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The Future of Norwegian Defence Procurements

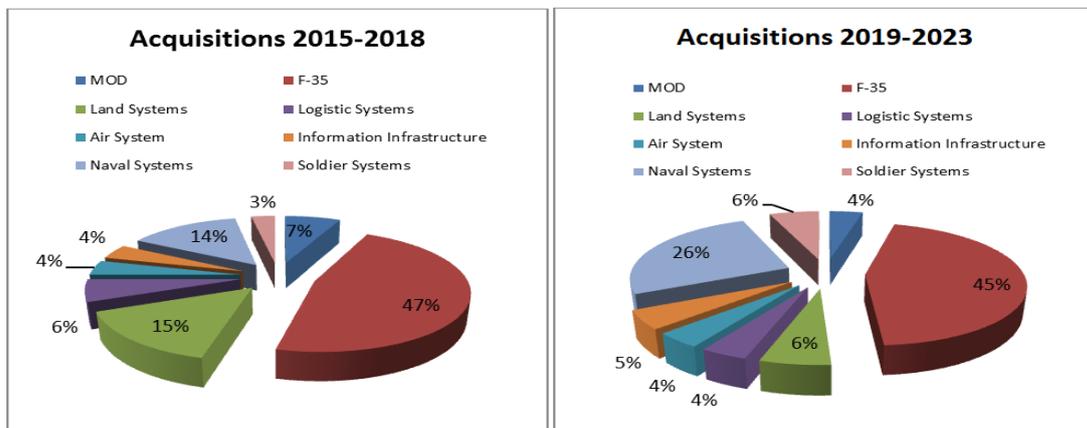


Norway’s armed forces are currently undergoing a modernisation process, which could be described as the country’s biggest military upgrade effort since the end of the Cold War. In 2020 defence expenditure is expected to increase by Norwegian Krone (NOK) 7.2 billion (890.2 million US dollars) above 2016-levels, while over the coming 20 years Norwegian defence budget will record an accumulated total of 165 billion NOK (approximately 20.4 billion US dollars) in additional funding. In 2015, defence budget amounted to 43.8 billion NOK (5.4 billion US dollars), while the budget for 2016, included a rise by approximately 11% and reached 49.1 billion NOK (6 billion US dollars). In 2017 defence spending is projected to reach 50.9 billion NOK (6.2 billion US dollars).

The level of the planned capital investment in the military budget is the highest by any Norwegian government since the end of the Cold War, as it covers 23.8% of the budget. Personnel and operations costs cover 69.9% of the total budget, while infrastructure costs cover 6.3%.

Norway, is looking to bolster its defence capabilities mainly due to the increasingly unpredictable behaviour of Russia. Regarding this, Norwegian Minister of Defence, Ms. Ine Eriksen Sørreide stated: “we are looking to strengthen short-term readiness, to invest in future capabilities and to create real long term sustainability. We have to ensure that we, along with our allies, have the means to present a credible deterrent against the use of force. This plan enables us to do just that”.

With the adding funds allocated on defence, Norway is planning to upgrade its current inventory. For the period 2015-2023 the main procurements for the air forces will be the on-going acquisition of 52 F-35A, which along with weapons and support equipment are estimated to cost in total 69.7 billion NOK (8.5 billion US dollars) in 2016 values. The F-35 will provide one of the core capabilities of the future Norwegian Armed Forces. The Norwegian government selected the F-35 as the replacement for the F-16 fleet, in 2008. Currently, Norwegian authorities has funded the procurement of 22 out of the 52 F-35s while subsequent authorization will occur on an annual basis.



Source: <http://www.defmin.fi/>

Regarding the land forces, the main acquisitions will include the procurement of new (CV90) and the upgrade of existing combat vehicles (CV90 and M113). Additionally, Norway will expand the operational lifespan of the Leopard 2A4 Main Battle Tank and will procure new Combat Service vehicles on the Leopard 2 chassis (Recovery-, Bridge layers and Engineer vehicles). Additionally, Norway will upgrade its air defence systems by introducing longer range weapons to the current NASAMS II-system, as well by acquiring dedicated long range air defence systems to protect critical areas.

