

Unmanned Underwater Vehicles (UUV) for Defense and Security - Market and Technology Forecast to 2030

<https://marketpublishers.com/r/UBB59D3E5A65EN.html>

Date: January 2022

Pages: 212

Price: US\$ 4,355.00 (Single User License)

ID: UBB59D3E5A65EN

Abstracts

Unmanned Underwater Vehicles (UUVs) are part of the unmanned maritime systems (UMS) market. Although such systems have been in use for decades, global security, technological developments and new concepts of operations have been driving the market's expansion.

Most recently, several major naval forces have been developing or experimenting with Extra-Large UUVs and how these could benefit them in actual combat scenarios. Those systems can assume a wide range of tasks, such as ISR, homeland security, ASW and oceanography, while also being considered as weapons' platforms.

UUVs have been an integral part of many naval forces' operations. They have been widely used in Mine Counter-Measures missions but it has only been a few years since certain countries envision their use as part of a wider system that also includes the use of USVs.

Nevertheless, there are technological developments, in the fields of autonomy, batteries and power management, underwater telecommunications, underwater charging, sensors, and most importantly in Artificial Intelligence that will boost this market.

The current global security environment poses many challenges both in the form of asymmetric threats and confrontations between peers. Having the need to field disruptive technologies the soonest possible and take staff out of harm's way, naval forces have the ideal toolset in the form of UUVs.

With most of the Earth's surface covered by water, with around 40% of the population

living near coastlines, with many energy resources found in the sea and with shipping being the arteries of global commerce, the UUV market is a promising one indeed.

Recognizing the potential of the market and the R&D funds being invested for new systems and technologies, large defense contractors are positioning themselves through the acquisition of smaller companies. With all the consolidation activity taking place, there are business opportunities for all sizes of businesses.

Market Forecast provides a detailed analysis of the military Unmanned Underwater Vehicles (UUV) market in the years 2018 through to 2025 in terms of in service systems and requirements per country, development programs, products available, leading companies and opportunities for manufacturers.

The global military UUV market is projected to grow to US\$10.17 bn by 2030, with a CAGR of 10.2% in the 2022-2030 period.

Covered in this study:

Global market share assessments for all types in numbers delivered and value for 2018 to 2025.

Market share assessments per segments and regions for 2018 to 2025.

Snapshot on global security issues, defense budgets, spending patterns and how these affect the procurement of UUV systems.

Focus on US, Russian and European R&D and procurement programs.

Market Dynamics: An insight on the latest technological developments in the UUV market and which countries are changing their preferences, are in position to absorb the new technology and adapt their modus operandi.

Roles for all types: Insight on how UUV systems can fit in a military or security concept of operations and how they form a revolution in military affairs.

Main military UUV technology trends.

Market Trends: Drivers, Inhibitors and Porter's 5 Segment Analysis and

recommendations for the companies that want to stay ahead of the competition.

Profiles for the leading companies, including financial information, strategic alliances and recent contract wins.

Geographic coverage

Americas Military and Security USV Market Revenue and/or Volume;

Europe Military and Security USV Market Revenue and/or Volume;

Middle-East & Asia Military and Security USV Market Revenue and/or Volume;

Africa Military UAV Market Revenue and/or Volume.

Types coverage

Unmanned Underwater Vehicles for Defense and Security.

Unmanned Underwater Vehicles as part of integrated UMV systems.

Unmanned Surface Vehicles for Maritime Mines Countermeasures; Anti-Submarine Warfare; Security and other missions.

Market segments: Procurement, O&M and R&D.

Scenarios.

Key vendors

Boeing

Lockheed Martin

ECA Group

L3Harris Technologies

Atlas Elektronik

Naval Group

Saab

iXblue

Hanwha Systems

Mitsubishi Heavy Industries

Who is This Report For? This report is a must, particularly if you are one of the following:

Business Leaders & Business Developers

Market Analysts

Government and Military decision-makers

Component manufacturers

Who is This Report For?

