

**SeapiX** revolutionizes fishing techniques by providing optimally accurate information about an unparalleled underwater spatial volume, while merging skipper's fishing plans and fish detection sonar data.

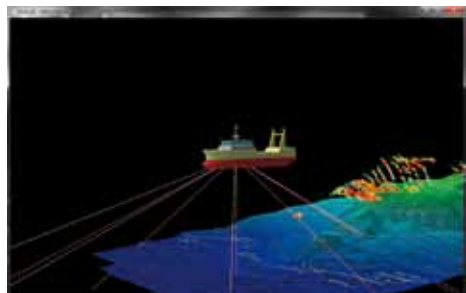
**SeapiX** has become much more than a simple acoustic system, and for the first time, the skipper is assisted by a tactical console providing a global fishing action picture. He can take correct and faster decisions, enhancing his profitability and selectivity.



### BUILT IN FISHING PLOTTER

To make seabed and biomass information relevant, **IXBlue** (Sodena) makes the most of its 30 years' GIS experience by introducing its latest Gecdis technology into the **SeapiX** processing chain.

This built-in state of the art ECS type Geographical Information System brings to **SeapiX** the full high end fishing plotter capabilities. Every acoustic data processed by **SeapiX** is instantaneously plotted and stored into the skipper's database for real-time or future analysis.

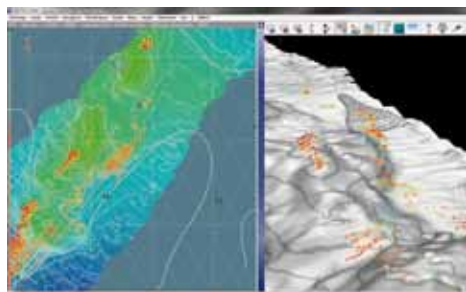


### MERGE AND ANALYZE

**SeapiX** interfaced to sensors available on board (net control, radar, Oceano data service, logbook, fuel meter, etc...), superimposes relevant streams.

Powerful multilayer analysis and user object filtering methods provide key information to build genuine fishing strategy based on skipper criteria.

