ND SATCOM

Course Details: 8340

Title	8340 - SKYWAN IDU 7000/1070 Network Design & Engineering
Level	Basic / Specialist
Objectives	The participant will have general knowledge about: • Designing & engineering SKYWAN satellite networks, • Usage of the SKYWAN IDU 7000/1070 TDMA calculation tool.
Contents	Description of SKYWAN solution & features: 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 and populations, reference burst modes, 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, • SKYWAN link budget tool & procedure. Detailed indoor unit design: • Detailed SKYWAN IDU data, • IP features: IP router, static routing, dynamic routing (OSPF), differentiated services, robust header compression (ROHC), TCP-Acceleration, IP multicast, load balancing, • FR features: port types, basic FR service, traffic shaping, congestion management, communication services, FR multicast), Design finalization & cost optimization: • Optimization of network design, • Operational costs versus hardware costs.
Target Group	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 IDU 7000/1070 TDMA calculation tool and MS Excel and SKYWAN link budget tool.
Methods	Lecture, demonstrations & exercises, hands-on tool training.