Finally, the naval forces, will among others acquire a new ocean going Cost Guard vessel and Maritime Patrol Aircraft and helicopter. In addition, existing systems (such as the Naval Strike Missiles (NSM) and the Evolved Sea Sparrow Missile Block II) will undergo significant upgrades. The most important acquisition of the navy is that of four new submarines, to replace the current fleet of six Ula-class submarines, commissioned between 1989-1992. The submarines will reach the end of their operational life in the mid-2020s. The Ula-class submarines operated by Norway are the only submarines of this class in the world.

According to a press release published by the Norwegian Ministry of Defence designs provided by the French company Direction des Constructions Navales Services (DCNS) or the German company ThyssenKrupp Marine Systems (TKMS) are the strongest candidates for being the starting point for Norway's future submarines. We should notice though, that significant work remains to be done before a procurement program can be presented to the Norwegian Parliament.

The acquisition cost for the new submarines will be considerable. Therefore, Norway is actively trying to find partners to form an extensive cooperation in the development of the new submarines. The Polish requirements for future submarines are similar to the Norwegian and the two countries discussed on forming a potential cooperation towards this direction. The talks took place at the 23rd International Defence Industry Exhibition MSPO 2015 in Kielce, Poland in September 2015. Norway will continue to actively seek cooperation with other nations, primarily the Netherlands and Poland.

It is expected that a total of 44 billion NOK (5.4 billion US dollars), will be spend for the materialisation of the abovementioned programs in 2015-18 and a further 61 billion NOK (7.5 billion US dollars) in 2019-2023.

Kyriazis Vasileios,
Epicos Newsletter Head Editor

Norway: Defence Industry, Size, Exports and International Cooperation



Although the Norwegian defence industry is rather limited compared to the defence industries in other European countries, it has a wide span of technological competencies and a broad portfolio of products, ranging from tactical communications and crypto solutions to ammunitions and military explosives, as well as tents and protective suits to components for aircraft, vehicles, vessels and submarines. The

Norwegian Defence and Security Industries Association (FSI), the largest and most important association in Norway advocating the interests of the Norwegian Defence and Security Industry, currently counts 120 members. FSI's member companies employ more than 25,000 personnel, accounting for approximately 5000 man-years employed directly in defence-related activities. Turnover in the defence sector is estimated at more than 12 billion Norwegian Krone -NOK- (1.5 billion US dollars) per year.

Defence exports from Norway have grown steadily in the last decade. In 2014 Norwegian defence industry exported products totaling 3.4 billion million NOK (416 million US dollars). Exports of arms and military equipment accounted for 2.9 billion NOK (354.9 million US dollars), other defence-related products for nearly 650 million NOK (79.5 million US dollars), while exports of dual-use equipment accounted for 200 million NOK (24.5 million US dollars). More than 90% of Norwegian exports goes to European and NATO nations, while the USA is the largest recipient of Norwegian defence equipment.

Norwegian companies are participating as partner and supplier in numerous international programs such as:

- F-35 Lightning II
- F-16 Fighting Falcon
- NATO Helicopter (NH90)
- Evolved Sea Sparrow Missile
- AMRRAM
- IRIS -T
- EXOCET Block 3
- Sidewinder AIM-9L
- Interactive Defence & Attack for Submarines (IDAS)
- NATO Air command and Control System (ACCS)
- NATO Alliance Ground Surveillance (AGS)
- NATO Airborne Early Warning and Control (NAEW&C)