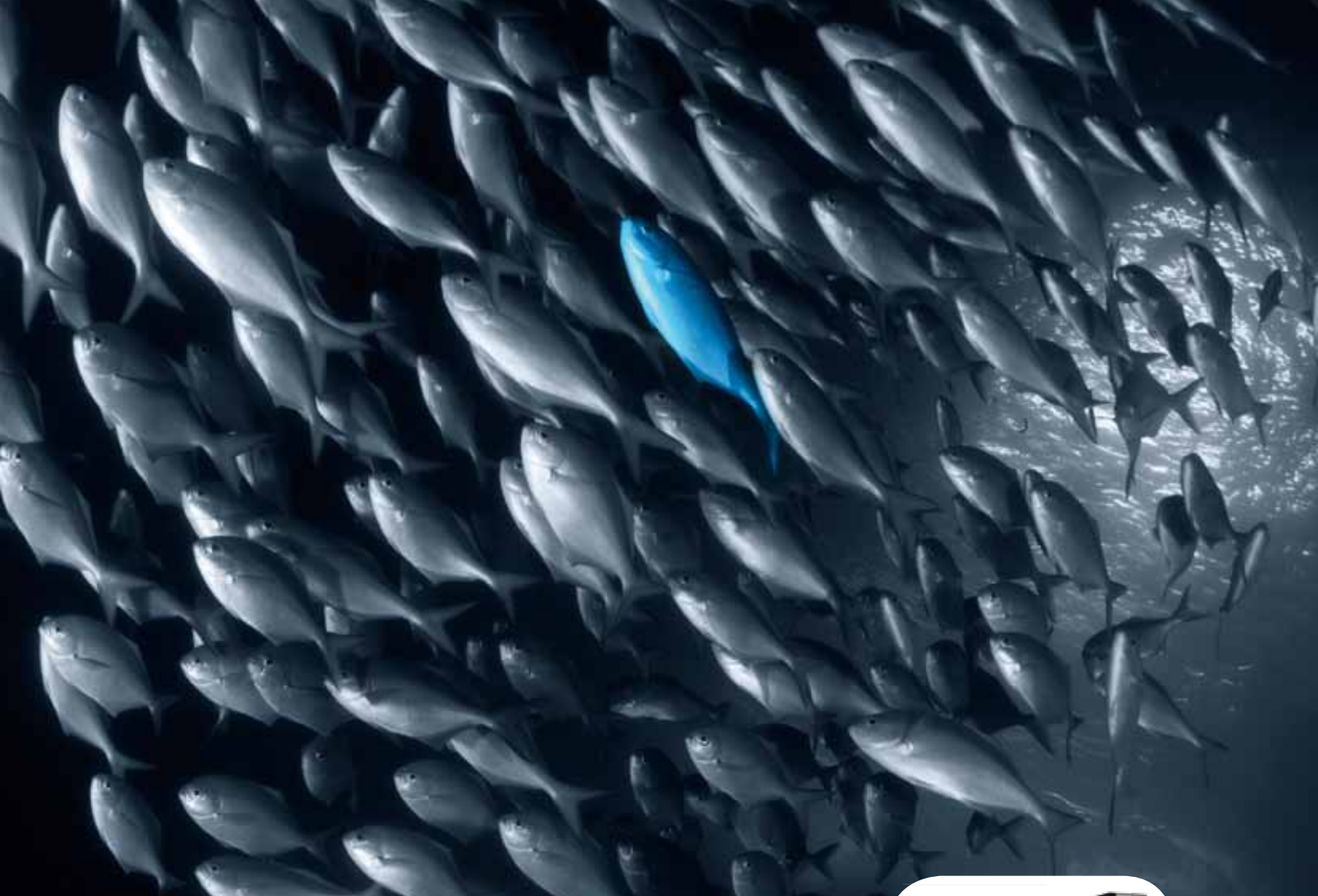
The skipper can imagine new fishing strategies, fuel saving oriented or selectivity oriented improving his profitability.



### FULL CONTROL

2D and 3D Modes consist of a whole synthetic fishing action picture. Net gear modelization and simultaneous shoal biomass representation offer the most advanced "Fishing console" functionalities, by providing total and accurate control for searching, tracking, and catching stages.

By optimizing net gear maneuvering close to wrecks and rocky areas, the skipper can reduce incident and increase his safety at sea.

