

PROSPECTS FOR MARITIME SATELLITE COMMUNICATIONS

Global Market Analysis & Forecasts

2016 Edition | A Euroconsult Executive Report

Sector dynamics, analysis and forecasts for the maritime satcom market.

- ✓ **Over 70 pages, including numerous graphs & tables**
- ✓ **Thousands of data points**
- ✓ **Priced at 4,500 euros**

In 2015 the global maritime satellite communications market reached close to 338,000 terminals, \$953 million in revenue at the satellite operator level and \$1.7 billion in revenue at the service provider level. The value of the maritime satcom market will continue to grow over the next decade, with a CAGR of 5% in terminals and revenue over the 10-year period. Ever-increasing data communications needs and the massive launch of new generation High Throughput Satellite (HTS) systems are expected to drive growth.

The collapse in oil prices and the global oversupply in the merchant sector, which particularly affected bulkers, have continued to negatively impact the maritime sector overall in 2016, resulting in a number of vessels decommissioning. However, demand for maritime satellite communications continued to grow driven by increasing operational communications needs, as opposed to crew communications a few years ago. Even though crew communications still represent the vast majority of a ship's consumption, vessels' operators are increasingly interested in big data-driven applications that improve operational efficiency. As a result, the number of VSAT terminals grew by 9% in 2015 to reach more than 16,000 commercial active terminals at year-end. A total of 8.5 Gbps of C-, Ku- and Ka-band capacity was used for maritime VSAT business, compared to less than 2 Gbps in 2010.

2016 was an important milestone for maritime satellite communications. It marked the entry into service of HTS satellites with a major maritime focus, with the entry into commercial operation of Inmarsat Global Xpress and Telenor's Thor 7 satellite, in addition to the launch of the first two Epic satellites. A number of additional HTS satellites will be launched in the coming years, with maritime satellite capacity expected to reach ~680 Gbps by 2020. This will result in a significant decrease in capacity prices which, along with innovations at the antenna level with the entry into service of flat-panel antennas in 2017, will drive demand for more bandwidth-hungry applications such as big data analytics and video streaming applications.

Regarding MSS services, competition and migration to VSATs will continue on large vessels. However, the development of smaller and cheaper MSS broadband terminals covering basic communications needs of small vessels will open up a new market for MSS broadband. This low-ARPU yet high-volume vertical market is expected to be the main growth driver for MSS services. Consolidation in the sector is expected to continue and will benefit service providers with higher purchasing power and economies of scale. We will see consolidation among both maritime players (as demonstrated by the recent acquisition of CapRock by SpeedCast) and other mobility verticals (such as GEE's acquisition of EMC).

ABOUT PROSPECTS FOR MARITIME SATELLITE COMMUNICATIONS

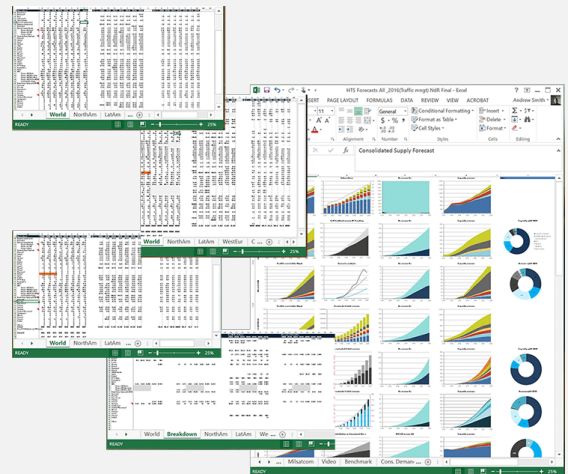
The report provides an in-depth view of the **sector dynamics, analysis and forecasts** for the maritime satcom market. Five comprehensive sections give a detailed analysis of trends and prospects within the major addressable maritime market segments.

