

Transforming Connectivity at Tan Son Nhat International Airport in Vietnam with EPIC DAS Solutions

Explore how Enhanced PROSE Integrated Coverage Distributed Antenna System (EPIC DAS) solutions revolutionized connectivity at Tan Son Nhat International Airport (IATA: SGN), Vietnam, overcoming network coverage challenges and delivering unparalleled experiences to travelers and staff. This case study unveils the strategic implementation of EPIC DAS, a testament to the power of innovative telecom solutions that bridge the digital divide in the largest city of Vietnam.

■ Background

SGN Airport, situated 6 km north of Ho Chi Minh City, stands as Vietnam's busiest airport, catering to over 40 million passengers in 2019. Two terminal buildings, Domestic Terminal 1 and International Terminal 2, have an area of 40,948m² and 115,834m² respectively. The airport faced substantial network capacity challenges amid a steady rise in passenger numbers over the past decade. *



■ Challenges

As passenger numbers soared, SGN Airport confronted significant hurdles in providing seamless network coverage. Inadequate connectivity hindered communication, transactions, and the overall travel experience, calling for an innovative solution.

Each operator wanted to install their own DAS system, but the Airport Authority wanted one shared system capable of handling multiple technologies with multiple operators.

■ Solutions

EPIC DAS solutions emerged as the strategic answer for shared DAS, addressing SGN Airport's network coverage challenges with precision. PROSE fulfilled diverse connectivity needs by leveraging frequencies such as UMTS2100, LTE1800, and LTE2600. Initially, a smart combination of Single Input Single Output (SISO) for 1800MHz and 2100MHz bands, integrated with Smart Point of Interface (SPOI), High Power Remote Unit (HPRU), and passive DAS solution, facilitated support for three leading major local

operators in the country. The surge in airport users necessitated an increased capacity.

EPIC DAS showcased its versatility with the introduction of the HPRU LPA (Low Power Amplifier) plug and play function and Smart POI's plug and play function. Seamlessly adding new 1800/2600 BTS (Base Transceiver Station) card modules in SPOI cabinets and 1800/2600 LPA modules in HPRU cabinets enabled Multiple-Input Multiple-Output (MIMO) 2x2 updates for the 1800MHz band and included MIMO 2x2 for the new 2600MHz band.

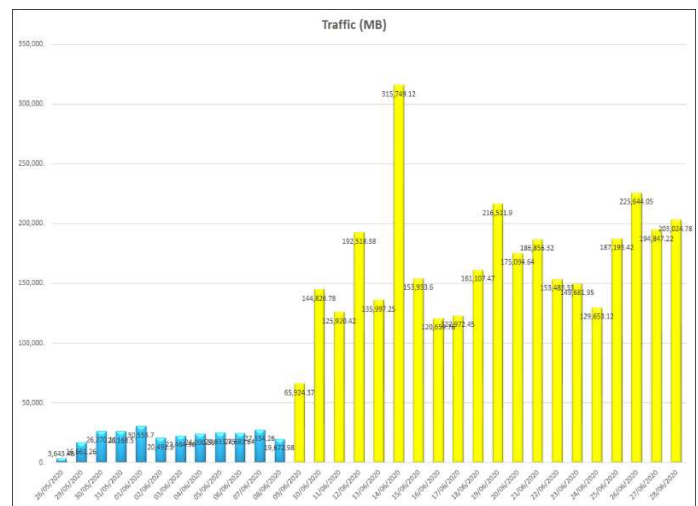
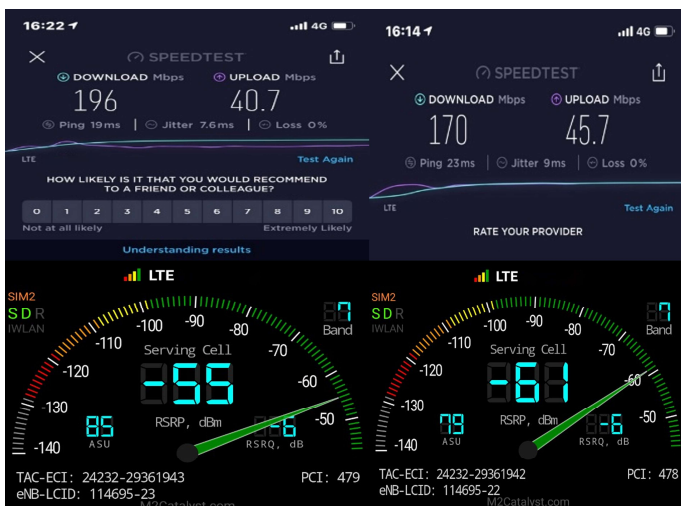
■ Benefits

The deployment of EPIC DAS solutions at SGN Airport yielded remarkable outcomes, transforming connectivity on multiple fronts:

- Consistent output surpassing coverage KPIs, ensuring uninterrupted network connectivity for all airport users.
- Multi-operator sharing across three bands, optimizing coverage and capacity, elevating the overall digital experience.
- Seamless integration of 2G, 3G, and 4G in a unified unit, simplifying network management and future-proofing connectivity.
- Low latency and high output power, empowering reliable applications for travelers and airport services.
- Compact and energy-efficient design with natural cooling, reducing environmental impact while maintaining peak performance.
- Enhanced uplink performance, increased cell coverage, and improved overall network quality, elevating communication for all airport users.
- Cost-effective deployment with reduced field testing and no additional localized power needs for remote units, streamlining implementation.



The successful implementation of EPIC DAS solutions at SGN Airport revolutionized network coverage, providing consistent and reliable connectivity for travelers and staff alike. EPIC DAS exemplifies the power of innovative telecom solutions, bridging the digital divide, empowering communities, and enhancing the quality of life. Together, we're forging a future where distance is no longer a barrier, and seamless connectivity prevails.



Network Performance Test for SGN Airport After the Implementation of EPIC DAS Solutions

PROSE

PROSE Technologies
www.ProseTechnologies.com
© 2023 PROSE Technologies
09/23

