## Miraya Detector

Miraya Detector is a generic software built for using real-time data streams from ASW active sonar systems to improve detection, classification and tracking underwater threats in difficult littoral environments.

The software is built so that it can easily and cost-effectively be adapted for all kinds of active sonar systems.

#### **Adaptive Signal Processing**

With adaptive signal processing algorithms, Miraya Detector enhances the sonar picture to find threats with low signal-to-noise ratio. The algorithms work automatically, but their settings can also easily be adjusted by the operator so that the performance is fine-tuned for even more optimised visuals.

# Automatic Target Detection and Tracking

With advanced detection and tracking algorithms, Miraya Detector automatically initiates the tracking of underwater threats. The algorithms suppress bottom reverberation echoes and focuses on both moving and non-moving threats.

#### Customisable User Interface

Miraya Detector features a customisable user interface with a choice of different palettes, overlay and data fusion techniques to give the operator the best possible understanding of the situation. For example; merging and overlaying amplitude and Doppler data on the same screen can greatly improve the operator's abilities to detect and classify targets in littoral environment.



#### **Historical Trails**

Miraya Detector helps finding target that are tricky or hard to detect due to lack of clear movement patterns. This is done by overlaying previous detections together with the current sonar picture.



#### **Geographical Information**

Presenting correct and relevant background data is essential to find targets in a complex environment. Miraya Detector supports a wide range of background geographical data, such as bathymetry, seabed geology, charts etc.

### **CMS** Integration

Miraya Detector is adjustable for your sonar and Combat Management Systems (CMS). It can be delivered as a stand-alone software, semi-integrated to transfer targets and pointers to CMS, or fully-integrated in existing software architecture.