



Network Design & Engineering (9340)

Title	9340 - SKYWAN 5G Network Design & Engineering
Level	Basic / Specialist
Objectives	<p>The participant will have general knowledge about:</p> <ul style="list-style-type: none"> • Designing & engineering SKYWAN satellite networks, • Usage of the SKYWAN TDMA calculation tool.
Contents	<p>Brief description of SKYWAN solution:</p> <ul style="list-style-type: none"> • SKYWAN features, • SKYWAN MF-TDMA technology. <p>General carrier design:</p> <ul style="list-style-type: none"> • 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). <p>Outdoor unit design (incl. satellite selection):</p> <ul style="list-style-type: none"> • Essential satellite link features, • Choice of satellite / transponder, • Outdoor unit design process, <p>Detailed indoor unit design:</p> <ul style="list-style-type: none"> • 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). <p>Design finalization & cost optimization:</p> <ul style="list-style-type: none"> • Optimization of network design, • Operational costs versus hardware costs.
Target Group	SKYWAN 5G - Network Designer
Duration	3 days
Prerequisites	<p>The following prerequisites are mandatory for the participant:</p> <ul style="list-style-type: none"> • 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.