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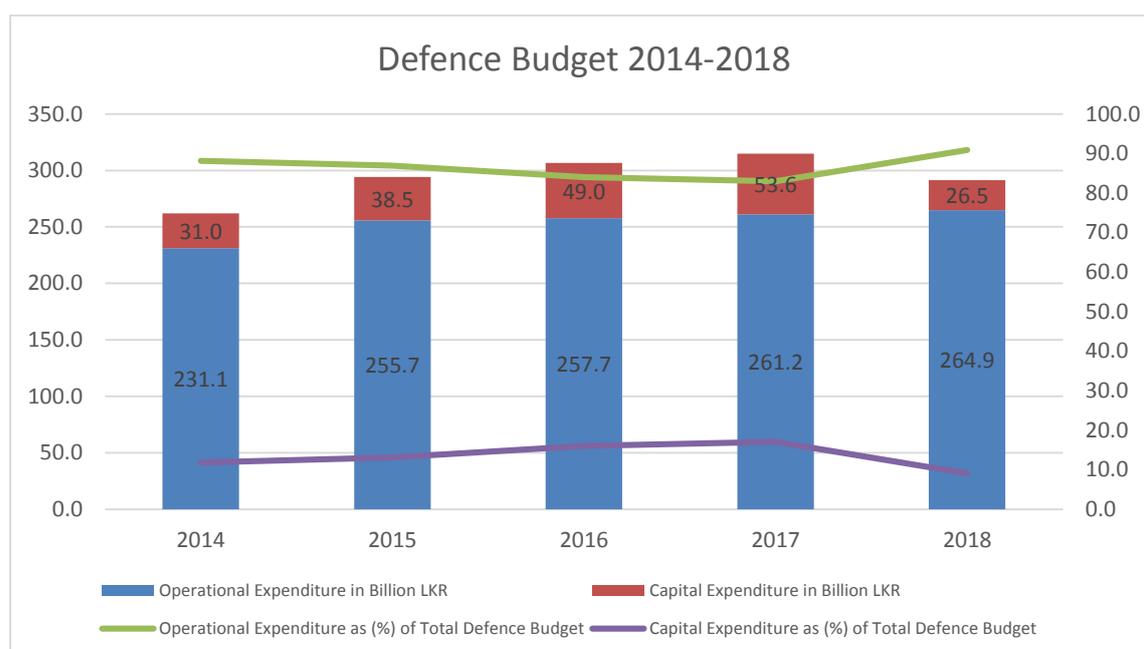
## Sri Lanka: Defence Budget and Future Procurements



Sri Lanka's defence budget for 2016 is estimated to reach, according to the country's authorities, 306.7 billion Sri Lanka's



Rupees (LKR) (approximately 2.1 billion US dollars), significantly augmented (294,1 billion LKR or 2 billion US dollars) compared to the 2015 defence budget. From this amount the biggest percentage, will be used to cover the payments of the defence forces' personnel, accounting for 200.7 billion LKR (1.4 billion US dollars) covering approximately 65.5% of the country's defence budget. An amount reaching 49 billion LKR (336.5 million US dollars) will be allocated to the procurement of new and to the update of existing defence assets. The same pattern will be also followed in 2017 and in 2018, as employment costs of defence personnel will capture the biggest percentage of the defence budget accounting for 64.1% and 69.6% respectively, while capital expenditure (procurement of new equipment etc.) will account for 17% in 2017 and 9% in 2018.



	Operational Expenditure In Billion LKR	Capital Expenditure In Billion LKR	Personnel's Wages* In Billion LKR	Total In Billion LKR
<b>2014</b>	231.1	31.0	158.0	262.1
<b>2015</b>	255.7	38.5	193.4	294.2
<b>2016</b>	257.7	49.0	200.7	306.7
<b>2017</b>	261.2	53.6	201.7	314.9
<b>2018</b>	264.9	26.5	202.7	291.4
<b>2015-2018</b>	1,270.6	198.6	956.6	1,469.2

Source: <http://www.treasury.gov.lk>

A quick glance in the chart above reveals that despite the fact that defence budget in 2018 will record a noteworthy decline, operational expenditure (employment costs are included

in this category) will marginally increase leaving to local authorities a smaller amount of funds for the materialisation of large-scale military acquisition programs. Further in this direction, Sri Lanka is expected to invest 10 billion US dollars in its armed forces over the period 2015-2018, and only 1.4 billion of that money is set to be spent on the acquisition of new military equipment or in the update of existing, offering foreign Original Equipment Manufacturers (OEMs) limited opportunities in the country.