EXTENSIVE FIGURES & ANALYSIS FOR THE COMING DECADE

All Euroconsult reports have, at their core, data derived from over 30 years of tracking all levels of the satellite/space value chain. To this we add dozens of dedicated industry interviews each year, along with the continual refinement of our data models, and the collection and interpretation of company press releases and financial filings. Our consultants have decades of experience interpreting and analyzing our proprietary databases in light of the broader value chain.

When you purchase research from Euroconsult, you receive thousands of data points and the expert interpretation of what this means for specific verticals and sectors of the satellite value chain, including forecasts based on years of data and highly refined models.

This report contains thousands of data points.



STRATEGIC ISSUES & FORECASTS

- ✓ Maritime satellite infrastructure revenues by technology
- ✓ MSS terminals by application
- ✓ VSAT terminals by frequency band
- ✓ Service providers' revenues
- ✓ Equipment sales
- ✓ Satellite transponder usage
- ✓ Available maritime Ku-band satellite resources

MARKET DYNAMICS & VALUE CHAIN

- ✓ Maritime satcom industry value chain
- ✓ FSS & MSS operators
- ✓ Maritime VSAT & MSS service providers
- ✓ VSAT & MSS equipment manufacturers
- ✓ Impact of international regulatory authorities

ADDRESSABLE MARITIME MARKET ANALYSIS

- ✓ Merchant Shipping
- ✓ Fishing
- ✓ Passenger Ships
- ✓ Leisure Vessels
- ✓ Offshore

A MUST READ FOR:

- ✓ MSS & FSS satellite operators
- ✓ Equipment manufacturers
- ✓ Satellite manufacturers
- ✓ Service providers
- ✓ Banks & investors
- ✓ Government agencies

TABLE OF CONTENTS

STRATEGIC ISSUES & FORECASTS

- > The maritime satellite communications market in 2015
- > Maritime MSS: The legacy maritime services
- > Maritime VSAT as a major growth driver
- > Most of the shipping routes are now covered by satellite capacity
- > Large number of Ku- and Ka-band capacity will come online
- > Four types of applications to drive satcom usage in the future
- > Market forecasts to 2025
- > Market forecasts to 2025 – Vertical markets
- > Market forecasts to 2025 – VSAT capacity demand by region

MARKET DYNAMICS & VALUE CHAIN

- > The MSS and VSAT competition
- > Inmarsat as the market leader
- > The rise of HTS capacity over maritime regions
- > Service providers play a key role in the value chain
- > Maritime VSAT service providers' market share in 2015
- > Consolidation in the VSAT market
- > Equipment manufacturers
- > Regulations
- > Regulations acting as both a driver and an inhibitor

MERCHANT SHIPPING

- > Addressable market
- > Emerging countries dominate the market
- > Regional trends
- > Different traffic patterns for different types of vessels
- > World merchant vessel traffic
- > The largest maritime satcom market
- > Growth drivers – Crew welfare and ship operations
- > Growth drivers – Regulation and the “Smart Ship”
- > Market forecasts

PASSENGER SHIPS

- > Addressable market
- > Cruise ships
- > Regulations
- > Satcom use on passenger ships
- > Solutions and service providers
- > Forecasts for the passenger ship market

TABLE OF CONTENTS

LEISURE VESSELS

- > Addressable market
- > A seasonal market
- > A highly regional market
- > The charter market
- > Extremely demanding customers
- > Regulations
- > Market forecasts

OFFSHORE MARKET

- > Addressable market
- > Drilling rigs market
- > Offshore production platforms
- > Offshore vessels
- > Satcom usage in the offshore market
- > Satcom's strong competition from other technologies
- > Evolution of market consolidation in the offshore market
- > MSS and VSAT solutions in the offshore market
- > Market drivers
- > Forecasts for the offshore market

FISHING MARKET

- > Addressable market
- > Industrialized fishing vessels
- > Regulations
- > Satcom use in the fishing market
- > MSS solutions in the fishing market
- > VSAT solutions in the fishing market
- > Regulations play a key role in satcom development
- > Market drivers
- > Forecasts for the fishing market





ORDER FORM

(1/2) (COPYRIGHT ON REVERSE SIDE IS MANDATORY)

PROSPECTS FOR MARITIME SATELLITE COMMUNICATIONS , 2016 Edition

Please complete this form and return by e-mail to reports@euroconsult-ec.com **or** by fax to + 33 1 48 05 54 39. If you have any questions about ordering, would like to enquire about specific corporate licenses or would like to order for multiple locations and/or legal entities, please contact reports@euroconsult-ec.com or call +1 (514) 903-1001. **All prices are in Euros. All orders must be prepaid** (if not possible, please contact us). Applicable VAT taxes will be added in Euros.