This report is a must, particularly if you are one of the following:

Business Leaders & Business Developers

Market Analysts

Government and Military decision-makers

Component manufacturers

Related studies:

Unmanned Surface Vehicles (USV) for Defense and Security - Market and Technology Forecast to 2030

Global Naval Sensors - Market and Technology Forecast to 2029

Global Military Batteries - Market and Technology Forecast to 2029

Global Surface Warships - Market and Technologies Forecast to 2028

Global Undersea Warfare Systems - Technology and Market Forecast to 2028

Global Submarines and MRO - Technology and Market Forecast to 2027

Contents

1 INTRODUCTION

- 1.1 Objective
- 1.2 Methodology
- 1.3 Events based Forecast Scenario
- 1.4 Who will benefit from this report?
- 1.5 Language

2 EXECUTIVE SUMMARY

- 2.1 Trends and Insights
- 2.2 Major Findings
- 2.3 Major Conclusions
- 2.4 Important Tables and Graphs

3 CURRENT UUV TECHNOLOGIES

- 3.1 Current and Future UUV Use
- 3.2 UUV Missions
- 3.3 UUV Definition and Components
 - 3.3.1 Platform
 - 3.3.2 Sensors
 - 3.3.3 Command, Control and Communications
 - 3.3.4 Power and Propulsion
 - 3.3.5 Weapons payload
 - 3.3.6 Launch and recovery mechanism
 - 3.3.7 Additional unmanned systems payload
- 3.4 Ship modularity and UUVs
 - 3.4.1 Persistent ISR
 - 3.4.2 Mine Counter Measures (MCM)
- 3.5 Anti-Submarine Warfare (ASW)
 - 3.5.1 Glider Use for ASW Environment Preparation
 - 3.5.2 Trailing a submarine and attaching to it
 - 3.5.3 Using Gliders to Collect Oceanographic Data
- 3.6 Operational Environment Characterization
- 3.7 Should UUVs be On-Board all Military Vessels?
- 3.8 UUVs Potential in Special Operations Forces Missions

- 3.9 UUVs in Security Operations
 - 3.9.1 UUV for Port Protection
 - 3.9.2 Mapping Port, Harbors and Channels
 - 3.9.3 Facilities and Infrastructure Protection
 - 3.9.4 Hydrographic Surveys
- 3.10 Future Uses – Obstacles
 - 3.10.1 GPS
 - 3.10.2 Ethics
 - 3.10.3 Budget
 - 3.10.4 Propulsion
 - 3.10.5 Regulations
 - 3.10.6 Technology Transfer
 - 3.10.7 Unknown Requirements
 - 3.10.8 Cultural Adaptation

4 FUTURE UUV TECHNOLOGIES

- 4.1 Technologies Common to UUVs and USVs
 - 4.1.1 Persistence
 - 4.1.2 USV-UUV Integration
- 4.2 Interoperability
 - 4.2.1 Integration of UUV by Military Forces and Security
 - 4.2.2 Open Architecture
 - 4.2.3 Need for Common Interfaces
 - 4.2.4 Need for Better User Interface
 - 4.2.5 C2 Systems – Agent Technology – Collaborative behavior
 - 4.2.6 Digital Acoustic Underwater Communication
 - 4.2.7 Autonomy
 - 4.2.8 COLREG
 - 4.2.9 Obstacle Avoidance and Guidance
 - 4.2.10 Reliability
 - 4.2.15. Deployment of Leave-behind Systems
- 4.3 UUVs – Future Technologies
 - 4.3.1 UUV Weaponization
 - 4.3.2 UUV Data Analysis and Processing
 - 4.3.3 UUV Data Dissemination
 - 4.3.4 UUV Powerplant and Refueling at Sea
 - 4.3.5 USV Innovative Propulsion and Ship Builders Involvement
- 4.4 UUVs vs. USVs: Technical Maturity Speed Comparison

- 4.4.1 Extra Large UUVs
- 4.4.2 When Technology Outpaces Command Culture
- 4.5 UUV Advanced Sensors
 - 4.5.1 Synthetic Aperture Sonar
 - 4.5.2 Communications and Networking
 - 4.5.3 Laser Scanners
 - 4.5.4 Sensors' Fusion
 - 4.5.5 Passive Sensors
- 4.6 Other UUV Applications and Challenges
 - 4.6.1 Counter-UUV
 - 4.6.2 Countering Nets
 - 4.6.3 Cultural Adaptation

