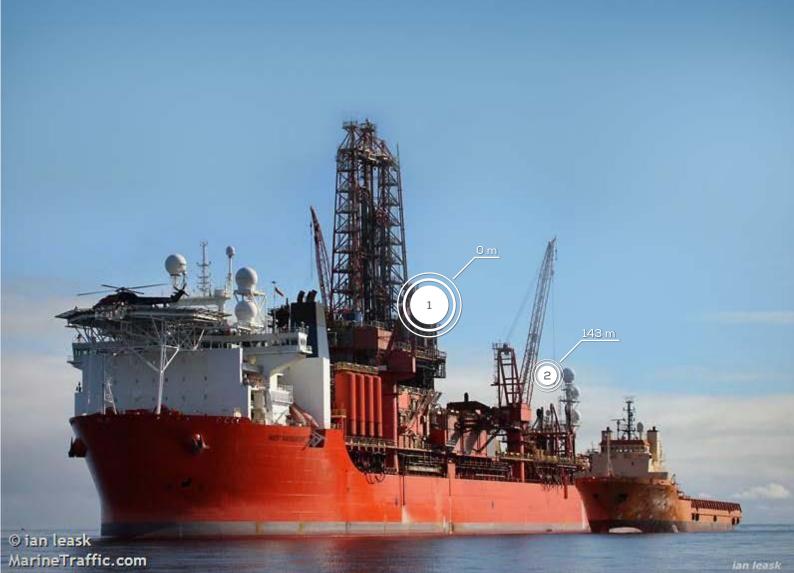
"100% availability and maximum requirement by Safety, ATEX and ship approval."

THOMAS SCHILDKNECHT CEO of Schildknecht AG





# DATA TRANSMISSION IN CRUDE OIL PRODUCTION DATAEAGLE on an oil drilling ship

## Application

Seadrill Limited is a Norwegian company dealing with the oil production industry. Operated are: Jack-up drilling rigs, semi-submersibles and drilling vessels for sinking drillings for crude oil and natural gas. The 253 m long drilling ship West Navigator relies on a DATAEAGLE radio link to the driller. The driller is the fully automatic machine unit, screwing the drilling rod weighing up to 750 tons together.

## Challenges

The challenge consisted in establishing a highly reliable radio link for replacing the very susceptible cable connection to the driller. One-day failure causes up to 600,000.00 euro costs. Requirements to technical solutions on an oil drilling ship are safety, ATEX and ship approval.

### Solution

On the ship, a wireless PROFIBUS and PROFIsafe radio link to the driller is built up. As radio technology, Bluetooth is applied since thanks to frequency hopping it enables extremely stable and robust communication. Due to the very sophisticated application, the DATAEAGLE 3000 was installed in an explosion-proofed housing.

#### Result

In a two-years test, DATAEAGLE has successfully asserted itself against all market players and so saves the operator downtimes and costs amounting to millions.



1. DATAEAGLE at the fixed side in the Ex-protective housing.



2. DATAEAGLE at the mobile side of the plant by which the drill pipe is installed.