Cambium Networks™

Connect a Rural Community in Weeks

Overview

JEVISOVICE IS A SMALL TOWN WITH A POPULATION OF 1,200 whose residents needed broadband connectivity to connect their businesses and residential locations to the world. Two small wireless ISPs had been offering service to the community, but as new subscribers were added to share the network, all others were slowed down. Over time, a growing number of customers were not satisfied with the speed and throughput of their connections.

videon

> "Each customer is receiving 20Mbps download and 20Mbps upload speeds. The network functions as expected, and customer satisfaction is high. We expect the number of end customers to increase in time."
>
> -ALES NECHVATAL, DIRECTOR OF OPERATIONS, VIDEON

Challenge

VIDEON, AN EXPERIENCED SERVICE PROVIDER IN NEARBY ZNOJMO with more than 4,000 wireless subscribers, saw the opportunity to provide high speed Internet access and offer VoIP and video services. In discussions with Jevisovice city officials, Ales Nechvatal, Videon's Director of Operations, found that he had to provide reliable service in the already crowded spectrum and had two weeks to install the Access Points (AP) and Subscriber Modules (SM).

Solution

VIDEON DEPLOYED AN ePMP™ 1000 WIRELESS ACCESS NETWORK to connect the first round of customers. Three APs were deployed in the church tower, which is the highest location in the town.

With the other ISPs also using the same tower location, the APs were co-located with 8 other APs. Frequency management was tight, and there was a high level of RF noise from the other networks.

GPS Synchronization in the ePMP system enabled it to perform well by:

- Reducing self-interference

- Enabling frequency re-use as the network expands

- Maximizing efficient use of the available spectrum

Wireless Access Network

THE ePMP WIRELESS ACCESS NETWORK is composed of three APs equipped with 120⁰ antennas to provide 360⁰ coverage from the tower.

- Frequency: 5 GHz unlicensed spectrum

- Maximum achievable throughput: 200+ Mbps per AP

The first 25 SMs were deployed in a matter of days. Subscribers were provisioned for Internet access, and some were provisioned for VoIP and streaming video services per their service agreement. Each customer is provisioned for:

- 20 Mbps download

- 20 Mbps upload

Source: Google.com

Results

"THE NETWORK PERFORMS AS EXPECTED," SAYS NECHVATAL.

"Users, who migrated from the other local competitors, are satisfied with the service they are receiving from Videon. They are finding that it is more reliable, better in quality with higher transmission speeds, and also at a lower cost."

We looked at other solutions, some with a lower equipment cost. The ePMP solution from Cambium has the advantage of synchronized transmitting for frequency reuse and proven radio robustness. From our experience, the equipment from other low-cost wireless manufacturers that the other service providers are using lacks robustness in noisy areas, and customers are not satisfied. We have great performance with well above 20 subscribers served by an AP.

"We are getting the most out of the equipment and our customers are very satisfied. Based on customer demand, we have already added hundreds of subscribers in the area. This network will continue to grow by word of mouth."

Videon Communications

Provides Internet, voice, and video connectivity to business and residential customers in the area of Znojmo in the Czech Republic.

Challenge

The nearby town of Jevisovice needed to provide Internet connectivity to their 1,200 citizens in a matter of weeks.

Solution

- ePMP wireless broadband connectivity provides high throughput and is quickly installed.

Why Videon Chose Cambium Networks:

- **High Throughput** – for consistently reliable 20 Mbps symmetrical data transfer, voice, and streaming video

- **Synchronization** – to provide reliable service in a noisy RF spectrum

- **Scalability** – to enable frequency re-use and add customers without loading down the network

- **Proven Reliability** – to minimize downtime and maintenance labor costs while maximizing customer satisfaction