Military spending in Sri Lanka in the future will be mainly shaped by the need of the country to keep open the Indian Ocean sea routes for oil transportation and maritime trade, the struggle with the post Liberation Tigers of Tamil Eelam (LTTE) movement and the strained relationship of Sri Lanka with India. Russia and China are expected to be the main exporters of defence equipment to Sri Lanka. The South East Asian country has developed good relations with them during the long civil war which ended in 2009, something that is further highlighted by the fact that the armed forces of Sri Lanka are mainly armed with Russian and Chinese equipment.

Finally, it is worth mentioning that historically the army of Sri Lanka receives the highest allocation of funds. It is indicative that in 2016 the army received 58%, the navy 22.4% and the air force 19.6% of the budget. This trend is projected to continue as in 2018 the army is planned to receive 62.8%, the Navy 21.4% and the air force 15.8% of the total defence budget.

	Army		Navy		Air Force	
	Operational Expenditure In Billion LKR	Capital Expenditure In Billion LKR	Operational Expenditure In Billion LKR	Capital Expenditure In Billion LKR	Current Expenditure In Billion LKR	Capital Expenditure In Billion LKR
<b>2014</b>	135.3	7.5	48.3	5.8	30.3	12.4
<b>2015</b>	150.8	7.8	48.3	9.7	34.0	6.9
<b>2016</b>	151.9	5.8	48.7	12.4	34.0	19.2
<b>2017</b>	153.9	4.7	49.4	8.7	34.5	26.0
<b>2018</b>	156.0	3.7	50.3	4.2	35.1	5.1

Source: <http://www.treasury.gov.lk/>

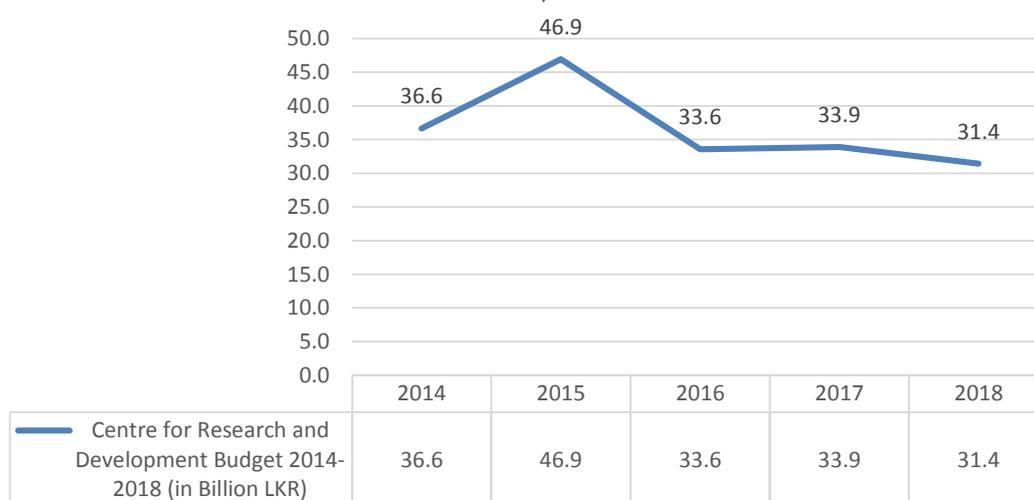
Kyriazis Vasileios  
Epicos Newsletter Head Editor

## Sri Lanka: Defence Industry, R&D Spending and Technological Capabilities



Sri Lanka does not have a defence industry in its full and proper sense. Nevertheless, the South East Asian country has developed some domestic defence production capabilities in order to adequately equip the armed forces of the country during the final stages of the struggle against the Liberation Tigers of Tamil Eelam (LTTE) movement. More on that local authorities are currently attempting to further develop the nation's defence industry and a small portion of funds are directed toward this end. It is indicative that in 2016 around 33.5 million Sri Lanka's Rupees (LKR) (approximately 0.23 million US dollars) were allocated to the Centre for Research and Development the national agency in charge of research and development in the defence industry, while for the period 2015-2018 it is expected that the budget of the centre will reach 145.8 million LKR (1 million US dollars).

