Autonomous Underwater Vehicles Market by Type, Technology and by Application - Global Forecast to 2022

Description: "Autonomous underwater vehicle (AUV) market projected to grow at a significant rate"

The AUV market is expected to grow from USD 211.8 million in 2016 to USD 497.9 million by 2022, at a CAGR of 15.31% during the forecast period. The high demand for autonomous underwater vehicle worldwide by the countries for monitoring their sea borders and by the oil & gas industries is a key factor responsible for the growth of the AUV market. However, stringent government regulations on using AUVs in the countries such as United States is a key factor that is restraining the growth of the autonomous underwater vehicles market.

"Search and salvage operations application projected to grow at the highest rate"

The market for the search and salvage operations application is expected to grow at the highest rate among all the applications. Incidences such as Malaysia Airlines flight MH-370 crash have been a vital factor for driving the growth of the AUV market for search and salvage operations. AUVs are expected to be adopted as an important tool for carrying out search and salvage operations in cases such as airplane crash in oceans, crash of warships, and breakdown of other commercial water vehicles.

"Imaging technology is estimated to grow at the highest rate between 2016 and 2022"

Imaging systems on AUVs are capable of capturing the pictures of the sea bed and the surrounding habitat which help the researchers in their oceanography or habitat research studies. Along with this, the growing awareness about the ability of the imaging systems to provide the exact information such as color and size of the objects present within the area under survey is one of the key factors which propel the growth of the imaging system market.

"North America is the major region for the AUV market"

The North American market is expected to hold the largest share in 2016, where the AUVs and its related products such as launch and recovery surface platforms are gaining momentum from various applications such as military & defense, oil & gas, environment protection and monitoring, oceanography, archeology and exploration, and search and salvage operation. The market in the APAC region is expected to grow at the highest rate. In the APAC region, especially in India, the plans to boost manufacturing under the project "Make in India" is one of the key driving factors for the AUV market in APAC.

Breakdown of profile of primary participants:

- By Company Type: Tier 1 - 35%, Tier 2 - 45%, and Tier 3 - 20%
- By Designation: C-level Executives - 35%, Directors - 25%, and Others - 40%
- By Region: North America - 45%, Europe - 20%, APAC - 30%, and RoW - 5%

Major players in the AUV market are Kongsberg Maritime AS (Norway), Teledyne Gavia ehf. (Iceland), Bluefin Robotics Corporation (U.S.), ECA Group (France), Saab Group (Sweden), Fugro N.V. (Netherlands), Atlas Elektronik Group GmbH (Germany), OceanServer Technology, Inc. (U.S.), Boston Engineering Corporation (U.S.), and International Submarine Engineering Ltd. (Canada).

The report on the AUV market segments the market by type, technology, application, and geography. Depending on the depth, the market for AUVs based on type is segmented into shallow AUVs (depth up to 100 meters), medium AUVs (depth up to 1,000 meters), and large AUVs (depth above 1,000 meters). The AUV market is segmented on the basis of technology, namely, collision avoidance, communication, navigation, propulsion, and imaging.

Depending on the adoption of AUVs for various applications, the AUV market is segmented on the basis of applications, namely, military & defense, oil & gas, environmental protection and monitoring, oceanography, archeology and exploration, and search and salvage operation. Lastly, the global AUV market is segmented
into four regions, namely, North America, Europe, APAC, and RoW.

The report would help the market leaders/new entrants in this market in the following ways:

1. This report segments the AUV market comprehensively and provides the closest approximations of the overall market size and that of the subsegments across different applications and regions.
2. The report helps stakeholders to understand the pulse of the market and provides them information on key market drivers, restraints, challenges, and opportunities.
3. This report would help stakeholders to understand their competitors better and gain more insights to enhance their position in the business. The competitive landscape section includes competitor ecosystem, new product launches, partnerships, and mergers & acquisitions in the AUV market.