5 MARKET ANALYSIS AND FORECAST FACTORS

- 5.1 Introduction
- 5.2 Market Segmentation
- 5.3 Forecast factors - Drivers
 - 5.3.1 Market Driver 1 - UUVs Defense Sector
 - 5.3.2 Market Driver 2 - Need for UUVs for the Coast Guard
 - 5.3.3 Market Driver 3 - Harbor Security Needs
 - 5.3.4 Market Driver 4 - New Era for Mine Countermeasures
 - 5.3.5 Market Driver 5 - Underwater Networks
 - 5.3.6 Market Driver 6 - Terrorism
 - 5.3.7 Market Driver 7 - Limited Defense Budgets, Personnel Reduction
 - 5.3.8 Market Driver 8 - Need for submarines
 - 5.3.9 Market Driver 9 – Endurance
 - 5.3.10 Market Driver 10 - Support of Multi-Mission Vessels
 - 5.3.11 Market Driver 11 - Environmental Consequences
 - 5.3.12 Market Driver 12 - Increasing Outreach of Non-State Actors
 - 5.3.13 Market Driver 13 - Increased Demand for Offshore Patrol Vessels and Frigates
 - 5.3.14 Market Driver 14 - Asymmetric Threats Drive the Need for UUVs
 - 5.3.15 Market Driver 15 - Small Speed Boat Threats
 - 5.3.16 Market Driver 16 - Unmanned Maritime Systems Defense Policy
 - 5.3.17 Market Driver 17 - Littorals as Future Areas of Conflict
 - 5.3.18 Market Driver 18 - Additive manufacturing
 - 5.3.19 Market Driver 19 - From Ocean Observation to Military Intelligence
 - 5.3.20 Market Driver 20 - Oceanic Competition
 - 5.3.21 Market Driver 21 - Clarification of Roadmaps and UMS Support by Large

Governmental Groups

5.4 Inhibitors

5.4.1 Market Inhibitor 1 - Production Issues

5.4.2 Market Inhibitor 2 - Operating & Life Cycle Costs

5.4.3 Market Inhibitor 3 - Rules of Engagement & International Laws

5.4.4 Market Inhibitor 4 - Navigation in Surface Traffic

5.4.5 Market Inhibitor 5 - Culture of Seafarers / Lack of Maturity to Understanding the Value of UMV

5.4.6 Market Inhibitor 6 - Lack of Proven Concept of Operations

5.4.7 Market Inhibitor 9 - Defense Budgets and National Economy

5.4.8 Market Inhibitor 10 - Export Control of Defense Technology

6 COUNTRY ANALYSIS

6.1 United States

6.1.1 Small and Medium UUVs

6.1.2 Large and Extra-Large UUVs

6.1.3 US Coast Guard – USVs

6.1.4 DARPA

6.2 United Kingdom

6.2.1 Project Hecla

6.2.2 Atlantis 2040

6.2.3 XLUUV

6.2.4 New shipbuilding & USVs

6.3 France

6.4 Netherlands – Belgium

6.5 Australia

6.6 Japan

6.7 South Korea

6.8 Russia

6.9 European Defence Agency

7 FORECAST UUV MARKET TO 2030 BY REGION

7.1 Introduction

7.2 UUV market by Region Overview

7.3 North America – UUV Market Forecast to 2030

7.4 Europe – UUV Market Forecast to 2030

7.5 Asia-Pacific – UUV Market Forecast to 2030

- 7.5.1 The Asian-Pacific UUV Market Forecast to 2030 by End Use
- 7.5.2 The Asian-Pacific UUV Market Forecast to 2030 by Spending Element
- 7.6 Rest of the World – UUV Market Forecast to 2030
 - 7.6.1 Rest of the World – UUV Market Forecast to 2030 by End-Use
 - 7.6.2 Rest of the World – UUV Market Forecast to 2030 by Spending Element

