Course Details

Network Design & Engineering (9340)

Title	9340 - SKYWAN 5G Network Design & Engineering
Level	Basic / Specialist
Objectives	The participant will have general knowledge about: • Designing & engineering SKYWAN satellite networks, • Usage of the SKYWAN TDMA calculation tool.
Contents	Brief description of SKYWAN solution: • SKYWAN features, • SKYWAN MF-TDMA technology. General carrier design: • Traffic calculation (Networking features overview; calculation tool & procedure), • Carrier design (Essential satellite link layer features: Master/ Slave concept, channel coding & modulation, topologies, data transport; TDMA parameter optimization tool & procedure). Outdoor unit design (incl. satellite selection): • Essential satellite link features, • Choice of satellite / transponder, • Outdoor unit design process, Detailed indoor unit design: • Networking features • (IP features: IP router, static routing, dynamic routing (OSPF), differentiated services, VRF; • Detailed SKYWAN IDU data (Indoor unit structure; technical specifications IDU 5G Series). Design finalization & cost optimization: • Optimization of network design, • Operational costs versus hardware costs.
Target Group	SKYWAN 5G - Network Designer
Duration	3 days
Prerequisites	The following prerequisites are mandatory for the participant: • Good knowledge in ‘satellite communication fundamentals (VSAT)’, • General good English language skills.
Environment	PC or notebook with SKYWAN 5G TDMA calculation tool.
Methods	Lecture, demonstrations & exercises, hands-on tool training.