 1924, they established **Ericsson - Polska Akcyjna Spółka Elektryczna (PASE)**, a company engaged in the production of telephone equipment and the manufacture and installation of signalling equipment to protect train traffic.

Between 1930 and 1934, Warsaw's telephone network underwent automation. Six automatic telephone exchanges with OS system from L.M. Ericsson were constructed, with a capacity of 87,500 numbers. By the end of 1938, there were more than 90,000 telephone sets in Warsaw.

Telephone Operators in 1920s and 1930s

After Poland regained its independence, the pre-war telephone operators were eager to return to work at Ericsson's telephone exchange. Up until the automation of Warsaw's telephone network and the resulting mass layoffs of telephone operators, the Swedish company consistently looked after its employees. They continuously worked to address the challenges that telephone operators faced in their roles.

During the interwar period, as in the years before World War I, telephone operators were vulnerable to various occupational diseases. The constant need to stay alert and focus on the illuminated signals when subscribers called the switchboard, followed by quickly and accurately dialling the requested number, led to telephone operators suffering from conditions such as anaemia, neuralgia, vision and hearing problems, respiratory and stomach disorders, and overall fatigue. The solution involved acquiring state-of-the-art equipment, placing switchboards in spacious and clean rooms, and properly organizing the workflow to ensure telephone operators had several short breaks during their shifts, as well as granting them annual leave during vacations.

While the operators generally exhibited excellent manners, there were instances when the technical staff responsible for repairing and

maintaining the switchboards expressed concerns about some telephone operators using the switchboards as dining tables, storage for breakfast items and purses, or surfaces for sharpening pencils. Although these incidents were uncommon, they were often reported in the press.

Even with the introduction of automation, Ericsson continued to support its employees. They received compensation for an extended period after their dismissal. Depending on their seniority, former telephone operators could receive a sum as high as 5,000 zlotys. It was an amount that could sustain a living for up to two years at that time.

World War II

The outbreak of World War II in 1939 interrupted the thriving expansion of telecommunications. In September, amid the courageous battles fought by soldiers and civilians, communications workers made every effort to keep lines open until the very end, particularly for military purposes. Unfortunately, as the Polish territories were invaded, commanders of the German army also seized telecommunications facilities. Telecommunications personnel who remained on site were tasked with repairing and restarting the station equipment and lines that had been damaged during the fighting. The PAST management acted swiftly to repair the damage to the Warsaw and Lublin networks and restore connections for subscribers.

During the war, the Polish population was permitted to use the telephone, but the Gestapo monitored the application lists for new telephone subscribers.

Secret organizational cells of the resistance movement were established in the Warsaw Telecommunications Office and the PAST building, with telephone personnel collaborating closely with the Polish underground. A special cipher was even developed that allowed two subscribers to be securely connected without the occupants' knowledge. In addition, telephone operators working at the switchboards eavesdropped on the official conversations of

German officers, alerting those who were at risk of arrest or deportation.

One of the greatest successes of the insurgents was the capture of the PAST building in August 1944, where the Germans had organized a strong resistance point. Immediately after the successful operation, technicians cut telephone cables leading to facilities held by the occupiers and captured 115 prisoners of war. However, the heroic victorious battle for the PAST building ended with a fire that engulfed the structure for several days.

Reconstruction of telecommunications networks during the Polish People's Republic (PRL) period.

After the end of the warfare, the new authorities faced enormous losses. The retreating Germans either destroyed telecommunications equipment or removed the communication devices from both small and large exchanges. The shortage of adequate technical staff and the level of destruction in the telecommunications sector hindered the rapid restoration of telephone communications.

Furthermore, the proposed enhancement of automation in village exchanges and the maintenance of 24-hour telephone communications at municipal headquarters presented a challenging problem to implement and progressed very slowly.

Automation was crucial, particularly for rural communities, as many establishments only allowed phone calls to be made until 3:00 PM, which was when the office closed.

Restriction of ERICSSON's telecommunications activities during the Polish People's Republic (PRL) period

The monopolization and limitation of interactions with the West by the communist authorities across nearly all aspects of social life and production facilities hindered the execution of initial agreements with Sweden and the United Kingdom for the procurement of foreign equipment and components for automatic exchanges. The nationalization of the Polish Joint Stock Telephone Company and the factory in Radom has severely restricted Ericsson's operations in Poland.

The company did not expand its operations in Poland until 1992, when Schrack Ericsson was established in Warsaw. In 1996, the Polish company Ericsson Sp. z o.o. was established.

Telephone operators in Polish People's Republic

In Poland during the 1950s, high-quality teams were selected from among telephone operators to improve long-distance calling efficiency and minimize waiting times. The telephone operators in these groups were responsible for providing prompt, efficient, and courteous service to each subscriber. During a seven-hour shift, the operators managed to facilitate approximately 155 talk minutes on each connection while ensuring the highest level of courtesy. These results were influenced by the optimization of work processes, strict compliance with operational regulations, and the enforcement of rigorous discipline in the use of telephone circuits.

Telephone operators from the top-quality teams participated in competitions across various Polish cities, competing in four different categories:

- harmonious cooperation with other exchanges
- courteous and friendly service to subscribers
- rational manipulation
- working out as many units as possible.

Moreover, the regulations highlighted the professional conduct of telephone operators towards subscribers and one another.

The telephone operators worked with exceptional care and diligence,

prioritizing the needs of the authorities. When processing the application, it was essential to review the priority list, explicitly reserving the order of connection. Failure to follow the proper sequence could have resulted in a reprimand.

On the other hand, to avoid incorrect billing of call charges in the event of a broken call, the telephone operator would utilize a precise electric clock that displayed the duration of the call in minutes and seconds. When the telephone was hung up on the fork, it stopped automatically.

What does Ericsson do in Poland today?

Founded in 1876 in Stockholm by Lars Magnus Ericsson, the company is currently a provider of services and maintenance for telecommunications operators. Today, the global unit operates fixed and mobile network infrastructure, broadband Internet and multimedia solutions.

Ericsson has been operating in Poland for 120 years, supporting the development of technology and telecommunications, leading to economic, sociological and urban changes in the country.

The company has 2,100 employees in Poland, 21% of whom are women, who are supported in IT and technology. At Ericsson, women play a key role in many projects, contributing to the company's success. Through programs such as SDA (Software Development Academy), or *IT for She*, women are gaining the skills to make a difference in the industry.

The Polish National Centre for Research and Development in Łódź and Kraków is now the company's second largest centre in Europe. Polish engineers work on developing networks from 2G to 6G, engaging in the full software lifecycle for each generation of networks. The manufacturing of 5G devices at a partner company named Flex in Tczew is significantly enhancing next-generation networks in Europe, utilizing components and solutions made in Poland. The company's

presence in Poland has expanded since 2022 with the global acquisition of *Vonage*, with a local office in Wrocław.

The company is currently headquartered at 12 Konstruktorska Street in Warsaw.