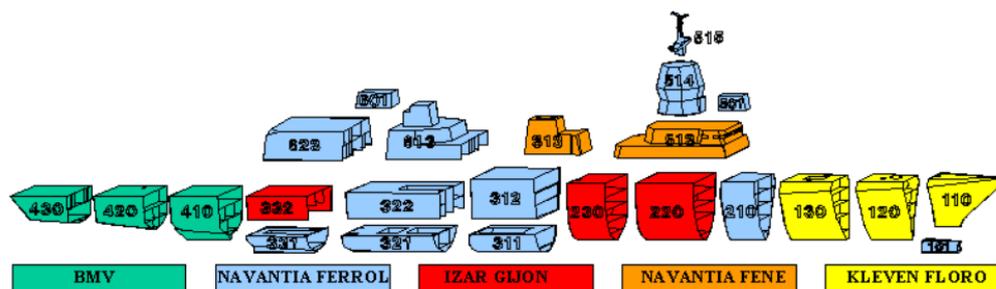
Norway is planning to procure 4 submarines and it seems that designs provided by the French company Direction des Constructions Navales Services (DCNS) or the German company ThyssenKrupp Marine Systems (TKMS) are the strongest candidates for being a good starting point for Norway's future submarines. We should notice though, that significant work remains to be done before a procurement program can be presented to the Norwegian Parliament. Norwegian defence industry is able to provide key technologies for submarines, and the Norwegian Government will seek to utilize the planned submarine procurement to help strengthen their market access to countries where they do not currently have a footprint.

In several other cases Norwegian authorities have helped local defence industry to enhance its capabilities by utilising offset obligations created by the procurement of defence

equipment. One such case is the implementation of the offset contracts associated with the Fridtjof Nansen-class frigates. The Fridtjof Nansen-class frigates are the main surface combatant units of the Royal Norwegian Navy. Five ships were ordered from Spanish shipbuilder Bazan (now Navantia). The total projected cost for all five ships was about USD 3.61 billion.

The offset projects resulting from the purchased frigates, largely benefited the Norwegian industry, with more than 250 Norwegian companies receiving orders within the framework of related offset agreements. The Norwegian Defence Ministry indicates that contracts worth approximately 1 billion NOK (122 million US dollars) have been awarded by the government to local shipbuilding companies and sub-suppliers.

This project had a very significant effect on the Norwegian industry, showing a positive influence related not only to the long-term support of the frigate program, but also to a wide range of subcontractors both in Spain, as well as Norway. According to the Norwegian authorities, more than 100 Spanish companies were involved in offset purchase contracts with some 250 Norwegian entities (among them many SMEs).



Source: NAVANTIA

As a result of the offset program several business opportunities for SMEs were created not only for the construction phase, but also for the whole life cycle of the vessels (approx. 30 years). Additionally, it is worth mentioning that NAVANTIA's intention is to promote a long term relationship with the different suppliers (Norwegian SMEs companies), considering their products/services as an option for other ongoing and future programs.

This opens up a wide range of business opportunities for the domestic industry, through integration into the global supply chain of NAVANTIA. The Frigate's Industrial Cooperation Program created new or increased high-tech international commercial and technological benefits for the Norwegian SMEs, giving them the opportunity to acquire new technologies and know-how. Additionally, through the offset program, NAVANTIA created new business opportunities for the Norwegian SMEs in the Spanish, US and other international markets.

Kyriazis Vasileios,
Epicos Newsletter Head Editor

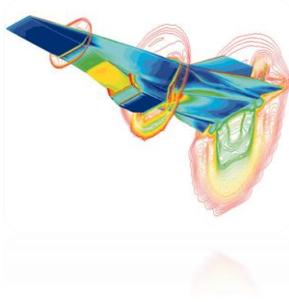
Epicos "Industrial Cooperation and Offset Projects"



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](#)

Testing, Modeling and Simulation Engineering Services provision for aerospace applications

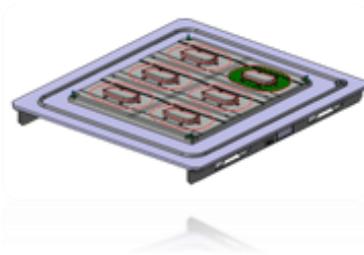


An institute with significant experience in providing Research and Development services, is proposing, in the frame of an offset project, collaboration with an Aerospace and Defense (A&D) prime contractor, to undertake engineering services tasks in the areas of testing, modeling and simulation, for specific aerospace programs and/or applications.

