

Broadband on the High Seas: What you Need to Know



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As the world's leading providers of broadband services to maritime customers seek to improve the end-user experience amid a hotly competitive landscape, offering the optimal combination of technical and economic connectivity performance at sea has never been more critical.

These service providers, which offer telephony, Internet, and enterprise broadband networks and applications to their customers at sea, understand the importance of reliable connectivity in today's marketplace. Indeed, satellite-based infrastructure is the only method to deliver robust access across the global waters. But before they can attempt to meet customer broadband requirements, they must consider three questions.

1: As a maritime industry service provider, how do I ensure there will be satellite capacity where my customers need it the most?

Across the world's busiest waterways, there are routes where ships aggregate, such as the Straits of Malacca and the English Channel. Fleet owners traversing these hot spots often see their broadband performance stretched to the breaking point when delivering business critical and bandwidth intensive applications. To ensure a consistent user experience, it is necessary for maritime broadband providers to understand where geographic demand for connectivity is greatest among their cruise line, commercial shipping, oil and gas, leisure and government customers.

One analogy that I'm particularly fond of makes the point that we don't build roads with absolute



uniformity of capacity, so why build a maritime satellite communications network that way? For example, in rural areas where there are fewer vehicles and single-lane highways, a driver can generally travel without interruption. This mirrors today's wide beam Ku-band networks, which allow

users a dependable and speedy experience.

Now consider navigating a large metro area. It's here that higher volumes of traffic require the multi-lane highways that are designed to avoid traffic jams. I believe this analogy lends itself well to the world's shipping lanes. For that reason,

Intelsat has worked closely with our maritime customers to determine where capacity is needed the most, so that end-user requirements for network capacity and throughput can be met and surpassed.



2: Will offering high-performance broadband service require a costly infrastructure upgrade?

Maritime service providers exist in a world where up-front costs are considerable and development timelines are lengthy. When the customer is a global shipping fleet that requires state-of-the-art VSATs (very small aperture terminals) on all of its vessels, for example, a tremendous capital expense is incurred.

This is why they must consider whether their end-user customers will require an infrastructure upgrade in the future. Shipping companies who have already invested millions in their networks may not want to incur additional costs or operational disruptions should they decide to transition to a high-throughput solution.

With the world's first global broadband mobility platform, and the recently unveiled Intelsat Epic^{NG} network, Intelsat provides a compelling solution to this challenge. Maritime service providers will continue to leverage their expertise in service design and management, and will be able to re-use both the installations they have already made on their clients' vessels and their own network infrastructure. Today's hardware can therefore



deliver the high-throughput services of tomorrow, without a complete overhaul of hub or vessel infrastructure – increasing the return on a substantial investment.

3: Will the high-throughput satellite platform that I choose support my customers' requirements 10 years from now?



As a maritime service provider, it is difficult to determine what specific technologies, equipment and applications will be required on a vessel in the future. As the maritime industry's requirements continue to evolve, service providers need a powerful, flexible satellite infrastructure that can offer solutions that meet not only today's requirements, but tomorrow's as well.

This led Intelsat to develop the high-performance, high-throughput Intelsat Epic^{NG} platform. The backward compatible, open architecture network will serve as a complementary overlay to our existing network, and will ensure that mobility communications requirements on land, at sea and in the air are met with seamless reliability. The platform will leverage an innovative combination of C-, Ku- and Ka-bands, wide beams, spot beams, and frequency reuse technology to provide a host of customer benefits.

Shortly after Intelsat Epic^{NG} was unveiled, Intelsat announced multi-year agreements with leaders in their respective industries - Panasonic Avionics, Harris CapRock and MTN - for capacity on the platform. These anchor agreements were instrumental in establishing the Intelsat Epic^{NG} platform as a bridge to the network of the future.

Intelsat has led the way in ensuring a robust experience for its customers, regardless of location. To learn more about Intelsat, our global mobility platform and Intelsat Epic^{NG}, visit: www.intelsat.com.