

# Ranger 2 Acoustics for CCC's DP Fleet

CCC (Underwater Engineering) S.A.L. has selected Sonardyne's Ranger 2 acoustic positioning technology for its entire fleet of dynamically positioned (DP) diving and support vessels. Supplied by Sonardyne Asia Pte. in Singapore, the Ranger 2 systems will be used as independent position references for each vessel's dynamic positioning system and to track underwater targets including divers and ROVs.

Four multi-purpose vessels make up CCC's fleet, including two new 65 metre vessels rated for Class 2 operations. All are fitted with DP systems from GE, with their two 90 metre Dive Support Vessels, the CCC *Pioneer* and the new build *Said Alethia*, equipped with dual redundant Ranger 2 Pro systems, the highest specification available. This capability allows CCC to utilise their vessels on survey projects where maintaining a reliable position is a critical operational requirement.

For all of its Ranger 2 installations, CCC additionally specified Sonardyne's Optimised USBL configuration. Here, Sonardyne's attitude and heading reference system (AHRS) Lodestar is interfaced directly with the Ranger 2 acoustic transceiver allowing raw range, bearing and attitude data to be simultaneously processed. This integration achieves a tightly compensated solution and allows users to meet the positioning specifications of a wide range of subsea construction and survey projects.

*Image: CCC has elected to install Sonardyne's Optimised Ranger 2 subsea acoustic positioning technology across its entire fleet of multi-purpose diving and support vessels.*