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

Mail at: a-kintis@epicos.com

Design and development of precision tools for composite and plastic parts manufacturing, for defence applications



A company providing Engineering Design, as well as complete Project Management services (turn-key projects) for the aerospace and automotive markets is proposing, in the frame of an offset program, collaboration with Aerospace or Defence Primes, or lower tier companies, for the development of precision tools for manufacturing composite and plastic material parts. These parts will be subassemblies or lower level parts for defence equipment.

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

Mail at: a-kintis@epicos.com

News from our A&D Business Network

Leonardo: the AW169 Scores Further Global Success



The AgustaWestland AW169 helicopter of Leonardo-Finmeccanica further

strengthened its presence in the market with orders for aircraft from operators who've already experienced its excellent capabilities and a new customer in the Republic of Korea. Helikorea has ordered two aircraft for Emergency Medical Service (EMS) missions in the Republic of Korea, where Leonardo has experienced significant success in recent years. Approximately 50 helicopters of various types are now in service or on order for military, parapublic and commercial roles ranging from naval applications, search and rescue, law enforcement, firefighting and VIP/corporate transportation. The contract, which also includes an option for one additional aircraft, foresees deliveries by the end of 2016.

Furthermore, Lease Corporation International (LCI), based in Ireland, signed a further contract for three additional AgustaWestland AW169s at Helitech, in Amsterdam. This is the second repeat order LCI has signed for the AW169. These particular aircraft are expected to be delivered in mid-2017. In 2016 LCI has already taken delivery of five AW169s which have gone on lease to their customers in the EMS, offshore and utility markets. In 2016 a total of 15 new AW139/AW169/AW189 helicopters have been, or will be, delivered to LCI.

At Helitech Leonardo has also signed a Framework Agreement with Specialist Aviation Services (SAS) of the UK for six additional AgustaWestland AW169s. The aircraft, expected to be delivered between 2017 and 2019, will be used to expand the SAS emergency medical service (EMS) operations across the nation and to enter the rapidly growing offshore windfarm support market. This latest agreement brings the total number of AW169s for the UK market to almost twenty.

For Further Information [Click Here](#)



Long-term contract to provide Combat Systems Integration Service to the Royal Navy



BAE Systems has signed a ten-and-a-half-year contract extension to provide the Royal Navy with combat systems integration services to both in-service and future platforms, including Type 45 destroyers, the new Queen Elizabeth (QE) Class aircraft carriers, and the Type 26 Global Combat Ships. Following on from the first phase of the Naval Combat Systems Integration Support Services contract (NCSISS), awarded in March 2012, the extension will see BAE Systems' highly skilled combat systems engineers supporting the key in-service Royal Naval ships. The contract is a collaborative service delivered by BAE Systems, QinetiQ and Defence & Equipment Support (DE&S) and will be delivered out of BAE Systems' Maritime Integration Support Centre (MISC) facility at Portsmouth Technology Park in Portsmouth.

Richard Williams, BAE Systems Combat Systems Director, said: "The award of the NCSISS phase two contract is a vital part of our continuing support to the Royal Navy and secures BAE Systems' position at the heart of naval combat systems integration for the next decade.

"It will ensure the UK's highly complex and capable surface ships remain at peak operational performance, able to deploy the latest technology in support of the nation's requirements long into the future."

Harriett Baldwin, Minister for Defence Procurement, said: "This contract is great news for the Royal Navy and for jobs in the region. Our commitment to Portsmouth is demonstrated by the Ministry of Defence's £100 million investment over the next six years. With a rising defence budget we are ensuring that our armed forces have the equipment and support they need to keep the UK safe and secure."