Centre for Research and Development Budget 2014-2018 (in Billion LKR)



Source: <http://www.treasury.gov.lk>

The Research & Development Centre is deliberately trying to intensify its R&D efforts and to link them with the needs of the local armed forces. Thus, its R&D efforts are extensively oriented towards the development of concrete products and/or services that could be used by the local armed forces. The result of these efforts is the development of an artillery fire simulator, which is currently in use by Sri Lanka's armed forces. Additionally, the Research & Development Centre is in the process of developing a UAV for the needs of the local air force. The development cost of the project is estimated to reach 20 million LKR (137 thousand US dollars).

One of the most noteworthy defence companies in Sri Lanka is Colombo Dockyard, a shipbuilding company that has been successful in securing orders from both local and

overseas clients. Colombo Dockyards were established in 1974 and started with the construction of small tug boats, patrol boats and barges. In the 90's the dockyard started building fast patrol boats for the Sri Lanka's Navy and recorded its first export success when an aluminium vessel was delivered to the Republic of Maldives. In 1996 the Ultra-Fast Attack Craft, commonly known as the Colombo Class, were commissioned becoming the workhorse of the Navy against the LTTE. Nowadays Sri Lanka's Navy operates 22 Colombo Class vessels and more than 100 Arrow class patrol boats designed by Colombo shipyard according to the requirements and needs of the Navy's elite units.

In 2016 nine Arrow-class boats were exported to Nigeria, for a total amount of 4.2 million US dollars.

Kyriazis Vasileios  
Epicos Newsletter Head Editor

## Epicos "Industrial Cooperation and Offset Projects"



Epicos "Industrial Cooperation and Offset Projects" provides a unique set of online tools enabling the structure, identification and implementation of comprehensive Offsets programs, through a searchable database. By introducing different offset projects and ideas proposed by local A&D industry it ensures the optimum cost for Prime Contractors and reassures that the priorities of local industry are fully met...

[For Further Information Press Here](#)

### Development of a field-deployable, compact weather station system



A manufacturing company with significant experience in designing and developing environmental Meteorological Stations, and sensors for meteorological, hydrological and agro-meteorological applications is willing to expand its capabilities in the field of automated weather stations that can be rapidly deployed and used in diverse field operations.

[For Further Information Contact our ICO Department](#)

Mail at: [a-kintis@epicos.com](mailto:a-kintis@epicos.com)

### Ballistic protected container field kitchen for peace keeping operations and catering services near the front line



A modern company with a long history in manufacturing high quality products for demanding customers in the fields of thermal technology and advanced use of stainless steel (e.g. modern field catering systems and equipment for rapid deployment troops, from refrigerated trailers to field kitchens) is proposing the sourcing of a ballistic protected container field kitchen for peace keeping operations and catering services near the front line. The proposed field kitchen will be installed on a NATO standard container and it will be equipped with catering equipment presenting the best possible ergonomic and working conditions for the personnel.

[For Further Information Contact our ICO Department](#)

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## News from our A&D Business Network



### Lithuania buys Boxer in deal worth almost €400 million



Rheinmetall and Krauss-Maffei Wegmann will soon be supplying the Lithuanian armed forces with 88 Boxer multirole armoured fighting vehicles. Worth a total of around €390 million, this important export order is set to run from 2017 to 2021. Along with Germany and the Netherlands, this will make Lithuania the third NATO nation to field the battle-tested, superbly protected, high-mobility combat vehicle.

The order was placed on 22 August 2016 in Vilnius via OCCAR, the Organization for Joint Armament Cooperation, which in turn contracted with ARTEC GmbH – a joint venture of Rheinmetall and KMW – to supply the Boxers. These will be configured as infantry fighting vehicles armed with a turret-mounted 30mm automatic cannon.

Thanks to its advanced composite armour, the Boxer is one of the world's best-protected 8x8 protected vehicles. Moreover, it assures high mobility both on and off road, even in the toughest terrain. Powered by a 530 kW (720 HP) turbo-charged diesel engine, the Boxer has a top speed of over 100 km/h with a combat weight of 36.5 tonnes. The vehicle's modular concept – consisting of driver cab and mission modules – results in outstanding flexibility and versatility.

The Bundeswehr already has 405 of these vehicles in its inventory, while the Dutch armed forces own a further 200. Operational experience gained in Afghanistan confirms the Boxer's significant contribution to military sustainment and mobility. Among other factors, positive tactical outcomes and the compelling results of Lithuanian field trials strongly influenced the Baltic nation's decision to choose the Boxer. The Lithuanian military will call the vehicle the Vilkas, which means 'wolf'.

