

USV to Map Lakes and River Sediment Movement in Norway



Swathe Services has announced that an [Unmanned Surface Vessel \(USV\)](#), designed and built by Unmanned Survey Solutions in Hayle, Cornwall, has been purchased by Trondheim University for research studies in Norway. The [Inception Class Mark 2 USV](#) is built by surveyors for surveyors. It's designed for hydrographic surveys and data acquisition in ports and harbours, lakes and rivers, shallow coastal or enclosed inland areas.

James Williams, managing director of Swathe Services said: "We are proud to have been selected to provide the Department of Civil Engineering with a complete [Multi-Beam Echo-Sounder \(MBES\) system](#) along with the USS Inception Mark II USV. The department at NTNU selected state of the art equipment including an [R2SONIC 2020 MBES](#), [SBG](#)

[Ekinox2 Inertial Navigation System](#) (INS), Valeport sound velocity sensors and Hypack software for data acquisition and post-processing."

The university intends to use the new USV to map lakes and river sediment movement in Norway.

Dr Nils R  ther, associate professor at the Department of Civil and Environmental Engineering, Trondheim University is an expert on floods, hydropower, waterways and environmental design. He said: "We are delighted with the new Inception Class Mark 2 USV. It will be invaluable in our research on hydro-morphodynamic processes for rivers and lakes as well as water resources management."

The Inception class USVs can be operated with remote control capabilities or as an autonomous vessel for ultimate line running and survey efficiency. They are extremely robust, built out of aluminium and can operate in ultra-shallow waters.