

Major upgrade to Kongsberg Discovery Echosounder & ADCP systems

Kongsberg Discovery, a world leading supplier of underwater acoustic solutions for the ocean industry and management announced today several updates and innovations to their single-beam echosounder solutions (SBES). The updates will bring new functionality and improvements to the user experience, but also have practical implications for the upgrade path for existing EA640 users.

The best of two worlds

The biggest part of the update is the merging of the EA640 hydrographic SBES and the EK80 scientific echosounder and ADCP system into one solution that covers both survey vessels, physical oceanography as well as fishery research and ecosystem management. Having much of the same look and feel already, specific EA640 functionality for hydrography such as bottom detection algorithms, real time sound velocity input and other are added to the EK80 software that will continue as the acquisition and data storage solution for the combined product. The EK80 system is already the de-facto world standard for fishery research and ecosystem surveys and have over the last few years also added ADCP functionality which has lowered the complexity and cost of sourcing and maintaining the combined system.

Going forward, Kongsberg Discovery's SBES users will have the option to select between split-beam licenses, allowing them to collect calibrated backscatter data, or more traditional single beam licenses focusing on seafloor mapping only. A split-beam transducer can be used in cost-saving single-beam mode with an appropriate license. This can later be upgraded to a full split-beam license if the user wants to take full advantage of the split-beam capabilities. The split-beam capable ES18-11 MK2 and ES38-7 transducers will be the standard options for users who require long range performance, as EK80 use all four transducer channels to produce 2 kW transmission signal regardless if split beam functionality is used or not.

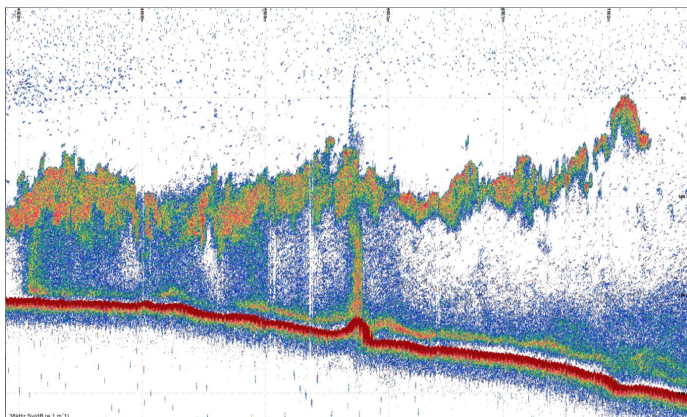


Image: EK80 screenshot showing seafloor detection, a natural gas seep in the middle, and fish schools spread out midwater.

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The new wideband transducer ES18-11 MK2 launched in 2024 is a vital piece in the new product strategy. While covering the requirements for biomass surveys, it also allows the new system to boast “full ocean depth” capabilities. The transducer covers a wide frequency spectrum and will have the best range performance at 14 kHz, but also usable at 12 kHz if specific survey requirements state this. In addition to fishery research, it has also shown great promises on other applications, including water masses mapping, sub bottom profiling and gas seep detection and quantification.

Maintaining the EA440 as a versatile and cost efficient standalone hydrographic system

The EA440 SBES is used by a wide range of users worldwide as an easy to use, cost efficient solution for bottom detections. The system will share transceiver hardware with EK80, but other than that the system will be continued and sold as before.

Obsolescence and reduced complexity

The existing High Power wideband transceiver (WBT) is discontinued and replaced by the standard WBT used across EK80 and EA440 systems going forward. EA640 software is available but will not be updated any further. The HP WBT will be supplied for existing delivery backlog and a small number kept as service units. A technical and commercial EK80 upgrade path for existing EA640 HP WBT users will be offered through dedicated campaigns in 2025.

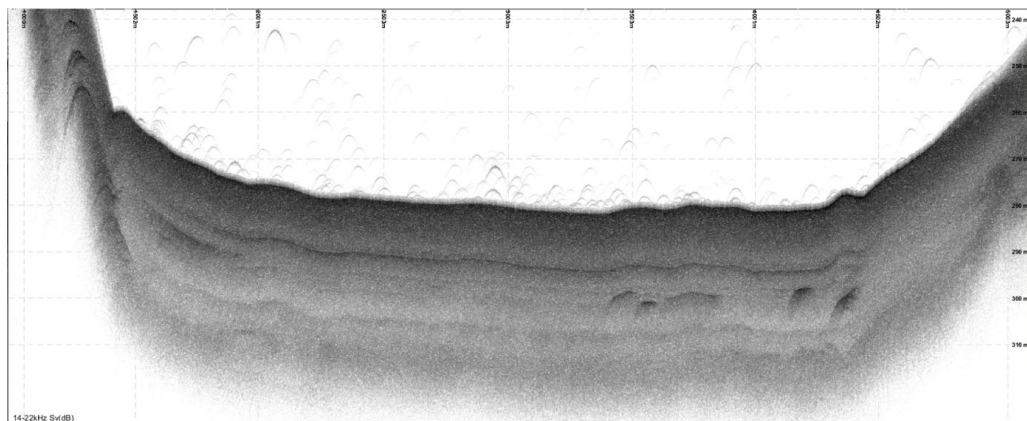


Image: Sub bottom profiling results from EK80 using the ES18-11 MK2 transducer with good penetration and resolution.