Sub-bottom Profilers Delivered to SHOM

iXBlue, France, is providing ECHOES sub-bottom profilers and DELPH seabed mapping software to SHOM for shallow-water hydrographic applications. SHOM missions include ensuring safety of navigation, defence support and public policies such as cartographic reference.

Sub-bottom profiling in shallow water has always proved challenging. First, the profilers are usually towed bodies that are difficult to use when survey lines are short, U-turns are frequent and water depth is limited. Additionally, commonly used small vessels limit the acceptable size of survey equipment. iXBlue ECHOES 3500T3 and 10000 models are selected as they are compact and purpose-fitted for pole-mounted and hull-mounted installations.

Seeking to extend its sub-bottom profiling capacity in coastal waters and on the continental shelf, SHOM was looking for cost-effective, compact and versatile equipment. It conducted an extensive evaluation of industry-leading products, giving iXBlue an opportunity to demonstrate the ECHOES capabilities.

ECHOES 10000 was demonstrated onboard SHOM 7-metre coastal hydrographic vessel. Its compact design made the integration onboard easy, transducer fitted on the single-beam echo-sounder pole. ECHOES topside unit, of a standard computer size, was racked onboard and the system was ready within minutes. DELPH software was used to gather all sub-bottom, positioning and motion sensor data. ECHOES superiority over competition was demonstrated across parametric sub-bottom profilers (higher primary frequency). On top of being highly compact, they are able to operate with the multibeam echosounder without interferences or the need for synchronisation.

ECHOES 3500T3, using wide-band and low-frequency chirps, also proved its capability to achieve smart penetration and resolution in sediment. This versatile profiler outperforms sparkers and boomers when both power and resolution matter.

SHOM purchased multiple units of each model, including detachable gondolas so systems could be shared between vessels.