Neal Lawson, Director Ships Support at the MOD's Defence Equipment and Support Headquarters said: "This contract demonstrates how DE&S, industry and the Royal Navy are working collaboratively to deliver cutting-edge technology to the Surface Fleet through evermore efficient means.

"This arrangement will ensure that our future Queen Elizabeth Aircraft Carriers and the new Type 26 Frigates will have the world-class capability required to deliver the Nation's global effect. The Portsmouth Technology Park will remain a unique and vital centre of excellence for the UK."

For Further Information [Click Here](#)



Cubic Receives Potential \$20 Million Task Order to Support US Pacific Command's Center for Excellence in Disaster Management and Humanitarian Assistance

Cubic Global Defense (CGD), a business unit of Cubic Corporation (NYSE: CUB), today announced the award of a potential five-year task order valued at approximately \$20 million to support the U.S. Pacific Command's (USPACOM) Center For Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) under the Navy's SeaPort-e Indefinite Delivery Indefinite Quantity (IDIQ) Multiple Award Contract (MAC). SeaPort-e, the U.S. Navy's web-based commercial e-procurement portal solution, provides a standardized, efficient means of soliciting offers from large and small businesses. All task orders are competitively solicited, awarded and managed using the SeaPort-e platform.

Under this task order, awarded by Space and Naval Warfare Systems Center Pacific's (SSC Pacific) Command, Control, Communications, Computers, Intelligence (C4I) and Information Operations Division based in San Diego, Cubic will support CFE-DM with various operational requirements such as advising USPACOM leaders, enabling focused engagements, training and education. In addition, Cubic will assist in increasing knowledge of best practices and information to enhance U.S. and international civil-military preparedness for disaster management and humanitarian assistance.

"Cubic is proud to partner with USPACOM and its work through the CFE-DM, supporting real-time operational commitments to the nations and allied partners in the Asia-Pacific region," said Dave Buss, president of Cubic Global Defense. "When coupled with our work in training and exercise management in the PACOM Theater, this task order will allow us to strengthen our offerings of innovative, end-to-end solutions and build partner capacity in the Pacific."

CFE-DM was established to bridge the understanding between civil and military humanitarian responders as well as to provide a Department of Defense platform for building disaster management, humanitarian assistance awareness and expertise among U.S. forces and partner nations in the Indo-Asia-Pacific. With more than 20 years of support and experience within USPACOM, Cubic continues to provide expertise in the areas of joint exercise support, modeling and simulation, software development, joint readiness, innovation, energy security and nation building.

About Cubic Corporation

Cubic Corporation designs, integrates and operates systems, products and services focused in the transportation, defense training and secure communications markets. Cubic Transportation Systems is a leading integrator of payment and information technology and services to create intelligent travel solutions for transportation authorities and operators. Cubic Global Defense is a leading provider of live, virtual, constructive and game-based training solutions, special operations and intelligence for the U.S. and allied forces. Cubic

Mission Solutions provides networked Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) capabilities for defense, intelligence, security and commercial missions. For more information about Cubic, please visit the company's website at www.cubic.com or on Twitter @CubicCorp.

Source: Epicos, Cubic Corporation

Orbital ATK Awarded Contract to Build Eutelsat Broadcast Satellite

Orbital ATK, Inc, a global leader in aerospace and defense technologies, today announced the company has been awarded its first contract with Eutelsat Communications (NYSE Euronext Paris: ETL) to build the EUTELSAT 5 West B satellite. The company will team with Airbus Defence and Space to build EUTELSAT 5 West B, marking the first time the two have partnered on satellite work. Relying on the two companies' extensive heritage in the satellite industry, EUTELSAT 5 West B will be based on Orbital ATK's GEOStar satellite platform while Airbus Defence and Space will provide the communications payload of 35 active Ku-band channels.

