# Vessel Traffic Management Market – Global Industry Size, Share, Trends, Opportunity, and Forecast Segmented By Component (Equipment, Solutions, Services), By System (Port Management Information Systems, Maritime Distress Safety Systems, River Information Systems, Aton Management & Health Monitoring Systems), By End User (Commercial, Defense), By Region & Competition, 2019-2029F

https://marketpublishers.com/r/VC3D1F08D1ACEN.html

Date: July 2024
Pages: 185
Price: US$ 4,900.00 (Single User License)
ID: VC3D1F08D1ACEN

## Abstracts

Global Vessel Traffic Management Market was valued at USD 5.25 Billion in 2023 and is anticipated to project robust growth in the forecast period with a CAGR of 7.81% through 2029. Vessel traffic management (VTM) is essential for managing traffic in busy maritime areas such as ports, harbors, and coastal regions. The increasing volume of sea traffic, driven by a rise in trade activities, is expected to propel the growth of the vessel traffic management market. Additionally, the adoption of stringent safety and environmental regulations by international bodies such as the International Maritime Organization (IMO) is pushing maritime operators to implement sophisticated traffic management solutions to ensure compliance and enhance operational safety. Technological advancements, including the integration of artificial intelligence (AI), machine learning (ML), and big data analytics, are further propelling market growth by providing real-time monitoring, predictive analytics, and improved decision-making capabilities. Significant investments in port infrastructure and modernization efforts are boosting the demand for VTM systems, facilitating better coordination, reducing congestion, and preventing collisions in high-traffic areas.

Key Market Drivers

Safety and Security Requirements

Safety and security requirements play a pivotal role in driving the Global Vessel Traffic Management market, making it an essential component of modern maritime operations. The maritime domain, characterized by its vastness and complexity, demands a robust and efficient system to ensure the safety of vessels, protect coastal areas, and respond to emergencies. This driving force can be explained through several key facets, First and foremost, the safety of vessels and those who navigate them is of paramount importance. VTM provides real-time vessel tracking, collision avoidance, and navigational assistance, reducing the risk of accidents, groundings, and collisions. In the event of emergencies, such as severe weather conditions or technical failures, VTM aids in coordinating search and rescue operations efficiently. This capability saves lives, mitigates human suffering, and minimizes economic losses.

Compliance with international maritime regulations is a critical driver of the VTM market. Regulatory bodies like the International Maritime Organization (IMO) have established stringent standards, including the SOLAS and ISPS codes, to ensure maritime safety and security. VTM helps vessel operators and maritime authorities adhere to these regulations, avoiding potential penalties and ensuring the safe passage of vessels through international waters. The global increase in maritime traffic, driven by the growth of international trade, necessitates efficient vessel traffic management. VTM assists in managing congestion and facilitating the smooth flow of vessels within busy ports and waterways, thereby reducing the risk of accidents and delays. This efficiency not only enhances safety but also contributes to the economic well-being of nations dependent on maritime trade.

VTM systems continually benefit from technological advancements, including the integration of Automatic Identification System (AIS), radar, satellite communication, and advanced data analytics. These technologies enhance the precision and effectiveness of VTM, making it a more attractive solution for maritime authorities and operators. This digital transformation aligns with the growing need for data-driven decision-making in the maritime sector, further emphasizing safety and security. In conclusion, the VTM market thrives on the imperative of ensuring safety and security in the maritime domain. It addresses a multitude of challenges, from preventing accidents and securing coastal areas to complying with international regulations and facilitating economic growth through efficient maritime traffic management. Safety and security requirements are foundational drivers propelling the continuous evolution and adoption of Vessel Traffic Management on a global scale.

Increasing Maritime Traffic

The rapid growth of maritime traffic across the globe is a major driving force behind the expansion of the Global Vessel Traffic Management market. As the world becomes increasingly interconnected through international trade, the movement of goods and people by sea has surged, creating a heightened need for effective maritime traffic management. This trend has several key implications for the VTM market, Traffic Congestion Management: The surge in maritime traffic has resulted in congested waterways and ports, increasing the risk of accidents and delays. VTM systems are essential in mitigating these issues by providing real-time data and analytics that help manage vessel movements efficiently. This not only improves safety but also enhances the overall flow of goods, reducing delays and economic losses.

