



ND SATCOM

Remote Communications for Exploration and Production

CHALLENGE

The Oil and Gas drilling business depends on real-time, direct connectivity with the customer's engineering lab.

Information gained at the drilling site needs to be transmitted without delay to the lab for analysis by the geologists and their supporting tools. In turn, the drilling process is controlled in real-time by control information that is created at the lab. Surveillance of remote installations, pipeline sections and video reporting of relevant events require broadband transmissions from one or more sites to the company headquarters, as well as to the headquarters in the region where the drilling and the production occur.

As the communications environment is getting more and more challenging – cloud computing, big data, Internet of Things and security threats – it is more important than ever to rely on experienced, trustful partners and solutions.

ND Satcom brings it all – long time experience in the satellite industry and Oil and Gas vertical having a long track record of customers.

Ongoing exploration forces the Oil and Gas industry to move out to far remote region and locations, moving their platforms more and more to the sea where terrestrial communication does not reach.

Communication via satellite is the most reliable and secure method to reach off-shore and remote sites. Engineers and supporting staff must have good voice quality and stable data transmissions among all of the relevant sites.

It is not only about satellite communication, it's about the right satellite system fulfilling all the needs of Oil and Gas industry.

ND SATCOM

SOLUTION

ND SatCom's new satellite communications platform – SKYWAN 5G – fulfills the requirements of drilling, exploration and transport in an ideal way: Small private networks become cost effective and the communication is fully within the enterprise's sphere. Single hop connectivity between exploration sites, drilling sites, pipeline stations, labs, and management sites or headquarters allow best voice quality for phone, excellent real-time quality for data, fully automatic IP-routing, and best video quality for surveillance and analysis, all at acceptable investment and operational costs.

Agile network connectivity is enabled, without double hops. The time critical data is transmitted in single-hop directly from their origin to their destination site; avoiding double hops and extra delays.

SUPPORTED APPLICATIONS

- Real Time Reservoir Management
- Remote Decision Making
- Oilfield Supply
- Crew Convenience and Social Communications
- Mobile Applications, local GSM or VHF Radio



Bandwidth is allocated as required – connections adapt to the different traffic types, i.e., video gets more bandwidth capacity and committed real-time quality to achieve the best possible image resolution. If required, fast file transfers get all of the available capacity at a certain point and are completed in the shortest possible time. This dynamic allocation of bandwidth brings substantial savings on satellite capacity cost as the overall network capacity can be reduced, thanks to the statistical effects and mix of traffic in the entire network. Simultaneously, the users feel their traffic is transmitted faster than using mainstream solutions.



The savings can be further increased through the integration of all types of sites into a single network: off-shore platforms, ships, fixed sites, land-mobile and transportable sites and moving vehicles can all communicate in one single project or company specific network. The network can be then seamlessly integrated with the IT environment of the company and still provide controlled interfaces to public networks. Point-to-point, point-to-multipoint, and multipoint-to-point connectivity, including automatic routing of IP traffic, make the SKYWAN 5G the platform of choice for companies who have the need for a certain type of connectivity today with a look forward to what may be needed in the future.

A SKYWAN 5G network guarantees highest availability due to unique redundancy and diversity concepts. Handling and maintenance of the dedicated or virtual private network, which could also be managed by the service provider of choice, is about as easy as it gets. Best of all, there is a complete independence of terrestrial networks and uncontrollable routes.

BENEFITS OF ND SATCOM SOLUTIONS

- More than 30 years of experience in satellite communications
- One unit for all cases – simplified logistics
- Extreme system scalability and resources efficiency
- Flexible in topologies – from star through mesh to hybrid
- Data rates from 64 kbit/s up to 20 Mbit/s
- Support of legacy protocols – SCADA, HDLC, x.25
- VoIP
- Enhanced QoS
- Support of transportable solutions – flyaways, communications on the move
- Maritime solutions



HEADQUARTERS

ND SatCom GmbH
Graf-von-Soden-Strasse
88090 Immenstaad Germany
PHONE: +49 7545 939 0 FAX:
+49 7545 939 8780 E-Mail:
info@ndsatcom.com

www.ndsatcom.com

CHINA

ND SatCom (Beijing) Co. Ltd.
PHONE: +86 10 6590 6869/6878

MIDDLE EAST

ND SatCom FZE
PHONE: +97148865012

ND SATCOM