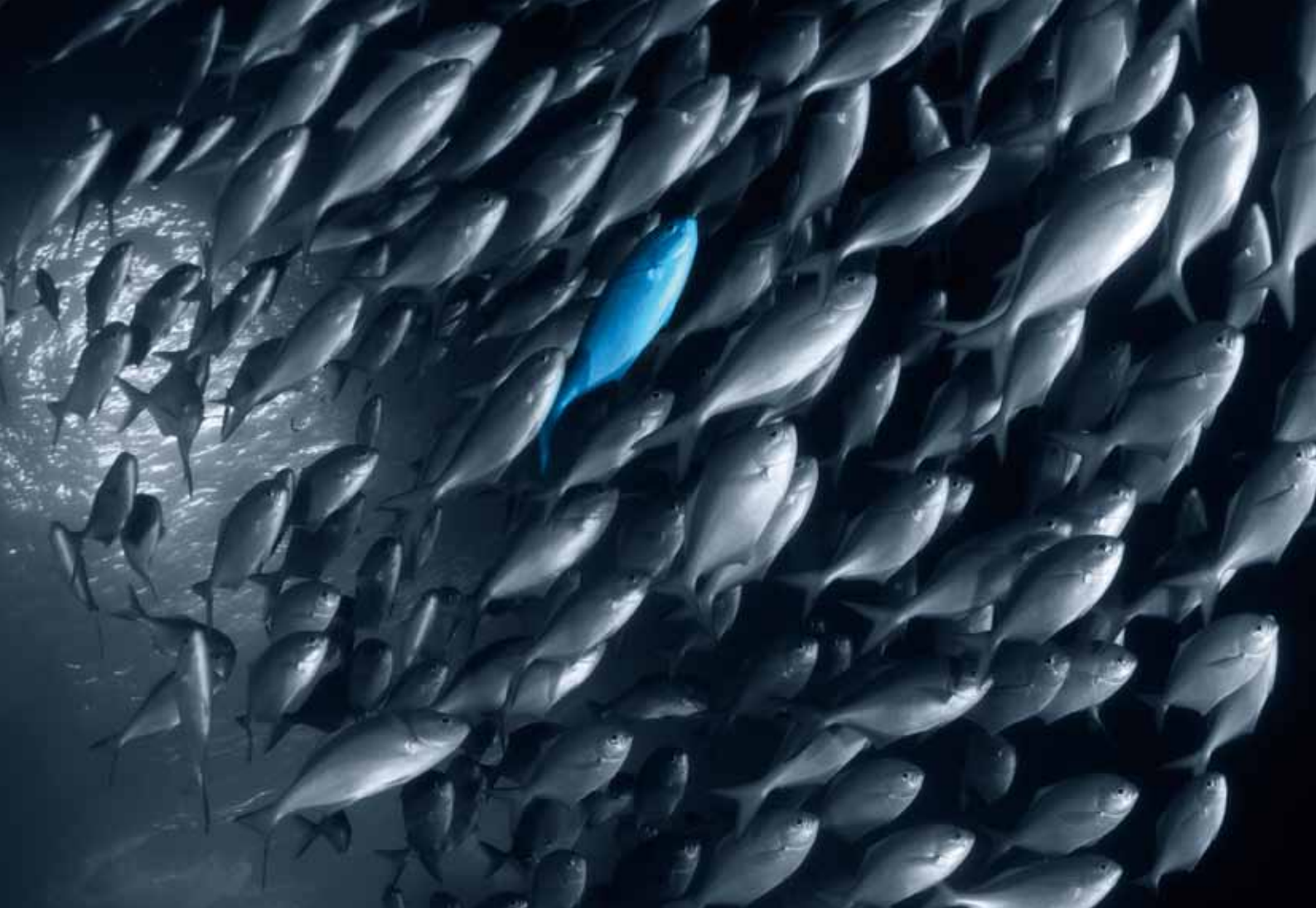


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**SEAPIX**

A SMARTER WAY TO FISH



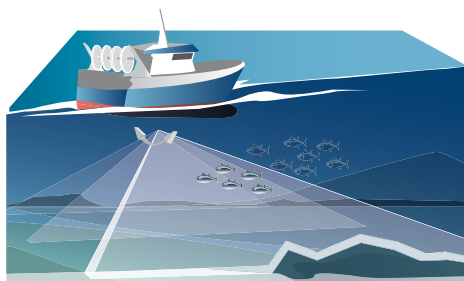


# SEAPIX

## 3D MULTIBEAM SONAR

**SeapiX** is a whole new category of equipment. For the first time in the fisheries market, in a unique product, a high-performance acoustic tool can merge acoustic data with the commercial fishing geographical information system, superimposing whole new layers of fishing information in 2D or 3D.

**SeapiX** is a genuine “third way” 3-Dimensional Sonar, offering both the key advantages of omnidirectional sonar and those of sounders, while at the same time providing completely new functionalities to fishermen in order to practise profitable and selective methods.



### UNIQUE TECHNOLOGY

As a military technology covered by a number of patents, **SeapiX** is the first compact civilian system comprising a dual Mills Cross multibeam sonar transducer.

It generates one or more scan swathes along or across the vessel axis, thus providing total three-dimensional coverage of the water column, a bathymetric profile of the seabed and sediment hardness analysis.

Its accuracy reaches an unparalleled level on the fishing market, thanks to narrowest beams ( $1,6^\circ \times 1,6^\circ$ ) and advanced acoustic modulation principles (resolution  $\pm 7,5$  cm only), and its embedded motion sensor.