The spacecraft will be designed, built and tested at Orbital ATK's state-of-the-art satellite manufacturing facility in Dulles, Virginia. EUTELSAT 5 West B will have an operational lifetime of more than 15 years as a broadcast satellite, replacing the current satellite at Eutelsat's 5° West longitude orbit slot. Once EUTELSAT 5 West B is positioned in geostationary orbit, it will serve mainly video markets in Europe and North Africa.

"Eutelsat is a global leader in satellite operations and we are proud to provide them with a spacecraft built on our innovative, reliable and affordable GEOStar product line," said Amer Khouri, Vice President of the Commercial Satellite Business at Orbital ATK. "With Airbus Defence and Space providing the payload and Orbital ATK using our flight-proven bus design, we are confident the team will deliver a high-quality broadcast satellite." EUTELSAT 5 West B is scheduled for launch in 2018 aboard an International Launch Services (ILS) Proton vehicle from Baikonur Cosmodrome in Russia. It will be the 41st commercial satellite ordered and built by Orbital ATK.

Orbital ATK's Space Systems Group (SSG) is an industry leader in satellite technology and advanced rated space systems providing a broad portfolio of products and services for commercial, military, civil government and international customers. The Group designs, manufactures and operates small to medium-class satellites for communication, imaging, science, human exploration and military operations. SSG also specializes in market-leading integrated thermal control systems, space components that power and enable satellites of all classes, satellite servicing technology and premier technical engineering services to government agencies and laboratories. Orbital ATK is currently producing additional commercial satellites for Yahsat Satellite Communications, Avanti Communications and SES S.A. that will be delivered and launched over the next year.

About Orbital ATK

Orbital ATK is a global leader in aerospace and defense technologies. The company designs, builds and delivers space, defense and aviation systems for customers around the world, both as a prime contractor and merchant supplier. Its main products include launch vehicles and related propulsion systems; missile products, subsystems and defense electronics; precision weapons, armament systems and ammunition; satellites and associated space components and services; and advanced aerospace structures. Headquartered in Dulles, Virginia, Orbital ATK employs approximately 12,000 people in 18 states across the U.S. and in several international locations. For more information, visit www.orbitalatk.com.

Source: Epicos, Orbital ATK

AUSTAL Awarded Armidale Class Patrol Boat Remediation Work

Austal Limited is pleased to announce that Austal Australia will deliver an important mid-life remediation program to the Royal Australian Navy's Armidale Class Patrol Boat (ACPB) fleet.

Austal will undertake a number of hull remediation and configuration changes as well as planned and corrective maintenance work on up to seven (7) ACPB's at the company's Henderson, Western Australia shipyard from October 2016.

The activity, won in a domestic and international environment, will provide immediate, ongoing work for over 120 Austal employees and provides continuity of work between the completion of two Cape-class Patrol Boats for the Royal Australian Navy and a major export contract for Mols Linien, commencing April 2017.

The work on the ACPB's adds to the company's growing service and sustainment business. Austal is already delivering in-service support to the Australian Border Force's fleet of eight Cape-class patrol boats (designed and constructed by Austal) and has been contracted to provide in service support for nineteen steel Pacific Patrol Boat Replacement (PPB-R) vessels, as they enter service from late 2018.

Austal Chief Executive Officer David Singleton commented "As the original designer and builder of the Armidale Class, Austal is in an ideal position to deliver this important, mid-life enhancement work to a proven naval platform. Our inherent knowledge base and practical experience building and servicing the hard working Armidale fleet will ensure the vessels depart Austal in 2017 as a fully operational and effective capability."

"This order is indeed timely for Austal and ensures that key skills in naval shipbuilding and repair are maintained in Henderson during the lead up to the placement of the Offshore Patrol Vessel contract.

“Once again, by winning this competitively bid contract, we have demonstrated that Australian shipbuilding can be internationally competitive.”