8 UUV MARKET FORECAST TO 2030 BY SPENDING ELEMENT

- 8.1 Introduction
- 8.2 UUV market by Spending Element overview
- 8.3 UUV Procurement market by Region
 - 8.3.1 North American UUV Procurement in Defense and Security market
 - 8.3.2 European UUV Procurement in Defense and Security market
 - 8.3.3 Asian-Pacific UUV Procurement in Defense and Aerospace market
 - 8.3.4 Rest of the World UUV Procurement in Defense and Aerospace market
- 8.4 UUV R&D in Defense and Security market
 - 8.4.1 North American UUV R&D in Defense and Security market
 - 8.4.2 Europe UUV R&D in Defense and Aerospace market
 - 8.4.3 Asian-Pacific UUV R&D in Defense and Aerospace market [US\$ Million]
 - 8.4.4 Figure 52: Asian-Pacific UUV R&D in Defense and Aerospace market [US\$ Million]
- 8.5 UUV Spending Element market by End-Use
 - 8.5.1 UUV Procurement market by End-Use
 - 8.5.2 UUV R&D market by End-Use

9 FORECAST UUV MARKET TO 2030 BY END-USE

- 9.1 Introduction
- 9.2 Global UUV market by End-Use overview
- 9.3 End-Users in UUV market by Spending element overview
 - 9.3.1 Military UUV Market Forecast by Spending Element
 - 9.3.2 Civil UUV Market Forecast by Spending Element

10 OPPORTUNITY ANALYSIS

- 10.1 General Opportunities List
 - 10.1.1 Business Opportunity 1 - Improving Acoustic Communications
 - 10.1.2 Business Opportunity 2 - Improving System Evaluation, Training and MCM Planning

- 10.1.3 Business Opportunity 3 - Improving USV Integration in MCM Missions
- 10.1.4 Business Opportunity 4 - Improving Marketing and Value-Added Messages
- 10.1.5 Business Opportunity 5 - Developing Unmanned Hybrids Covering “Blind Spots”
- 10.1.6 Business Opportunity 6 - Developing Ways to Extend the Useful Lifespan of Existing MCMVs
- 10.1.7 Business Opportunity 7 - Concurrent Use of USVs that Can Intelligently Work Together, Using a Single Control Station
- 10.1.8 Business Opportunity 8 - Gather and Model USV Oceanographic Data for ASW Modeling and Other Uses
- 10.1.9 Business Opportunity 9 - Developing Innovative Hull Designs, Materials, Electronics
- 10.1.10 Business Opportunity 10 - Bringing Remote Sensing Technology to Naval Customers
- 10.1.11 Business Opportunity 11 - Developing Counter Small Vessel Attack Measures
- 10.1.12 Business Opportunity 12 - Adapting Military Design to Coast Guard Use
- 10.1.13 Business Opportunity 13 - Improve Usability of Mission Planning Software; Automate Data & Image Post-Processing
- 10.1.14 Business Opportunity 14 - Underwater Communications, networking companies to work with UUV integrators towards providing information solutions to command and control centers
- 10.1.15 Business Opportunity 15 - Innovative Antenna Designs
- 10.1.16 Business Opportunity 16 - C4ISR and PED Integration of UMS and Operator-Based Manned Systems
- 10.1.17 Business Opportunity 17 - Reduce Ownership, Operational, and Maintenance Costs
- 10.1.18 Business Opportunity 18 - Software to Survey Accurately and Timely Ports and Harbors
- 10.1.19 Business Opportunity 20 - Develop Environmental Monitoring Sensors
- 10.1.20 Business Opportunity 22 - USV to Be Used as Connectivity Nodes between Water and Air
- 10.1.21 Business Opportunity 24 - Training Drives Need for Simulators and Virtual Environment
- 10.1.22 Business Opportunity 25 - Focus on Very Shallow Water MCM
- 10.2 Securing a Competitive Position
 - 10.2.1 Assessing your Current and Next Position
 - 10.2.2 Strengthening your Position
- 10.3 Keeping Up with Industry Changes
 - 10.3.1 News

- 10.3.2 Stop, Look Around, Look at Yourself, and Adjust your Course
- 10.4 Conceptualizing a Strategy

11 EVENTS-BASED FORECAST TO 2030 FOR THE UUV IN DEFENSE AND SECURITY MARKET

- 11.1 Introduction
- 11.2 Global Market
- 11.3 Forecast by Region
- 11.4 Forecast by Spending Element
- 11.5 Forecast by End-Use