Safety and Collision Avoidance: With more vessels navigating the world's oceans, the risk of collisions and accidents at sea rises. VTM plays a crucial role in enhancing safety by providing comprehensive information about vessel positions, routes, and conditions. It helps prevent accidents and ensures the secure passage of ships, thereby safeguarding lives, property, and the environment. Compliance with Regulations: The increasing maritime traffic is accompanied by stricter international maritime regulations aimed at safeguarding the environment and ensuring vessel safety. VTM is instrumental in helping vessels and maritime authorities comply with these regulations, such as the International Maritime Organization's (IMO) SOLAS and MARPOL conventions, by providing essential data and oversight.

Emergency Response and Search and Rescue: As maritime traffic grows, so does the demand for rapid and coordinated responses to emergencies, such as shipwrecks, oil spills, and medical evacuations. VTM systems aid in these efforts by providing real-time vessel tracking and communication capabilities, thereby improving the chances of successful search and rescue operations. Optimizing Port Operations: Ports are critical nodes in the global supply chain, and they are experiencing increased traffic due to growing maritime trade. VTM helps optimize port operations by coordinating the arrivals and departures of vessels, optimizing berthing and cargo handling, and reducing the turnaround time of ships. This efficiency is a key driver for both port authorities and shipping companies.

Economic Growth: As international trade continues to expand, effective maritime transportation is vital for the economic growth of nations. The ability to handle increased maritime traffic efficiently is directly linked to a country's economic prosperity, and VTM

contributes to this by enhancing the overall efficiency of maritime operations. In conclusion, the escalating maritime traffic is a significant driver for the global Vessel Traffic Management market. VTM solutions are essential tools for managing the challenges and opportunities presented by the growth in shipping and trade. They contribute to the safety, efficiency, and sustainability of maritime operations, making them indispensable in the modern world of global commerce.

Key Market Challenges

High Implementation Costs

High implementation costs represent a significant challenge that has the potential to hinder the growth and adoption of the Global Vessel Traffic Management market. While VTM offers numerous benefits in terms of safety, security, and efficiency in maritime operations, the initial investment required can be a barrier for many ports, coastal regions, and nations. Several factors contribute to the high implementation costs, Infrastructure Development: The establishment of VTM infrastructure demands significant investment. This includes the installation of radar systems, AIS (Automatic Identification System) equipment, communication networks, and control centers. In remote or less-developed areas, building this infrastructure can be particularly expensive due to the need for basic infrastructure like power and connectivity.

Hardware and Software Costs: The procurement of the necessary hardware and software components, such as radars, cameras, monitoring systems, and data analytics software, can be costly. Additionally, the regular updating and maintenance of these components incur ongoing expenses. Skilled Personnel: VTM systems require skilled personnel for their operation and maintenance. Recruiting, training, and retaining qualified staff adds to the operational costs. In regions with a shortage of experienced personnel, these costs can rise significantly.

Data Management: The collection, storage, and analysis of vast amounts of data generated by VTM systems can be resource intensive. Data management costs include not only the technology for data handling but also the personnel needed for data analysis and reporting.

Regulatory Compliance: Complying with international and national maritime regulations, such as those outlined by the International Maritime Organization (IMO), can be costly. Maintaining VTM systems to meet regulatory standards and adapting to changes in regulations require ongoing investments.

Integration with Existing Infrastructure: In many cases, VTM systems need to be integrated with existing maritime infrastructure, such as navigation aids and communication systems. Integration can be complex and costly, requiring expertise in both maritime and technology domains. Geographical Factors: The geographical location of VTM installations can affect costs. Remote areas may require more extensive infrastructure development, increased transportation costs, and logistical challenges. Economic Factors: Economic factors like currency exchange rates and inflation can influence the overall cost of VTM implementation. Economic instability in some regions can further exacerbate the financial burden of these systems.

