OVERVIEW: WIRUlink is a licensed telecommunications provider of business and residential voice and data services headquartered in Johannesburg, South Africa. Founded in 2010, they’ve expanded rapidly, with over 100% year-on-year growth since 2011. Adding subscribers at a rate of 150 per month, with a projected increase to 200 by early 2017, WIRUlink’s infrastructure must also grow to support its customers.

Challenge:
The rate at which new customers join WIRUlink’s network keeps the ISP erecting new towers at a rate of 3 per month, a number also expected to increase in step with subscribership over the coming years - trying to increase network capacity by adding new hardware was costly and time-intensive, and still lacked scalability. The existing equipment was fully functional, but overloaded - and end customers experienced sluggish uploading and downloading, and suffering from interference on the limited 5GHz spectrum. WIRUlink needed a solution that would reinvigorate network performance and improve scalability while supporting existing previous generation subscriber radios.

Requirements:
The ideal solution needed to overcome hurdles to delivering last-mile service to customers. The existing tower sites couldn’t connect enough users; with the hardware they had, WIRUlink couldn’t add more sectors on tower sites to increase user capacity without the system suffering from self interference.

Solution:
After extensive testing of various products and brands, WIRUlink selected solutions from Cambium Networks ePMP™ 1000 portfolio for their last-mile network upgrade. Without replacing any existing equipment, they transformed their networking capabilities by adding ePMP APs and installing ePMP Elevate software on existing customer SM/CPE hardware. ePMP Elevate software interoperates with other vendors’ hardware to integrate it with Cambium products.

“This saves us time and money, and we can invest our cash flow on expansion and gaining new customers to accelerate our growth.”

- Riaan Maree, Technical Director, WIRUlink
Results:
By incorporating Cambium ePMP APs with ePMP Elevate, WIRUlink was able to begin network migration and continue expansion immediately, and the ease of installation allowed the upgrade to take place in the background, reducing customer downtime. After the upgrade, users noticed increased speed and better signal reliability.

WIRUlink has already upgraded 90 APs with Cambium ePMP 2000 Access Points, and continues to switch their former vendors’ CPE radios with Cambium Force ePMP 180 and Force 200 equipment, which reduces operating cost because it enables higher subscription to fewer radios. But because ePMP Elevate assimilates other vendors’ hardware rather than rendering it obsolete, “ePMP Elevate enables us to focus our spending on Capex core network infrastructure and towers, rather than CPE and radio equipment,” says Riaan Maree, Technical Director, WIRUlink.

“With ePMP Elevate, our previously installed radios from another vendor performed just as if they were ePMP Force 200 radios. This saves us time and money, and we can invest our cash flow on network footprint expansion and gaining new customers to accelerate our growth.” He continues, offering advice to other ISPs, “Systems that do not scale will be more expensive to own and operate over time. Network operators should deploy ePMP Elevate software to migrate to ePMP technology sooner rather than later, which isn’t a problem if you have CPE from other vendors in the field. They can be upgraded quickly and easily.”