

**Title: Emerging enterprise application of autonomous UAVs (Unmanned Aerial Vehicles): QoS & QoE from modern telecom networks**

**Abstract:**

UAVs or drones are a rapidly expanding capability involving multiple applications like urgent package delivery, emergency medical applications, agricultural and industrial inspections and others. Safe and regulation-compliant autonomous drones operating in BeVLOS (Beyond Visual Line of Sight) mode require uninterrupted monitoring and command & control (MC&C) via wireless networks. As identified by CTIA and other industry bodies, commercial cellular networks are the most obvious choice for this purpose because they are ubiquitous, licensed, reliable, and inexpensive. The highly reliable monitoring and high-altitude operation (compared to ground-level) require a different type of network design and operations. How does a CSP ensure and assess the required QoS & QoE for UAV applications in a modern wireless telecom network?