Data Security and Privacy Concerns

Data security and privacy concerns are increasingly significant challenges that have the potential to hamper the growth and adoption of the Global Vessel Traffic Management market. As VTM systems become more reliant on digital technologies and data analytics, they face various issues related to safeguarding sensitive information, compliance with privacy regulations, and mitigating cybersecurity risks. Cybersecurity Risks: VTM systems, like any digitally connected infrastructure, are vulnerable to cyberattacks. Malicious actors could target these systems to disrupt maritime operations, gain unauthorized access to sensitive data, or engage in acts of cyberterrorism. Protecting against these threats requires robust cybersecurity measures and constant vigilance.

Data Breaches: Data breaches within VTM systems can lead to the exposure of sensitive information, including vessel positions, routes, and cargo details. Such data can be exploited for various criminal activities, including piracy, smuggling, and illegal fishing, posing significant threats to maritime security. Compliance with Privacy Regulations: Data collected and processed by VTM systems often includes personal information about seafarers and vessel operators. This data may be subject to privacy regulations, such as the General Data Protection Regulation (GDPR) in the European Union. Ensuring compliance with these laws can be complex and costly.

Safeguarding Maritime Assets: VTM systems often rely on advanced technologies like Automatic Identification System (AIS) data and radar. Safeguarding the integrity of these systems is essential, as tampering or manipulation of data can lead to accidents, collisions, or other safety issues. Secure Data Sharing: VTM systems often require the exchange of data with various stakeholders, including port authorities, coastal guards, and international organizations. Ensuring the secure and controlled sharing of data is

crucial for maintaining the confidentiality and integrity of information.

Resource Constraints: Smaller or less economically developed regions may struggle to allocate the necessary resources for robust cybersecurity measures and data protection. This can result in disparities in data security and privacy practices across different maritime areas.

Public Trust: Ensuring public trust in VTM systems is essential. High-profile data breaches or cyberattacks on VTM infrastructure can undermine confidence in the safety and security of maritime operations, potentially leading to hesitancy in adopting or maintaining VTM systems. To address these challenges, VTM stakeholders, including governments, maritime organizations, and technology providers, must prioritize data security and privacy. This involves implementing robust cybersecurity measures, conducting regular security assessments, and investing in data encryption and secure communication protocols. Collaboration between maritime authorities, data protection agencies, and the technology sector is crucial for developing standardized security practices and ensuring that data security and privacy concerns do not hinder the potential benefits of VTM systems in enhancing maritime safety and efficiency. By proactively addressing these issues, the VTM market can continue to grow while maintaining the highest standards of data protection and cybersecurity.

Limited Coverage in Remote Areas

The limited coverage of Vessel Traffic Management in remote and less-traveled maritime areas presents a significant challenge that can hamper the growth and effectiveness of the global VTM market. While VTM systems have become increasingly advanced and widespread in major maritime hubs, remote areas often remain underserved due to a variety of reasons, and this issue has far-reaching implications, Safety Concerns: Remote areas, such as vast stretches of open ocean or less-frequented waterways, are not exempt from maritime accidents, piracy, or environmental incidents. The absence of VTM coverage in these regions can result in delayed response times to emergencies, potentially leading to more extensive damage, loss of life, and environmental harm.

Security Vulnerabilities: Remote regions can be more vulnerable to security threats, such as piracy, illegal fishing, or smuggling. The lack of surveillance and monitoring in these areas can make it easier for illicit activities to go undetected, compromising maritime security. Economic Isolation: Neglecting VTM coverage in remote areas can isolate these regions economically. Many remote locations are reliant on maritime trade

for their economic well-being, and the absence of VTM may hinder their integration into global supply chains, potentially limiting growth opportunities.

Environmental Impact: Remote areas often have unique and fragile ecosystems. An oil spill, maritime accident, or other environmental incident can have severe and lasting consequences. VTM systems play a crucial role in preventing and mitigating such incidents, reducing the environmental impact.

Resource Allocation: Limited resources, both financial and human, are frequently allocated to remote areas for VTM coverage. Developing and maintaining VTM infrastructure in remote regions can be costlier due to challenging logistics, sparse populations, and lack of readily available infrastructure. Technological Challenges: Establishing VTM systems in remote areas can be technically challenging, especially when it comes to providing power, communication networks, and data connectivity. The lack of infrastructure in these regions can hinder the deployment of advanced VTM solutions.