Contents:
1 Introduction
1.1 Objectives of the Study
1.2 Market Definition
1.3 Study Scope
1.3.1 Markets Covered
1.3.2 By Geography
1.3.3 Years Considered for the Study
1.4 Currency
1.5 Limitations
1.6 Stakeholders
2 Research Methodology
2.1 Research Data
2.1.1 Secondary Data
2.1.2 Primary Data
2.1.2.1 Key Data From Primary Sources
2.2 Market Size Estimation
2.2.1 Bottom-Up Approach
2.2.2 Top-Down Approach
2.3 Market Breakdown and Data Triangulation
2.4 Research Assumptions
3 Executive Summary
4 Premium Insights
4.1 Attractive Market Opportunities in the Autonomous Underwater Vehicles Market
4.2 North America Expected to Hold Major Share of the AUV Market in 2016
4.3 Autonomous Underwater Vehicles Market Share Analysis: By Type vs By Application Segments
4.4 AUV Market, By Type
4.5 AUV Market, By Region
5 Market Overview
5.1 Introduction
5.2 Market Segmentation
5.2.1 Autonomous Underwater Vehicles Market, By Technology
5.2.2 AUV Market, By Type
5.2.3 AUV Market, By Application
5.2.4 Autonomous Underwater Vehicles Market, By Geography
5.3 Market Evolution
5.4 Market Dynamics
5.4.1 Drivers
5.4.1.1 AUVs Meeting the Specifications for Carrying Out Active and Vigorous Research
5.4.1.2 Growing Importance of More Reliable Security Measures Across the Globe
5.4.2 Restraints
5.4.3 Opportunities
5.4.4 Challenges
5.4.4 Challenges
5.4.4.1 Challenges Associated With Technical Accuracy and Communication Protocols in Deep Underwater Survey Operations

6 Industry Trends
6.1 Introduction
6.2 Value Chain Analysis
6.3 Porter's Five Forces Analysis
6.3.1 Threat of New Entrants
6.3.2 Threat of Substitutes
6.3.3 Bargaining Power of Buyers
6.3.4 Bargaining Power of Suppliers
6.3.5 Intensity of Competitive Rivalry

7 Autonomous Underwater Vehicles Market, By Application
7.1 Introduction
7.2 Military & Defense
7.2.1 Border Security and Surveillance
7.2.2 Antisubmarine Warfare (ASW)
7.2.3 Monitoring Smuggling of Illegal Goods
7.2.4 Environmental Assessment
7.2.5 Mine Countermeasures (MCMS)
7.3 Oil & Gas
7.3.1 Pipeline Survey
7.3.2 Geophysical Survey
7.3.3 Debris/Clearance Survey
7.3.4 Baseline Environmental Assessment
7.4 Environmental Protection and Monitoring
7.4.1 Habitat Research
7.4.2 Water Sampling
7.4.3 Fishery Study
7.4.4 Emergency Response
7.5 Oceanography
7.6 Archeology and Exploration
7.7 Search and Salvage Operations

8 Autonomous Underwater Vehicles Market, By Type
8.1 Introduction
8.2 Shallow AUVs (Depth Up to 100m)
8.2.1 Medium AUVs (Depth Up to 1,000m)
8.2.2 Large AUVs (Depth More Than 1,000m)

9 Autonomous Underwater Vehicles Market, By Technology
9.1 Introduction
9.2 Collision Avoidance
9.2.1 Sonar
9.3 Communication
9.4 Navigation
9.4.1 Compass-Based Navigation Solution
9.4.2 Inertial Navigation System
9.5 Propulsion
9.5.1 Fin Control Actuator
9.5.2 Propulsion Motor
9.5.3 Pump Motor
9.5.4 Linear Electromechanical Actuator
9.6 Imaging