For Further Information [Click Here](#)

## AAR Extends Reach in Middle East with flydubai PBH Contract



AAR (NYSE: AIR), a leading provider of aircraft maintenance and integrated supply chain solutions worldwide, has signed a long-term, multimillion-dollar contract to provide power-by-the-hour (PBH) component inventory management and repair services to Dubai-based flydubai.

The agreement represents a significant expansion of AAR's commercial footprint in the Middle East.

AAR will assume nose-to-tail management of components and repairs for flydubai's Next-Generation Boeing 737-800 fleet, starting with 53 aircraft and increasing to 60. In November 2013, flydubai announced an order for 75 737 MAX 8s and 11 Next-Generation Boeing 737-800s valued at USD 8.8 billion at list prices, in addition to purchase rights for 25 more 737 MAXs. In 2015, flydubai carried more than 9 million passengers across its network of more than 85 destinations, becoming the second largest carrier, by passenger numbers, operating out of Dubai International.

"As flydubai continues on its robust growth trajectory, it must optimize its fleet's performance while minimizing costs and aircraft-on-ground time," said Deepak Sharma, President, AAR international supply chain. "Given AAR's experience helping airlines increase operational efficiencies, flydubai decided we are the right partner for the crucial behind-the-scenes work."

"Focusing our efforts on supporting customers in the Middle East region has paid off," said AAR's Rahul Shah, Senior Vice President, Strategic Growth and Business Development, Asia Pacific, Middle East and Africa. "We are pleased that flydubai has entrusted AAR to provide long-term component support of its Next-Generation Boeing 737-800 fleet."

Mick Hills, SVP Engineering and Maintenance at flydubai said: "We continue to invest in technologies and partnerships that strengthen our commitment to maintain the highest levels of reliability and safety in our operations. We are excited about our component inventory management and repair services agreement with AAR, which will help us reduce aircraft-on-ground time and consequently contribute to our on-time performance."

The Dubai-based carrier, operating out of Terminal 2 at Dubai International (DXB) and the newly opened Al Maktoum Airport (DWC), is committed to opening up underserved markets and provides direct links from Dubai to 59 destinations that previously had no or very few links to the UAE.

About flydubai:

Dubai-based flydubai strives to remove barriers to travel and enhance connectivity between different cultures across its ever-expanding network. Since launching its operations in 2009, flydubai has:

- Created a network of more than 90 destinations in 44 countries, with 19 new routes launched in 2015.
- Opened up 59 routes that did not previously have direct air links to Dubai or were not served by a UAE national carrier from Dubai.
- Operates a single fleet type of 51 Next-Generation Boeing 737-800 aircraft and will take delivery of more than 100 aircraft by the end of 2023.

In addition, flydubai's agility and flexibility as a young airline has enhanced Dubai's economic development, in line with the Government of Dubai's vision, by creating trade and tourism flows in previously underserved markets.

For more information about flydubai services, please visit [www.flydubai.com](http://www.flydubai.com).

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#### **About AAR**

AAR is a global aftermarket solutions company that employs more than 4,500 people in over 20 countries. Based in Wood Dale, Illinois, AAR supports commercial aviation and government customers through two operating segments: Aviation Services and Expeditionary Services. AAR's Aviation Services include inventory management; parts supply; OEM parts distribution; aircraft maintenance, repair and overhaul; and component repair. AAR's Expeditionary Services include airlift operations; mobility systems; and command and control centers in support of military and humanitarian missions. More information can be found at [www.aarcorp.com](http://www.aarcorp.com).

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## US Army awards Raytheon Long Range Precision Fires Risk Mitigation Contract

The U.S. Army has awarded Raytheon Company a \$5.7 million risk-mitigation contract for the Long Range Precision Fires program. The new missile will replace the Army's aging inventory of long range, surface-to-surface missiles. Fired from mobile launchers, LRPF will fly farther, faster, and feature a new warhead.

"As the world's largest missile maker, Raytheon is ideally positioned to develop the Long Range Precision Fires solution the Army needs," said Dr. Thomas Bussing, Raytheon Advanced Missile Systems vice president. "With our wide portfolio of products, proven technology and guided missile expertise, Raytheon can deliver a low-risk, highly effective and affordable solution."

The Army's current inventory of long range, precision-guided, surface-to-surface missiles dates back to the 1980s. The new LRPF missile will be more affordable, survivable against advanced threats, and more compact, allowing the Army to double the fire power of long-range missiles in its mobile launchers.