International Maritime Trade: Remote areas are not excluded from international trade routes. Ignoring these areas in VTM coverage can disrupt the flow of goods and potentially increase shipping costs, affecting global trade and supply chains. To address the challenge of limited VTM coverage in remote areas, there's a need for greater investment in infrastructure and technology. This includes extending communication networks, providing training for personnel, and ensuring international cooperation to cover remote regions efficiently. Additionally, the development of cost-effective, scalable VTM solutions suitable for remote areas is crucial to bridge the safety and security gap in these regions. VTM providers, governments, and international maritime organizations should work together to overcome the challenges associated with limited VTM coverage and ensure comprehensive maritime safety, security, and efficiency.

Key Market Trends

Integration of Advanced Technologies

The integration of advanced technologies is a driving force behind the growth of the Global Vessel Traffic Management market. These technologies are revolutionizing the maritime industry by enhancing safety, security, and efficiency in vessel traffic management. Several key factors underscore the significance of advanced technology integration in the VTM market, AI and Machine Learning: Advanced algorithms and machine learning models are being employed to analyze data from various sources,

including radar, Automatic Identification System (AIS), and IoT sensors. This enables VTM systems to provide predictive analytics, improving situational awareness and decision-making.

Big Data Analytics: The massive volume of data generated in maritime operations is being harnessed through big data analytics. VTM systems can process and interpret this data in real time, identifying trends, anomalies, and potential risks. IoT Sensors: The Internet of Things plays a crucial role by equipping vessels, buoys, and coastal infrastructure with sensors that collect real-time data. These sensors provide critical information for VTM, enabling better traffic management and monitoring.

Cloud Computing: Cloud-based solutions are offering scalability and flexibility to VTM systems. They facilitate remote access, data sharing, and cost-effective data storage, making it easier for maritime authorities to manage and upgrade their systems. Remote Monitoring: Advanced technologies allow for remote monitoring and diagnostics of VTM infrastructure, reducing downtime and lowering maintenance costs.

Cybersecurity Measures: As VTM systems become more connected and data-driven, robust cybersecurity measures are essential. The integration of advanced security technologies helps protect these systems from cyber threats and ensures the integrity of maritime operations. Environmental Monitoring: Advanced technology enables the monitoring of environmental parameters, aiding in compliance with stringent regulations. VTM can detect oil spills, monitor emissions, and contribute to a more environmentally responsible maritime industry.

Autonomous Navigation: VTM is adapting to the rise of autonomous vessels by developing systems that ensure the safe integration of these vessels into maritime traffic. This advancement aligns with the trend of automation in the maritime sector. The integration of advanced technologies not only enhances the safety and security of maritime operations but also contributes to improved operational efficiency, cost savings, and reduced environmental impact. As the maritime industry continues to embrace these innovations, the VTM market is poised for sustained growth and innovation, ensuring the seamless and secure flow of vessels in our global waterways.

Digitalization and IoT

Digitalization and the Internet of Things (IoT) are playing a pivotal role in driving the Global Vessel Traffic Management market. The maritime industry is rapidly embracing digital technologies to enhance safety, efficiency, and environmental sustainability, and

VTM is at the forefront of this transformation. Several key factors demonstrate how digitalization and IoT are influencing the VTM market, Real-Time Data: IoT sensors and devices on vessels and coastal infrastructure collect and transmit real-time data to VTM systems. This data includes vessel positions, weather conditions, and equipment status, providing valuable information for traffic management and decision-making.

Enhanced Situational Awareness: Digitalization enables VTM systems to offer comprehensive situational awareness. By integrating data from various sources, including AIS, radar, and IoT sensors, VTM operators can monitor maritime traffic, track vessel movements, and identify potential risks more effectively. Predictive Maintenance: IoT sensors on VTM equipment enable predictive maintenance, reducing downtime and ensuring optimal system performance. This results in cost savings and improved system reliability.