12 LEADING COMPANIES IN THE USV MARKET

- 12.1 ECA Group
 - 12.1.1 Introduction
 - 12.1.2 Products & Services
 - 12.1.3 Segment Revenue
 - 12.1.4 Recent contract wins
 - 12.1.5 Recent Projects completed
 - 12.1.6 Strategic Alliances
 - 12.1.7 USV – Products & Services
 - 12.1.8 SWOT ANALYSIS
- 12.2 L3Harris
 - 12.2.1 Introduction
 - 12.2.2 Products & Services
 - 12.2.3 Segment Revenue
 - 12.2.4 Recent contract wins
 - 12.2.5 Strategic Alliances
 - 12.2.6 USV – Products & Services
 - 12.2.7 SWOT ANALYSIS
- 12.3 Thales
 - 12.3.1 Introduction
 - 12.3.2 Products & Services
 - 12.3.3 Segment Revenue
 - 12.3.4 Recent contract wins
 - 12.3.5 Strategic Alliances
 - 12.3.6 USV – Products & Services
 - 12.3.7 SWOT ANALYSIS

12.4 Atlas Elektronik

- 12.4.1 Introduction
- 12.4.2 Products & Services
- 12.4.3 Segment Revenue
- 12.4.4 Recent contract wins
- 12.4.5 Recent Projects completed
- 12.4.6 Strategic Alliances
- 12.4.7 USV – Products & Services
- 12.4.8 SWOT ANALYSIS

12.5 Textron

- 12.5.1 Introduction
- 12.5.2 Products & Services
- 12.5.3 Segment Revenue
- 12.5.4 Recent contract wins
- 12.5.5 Recent Projects completed
- 12.5.6 USV – Products & Services
- 12.5.7 SWOT ANALYSIS

13 CONCLUSIONS AND RECOMMENDATIONS

14 ABOUT MARKET FORECAST

- 14.1 General
- 14.2 Contact us
- 14.3 Disclaimer
- 14.4 License information
 - 14.4.1 1-User PDF License
 - 14.4.2 5-User PDF License
 - 14.4.3 Site PDF License
 - 14.4.4 Enterprise PDF License

15 APPENDICES

- 15.1 Companies Mentioned
- 15.2 Abbreviations

List Of Figures

LIST OF FIGURES

Figure 1: Global UUV Market Forecast to 2030 by Region [US\$ Million]

Figure 2: Global UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Figure 3: Global UUV Market Forecast to 2030 by End-Use [US\$ Million]

Figure 4: Scenario I vs Scenario II – Global UUV Market Forecast to 2030 [US\$ Million]

Figure 5: DARPA's Manta Ray UUV design

Figure 6: Lockheed Martin's Marlin UUV deployed with the assistance of a crane

Figure 7: An ECA Group Inspector 125 USV deploying an AUV from its launching mechanism.

Figure 8: Launch and recovery of the Textron Systems UISS CUSV from the LCS USS Independence. The USV is part of the MCM package and deploys/recovers UUVs.

Figure 9: Conceptual use of different types of UMS in MCM Operations

Figure 10: ARCIMS and the mission equipment it can be reconfigured with

Figure 11: Textron Systems' CUSV with Unmanned Influence Sweep System (UISS) payload during sea trials

Figure 12: Teledyne's Silbo G2 glider circumvented the Atlantic Ocean in a period of four years ending its journey in 2020

Figure 13 - USV Capable of launching and recovering UUVs

Figure 14: Bluefin UUV Operator Tool Suite

Figure 15: Probably a wake detection system integrated on the Royal Navy's HMS Talent submarine (Trafalgar-class)

Figure 16: The US Navy's UUV Vision as of 2021

Figure 17: The US Navy's vision for the development of the USV classes. Many of them will be capable of deploying and working alongside UUVs, thus supporting the development of the UUV market.

Figure 18: The range of USVs and the missions they would undertake

Figure 19: Boeing Echo Voyager

Figure 20: Royal Navy's Atlantic 2040 concept for the future of underwater warfare

Figure 21: The D-19T UUV acquired by the French. The shell of the UUV is the same as the F21 torpedo's.