Under the 9-month risk-reduction contract, Raytheon will conduct baseline system design. The Army is expected to solicit proposals for a more comprehensive technical maturation/risk reduction phase later, an effort that will culminate in flight testing.

### About Raytheon

Raytheon Company, with 2015 sales of \$23 billion and 61,000 employees, is a technology and innovation leader specializing in defense, civil government and cybersecurity solutions. With a history of innovation spanning 94 years, Raytheon provides state-of-the-art electronics, mission systems integration, C5I™ products and services, sensing, effects, and mission support for customers in more than 80 countries. Raytheon is headquartered in Waltham, Massachusetts. Follow on Twitter @Raytheon.

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For Further Information [Click Here](#)

**Source:** Epicos, Raytheon

## Lockheed Martin Awarded \$79.5 Million Contract to Provide an Open Architecture Combat Management System for the U.S. Navy's Frigates

The U.S. Navy selected Lockheed Martin's (NYSE: LMT) COMBATSS-21 as the combat management system for the Navy's frigate ship program. COMBATSS-21 is the combat management system in operation on the Freedom variant Littoral Combat Ship (LCS). The five-year contract, which is worth up to \$79.5 million, covers fiscal years 2016-2021.

COMBATSS-21 (COMponent-BASed Total-Ship System—21st Century) is built from the Aegis Common Source Library (CSL), and shares a pedigree with the Aegis Baseline 9 software developed for the Aegis cruiser and destroyer fleet, as well as international ships, the Aegis Ashore system, LCS and the Coast Guard National Security Cutters.

"We look forward to providing this combat management system to the frigates and potentially other platforms across the U.S. Navy, as it will bring commonality across the fleet of surface combatants and is a step toward realizing the vision of distributed lethality," said Rich Calabrese, director of Mission Systems at Lockheed Martin. "Using the CSL enhances life-cycle affordability by reducing costs for integration, test and certification—and delivers an open combat system architecture in line with the Navy's objective architecture, driving affordability and increasing interoperability across the entire fleet."

The CSL allows surface combatants to rapidly and affordably integrate new capabilities across the fleet. This means that ships using a CSL-derived combat system can incorporate new sensors, weapons and capability upgrades to keep pace with evolving threats. The benefit of the surface combatant CSL is that these updates become available for rollout across other ship classes.

"We can build capability, get it into the CSL and then deploy it in a ship class when the Navy determines the need," Calabrese said. In this way, capability developed on a forward fit program may be applied to ships already in service.

As the Aegis Combat System Engineering Agent, Lockheed Martin provides modern combat management systems and conducts the entire combat system integration life-cycle that enables navies around the world to achieve their most critical mission objectives. Lockheed Martin has successfully delivered and integrated Aegis and Aegis-based products on 126 platforms in eight nations, with an additional 23 under construction or planned. Aegis and Aegis-derived systems are in service in U.S. Navy cruisers, destroyers, Littoral Combat Ships, Coast Guard National Security Cutters and Aegis Ashore sites.

The navies of Japan, Spain, Norway, the Republic of Korea, and Australia have also chosen Aegis to protect their nations.

For additional information, visit: [www.lockheedmartin.com/us/products/aegis.html](http://www.lockheedmartin.com/us/products/aegis.html)

About Lockheed Martin

Headquartered in Bethesda, Maryland, Lockheed Martin is a global security and aerospace company that employs approximately 98,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services.

**Source:** Epicos, Lockheed Martin

### SAAB Receives Order from New Zealand for Tactical Engagement Simulation System

Defence and security company Saab has received the first order, under a five-year agreement recently signed with the New Zealand Army, to deliver a high fidelity Tactical Engagement Simulation System (TESS). This initial order will provide the army with a proven, off-the-shelf and technically advanced training system.

The laser-based TESS capability will be delivered by Saab New Zealand, drawing on over 35 years of tactical engagement simulation design, delivery and support expertise. Saab has a demonstrated track record of delivering on time and on budget, to the American, British, Canadian and Australian (ABCA) armies and to North Atlantic Treaty Organisation (NATO) land forces. Saab's live training system has been developed and continuously modernised with experience from more than 20 customer nations.

"We look forward to working closely with the New Zealand Army to enhance its training outcomes. We are proud to deliver this significant training system to the New Zealand Army, which will now lead the region in the employment of advanced laser-based tactical engagement systems to support training," says Saab Australasia Head of Training and Simulation, Inger Lawes.

