



Quality on Demand

Geofencing Subscription

Reliable connectivity to expand drone deliveries

Case study for connected drones using a range of APIs, including Network Slice Booking and Geofencing Subscription – [View API Descriptions](#)

Business Problem

For drone fleet operators and quick commerce companies, meeting customers' growing expectations for ultra-fast deliveries is challenging. Traffic congestion, complex routes, and variable agent availability limit efficiency and impact the customer experience. Scalable, dependable, on-demand solutions are needed to complement delivery models.

Impact

Proof-of-concept trials have demonstrated that connected drones can significantly reduce delivery times, increase peak-hour capacity, and maintain service-level commitments. The solution is now progressing towards live commercial deployment as merchants and mobile operators prepare to scale these capabilities into production services.

Technical Solution

To enable enterprises to access drones on demand, Tata Elxsi developed TETHERAero, a smart aerial intelligence platform incorporating a connected drone-as-a-service (CDaaS) model. By leveraging CAMARA network APIs for 5G quality on demand, network slice booking, predictive connectivity, location retrieval, geofencing and other capabilities, the platform provides drones with reliable, low-latency connectivity.

Value

The platform enables drone fleet operators and quick commerce companies to onboard connected drones to meet peak demand and enhance the customer experience without high upfront costs. In turn, mobile operators and drone OEMs can unlock new revenue streams by monetising network and hardware capabilities through a subscription-based CDaaS model. The result is a more efficient, resilient and profitable delivery model for all stakeholders.

"Supported by highly-reliable connectivity, drones can become an integral part of distribution networks, helping to complete customer deliveries as quickly as possible. Crucially, standardised APIs enable us to ensure that the drones are always connected and continually monitored, thereby meeting regulatory and safety requirements."

Rajagopalan Rajappa, CTO, Communication Tech & Platforms, Tata Elxsi

