## Nord Stream Pipeline Project Completed Ahead of Schedule

NCS Survey, of Aberdeen, UK, successfully completed a major survey contract recently for Saipem S.p.A. for pipelay support during the inshore phase of the Nord Stream Pipeline Project, two gas pipelines linking Russia with the European Union via the Baltic Sea. Two small vessels were mobilised with NCS Survey's real-time 3D SVS (subsea visualisation system) for Touchdown Monitoring (TDM), operating from the 4m contour at the beach pull-out to the intermediate lay-down locations.

Working on a 12-hour rotation the two vessels transmitted continuous live video images and data of the touchdown point to the C10 barge engineer, giving the accurate touchdown position of each pipelines in real-time as they were laid into the pre-excavated trench. In addition, when the capability of the system was realised by the client, additional pre-lay and post-lay surveys were performed, with field charts being completed within 24 hours with the same number of survey personnel onboard - just two!

During the installation of the second pipeline, which was laid parallel to the first, the barge display was constantly updated giving the actual position of each of the pipelines in the trench and thus the separation, DCC (distance cross course) and KP (kilometre point). This allowed the C10 to continue laying operations with confidence and accuracy, which contributed to the scope of work finishing well ahead of schedule.

The SVS enabled the C10 barge engineer to know exactly where the pipelines were laid in real-time and thereby minimised the risk of the pipelines coming out of the trench, and allowed the separation to be managed when laying round bends and near any seabed obstruction like wrecks.

https://www.hydro-international.com/content/article/nord-stream-pipeline-project-completed-ahead-of-schedule