

# CONNECTING COMMERCIAL FISHING VESSELS

A Signature Maritime Solution

Solution Brief



SES Networks

# UNCHARTED WATERS FOR COMMERCIAL FISHING

Global per-capita fish consumption is at an all-time high. Commercial fisheries are feeling the brunt of this demand—particularly in Asia, which produces nearly 60% of the total world’s catch. As fishing fleets in the region grow rapidly to meet demand, a major share of the growth is concentrated in developing markets that are dominated by small and mid-sized fisheries.

These are the fisheries that are most likely to be affected by the impact of this surge in demand—namely overfishing, and new regulations being put into place to prevent overfishing. Illegal fishing accounts for more than 30% of the total catch in some regions, causing countries such as Indonesia, Laos and Myanmar to implement new policies geared at combatting this activity, including tightening requirements around vessel monitoring systems (VMS) on fishing boats. These measures have also driven momentum around digital data collection technologies, such as real-time electronic reporting of fishing trip data; electronic monitoring equipment that captures information on fishing location, catch and discards; and geofencing that triggers an alert when a vessel has crossed a defined boundary. The ultimate goal is the development of more sustainable fishing practices.

Dwindling fish stocks have also taken a toll on fisheries’ profitability, with tight margins driving a focus on gaining operational efficiencies wherever possible. Digitalisation can play an essential role in enabling greater efficiencies on ships, including:

- Real-time digital catch monitoring, allowing fishermen to continuously monitor the contents of their nets
- Smart weighing to send accurate landing forecasts to ports and fish markets
- Marine telematics to enable remote monitoring and diagnostics, and condition-based management for better asset efficiency
- Route optimisation to ensure the most efficient use of fuel, based on factors such as weather conditions, fuel consumption and environmental regulations
- Electronic monitoring systems in lieu of high-cost human observers

# OVERCOMING CHALLENGES FOR SMALLER FISHERIES

As promising as these new technologies may be, connectivity limitations have largely kept them out of reach of the small and medium vessels that dominate the Asia-Pacific market.

Automatic tracking systems—such as Automatic Identification System (AIS), VMS and L-band satellite solutions—may fulfill regulatory requirements, but they lack the bandwidth to support more sophisticated capabilities that lower operational

costs and increase profitability. VSAT solutions offer high-speed broadband connectivity that supports all of these use cases and more; however, a number of factors have prevented them from being widely deployed.

## Hardware and Installation Costs

The cost of buying and installing conventional maritime VSAT solutions is out of reach for many smaller fisheries. The size of the VSAT terminal increases the cost and time required for installation—a major hurdle for businesses that can't afford to have their vessels in port for long. Narrowband systems typically cost a fraction of VSAT systems and take up less valuable deck space—a key factor for smaller vessels where space is at a premium.

## Operational Complexity

While smaller fisheries may recognise the value of enabling broadband services to their vessels, they typically lack the resources and knowledge required to monitor and manage their own satellite connectivity, deterring them from implementing a broadband internet solution.

## Cost of Service

The pay-per-use model associated with narrowband satellite services often looks more appealing than the monthly connectivity charges associated with VSAT services—at least initially. As their bandwidth requirements increase, the cost of connectivity can ramp up quickly, creating sticker shock for price-sensitive fisheries.



# MARITIME CONNECTIVITY FROM SES NETWORKS

Our Signature Maritime Solutions, underpinned by our high-quality satellite broadband connectivity, are ideal for small- to mid-sized vessels. The solution combines advanced widebeam and high-throughput satellite capabilities, high-performance ground infrastructure, and VSAT terminals optimised for the limited space on smaller vessels. Provided by maritime service providers as a managed service offering, it gives small and mid-sized fisheries the same connectivity experience as larger operations that can afford higher-priced solutions.



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## A MORE COST-EFFECTIVE SOLUTION

A maritime satellite broadband solution that is provided as a managed service greatly reduces the OpEx and CapEx costs associated with procurement, installation, and hardware maintenance and support.



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## TAILOR AND SCALE YOUR SERVICE

