Application Report
IPR100/400 VoIP
DX64 Radio Dispatch

HIGH RELIABILITY VoIP RADIO DISPATCH

Customer Profile

- Woodside operates a number of Natural Gas drilling and production platforms in Western Australia's North West Shelf region. UHF op's, Marine and Air band communications are a crucial part of day-to-day operations.

Application

- To deploy high reliability radio and telephone management across two Natural Gas platforms, one of which is not normally manned.

Business Benefits

- Improved safety.
- Increased operational efficiencies.
- Network flexibility & cost savings by using IP infrastructure.

Products Used

- DX64 with VoIP
- 960CSD
- IPR100
- IPR400
- 970DD

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Customer Overview

Woodside is Australia's largest publicly traded oil and gas exploration and production company. It operates a number of Natural Gas drilling and production platforms in the Western Australian North West Shelf region. On each platform UHF op's, Marine and Air band communications play a crucial part in day-to-day operations. Control room staff need to communicate with operations, maintenance staff, emergency crews and supervisors. Radio communications is also used to coordinate with workboats and helicopters.

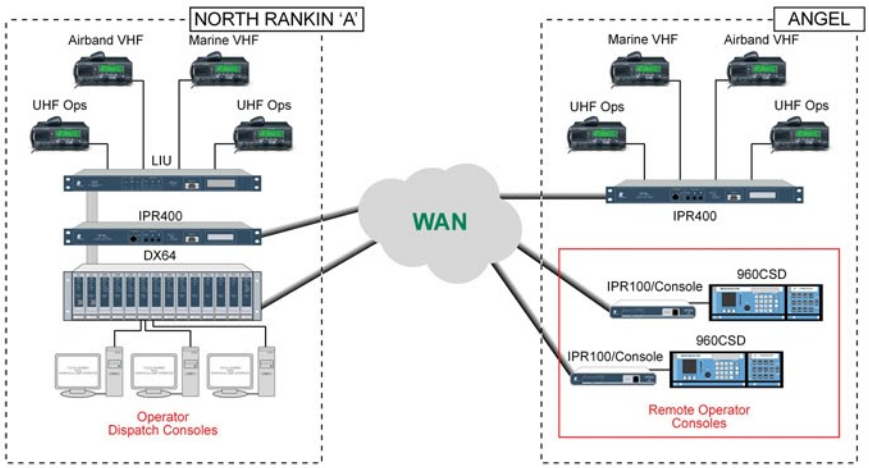
The Challenge

The North Rankin 'A' platform is located 135km from the Western Australian town of Dampier and is set in 125m of water. The platform is self sufficient but is linked to the mainland through a sub sea pipeline. Woodside's new Angel platform will be located about 49km east of North Rankin A. It will be remotely operated from North Rankin A through a sub sea pipline and communications fibre.

The Angel facility required a radio management system that would operate across both platforms. Each platform would have its own transceivers for air, marine and platform operations but the communications hub would be situated on North Rankin A. Even though Angel is not normally manned, there is still a requirement to provide communications for maintenance, operations and emergency staff. However, due to harsh environments high reliability equipment is required.

Solution

Omnitronics partnered with NesscoInvsat and Transtel to provide an integrated radio and telephone dispatch system with Voice over IP functionality. The Omnitronics DX64 system provides standard facilities, such as channel change on the remote radios, to cater for Woodside's communication needs. Additionally, through the use of VoIP, radios and consoles on the Angel platform are integrated into the North Rankin A system thereby creating a distributed radio communications network. Considering the harsh environments, Omnitronics provided standard consoles that are linked back to the DX64 at North Rankin A through IPR100 VoIP adapters. Radios on the Angel platform are also connected back to the DX64 through an IPR400 VoIP concentrator.



Conclusion

Using the DX64, Omnitronics provided Woodside with an efficient, tailor made radio dispatch system to carry out daily operations and emergency procedures. The system enables communications between UHF op's, Air band and Marine band radios and provides this functionality across both gas platforms. This will result in more efficient communications and improved safety for all staff. In addition, by using VoIP technology to integrate communications across the two platforms and between disparate radio sub-systems, the client has more flexibility for future expansion.