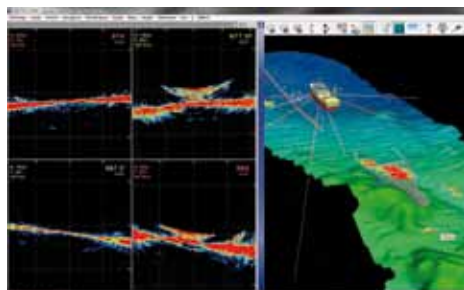


### PROFITABILITY SAVER

**SeapiX** revolutionizes fishing techniques by providing optimally accurate information and unparalleled surveillance of a designated underwater spatial volume.

**SeapiX** seeks an unparalleled water volume with unique accuracy, providing reliable decision key information.

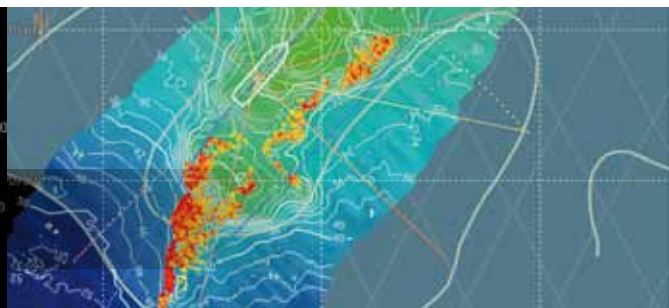
The skipper can apply genuine “Fishing strategy”, by targeting more and reducing dramatically his time at sea. It concerns all fishing methods (pot, net, trawl, etc...).



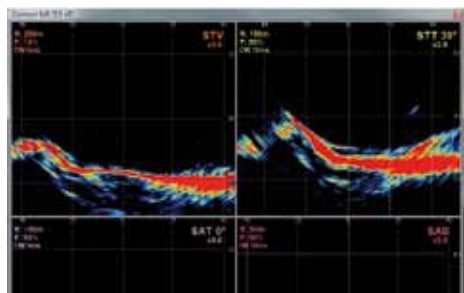
### EASY, FAST, EFFICIENT

**SeapiX** provides the skipper with completely new functionalities, thanks to its four simultaneous sonar beams. Automatic control of each of the unit transducers provides four multibeam sonars with exclusive plug and play assisted “work modes”. According to the skipper needs on task, **SeapiX**'s functional versatility allows quick reactions to secure tracking and catches.

As a powerful catching machine, **SeapiX** will make the difference and enable the skipper to overcome even the most problematic fishing conditions, especially with rough sea and shallow water conditions.



The advanced dual multibeam antenna provides exclusive tiltable sonar beams, providing 3 dimensional water column and biomass control all around the vessel, even with rough sea conditions and shallow water. **SeapiX** brings rich functionalities to the skipper, from 6 simultaneous sonar and echo sounder modes and 2D and 3D presentations. The skipper can activate the suitable sonar mode combination in order to secure his daily catch.



### FISH FINDING

STV (Sonar Transversal Vertical) mode provides a widest port to starboard coverage (swath 120°) as an acoustic real-time sonar type presentation. **SeapiX** STV mode brings 12 times more probability to detect fish compared with normal fish finder sounders. The skipper can open the ECHO mode in order to record and analyze fish targets as a familiar presentation. Thanks to the STT sonar mode, he can improve and anticipate his fishing track according to shoal motion in front of the ship, giving an outstanding advantage to prevent well-known shoal avoidance effect while passing below the keel... The STT sonar beam also has 120° swath coverage and can be Tilted from 90° to 45° in front or in aft of the vessel to ensure the best chance of seeking biomass.

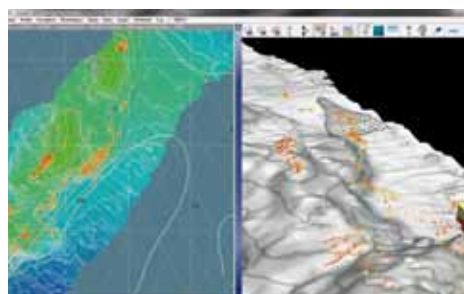


### FISH TRACKING

SONAR display controls side shoal and fish avoidance effect. It consists of an omnidirectional Sonar image, merging fish targets only, thanks to STV, STT, SAT and SAS swath coverage biomass extraction.