"With this agreement and order for training systems, the New Zealand Army will have a market-leading live training system that will improve their training capability. We deliver a modern system that enables a wide range of training scenarios and the highest realism. This order further strengthens our market position within this field", says Åsa Thegström, head of business unit Training & Simulation within business area Dynamics.

Saab will work with the New Zealand Army to deliver a value for money, off-the-shelf TESS capability that will significantly enhance the Army's ability to conduct and analyse the outcomes of force-on-force exercises. The capability meets the New Zealand Army's current requirements while providing a platform and capacity for long-term system growth.

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**Source:** Epicos, SAAB

### **Huntington Ingalls Industries Awarded \$52 Million Modernization Contract for USS Harry S. Truman (CVN 75)**

Huntington Ingalls Industries (NYSE:HII) announced today that its Newport News Shipbuilding division has received a \$52 million contract from the U.S. Navy for nuclear propulsion and complex modernization work on the aircraft carrier USS Harry S. Truman (CVN 75) as part of its planned incremental availability.

The contract covers planning, material procurement, prefabrication, manpower, support services, design integration, engineering and management support, and technical data. Work will be performed at Norfolk Naval Shipyard and is expected to be completed by September 2017.

“We are proud to do the maintenance and modernization work that is vital to the Navy’s ability to carry out its mission,” said Chris Miner, Newport News’ vice president, in-service aircraft carrier programs. “Our shipbuilders look forward to completing this important work in support of re-delivering a first-rate ship that is ready to continue projecting our Navy’s strength at sea.”

USS Harry S. Truman (CVN 75), named after the 33rd president of the United States, is the eighth Nimitz-class aircraft carrier. The ship was launched in September 1996 by Newport News and is homeported at Naval Station Norfolk.

#### **About Huntington Ingalls Industries**

Huntington Ingalls Industries is America’s largest military shipbuilding company and a provider of engineering, manufacturing and management services to the nuclear energy, oil and gas markets. For more than a century, HII’s Newport News and Ingalls shipbuilding divisions in Virginia and Mississippi have built more ships in more ship classes than any other U.S. naval shipbuilder. Headquartered in Newport News, Virginia, HII employs nearly 35,000 people operating both domestically and internationally. For more information, visit:

HII on the web: [www.huntingtoningalls.com](http://www.huntingtoningalls.com)

HII on Facebook: [www.facebook.com/HuntingtonIngallsIndustries](http://www.facebook.com/HuntingtonIngallsIndustries)

HII on Twitter: [twitter.com/hiindustries](https://twitter.com/hiindustries)

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**Source:** Epicos, Huntington Ingalls Industries

### **ManTech Awarded \$24 Million Contract for Multi-Sensor Data Aggregation Analysis Support to U.S. Customs and Border Protection**

The Department of Homeland Security (DHS) has awarded ManTech International Corporation (Nasdaq:MANT) a prime contract to develop a joint service-oriented architecture prototype integrating operational data for real-time situational awareness to enhance border security. Work will be performed in various locations across the United States and at the U.S. Customs and Border Protection headquarters in Washington, D.C., with an estimated completion date of March 10, 2019. The cost-plus-fixed-fee task order has a 12-month base period of performance and two 12-month option periods, with a potential total value to ManTech of \$24 million.

"ManTech is pleased to continue its long-standing relationship with the U.S. Customs and Border Protection through exploration and demonstration of new and innovative solutions for intelligence-driven approaches to securing the border and areas of operation," said Daniel J. Keefe, president and chief operating officer of ManTech's Mission Solutions & Services Group.

#### **About ManTech International Corporation**

ManTech provides innovative technologies and solutions for mission-critical national security programs for the Intelligence Community; the Departments of Defense, State, Homeland Security, Health and Human Services, Veterans Affairs and Justice, including the Federal Bureau of Investigation (FBI); the space community; and other U.S. government customers. We support important national missions by providing services to approximately 50 federal government agencies under approximately 1,000 current contracts. ManTech's expertise includes cybersecurity; software and systems development; enterprise information technology; multi-discipline intelligence; program protection and mission assurance;

systems engineering; test and evaluation (T&E); command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR); training; supply chain management and logistics; and management consulting. Additional information on ManTech can be found at [www.mantech.com](http://www.mantech.com).

**Source:** Epicos, ManTech International Corporation

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