MSI completes a 520-day measurement programme

MSI has completed a 520-day measurement programme to support the feed of a Floating Storage and Regasification Unit (FSRU) and pipelines in Alexandroupolis, Greece. The Alexandroupolis Independent Natural Gas System (INGS) is a modern, cutting edge technology project which will supply natural gas to the Greek and Southeast European gas markets. The project comprises an offshore Liquefied Natural Gas (LNG) Floating Storage and Regasification Unit and a subsea and onshore gas transmission pipeline system.

Expecting to begin commercial operations in 2022, the project is being implemented by GASTRADE S.A, a company that studies, designs, develops, operates and exploits infrastructures which are necessary for the reception, transmission and distribution of natural gas as well as for its storage, liquefaction and re-gasification.

Directional Waves and Current Profiles

To support the detailed design of the project, GASTRADE contracted MSI to collect a range of metocean data, including directional waves and current profiles at two locations (one at the proposed FSRU location and one nearshore at a pipeline crossing), as well as various meteorological parameters onshore.

Deployment of wave buoy

Originally deployed in November 2017, the equipment was finally recovered in May 2019 with 4 interim site visits to check on equipment status, as well as to collect water samples for suspended sediment concentration and photograph biofouling for identification.

Wave Buoys

The equipment provided comprised two AXYS TRIAXYS directional wave buoys, each fitted with an integrated Nortek Aquadopp current profiler, as well as a Campbell Scientific weather station onshore for measurement of winds, air pressure, air temperature, relative humidity and rainfall. Data from both the wave buoys and the weather station was transmitted in real-time to a website for the client to access. Data collected from the project was provided to BMT to produce a metocean criteria report.

Weather Station and Facilities

The data collection exercise was supported by a number of organizations, in particular the Alexandroupolis Port Authority, which provided a suitable location for the installation of the weather station and facilities for MSI to store and maintain the equipment; BMT for the derivation of the metocean criteria and Lwandle Technologies for the identification of biofouling.