the transport of bulk and liquid cargo. The Polish Baltic Steamship Company (*Polska Zegluga Baltycka, or PZB*) operates ferries in the Baltic and North Seas.

PP Polskie Linie Oceaniczne Skrytka Pocztowa nr 265 81-366 Gdynia Tel: 20 19 01

Telex: 054 231 pol pl Cable: Polocean Gdynia Polska Zegluga Morska Skrytka Pocztowa 527 70-515 Szczecin Tel: 30 50 11, 350

Telex: 042 2136 PZM pl Cable: Polsteam Szczecin

## **Telecommunications**

Communications remains the weak link in Poland's overall infrastructure. The country will have to spend billions during the coming decade to bring its systems in line with those of the advanced industrialized countries. But the situation is already improving because foreign governments, international financial institutions, and investors have recognized the opportunity. For example, part of the \$US 620 million in French government export credits will support sales of Alcatel telephone equipment and services in Poland. Other western companies have expressed similar interest in helping Poland meet its telecommunications requirements.

Telephone Services: Telephone penetration in Poland remains significantly below that in the industrialized countries and is among the lowest in Europe. According to one estimate, in 1985 the waiting list for telephones contained 1.7 million names, and it took the average person 13 years to get a new telephone installed. The situation was somewhat better for businesses, particularly if they were willing to pay for telephone installation in hard currency, but according to the World Bank, connecting a business telephone still can cost around \$US 600.

Existing telephones are unreliable and antiquated. Every fifth telephone exchange is over 30 years old. In the late 1980s, about half the exchanges still used the antiquated Strowger switch and a third used cross-bar technology. Only about 5% were connected to digital switches and a tenth of the exchanges were hand operated. As a result, repeated attempts are often needed to make a connection; connections are dropped, or background noise impairs voice clarity. To compound these

difficulties, there is an inadequate supply of telephone directories which are only updated every 4 years. And except in hotels, telephone operators rarely speak a foreign language.

Public telephones are few in number, and because of inflation, have been set to use special jetons rather than devalued coins. There are no phone-card or credit-card operated phones and no technical possibility of arranging reverse charge calls or charging calls to a third party. Calls to the West from hotels are usually very expensive.

Telexes are the easiest and most reliable form of telecommunications in Poland and this accounts for their tremendous popularity. There are some 40,000 of them registered. Clearly, however, the future lies with faxes. These are now coming into more general use because of recent improvements in the telephone system, especially in transmissions to the West. There are now some 5000 faxes in operation in Poland and their numbers are growing exponentially. Other office devices such as photocopiers, remain in short supply. Companies in need of such equipment must import it from the West.

Efforts are now under way to modernize Poland's telephone system. New telephone exchanges are being installed in Warsaw and Katowice, and a new undersea cable is being laid to link Poland with Denmark and thus to western telephones. Negotiations are also under way between the Polish government and western suppliers for licenses to produce modern digital exchanges.