Product		Price	Total
eFiles/Single User license (PDF/PPT/XLS files)	X	€ 4,500	
Additional license(s) for eFiles	Qty:	€ 450	
Enterprise license	X	€ 11,250	
VAT if applicable companies based in France must add VAT 20%			
Product Total in Euros (€)			_____

3 **Accounting Dept. E-mail:** _____

4 **Invoicing Address** (Please use capital letters)

First name _____

Last name _____

Company name _____

Occupation _____

Address _____

Zip Code _____ City _____

State _____ Country _____

Phone _____ Fax _____

E-mail _____

2 **Payment Information**

Company VAT n° (required for all companies) _____

Credit Card

VISA Mastercard AMEX

Cardholder Name (as it appears on card) _____

Cardholder Number _____

Expiration Date (month/year) | Cryptogram (last 3 digits on the back) _____

Cardholder's Signature _____

Bank Transfer
(All bank charges are to be paid by the sender)

to EUROCONSULT, please NOTE IMPERATIVELY:
Swift-BIC code: CM CI FR PP
IBAN: FR76 3006 6109 1500 0200 6760 132
Account n° 00020067601
CIC Nanterre Enterprises, 105 Rue des 3 Fontanot, 92022 Nanterre Cedex, France.

Cheque or Money Order Enclosed
Payable to Euroconsult:
86 Blvd. Sebastopol, 75003 Paris, France

5 **Delivery Address** (If different from invoicing address)

First name _____

Last name _____

Company name _____

Occupation _____

Address _____

Zip Code _____ City _____

State _____ Country _____

Phone _____ Fax _____

E-mail _____



COPYRIGHT AGREEMENT

FOR THE SOFTCOPY AND/OR ELECTRONIC FILES OF:

PROSPECTS FOR MARITIME SATELLITE COMMUNICATIONS , 2016 Edition

Please complete and return the order form & copyright agreement by e-mail to reports@euroconsult-ec.com or fax to + 33 1 48 05 54 39. Each team user must sign a copy of the copyright agreement. Please complete the information below for each user of the research report files.

Please read this license agreement carefully.
By using the research report files, you are agreeing
to adhere by the terms of this license.

SINGLE USER LICENSE

a) This product is licensed only for a team working together on a project, working on the same site in the same company. The person signing this agreement is responsible for the use of the research files. Euroconsult must be informed of all users of the research files before use. The information may not be shared with other company sites or other work teams in the same or other companies in any form, neither photocopied nor reproduced, including for internal use. The content of the research files may not be stored, transferred, or copied to any type of electronic storage device.

b) No part or extract, in any format whatsoever, must be transmitted to any other organization, including cooperative entities and subsidiaries. All licenses purchased at the additional license price are for internal use only by the organization ordering (same company name, same location as indicated on original order form). Euroconsult must be informed of the users of the additional licenses purchased.

c) All data or information extracted from the research files for use in other documents must rightfully use the copyright reference: *Euroconsult, name of report, year*. Before any other use of the information contained in the research files, prior written consent by Euroconsult is required.

d) This Agreement shall in all respects be governed by the laws of the Republic of France. The user agrees that the proper jurisdiction and forum for the resolution of any claim arising under this license shall be at Euroconsult's sole option.

Research Report User

First name _____

Last name _____

Company _____

Occupation _____

E-mail _____

Date _____

SIGNATURE: _____

Research Report User (For additional user)

First name _____

Last name _____

Company _____

Occupation _____

E-mail _____

Date _____

SIGNATURE: _____