Next generation real-time software for EM™ systems

A modern and efficient working environment
Seafloor Information Systems (SIS 5) has been redesigned in order to improve both user experience and work processes. The modern window environment, menus and layout are more intuitive, helping the operator to work more efficiently.

The new 3D displays handle all depths, even when displaying shallow water multibeams at maximum ping rate. The background maps are generated from GeoTIFF or S 57 charts using Web Map Services (WMS).

SIS Remote
A single SIS installation can support multiple survey vessels simultaneously, and the EM system can be controlled from a remote location. The connection between the mother ship and the survey vessels is via a standard internet connection, such as KONGSBERG’s Marine Broadband Radio (MBR). This setup provides a reliable Internet connection for the surveyor on the mother ship to monitor and control the survey operation on each of the survey vessels from one operator station.

Setting up SIS Remote is simple, requiring only network configuration. SIS provides all the necessary infrastructure for reliable communication no matter which Internet provider is used, and can be configured to use fast or slow connections within any price range. For satellite connections the amount of data can be filtered to only send updates of the terrain model at regular intervals. This will still provide the operator with sufficient data to perform accurate quality control and provide survey guidance.

Using the faster MBR allows the operator hands-on control of the survey in real time.

KEY FEATURES:
- Supports all EM systems in real-time
- Provides control, logging and QA-functionality
- Powerful 3D-graphics and simultaneous multi-survey ship displays
- Uses S-57 background maps from WMS-server
- Facilitates remote operations and multi-survey setup
Survey planning in SIS is available in the office and during the survey. The new design allows for easy planning and transfer of survey plans to the right vessel. The NMEA XTE (Cross-track offset) sentence can be sent to autopilot, aiding steering along the active line. Additional advanced import and export options are also available.

A separate Helmsman display gives a view of the survey operation and the active survey line. This display is intended for the bridge personnel while the survey operation is controlled elsewhere.

**New logging format for easier post-processing**

SIS supports .KMall, the KONGSBERG logging format used by all of our EM systems. This format makes it much easier to post-process the logged data as it contains already calculated latitude, longitude, depth, time and ellipsoidal height.

With SIS comes a complete set of documentation in .html format and examples in C++ and Python showing how to read the .KMall files. Software developers find this useful as it shortens the development time considerably.

**Mapping Cloud**

KONGSBERG has developed a Digital Ecosystem named Kognifai. Mapping Cloud is the solution which uses Kognifai to offer additional services in a cloud environment. Find out more at kongsberg.com/mappingcloud.

SIS 5 can send data to Mapping Cloud in real time, both in remotely and during regular operation. Depending on the bandwidth and cost of the Internet connection, SIS 5 can be configured to send the right amount of data from the ship into Mapping Cloud in real time. Mapping cloud is accessed through a web-browser so data can be processed and displayed anywhere on the Internet. Team collaboration and remote monitoring are now possible. Together with partners such as Earth Analytic, Geocap and ESRI even more products can be made from data stored in Mapping Cloud.

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