10 Autonomous Underwater Vehicles Market, By Geography
10.1 Introduction
10.2 North America
10.2.1 U.S.
10.2.1.1 Rules and Regulations for AUVs in the U.S.
10.2.2 Canada
10.2.3 Mexico
10.3 Europe
10.3.1 U.K.
10.3.1.1 Rules and Regulatory Aspects in the U.K.
10.3.2 Germany
10.3.3 France
10.3.4 Italy
10.3.5 Spain
10.3.6 Rest of Europe
10.4 APAC
10.4.1 India
10.4.2 China
10.4.3 Japan
10.4.4 Rest of APAC
10.5 RoW
10.5.1 South America
10.5.2 Middle East and Africa

11 Shapes of AUVs
11.1 Introduction
11.1.1 Torpedo
11.1.2 Laminar Flow Bodies
11.1.3 Streamlined Rectangular Style
11.1.4 Multi-Hull Vehicles

12 Competitive Landscape
12.1 Overview
12.3 Competitive Situations and Trends
12.3.1 Contracts & Agreements
12.3.2 New Product Launches
12.3.3 Acquisitions
12.3.4 Partnerships & Collaborations
12.3.5 Expansions

13 Company Profiles
13.1 Introduction
(Business Overview, Products & Services, Key Insights, Recent Developments, SWOT Analysis, Ratio Analysis, View)*
13.2 Kongsberg Maritime as
13.3 Teledyne Gavia EHF.
13.4 Bluefin Robotics Corporation
13.5 ECA Group
13.6 SAAB Group
13.7 Fugro N.V.
13.8 Atlas Elektronik Group GmbH
13.9 Oceanserver Technology, Inc.
13.10 Boston Engineering Corporation
13.11 International Submarine Engineering (ISE) Ltd.

*Details on Business Overview, Products & Services, Key Insights, Recent Developments, SWOT Analysis, MnM View Might Not Be Captured in Case of Unlisted Companies.

14 Appendix
14.1 Discussion Guide

List of Tables
Table 1 Autonomous Underwater Vehicles Market, By Application, 2014-2022 (USD Million)
Table 2 AUV Market for Military & Defense Application, By Type, 2014-2022 (USD Million)
Table 3 AUV Market for Military & Defense Application, By Region, 2014-2022 (USD Million)
Table 4 AUV Market for Military & Defense Application in North America, By Country, 2014-2022 (USD
Table 50 Market for Large AUVs, By Technology, 2014-2022 (USD Million)
Table 51 Market for Large AUVs, By Application, 2014-2022 (USD Million)
Table 52 Market for Large AUVs, By Technology, 2014-2022 (USD Million)
Table 53 Autonomous Underwater Vehicles Market, By Technology, 2014-2022 (USD Million)
Table 54 AUV Market for Collision Avoidance Technology, By Type, 2014-2022 (USD Million)
Table 55 AUV Market for Communication Technology, By Type, 2014-2022 (USD Million)
Table 56 AUV Market for Navigation Technology, By Type, 2014-2022 (USD Million)
Table 57 AUV Market for Propulsion Technology, By Type, 2014-2022 (USD Million)
Table 58 AUV Market for Navigation Technology, By Type, 2014-2022 (USD Million)
Table 59 AUV Market for Propulsion Technology, By Type, 2014-2022 (USD Million)
Table 60 AUV Market for Imaging Technology, By Type, 2014-2022 (USD Million)
Table 61 Autonomous Underwater Vehicles Market, By Region, 2014-2022 (USD Million)
Table 62 AUV Market in North America, By Country, 2014-2022 (USD Million)
Table 63 AUV Market in Europe, By Country, 2014-2022 (USD Million)
Table 64 AUV Market in APAC, By Country, 2014-2022 (USD Million)
Table 65 AUV Market in RoW, By Region, 2014-2022 (USD Million)
Table 66 Market Ranking of the Top 5 Players in the AUV Market, 2015
Table 67 Contracts & Agreements, 2014-2016
Table 68 New Product Launches, 2015-2016
Table 69 Acquisitions, 2014-2016
Table 70 Partnerships & Collaborations, 2014-2015
Table 71 Expansions, 2014-2016

