

7 Questions about Facebook Express Wi-Fi Partnership with Cambium Networks

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Connecting the unconnected is the foundation of the Cambium Networks mission. Our history of designing robust and affordable wireless networks to bring sustainable lower-cost solutions to the developing world has been internationally recognized by connectivity initiatives, such as the Express Wi-Fi initiative from Facebook. Facebook's connectivity initiatives share our goal of overcoming obstacles to connectivity solutions and scaling access solutions globally. Chetan Hebbalae, Senior Director of Product Management, oversees our partnership with Facebook, including the Express Wi-Fi initiative. He explains this exciting partnership with a global tech powerhouse, highlighting Cambium Networks' position in the Wi-Fi world and how we're making a difference in the lives of people, in areas without reliable internet service.

What is Express Wi-Fi (XWF)?

Express Wi-Fi is an initiative lead by Facebook's not-for-profit connectivity team with the primary objective to solve global connectivity problems. There are approximately 3.8 billion people worldwide who are highly underserved, or completely unconnected to the internet. For Facebook - and the broader ecosystem of apps and services - to grow, the global network must grow. Express Wi-Fi seeks to provide people with basic internet connectivity. Express Wi-Fi works with local Internet Service Providers (ISPs) in these under- and unserved areas by helping them get started offering basic connectivity to their communities, and one of the primary technologies to accomplish this is Wi-Fi because it offers low barriers to entry, scales very rapidly and is easy to set up and manage. By overcoming the problems of accessibility, affordability and awareness, our joint initiatives provide better internet for everyone.

What does it mean that Cambium Networks is part of Facebook's Express Wi-Fi ecosystem?

Facebook's goal is to create an approved ecosystem of technology manufacturers that ISPs can choose from for assistance in connecting hard-to-serve places - making access feasible to deploy and operate. Facebook tested several Wi-Fi vendors, and our cnPilot™ portfolio of Wi-Fi products was among the earliest to be approved. Cambium Networks is able to offer a complete wireless fabric of solutions, mixing Wi-Fi and a combination of wireless backhaul, at a very attractive ROI, which makes it quick and easy for the small ISPs to expand and make rapid Wi-Fi deployments a reality.

Cambium Networks always had a well-established presence in hard-to-reach and underserved areas with our backhaul and distribution solutions. Building on that strength, with the launch of the cnPilot product family, we've earned significant approval as a worldwide supplier of quality Wi-Fi equipment and are deployed globally in over 100 countries. The endorsement of a technology powerhouse like Facebook confirms our technology's capability to address the challenges of the developing world. This means that we have hit the sweet spot in terms of matching technology, performance and price, meeting the needs of the world's underconnected.

Who benefits from this?

The primary beneficiaries of XWF networks are the people and communities who previously had poor or no connectivity. Within that user base, we see people begin using their new access to consume entertainment and cultural media such as movies and music. Then they rapidly proceed to explore the educational potential of the Internet. Whole families watch tutorials, conduct research, and access other resources. They discover possibilities to start rural enterprises and reach the world. The ISPs also benefit because they now have access to world class technologies, are able to offer better Wi-Fi experiences and expand their businesses. I call this the 3Es of a connectivity-led change. People use connectivity for Entertainment, Education, and Economics.

How does Cambium Networks' equipment fit into this plan?

Our unique value proposition is the combination of not only robust Wi-Fi, but also comprehensive and proven wireless link technologies - from long-distance, high-capacity Point-to-Point (PTP) to scalable, reliable Point-to-Multipoint (PMP) solutions. This, plus the ease of central control across both wireless backhaul and Wi-Fi, with our cnMaestro™ online management system, substantially reduces the total cost of ownership, daily operations and maintenance. This a very attractive opportunity for ISPs as they extend their networks to parts of the world where there are no easy fiber connections and where site visits are hard to reach.

Where are the deployments happening?

Across Nigeria, Kenya, Indonesia, India and Brazil, ISPs are deploying our products as part of Facebook Express Wi-Fi networks. Our products are robust and easy to manage even in challenging outdoor environments.

How will the ISPs manage their equipment?

One of the ways ISPs can ensure network reliability is with continuous remote management of the network using our network management tool, cnMaestro. The tool provides a rich view of the network and enables remote configuration and upgrades, saving time while gaining much deeper network visibility and control. cnMaestro is available via cloud or on-premise in local data centers, according to the needs and preferences of the ISPs, and it allows multiple operators to view the network securely. For example, if there is an issue on the ground, the Cambium Networks support staff can (with permission) log in to a network without disrupting the owner's login credentials with the ability to co-monitor and co-manage the network alongside the ISP operators.

How has Cambium Networks adapted training methods to support the needs of the people installing the networks?

One of the challenges that ISPs face in rural areas is lack of trained personnel. We, too, had to learn new ways of training people to perform correct and safe installation work. Our previous methods would rely heavily on user manuals, which assumed some familiarity with technology. In this market, however, it is important for us to create installation videos and job aids that offer a simplified version of best practices and provisioning information. With these guides, local people are able to perform the installation work.

One of the advantages of Cambium Networks is our worldwide sales reach. ISPs work directly with Cambium Networks' engineers and sales representatives who visit these ISPs on location. With our worldwide base of over 6,000 channel partners, an ISP anywhere in the world is within rapid reach of a partner who can provide support. Additionally, our development teams are very customer-focused. Our development engineers reach out periodically to check in with these ISPs as well, supporting their needs.

In terms of next steps, we want to continue helping XWF and their partners scale these networks rapidly. We are working on the next generation of management and network technology that will facilitate that growth, install faster, and make networks operational sooner.