Efficient Route Optimization: Digital technologies, including machine learning and AI, empower VTM to optimize vessel routes and speeds, reducing fuel consumption and greenhouse gas emissions. This not only benefits the environment but also improves the cost-efficiency of maritime operations. Safety and Security: IoT devices enhance safety and security by offering data for collision avoidance, navigation assistance, and monitoring of restricted zones. They also contribute to the rapid detection of security threats and emergencies.

Environmental Compliance: Digitalization supports the monitoring and enforcement of environmental regulations, such as emissions control and oil spill detection, making it easier for VTM systems to ensure compliance. Remote Monitoring: IoT enables remote monitoring of VTM infrastructure and equipment, reducing the need for on-site maintenance and enabling timely responses to technical issues. The convergence of digitalization and IoT with VTM is driving increased adoption and the development of more advanced, data-driven solutions. As the maritime industry continues to embrace these technologies, the VTM market will play a crucial role in ensuring safer, more efficient, and environmentally sustainable maritime operations on a global scale.

Segmental Insights

End User Insights

Commercial held the largest share of Vessel Traffic Management market in 2023, driven by the escalating demand for efficient maritime operations, increased global trade activities, and the need for enhanced safety and security measures in busy commercial

waterways. The commercial maritime sector encompasses a wide array of activities including cargo shipping, oil and gas transportation, and passenger ferry operations, all of which contribute significantly to the demand for advanced VTM solutions.

One of the primary factors fueling the dominance of the commercial segment is the exponential growth in global trade. As international trade continues to expand, the volume of goods transported via sea routes is increasing. This surge necessitates the adoption of sophisticated VTM systems to manage the high density of vessel traffic in major shipping lanes and ports. Advanced VTM solutions help in optimizing route planning, reducing congestion, and preventing collisions, thereby ensuring the smooth and efficient movement of commercial vessels.

The commercial shipping industry is increasingly prioritizing safety and compliance with stringent international regulations. Organizations such as the International Maritime Organization (IMO) have established rigorous standards for maritime safety and environmental protection, which commercial shipping companies must adhere to. VTM systems play a crucial role in helping these companies meet regulatory requirements by providing real-time monitoring, tracking, and reporting capabilities. This not only enhances safety but also ensures compliance with international maritime laws, thereby driving the adoption of VTM systems in the commercial sector.

Technological advancements are another significant driver of market growth in the commercial segment. The integration of technologies such as artificial intelligence (AI), machine learning (ML), and big data analytics into VTM systems is revolutionizing the way maritime traffic is managed. These technologies enable the processing of vast amounts of data in real-time, providing actionable insights and predictive analytics that enhance decision-making processes. For commercial operators, this translates into improved operational efficiency, reduced fuel consumption, and minimized operational costs, all of which are critical for maintaining competitive advantage in a highly dynamic market.

The commercial sector is witnessing substantial investments in upgrading port infrastructure to accommodate larger vessels and higher traffic volumes. Ports are increasingly adopting advanced VTM systems to handle the growing complexity of maritime operations. These systems facilitate better coordination and communication among various stakeholders, including port authorities, shipping companies, and coast guards, ensuring seamless operations and enhanced maritime safety.

The rise of e-commerce and the corresponding increase in demand for fast and reliable

shipping services are further bolstering the need for efficient VTM solutions. As consumer expectations for quick delivery rise, shipping companies are under pressure to optimize their operations, making advanced VTM systems indispensable. The commercial segment's dominance in the VTM market is driven by the need for efficient and safe maritime operations amid growing global trade, regulatory compliance requirements, technological advancements, infrastructure investments, and the e-commerce boom. These factors collectively underscore the importance of advanced VTM solutions in maintaining the efficiency, safety, and competitiveness of the commercial maritime sector.

Regional Insights

Asia Pacific dominated the market in 2023, driven by a combination of economic growth, strategic maritime significance, and robust investment in technological advancements. The region's economic dynamism, particularly in countries such as China, Japan, South Korea, and India, has led to a massive increase in maritime trade activities. These nations are pivotal hubs for global import and export, handling a substantial portion of the world's container traffic. This surge in maritime commerce necessitates the implementation of advanced VTM systems to ensure the safe and efficient management of vessel movements. The strategic importance of Asia Pacific's maritime routes, including the South China Sea and the Strait of Malacca, further underscores the need for sophisticated traffic management systems. These waterways are among the busiest globally, and their security and efficiency are critical for maintaining smooth global trade flows. Consequently, the demand for VTM solutions that can effectively monitor, control, and optimize vessel traffic in these congested and strategically vital routes is burgeoning.

