

Through-Ice Location And Communication System



Wireless Fibre Systems (WFS), has joined up with Kongsberg Maritime to develop a wireless system for location of and communication with the company's unmanned underwater vehicles in ice conditions. The EUR1.8m TILACSys project (Through-Ice Location and Communication System) will run for 24 months and deliver a demonstrator system. It is being supported with investment from the UK's Technology Strategy Board and the Research Council of Norway.

The use of Autonomous Underwater Vehicles (AUVs) is growing across the globe, due to their high levels of mobility and flexibility and capability of delivering high quality - and resolution - data from the underwater environment. In polar regions, AUVs offer the added advantage of being able to explore

beneath the ice. But today sub-ice AUVs are seldom used because of the risk of loss of vehicle.

The TILACSys will enable a surface vessel, a helicopter or an unmanned aerial vehicle to locate and communicate with the AUV through the ice. The system is seen as a key component for de-risking under-ice AUV operations. The resulting increased use of AUVs under ice to successfully collect data will greatly enhance human knowledge about topography, oceanography, marine life and marine systems in arctic areas.