List of Figures

Figure 1 Market Segmentation
Figure 2 Autonomous Underwater Vehicle (AUV) Market: Research Design
Figure 3 Autonomous Underwater Vehicles Market: Bottom-Up Approach
Figure 4 AUV Market: Top-Down Approach
Figure 5 Data Triangulation
Figure 6 Imaging Technology to Grow at the Highest Rate During the Forecast Period
Figure 7 Large AUV are Expected to Hold Major Share of the Market During the Forecast Period
Figure 8 North America Expected to Hold the Largest Share of the Autonomous Underwater Vehicles Market in 2016
Figure 9 Search & Salvage Operations Expected to Be the Fastest-Growing Application in the Market During the Forecast Period
Figure 10 Lucrative Opportunities in Developing Countries for the Autonomous Underwater Vehicles Market in Forecast Period: 2016-2022
Figure 11 Market in APAC Expected to Grow at A Significant Rate During the Forecast Period
Figure 12 Military & Defense Application Likely to Hold A Major Share of the AUV Market in 2016
Figure 13 Large AUVs Expected to Lead the Market During the Forecast Period
Figure 14 APAC Expected to Dominate the AUV Market During the Forecast Period
Figure 15 AUV Market, By Geography
Figure 16 Evolution and History of AUVs
Figure 17 Drivers, Restraints, Opportunities, and Challenges for the Autonomous Underwater Vehicles Market
Figure 18 Value Chain Analysis (2015): Major Value Was Added During the Research & Development and Manufacturing Phases
Figure 19 Porter's Five Forces Analysis: 2015
Figure 20 Porter's Five Forces: Impact Analysis
Figure 21 Threat of New Entrants to Have Low Impact on AUV Market
Figure 22 Threat of Substitutes to Have Low Impact on AUV Market
Figure 23 Bargaining Power of Buyers to Have Low Impact on AUV Market
Figure 24 Bargaining Power of Suppliers to Have Medium on Autonomous Underwater Vehicles Market
Figure 25 Intensity of Competitive Rivalry to Have Medium Impact on AUV Market
Figure 26 Market for Search and Salvage Operations Application Expected to Grow at the Highest Rate During the Forecast Period
Figure 27 Market for Military & Defense Application in APAC Expected to Grow at the Highest Rate During the Forecast Period
Figure 28 Autonomous Underwater Vehicles Market for Oceanography Application in India Expected to Grow at the Highest Rate During the Forecast Period
Figure 29 Search and Salvage Operations Application Expected to Hold the Largest Size of the North American Autonomous Underwater Vehicles Market During the Forecast Period
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct and select the format(s) you require.

Product Name: Autonomous Underwater Vehicles Market by Type, Technology and by Application - Global Forecast to 2022
Web Address: http://www.researchandmarkets.com/reports/3897710/
Office Code: SC2GWQ2N

Product Formats
Please select the product formats and quantity you require:

<table>
<thead>
<tr>
<th>Quantity</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (PDF) - Single User:</td>
<td>□</td>
<td>USD 5650</td>
</tr>
<tr>
<td>Electronic (PDF) - 1 - 5 Users:</td>
<td>□</td>
<td>USD 6650</td>
</tr>
<tr>
<td>Electronic (PDF) - Site License:</td>
<td>□</td>
<td>USD 8150</td>
</tr>
<tr>
<td>Electronic (PDF) - Enterprisewide:</td>
<td>□</td>
<td>USD 10000</td>
</tr>
</tbody>
</table>

* The price quoted above is only valid for 30 days. Please submit your order within that time frame to avail of this price as all prices are subject to change.

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title: Mr □ Mrs □ Dr □ Miss □ Ms □ Prof □
First Name: ____________________________ Last Name: ____________________________
Email Address: * ____________________________
Job Title: ____________________________
Organisation: ____________________________
Address: ____________________________
City: ____________________________
Postal / Zip Code: ____________________________
Country: ____________________________
Phone Number: ____________________________
Fax Number: ____________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer:
Please transfer funds to:
Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB98533083313083
Bank Address Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

If you have a Marketing Code please enter it below:

Marketing Code: ____________________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World