

A man in a dark suit and glasses is walking a tightrope. He is holding a smartphone in his right hand and a blue briefcase in his left. The background is a city skyline with many skyscrapers under a cloudy sky. The image is split horizontally by the tightrope, with the top half being a light blue sky and the bottom half being a blue-tinted cityscape.

SKYWAN

Reliability | Security | Efficiency

SKYWAN Satellite Communication Networks

Infinite communication possibilities

ND SATCOM

ND SatCom's SKYWAN is a highly flexible and versatile VSAT terminal for establishing wide area corporate networks while providing direct single hop connectivity for IP, voice and legacy protocols. This enables an extensive variety of end-user business communication applications.

SKYWAN provides instant bandwidth-on-demand through its fully dynamic bandwidth allocation scheme. Space segment resources are automatically and dynamically assigned to stations requiring transmission capacity as and when they need it.

## FEATURES AND BENEFITS OF A SKYWAN NETWORK

### **If money really matters.**

SKYWAN brings lower overall operational and investment costs. Efficient network sizing results in reduced terminal, space segment and start-up costs.

SKYWAN is best in class when it comes to minimal use of bandwidth.

### **Keep your privacy.**

SKYWAN provides sophisticated security functionalities like Link Encryption, Configuration Check Code and network access based on physical address.

### **Stay everywhere connected.**

With SKYWAN you get excellent Quality of Service mechanisms for voice and other latency critical applications.

SKYWAN makes sure that your data always gets the priority it requires. Efficient connections from all locations to all locations are feasible with one single hop. The quality and bandwidth usage of single hop connections are much better compared to connections with double hop, thus achieving user satisfaction and lowering space segment costs.

### **Do you want to be fast?**

100 ms. This is the time period required of a SKYWAN system to adapt to your ever changing bandwidth requirements. In the blink of an eye the network assigns bandwidth to newly started applications at any station. Speed and bandwidth flexibility are key for today's IP based applications.

### **Or even faster?**

Do you need access to your ERP system from remote places? Are you tired of the sluggish behavior of your SAP application when working in your branch office in Africa, Brazil or the Bavarian country side? ND SatCom has the solution ready for you. With XWARP, the Zero Latency Engine for Citrix online applications, you will not notice any difference between an in-house LAN connection and a satellite link.

### **Tailored flexibility.**

Using our SKYWAN technology you get a fully tailored solution. No matter what kind of network topology (mesh, star or hybrid) or business application (IP applications or legacy protocols), our unified platform always suits. And with the instant bandwidth-on-demand and easy network expansion (size, bandwidth) you will be extremely flexible.

### **Dependable and always available.**

Geographic redundancy of the traffic management (no interruption of user traffic during automatic handover) and frequency hopping prevent single points of failure. SKYWAN brings ultimate availability and reliability to your network operation at all times.

### **Efficiency is a requisite**

Taking advantage of both time domain and frequency domain access methods, SKYWAN allows users to benefit from multiple services such as data, voice, and video on one simple, integrated platform. In addition this enhances the maximum use of satellite bandwidth.

### **Network around the world.**

Satellite communication is limited within the footprint of a satellite. These footprints, like the beam of a flashlight, could cover a large area (like a continent) with small power or concentrate on a small area (like a country) with high power. But what if you have to connect your operations across several continents? What if you have to connect your offices in Brazil with your Headquarters in Europe? SKYWAN offers the unique feature to make use of interconnected transponders, thus combining footprints pointed at different areas into one multi-station network.



## FACETS OF SKYWAN

### SKYWAN for Defence & Military

Successful network-centric operations require reliable command and control structures. Communication and data transfer need to be secure, dynamic, interoperable and independent of any local infrastructure. That's why satellite communication plays a major role in providing information superiority and helps you to make the right decision.

ND SatCom is your premium partner for satellite network solutions. One of our core competencies lies in our proven system engineering abilities and extensive experience. We support our customers, from the consulting stage, through the design, development, implementation and well into the operation stage.



### SKYWAN for Government

Due to its inherent flexibility SKYWAN ideally supports the versatile requirements of governmental networks. All governmental institutions require highly reliable and secure network solutions. Built-in security functions as well as powerful and overhead free encryption technology are used on-demand to provide a high security level to these specialized networks.

#### Typical applications:

- Air Traffic Control
- Embassy Communication
- Distance Education
- Disaster Management
- Border Control
- Emergency Services





## What is SKYWAN

Secure Communication

Key for your success

Years of experience

World leading in satellite networks

Adaptable to your requirements

Nothing else needed



### SKYWAN for Broadcast

ND SatCom's SKYWAN Broadband Media Network solution is ideal for the high-speed contribution and exchange of any video or data content, live or on demand. This solution offers various choices for transmitting video or streaming data in combination with telephony and production intercommunication. The network may consist of multiple sites supporting several transmissions in parallel. Transmissions can be effected ad hoc utilizing the fully automatic bandwidth allocation of SKYWAN or can be scheduled by our Media Fleet Manager. These possibilities extend production workflow (intercom, e-mail, internet, SAP, editing...) into the mobile world.



### SKYWAN for Enterprise

SKYWAN provides independence from terrestrial infrastructure. It offers fail-safe communication that supports critical IP applications across the enterprise like voice, video, VPN, streaming media, internet access or data backup. SKYWAN is one platform for all applications. ND SatCom's unique XWARP technology is key for global enterprise networks to connect ERP systems from remote branch offices or production sites all over the world to the data center.

#### Typical applications:

- Enterprise Connectivity
- Business Continuity
- Oil & Gas
- Cellular Backhaul



## OVERVIEW



	IDU 7000	IDU 2570	IDU 2070	IDU 1070
IP Data Dynamic Routing	✓	✓	✓	✓
IP Voice (QoS)	✓	✓	✓	✓
Star	✓	✓	✓	✓
Full Mesh	✓	✓	✓	✓
Hybrid/Partly Mesh/ Multi Star	✓	✓	✓	✓
Secure Communication	✓	✓	✓	✓
Weather aware Automatic Transmit Power Adjustment	✓	✓	✓	✓
Fast Frequency Hopping	✓	✓	✓	✓
GSM Backhaul	✓	✓	✓	
Legacy Voice	✓	✓	✓	
Legacy Data	✓	✓	✓	
Communication on the Move	✓	✓		✓
Network Control	✓			
Dual Receiver	✓			
Central Office	✓			
Branch Office		✓	✓	✓
Integrated ODU Power Supply			✓	✓
Slim Body				✓



### SKYWAN - Enabling Agile Networks

ND SatCom is known for its highly reliable satellite communication equipment and solutions. Customers worldwide have trusted our engineering team to implement more than 1000 transnational networks for Government & Defence, Broadcast, Enterprise and Telecom applications. All our systems, components and solutions are engineered and manufactured to the highest German quality standards.

As a global company with more than 30 years of experience in the satellite networks and systems businesses, ND SatCom is a reliable source of comprehensive and secure turnkey and tailored system engineered solutions.

## ND SATCOM

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