Figure 22: The MCM mother ship with the modular design capable of hosting and launching two Inspector 125 USVs with their UUVs.

Figure 24: UUV Market Forecast to 2030 by Region [US\$ Million] – 2022-2030

Figure 25: USV Market Forecast Share by Region [%]

Figure 26: The North American UUV Market Forecast to 2030 by End-Use [US\$ Millions]

Figure 27: The North American UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Figure 28: The North American UUV Market Forecast Share by Spending Element [%] – 2022, 2025, 2030

Figure 29: European UUV Market Forecast to 2030 by End-Use [US\$ Million]

Figure 30: The European UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Figure 31: The European UUV Market Forecast Share by Spending Element [%] – 2022, 2025, 2030

Figure 32: The Asian-Pacific UUV Market Forecast by End-Use [US\$ Millions]

Figure 33: The Asian-Pacific UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Figure 34: The Asian-Pacific UUV Market Forecast Share by Spending Element [%] – 2022, 2025, 2030

Figure 35: The ROW UUV Market Forecast to 2030 by End-Use [US\$ Million]

Figure 36: The ROW UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Figure 37: The Asian-Pacific UUV Market Forecast Share by Spending Element [%] – 2022, 2025, 2030

Figure 38: UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Figure 39: UUV Market Forecast to 2030 by Spending Element [US\$ Million] – 2022, 2025, 2030

Figure 40: North American UUV Procurement in Defense and Security Markets [US\$ Million]

Figure 41: North American UUV Procurement in Defense and Security Markets [US\$ Million] – 2022, 2025, 2030

Figure 42: European UUV Procurement in Defense and Security Markets [US\$ Million]

Figure 43: European USV Procurement in Defense and Security Markets [US\$ Million] – 2022, 2025, 2030

Figure 44: Asian-Pacific UUV Procurement in Defense and Security Markets [US\$ Million]

Figure 45: Asian-Pacific UUV Procurement in Defense and Security Markets [US\$ Million] – 2022, 2025, 2030

Figure 46: Rest of the World UUV Procurement in Defense and Security Markets [US\$ Million]

Figure 47: RoW UUV Procurement in Defense and Security Markets [US\$ Million] – 2022, 2025, 2030

Figure 48: North American UUV R&D in Defense and Security Markets [US\$ Million]

Figure 49: North American UUV R&D in Defense and Security Markets [US\$ Million] – 2022, 2025, 2030

Figure 50: European UUV R&D in Defense and Security Markets [US\$ Million]

Figure 51: European UUV R&D in Defense and Security Markets [US\$ Million] – 2022, 2025, 2030

8.4.4 Figure 52: Asian-Pacific UUV R&D in Defense and Aerospace market [US\$ Million]

Figure 53: Asian-Pacific UUV R&D in Defense and Security Markets [US\$ Million] – 2022, 2025, 2030

Figure 54: ROW UUV R&D in Defense and Aerospace Market Forecast [US\$ Million]

Figure 55: ROW USV R&D in Defense and Security Markets [US\$ Million] – 2022, 2025, 2030

Figure 56: UUV Procurement by End-User [US\$ Million]

Figure 57: UUV R&D Market by End-Use

Figure 58: Military UUV Market Forecast by Spending Element [US\$ Million]

Figure 59: Civil UUV Market Forecast to 2030 by Spending Element

Figure 60: Civil UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Figure 61: Scenario I vs Scenario II – Global UUV Market Forecast to 2030 [US\$ Million]

Figure 62: Scenario I vs Scenario II – North American UUV Market Forecast to 2030 [US\$ Million]

Figure 63: Scenario I vs Scenario II – European UUV Market Forecast to 2030 [US\$ Million]

Figure 64: Scenario I vs Scenario II – Asian-Pacific UUV Market Forecast to 2030 [US\$ Million]

Figure 65: Scenario I vs Scenario II – ROW UUV Market Forecast to 2030 [US\$ Million]

Figure 66: Scenario I vs Scenario II UUV Market Forecast to 2030 by Procurement [US\$ Million]

Figure 67: Scenario I vs Scenario II UUV Market Forecast to 2030 by R&D [US\$ Million]

