

# Connecting Poland's Rural Community



## CUSTOMER PROFILE

INEA S.A. is the largest integrated telecommunications service provider in Poland's Wielkopolska region.

"We have chosen Cambium infrastructure because it is compact and the components are space and energy efficient. Also, simple operation, management and installation ensure low cost of ownership. The Cambium team has provided professional support from first testing to deployment," said Eugeniusz Grzybek, Board Member for Technology at INEA.

## SITUATION

Despite INEA's earlier success delivering broadband-based services to individuals and business clients across the Wielkopolska region, huge demand grew for its services from the large rural community. Various solutions were considered to provide broadband connectivity in the most cost-effective and reliable way. Having eliminated expensive leased-line, INEA looked at wireless alternatives and after extensive trials, Cambium's PMP 320 technology was chosen due to the ease of installation, low power consumption, cost-efficiency and network stability. Wireless is being extended to the rural community with PMP 320 WiMAX base stations connected to the existing fibre infrastructure to provide user connectivity up to 50km around each base station tower.

## SOLUTION

As one of the first large-scale WiMAX deployments in Europe, Cambium helped secure EU funding for the project. Cambium's PMP 320 solution complements the IEEE 802.16e global standard and provides a cost-effective, simple, low maintenance infrastructure

that offers high reliability based on field-proven toughness, performance, scalability and ease-of-use. The PMP 320 solution can serve up to 200 registered subscribers per sector providing a typical aggregate bandwidth of up to 23 Mbps (10 MHz channel). Even higher throughput can be achieved as a result of MIMO multi-path technology which improves reliable connectivity and OFDMA for providing maximum throughput in multi-path environments. Because the PMP 320 is a licensed spectrum solution, it is not subject to the system output power restrictions of unlicensed products, which allows for higher throughput at longer range.

## RESULT

The network is delivering fast, reliable Internet access and VoIP telephony services. With its low cost infrastructure and rapid deployment, the network will allow INEA to continue to roll-out cost-effective wireless services with an excellent return on investment.