The Armidale Class Patrol Boat (ACPB) is a 56 metre all-aluminium monohull patrol boat designed and constructed by Austal for the Royal Australian Navy. Fourteen ACPB’s were delivered from 2005 to 2007 and the vessels continue to play an integral role in Australia’s naval capability in the lead up to the arrival of the new Offshore Patrol Vessel fleet from 2020.

For Further Information [Click Here](#)

Source: Epicos, AUSTAL

L-3 Begins U.S. Air Force KC-10 Contractor Logistics Support Contract

L-3 Communications announced today that its Vertex Aerospace division has commenced performance on a previously announced contract to provide full contractor logistics support (CLS) for the U.S. Air Force (USAF) KC-10 aircraft fleet. A competitor protest, following the program’s award in June 2016 to L-3, has been denied by the Government Accountability Office.

The approximate total value of this firm-fixed-price, indefinite-delivery/indefinite-quantity requirements contract is expected to reach \$1.9 billion over a nine-year performance period that starts with a six-month phase-in that began on September 27, 2016.

“As a CLS provider, L-3 is committed to delivering excellent performance to the Air Force,” said Michael T. Strianese, L-3’s Chairman and Chief Executive Officer. “This KC-10 contract award gives L-3 the opportunity to provide the Air Force and a key international ally with engineering innovation and affordable, best value solutions and services. This new business win also adds a new aircraft to our scope of CLS work and expands our business base.”

Under the contract, L-3 will provide Contractor Operated and Maintained Base Supply (COMBS), Field Service Representative (FSR) and depot maintenance support for 59 USAF KC-10 aircraft, as well as COMBS and FSR support for the Aerial Refueling System for two Royal Netherlands Air Force KDC-10 aircraft.

L-3 Vertex Aerospace, located in Madison, Mississippi, is part of L-3’s Aerospace Systems business segment. The division is an aerospace and defense support services contractor specializing in the delivery of integrated contractor logistics support for aircraft, ground vehicles and other defense systems.

Headquartered in New York City, L-3 employs approximately 38,000 people worldwide and is a leading provider of a broad range of communication and electronic systems and products

used on military and commercial platforms. L-3 is also a prime contractor in aerospace systems. The company reported 2015 sales of \$10.5 billion.

To learn more about L-3, please visit the company's website at www.L-3com.com. L-3 uses its website as a channel of distribution of material company information. Financial and other material information regarding L-3 is routinely posted on the company's website and is readily accessible.

For Further Information [Click Here](#)

Source: Epicos, L3

Safran Electrical & Power signs partnership agreement with WiN MS

Safran Electrical & Power signed a technical and commercial cooperation agreement with WiN MS, which aims to offer aircraft manufacturers and airlines combined solutions for the monitoring and diagnosis of aeronautical wiring.

WiN MS is a startup that specializes in the monitoring of wiring. It uses reflectometry, a technology that analyzes the condition of wiring and locates any malfunctions.

Under this agreement, the two partners undertake a cooperation involving the integration of WiN MS technologies in the future products or processes of Safran Electrical & Power.

WiN MS will supply to Safran Electrical & Power differentiating technologies developed on different markets, including aeronautical, railroad, energy and motor. "Having the technological bricks of WiN MS gives a tremendous boost to our maintenance-assistance and health-monitoring activities, which will help make the electrical systems of tomorrow even safer," says Christophe De March, Technical and Innovation Director of Safran Electrical & Power's EWIS Eurasia Division.

Safran will provide WiN MS with its technical and industrial expertise as a world leader in aeronautical wiring. "This agreement will allow us to work together to speed up the entry onto the market of on-board solutions for the aircraft of tomorrow. We also hope to enhance our current wiring-maintenance services, which have already met with considerable success with airlines throughout the world," says Arnaud Peltier, President of WiN MS.

For Further Information [Click Here](#)

Source: Epicos, Safran