The region is witnessing significant investments in maritime infrastructure, with governments and private sectors prioritizing the modernization of their VTM systems. The integration of cutting-edge technologies such as artificial intelligence (AI), machine learning (ML), and big data analytics into these systems is becoming increasingly prevalent. These technologies enhance the capabilities of VTM systems by providing real-time monitoring, predictive analytics, and improved decision-making processes, which are crucial for managing the complexities of high-traffic zones and ensuring maritime safety. Additionally, the Asia Pacific region is experiencing a growing focus on enhancing maritime safety and security regulations. Governments are implementing stringent policies and standards to mitigate risks associated with increased maritime activities, driving the adoption of advanced VTM solutions. These regulatory frameworks aim to ensure compliance with international maritime safety norms, further propelling

the market growth.

The Asia Pacific region's expansive coastline and numerous ports necessitate efficient VTM systems to manage the diverse and extensive maritime traffic. Ports in this region are continually upgrading their traffic management systems to handle the increasing volume of maritime traffic efficiently and to prevent accidents and environmental hazards. This comprehensive approach to modernizing port infrastructure and enhancing VTM capabilities is a significant factor contributing to the region's dominance in the global VTM market. In summary, the convergence of economic growth, strategic maritime significance, technological advancements, regulatory enhancements, and extensive coastline infrastructure collectively positions Asia Pacific as a dominant force in the global Vessel Traffic Management market during the forecast period.

Key Market Players

Kongsberg Gruppen ASA

Saab Group

Thales Group

Tokyo Keiki Inc.

Singapore Technologies Engineering Ltd

L3Harris Technologies, Inc.

Wartsila Corporation

Frequentis AG

Radio Holland Group B.V.

Report Scope:

In this report, the Global Vessel Traffic Management Market has been segmented into the following categories, in addition to the industry trends which have also been detailed

below:

· Vessel Traffic Management Market, By Component:

Equipment

Solutions

Services

· Vessel Traffic Management Market, By System:

Port Management Information Systems

Maritime Distress Safety Systems

River Information Systems

Aton Management & Health Monitoring Systems

· Vessel Traffic Management Market, By End User:

Commercial

Defense

· Vessel Traffic Management Market, By Region:

North America

United States

Canada

Mexico

Asia-Pacific

China

India

Japan

South Korea

Indonesia

Europe

Germany

United Kingdom

France

Russia

Spain

South America

Brazil

Argentina

Middle East & Africa

Saudi Arabia

South Africa

Egypt

UAE

Israel

Competitive Landscape

Company Profiles: Detailed analysis of the major companies presents in the Global Vessel Traffic Management Market.

Available Customizations:

Global Vessel Traffic Management Market report with the given market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

# Contents

## 1. PRODUCT OVERVIEW

1.1. Market Definition
1.2. Scope of the Market
1.3. Markets Covered
1.4. Years Considered for Study
1.5. Key Market Segmentations

## 2. RESEARCH METHODOLOGY

2.1. Objective of the Study
2.2. Baseline Methodology
2.3. Key Industry Partners
2.4. Major Association and Secondary Sources
2.5. Forecasting Methodology
2.6. Data Triangulation & Validation
2.7. Assumptions and Limitations

## 3. EXECUTIVE SUMMARY

## 4. VOICE OF CUSTOMERS

## 5. GLOBAL VESSEL TRAFFIC MANAGEMENT MARKET OUTLOOK

5.1. Market Size & Forecast
  5.1.1. By Value
5.2. Market Share & Forecast
  5.2.1. By Component (Equipment, Solutions, Services)
  5.2.2. By System (Port Management Information Systems, Maritime Distress Safety Systems, River Information Systems, Aton Management & Health Monitoring Systems)
  5.2.3. By End User (Commercial, Defense)
  5.2.4. By Region
5.3. By Company (2023)
5.4. Market Map