Figure 68: Scenario I vs Scenario II - Military UUV Market Forecast to 2030 by R&D [US\$ Million]

Figure 69: Scenario I vs Scenario II - Civil UUV Market Forecast to 2030 by R&D [US\$ Million]

Figure 70: ECA Group Segment Revenue (%)

Figure 71: ECA Group Revenues (US\$ Million)

Figure 72: L3Harris Revenue per Segment 2020 (%)

Figure 74: Thales – Total Revenue (US\$ bn)

Figure 75: ThyssenKrupp Marine Systems Revenue (US\$ Bn)

Figure 76: ThyssenKrupp Marine Systems Sales from Contracts by Region (2021) (US\$ Million)

Figure 77: Textron Revenue 2018-2020 (US\$ Bn)

List Of Tables

LIST OF TABLES

Table 1: UUV Classification

Table 2: Global UUV Market Forecast to 2030 by Region [US\$ Million]

Table 3: Global UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Table 4: Global UUV Market Forecast to 2030 by End-Use [US\$ Million]

Table 5: Scenario I vs Scenario II – Global UUV Market Forecast to 2030 [US\$ Million]

Table 6: Mission critical meteorological and oceanographic sensing requirements for special operations

Table 7 - How to Increase UUV Persistence

Table 9: UUV Market Forecast to 2030 by Region [US\$ Million] – 2022-2030

Table 10: The North American UUV Market Forecast by End-Use [US\$ Millions]

Table 11: The North American UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Table 12: European UUV Market Forecast to 2030 by End-Use [US\$ Million]

Table 13: The European UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Table 14: The Asian-Pacific UUV Market Forecast by End-Use [US\$ Million]

Table 15: The Asian-Pacific UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Table 16: The ROW UUV Market Forecast to 2030 by End-Use [US\$ Million]

Table 17: The ROW UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Table 18: UUV Market Forecast to 2030 by Spending Element [US\$ Million]

Table 19: UUV Market Forecast to 2030 by Procurement [US\$ Million]

Table 20: North American UUV Procurement in Defense and Security Markets [US\$ Million]

Table 21: European UUV Procurement in Defense and Security Markets [US\$ Million]

Table 22: Asian-Pacific UUV Procurement in Defense and Security Markets [US\$ Million]

Table 23: Rest of the World UUV Procurement in Defense and Security Markets [US\$ Million]

Table 24: North American UUV R&D in Defense and Security Markets [US\$ Million]

Table 25: European UUV R&D in Defense and Security Markets [US\$ Million]

Table 26: Rest of the World UUV R&D in Defense and Aerospace market [US\$ Million]

Table 27: UUV Procurement by End-User [US\$ Million]

Table 28: UUV R&D Market by End-Use [US\$ Million]

Table 29: Global UUV market to 2030 by End-Use [US\$ Million]

Table 30: Military Market Forecast to 2030 by Spending Element [US\$ Million]

Table 31: Scenario I vs Scenario II – Global UUV Market Forecast to 2030 [US\$ Million]

Table 32: Scenario I vs Scenario II – North American UUV Market Forecast to 2030 [US\$ Million]

Table 33: Scenario I vs Scenario II – European UUV Market Forecast to 2030 [US\$ Million]

Table 34: Scenario I vs Scenario II – Asian-Pacific UUV Market Forecast to 2030 [US\$ Million]

Table 35: Scenario I vs Scenario II – ROW UUV Market Forecast to 2030 [US\$ Million]

Table 36: Scenario I vs Scenario II UUV Market Forecast to 2030 by Procurement [US\$ Million]

Table 37: Scenario I vs Scenario II UUV Market Forecast to 2030 by R&D [US\$ Million]

Table 38: Scenario I vs Scenario II - Military UUV Market Forecast to 2030 by R&D [US\$ Million]

Table 39: Scenario I vs Scenario II - Civil UUV Market Forecast to 2030 by R&D [US\$ Million]

I would like to order

Product name: Unmanned Underwater Vehicles (UUV) for Defense and Security - Market and Technology Forecast to 2030

Product link: <https://marketpublishers.com/r/UBB59D3E5A65EN.html>

Price: US\$ 4,355.00 (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/UBB59D3E5A65EN.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**

Customer 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