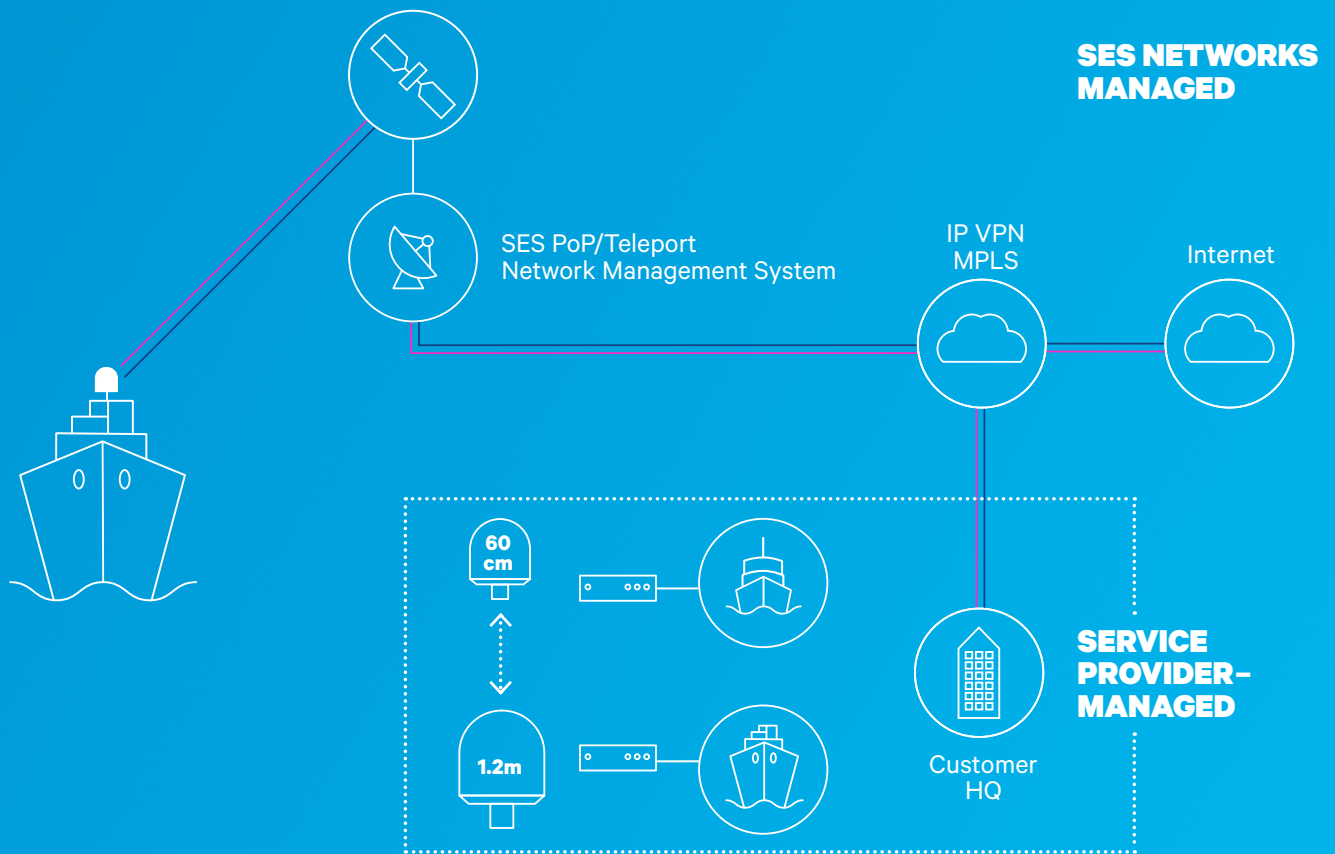
The managed service model helps fisheries to scale and grow their broadband service in a cost-effective manner by offering tailored packages that meet their requirements, with the option to upgrade as required. This ensures they are not paying for capacity they don't need, and won't be overwhelmed when broadband usage increases.



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## GUARANTEED QUALITY OF SERVICE

Fisheries receive a committed Service Level Agreement (SLA) per vessel, regardless of season or location. This critical feature ensures vessels can meet real-time reporting requirements, while also capitalising on the operational savings and efficiencies associated with digitalisation.



## Maritime Communications

Bringing connectivity to vessels at sea

## Satellite Assets

Ku-band capacity, powered by SES Networks' global fleet of GEO satellites, which provides seamless, resilient high-speed connectivity in the Asia-Pacific region

## Ground Systems

60cm to 1m antennas for Ku-band transmissions from multiple antenna manufacturers that have been approved for use on the Skala Global Platform, with iDirect Velocity compatible modems

## Network Services

The global maritime network enables a wide range of applications provided by our service provider partners, including web browsing, email, voice over IP, VPN security, multicasting and data transfers

## Ascent Lifecycle Services

- 24/7 network and operations support via our service centres and dedicated team of experts
- Trainings



## MARITIME CONNECTIVITY IN ACTION

Our Signature Maritime Solutions are market-proven on commercial fishing vessels operating around the world.

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### BROMMELAND

Meeting strict regulations for commercial fishing vessels

Strict Norwegian regulations demand that commercial fishing vessels are always able to reach and be reached by the government, making reliable broadband connectivity essential. SES Networks, together with partners Brommeland Elektronikk and GTMaritime, delivers a managed regional connectivity service with speeds up to 4Mbps for internet access and ship-to-shore calls at a price that's affordable for small fishing and cargo vessels. By bundling together VSAT equipment with connectivity from SES Networks—and providing installation, maintenance, customer support and training—Brommeland is able to offer a connectivity service to customers that had never before considered VSAT satellite broadband services due to the cost and complexity.

# IMPROVING COMPLIANCE AND PROFITABILITY FOR COMMERCIAL FISHERIES

The threat of overfishing will massively disrupt the commercial fishing industry. Small to mid-sized fisheries will feel the bulk of the impact, as they will be most affected by new regulations and tighter profit margins. Digitalisation has the potential to mitigate the impact on these businesses; however, the cost and complexity of delivering satellite broadband to smaller vessels have prevented these fisheries from

adopting new digital technologies that cannot be delivered over narrowband satellite.

Satellite broadband delivered as a managed end-to-end service will change the game for this segment of the industry. High-speed connectivity enables smaller vessels to implement the technologies they need to comply with regulations and operate more efficiently. This low-risk model removes

complexity, offers a more predictable cost structure, and provides access to next-generation technologies, including compact terminals developed specifically for use on smaller fishing vessels. SES Networks delivers everything commercial fisheries need to provision high-speed broadband connectivity for their vessels, enabling them to focus on their core business of meeting global demand in a responsible and sustainable way.

Talk to us today about how our managed services can streamline your operations and ensure compliance with government regulations.



Ready to outfit your fishing vessels with a fully managed maritime connectivity service?

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