

# CAPABILITY SHEET

## DV OBSTACLE DISTANCE MEASURING SYSTEM CHAIN OR CABLE TO SUBSEA INFRASTRUCTURE DISTANCE MONITORING MODULE

### DV OBSTACLE DISTANCE MEASURING SYSTEM

DV ODMS (Obstacle Distance Measuring System) is an integrated module in DredgeView 2.0 to monitor the distance from an anchor chain or cable to subsea infrastructure. This module is custom-tuned to each Boskalis anchor chain or cable installation project.

DV ODMS integrates precise surface and subsea navigation in 3D with project-specific information. These integrated data are used to monitor the shortest distance from an anchor chain or cable to infrastructure on the sea floor. The anchor chain is installed or picked up by an anchor handling tug or similar vessel.

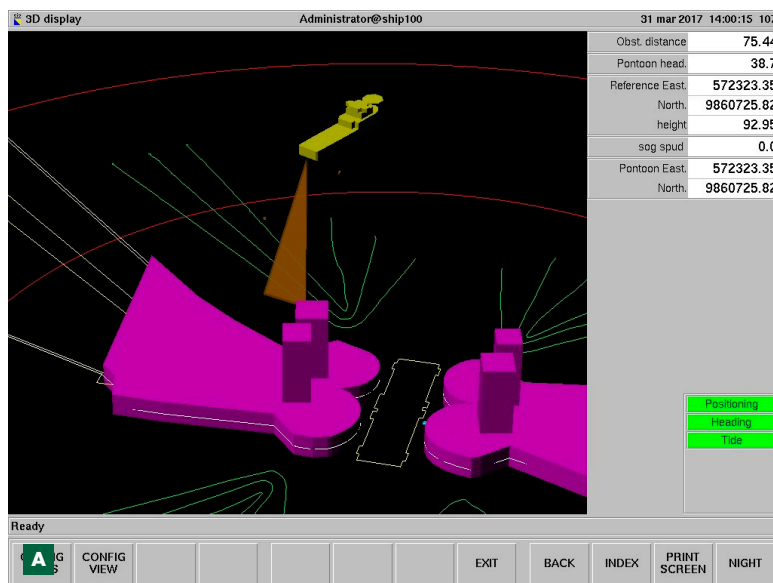
The real-time 3D display used during operations is shown in Figure 1. The chain catenary is within the brown triangle dropping from the vessel's stern.

The 3D catenary triangle is formed by the vessel stern, the projection of this point on the seabed, and the position of the Work Class ROV tracking the chain drop-down point.

The purple shape is the protection envelope covering the submarine infrastructure to be protected.

DV ODMS continuously calculates the distance from the catenary triangle to the protection envelope. If the minimum acceptable distance is exceeded, visual and audible alarms are triggered.

DV ODMS reads standard (NMEA) navigation strings and interfaces easily with vessel and third-party hard and software.



**A** TDV ODMS image during operation