



CASE STUDY SUMMARY



BRIDGING THE CONNECTIVITY GAP: CelerityX's SkyX Empowers Bliss GVS Pharma a Mid-Size Enterprise with High-Speed Broadband over satellite for Remote Wind Energy Operations.

In the realm of wind energy farms, reliable internet and fiber connectivity are crucial for efficient operation of wind turbines, even when technicians and engineers are situated far from the actual farms. This connectivity offers numerous benefits to wind farm operators, including enhanced operational management, real-time access to data, automated system warnings, and network security features. Moreover, enterprise-grade networks provide operators with comprehensive wind power generation reports on a daily, weekly, monthly, and annual basis, while also alerting them to potential breakdowns, thus minimizing downtime and transmission errors.

However, in the case of our client, a wind power generation farm located in the remote Ahmednagar district of India, mobile and fiber connections were non-existent. This absence of connectivity led to unnecessary delays in transmitting data back to their headquarters in Mumbai, resulting in substantial important information loss.



CLIENT GOALS

Bliss GVS Pharma was looking for high-speed bandwidth internet connectivity that could facilitate their wind turbines in Ahmednagar district situated in Maharashtra. By nature of business the farm is located on a plateau in a sparsely populated part of the district with non-existent reliable internet coverage via any medium.

Each wind farm needs digital communication services to exchange information with the local grid, which supplies energy to end-users, and the unified automated system. The system collects data from wind Panel sensors on wind radiation and direction through secure communication channels and automatically adjusts panel angles, thereby minimizing human involvement in these processes.

Seeking to address their connectivity challenge in a remote area, they found a rapid and efficient solution through SkyX, our Broadband-over-Satellite service. SkyX offers impressive fiber-like internet speeds ranging from 5 to 20 Mbps, ensuring seamless performance for all applications, whether on-premises or in the cloud. Additionally, it supports bandwidth-intensive tasks like video calls even on WhatsApp and incorporates valuable features such as SIM load balancing and Integrated Wi-Fi to accommodate latency-sensitive applications even in the most remote locations in India.

SERVICES DELIVERED

CelerityX promptly delivered SkyX the Broadband-over-Satellite solution within a week of being contacted by the client. Even though facing several challenges like onsite engineer had to come about 15-20 km out to the highway to speak and coordinate with the central team for testing during installation phase due to lost signals.



RESULTS ACHIEVED

The implementation of CelerityX's Broadband-over-Satellite solution, known as SkyX, greatly simplified operations for Bliss GVS Pharma, providing a concrete solution to their high-speed broadband connectivity issues. SkyX delivered high-speed data of 10 Mbps, significantly faster than the traditional VSAT players in the market, which typically operate at speeds of 110-512 Kbps. As a result, the following outcomes and impacts were realized by CelerityX for Bliss GVS Pharma:

- **Remote Monitoring and Control:** SkyX enabled real-time monitoring and control of the Wind farms from their headquarters. Bliss GVS Pharma could remotely access data on Wind farm performance, including energy production, Production status, and maintenance requirements. This capability allowed for efficient monitoring of Wind farm efficiency and productivity, enabling prompt adjustments or repairs as needed.
- **Data Analysis and Optimization:** With SkyX, Bliss GVS Pharma could collect and analyze data from the Wind farm, enabling optimization of their operation. This included adjusting panel; orientation and positioning for maximum energy generation, identifying potential issues or failures in advance, and implementing proactive maintenance strategies.
- **Energy Management and Integration:** SkyX facilitated the integration of Wind farm into Bliss GVS Pharma's energy management system, allowing for efficient distribution of generated electricity across their facilities or the grid. This integration ensured optimal utilization of renewable energy and reduced reliance on traditional power sources.
- **Remote Troubleshooting and Maintenance:** Bliss GVS Pharma could remotely diagnose and troubleshoot Windmill issues with the help of SkyX. Technicians could access Windmill control systems, analyze data, and identify potential causes of malfunctions or abnormalities. This capability led to timely and efficient maintenance or repairs, minimized downtime, and maximized renewable energy availability.
- **Reporting and Compliance:** SkyX facilitated reporting and compliance requirements for renewable energy generation. Bliss GVS Pharma could automate the reporting process, providing data and reports on energy production, carbon emissions reduction, or renewable energy credits, ensuring compliance with regulations and standards.
- **Forecast:** Real-time and continuous monitoring and analysis of critical information enabled Bliss GVS Pharma to forecast the amount of energy generated.
- **Cost optimization:** With SkyX in place Bliss pharma had a visibility of critical information through cloud based SAAS tools like energy lost during the transit of energy from source point to multiple destinations.

CONCLUSION

CelerityX's Broadband-over-Satellite solution SkyX is well-suited for enterprise companies looking to revolutionize their networking infrastructure having presence even in the most remote areas lacking connectivity. With its easy installation process and a wide array of features, CelerityX can assist Enterprises in achieving their business goals.

Don't miss out on the transformative possibilities. Make the switch to CelerityX now and unlock the unparalleled potential of next-generation networking.

CelerityX

SkyX

Pervasive connectivity , anywhere.

Customer background - <https://www.blissgvs.com>