In addition, seeing interesting targets, the skipper can keep it under control by tracking with SAT & STT modes.

The Tilt setting can be manually adjusted to follow up the shoal.



### FISH CATCHING

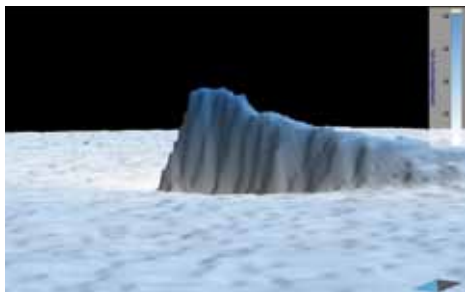
Because of the **SeapiX** multibeam tiltable features, the skipper can ensure total water volume seeking with the innovative SAS sonar mode. Its Axial beam performs a high resolution starboard to port scanning, providing front and aft shoal information to enhance the catch stage. Sonar mode display (tactical bow up sonar like view) brings a real-time accurate fishing situation on task. 2D and 3D mode give a tactical maneuvering view, superimposing trawl view in front of the catch for optimal efficiency. For shallow water catch maneuvering stages, SAS becomes THE perfect tool, as **SeapiX** applies the narrowest beam patterns and smart signal processing to discriminate targets and reject bottom echos and noises.



# SEAPIX

## BATHYMETRY & SEABED HABITAT QUALIFICATION

Bathymetry and bottom analysis are becoming key factors for skippers whatever fishing methods they employ. Matching bathymetry profiles with seabed qualifications provide skippers with clear understanding about the Habitat. **SeapiX** is really challenging on these topics, thanks to its narrowest individual beams (1,6°x1,6°x7 cm), and its self calibrated multibeam sonar producing “absolute” acoustic measurements (BS), ensuring extremely accurate hardness measurements.

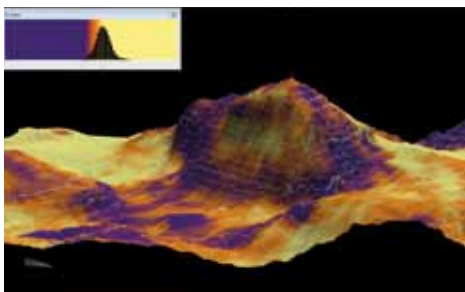


### HIGH RESOLUTION BATHYMETRY

3D is recognized as key information to perform fishing activities. Unfortunately, many skippers complain about lack of bathymetry accuracy on their own systems...

**SeapiX** is their first opportunity to optimize practice and vessel safety thanks to reliable and reproducible bottom profile measurements .

STV Sonar beam ensures real time bottom mapping while an acoustic view and the 2D & 3D Modes offer easy tools and virtual cameras to investigate and take the right shooting decisions. For the first time, skippers can now reach professional hydrographic standards, with full stabilized 3D sonar beams.



### BOTTOM HARDNESS

Reliable hardness measurement with acoustic methods keep a challenging topic for manufacturers.

To ensure reliable bottom hardness information, **iXBlue** combines exclusive sophisticated methods, including Hyper FM modulation, tiltable beams and automatic self calibration.

Hardness layer is available on 2D and 3D Modes, and stored automatically in the skipper database. At any time, the Hardness adjustment tool can be tuned to pinpoint key areas.



### SEABED ROUGHNESS

In order to enhance the skipper's self bottom type recognition, he can activate the Sided Scan imaging sonar mode SIL (Sonar Imaging Lateral), which gives a monocolour acoustic picture with shadows effects.

It gives an interesting match with hardness measurement to discriminate bottom types and its roughness.

From the information stored in the database, the skipper can, at any time, inspect several hours' history.