## 6. NORTH AMERICA VESSEL TRAFFIC MANAGEMENT MARKET OUTLOOK

7.3. Asia-Pacific: Country Analysis

7.3.1. China Vessel Traffic Management Market Outlook

7.3.1.1. Market Size & Forecast

7.3.1.1.1. By Value

7.3.1.2. Market Share & Forecast

7.3.1.2.1. By Component

7.3.1.2.2. By System

7.3.1.2.3. By End User

7.3.2. India Vessel Traffic Management Market Outlook

7.3.2.1. Market Size & Forecast

7.3.2.1.1. By Value

7.3.2.2. Market Share & Forecast

7.3.2.2.1. By Component

7.3.2.2.2. By System

7.3.2.2.3. By End User

7.3.3. Japan Vessel Traffic Management Market Outlook

7.3.3.1. Market Size & Forecast

7.3.3.1.1. By Value

7.3.3.2. Market Share & Forecast

7.3.3.2.1. By Component

7.3.3.2.2. By System

7.3.3.2.3. By End User

7.3.4. South Korea Vessel Traffic Management Market Outlook

7.3.4.1. Market Size & Forecast

7.3.4.1.1. By Value

7.3.4.2. Market Share & Forecast

7.3.4.2.1. By Component

7.3.4.2.2. By System

7.3.4.2.3. By End User

7.3.5. Indonesia Vessel Traffic Management Market Outlook

7.3.5.1. Market Size & Forecast

7.3.5.1.1. By Value

7.3.5.2. Market Share & Forecast

7.3.5.2.1. By Component

7.3.5.2.2. By System

7.3.5.2.3. By End User


**8. EUROPE VESSEL TRAFFIC MANAGEMENT MARKET OUTLOOK**

8.1. Market Size & Forecast

  8.1.1. By Value

8.2. Market Share & Forecast

  8.2.1. By Component

  8.2.2. By System

  8.2.3. By End User

  8.2.4. By Country

8.3. Europe: Country Analysis

  8.3.1. Germany Vessel Traffic Management Market Outlook

    8.3.1.1. Market Size & Forecast

      8.3.1.1.1. By Value

    8.3.1.2. Market Share & Forecast

      8.3.1.2.1. By Component

      8.3.1.2.2. By System

      8.3.1.2.3. By End User

  8.3.2. United Kingdom Vessel Traffic Management Market Outlook

    8.3.2.1. Market Size & Forecast

      8.3.2.1.1. By Value

    8.3.2.2. Market Share & Forecast

      8.3.2.2.1. By Component

      8.3.2.2.2. By System

      8.3.2.2.3. By End User

  8.3.3. France Vessel Traffic Management Market Outlook

    8.3.3.1. Market Size & Forecast

      8.3.3.1.1. By Value

    8.3.3.2. Market Share & Forecast

      8.3.3.2.1. By Component

      8.3.3.2.2. By System

      8.3.3.2.3. By End User

  8.3.4. Russia Vessel Traffic Management Market Outlook

    8.3.4.1. Market Size & Forecast

      8.3.4.1.1. By Value

    8.3.4.2. Market Share & Forecast

      8.3.4.2.1. By Component

      8.3.4.2.2. By System

      8.3.4.2.3. By End User

  8.3.5. Spain Vessel Traffic Management Market Outlook

    8.3.5.1. Market Size & Forecast

      8.3.5.1.1. By Value

## 11. MARKET DYNAMICS

## I would like to order

Product name: Vessel Traffic Management Market – Global Industry Size, Share, Trends, Opportunity, and Forecast Segmented By Component (Equipment, Solutions, Services), By System (Port Management Information Systems, Maritime Distress Safety Systems, River Information Systems, Aton Management & Health Monitoring Systems), By End User (Commercial, Defense), By Region & Competition, 2019-2029F

Product link: https://marketpublishers.com/r/VC3D1F08D1ACEN.html

Price: US$ 4,900.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/VC3D1F08D1ACEN.html

## To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

**All fields are required

Custumer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below
and fax the completed form to +44 20 7900 3970